Dyslexia Awareness Training
and Other Related Disorders

Laurie Weathersby
Jayda Brantley
VISION

To create a world-class educational system that gives students the knowledge and skills to be successful in college and the workforce, and to flourish as parents and citizens

MISSION

To provide leadership through the development of policy and accountability systems so that all students are prepared to compete in the global community
**State Board of Education**  STRATEGIC PLAN GOALS

1. **ALL** Students Proficient and Showing Growth in All Assessed Areas
2. **EVERY** Student Graduates from High School and is Ready for College and Career
3. **EVERY** Child Has Access to a High-Quality Early Childhood Program
4. **EVERY** School Has Effective Teachers and Leaders
5. **EVERY** Community Effectively Uses a World-Class Data System to Improve Student Outcomes
6. **EVERY** School and District is Rated “C” or Higher
Agenda

• Presenter Information
• Session Details
• Define Dyslexia
• Legislation
• Characteristics
• Supports
• Review
• Resources
Presenter Information

- Laurie Weathersby
- Licensed Dyslexia Therapist
- Certified Academic Language Therapist
- Bureau Director of Office of Intervention Services at the MDE
- 20+ years in education
Presenter Information

• Jayda Brantley
• Licensed Dyslexia Therapist
• Certified Academic Language Therapist
• Academic Intervention Specialist at the MDE
• 25+ years in education
The Department of Education shall require school districts to conduct four hours of awareness training for dyslexia and other related disorders to all licensed educators and paraprofessionals responsible for instruction.

Standards 1 and 2 of the International Dyslexia Association’s “Knowledge and Practice Standards for Teachers of Reading” 2018 Edition (KPS) shall be the minimum content used for the dyslexia training.
The Knowledge and Practice Standards of Teaching of Reading are used to guide the preparation of those who teach reading and related literacy skills.

- Whole group instruction
- Targeted instruction
- Intensive intervention

These standards can be used by individuals who are teaching reading to ALL students. Refer to the MS MTSS Three-tiered instructional model.
Session Details

- Pause the video…
- Print the handout
- Have pen, pencil, and highlighter
- Set time aside to actively listen and participate
Session 1 Handout

A. List one thing you think of when you hear the word dyslexia?

B. What do you plan to gain from this session?
Dyslexia Overview
Dyslexia Defined

Recognize the tenets of the (2003) IDA definition of dyslexia, or any accepted revisions thereof. KPS 2.1
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.”

Adopted by the IDA Board of Directors, Nov. 12, 2002.
Neurological in origin

- Brain imagery studies have shown that dyslexia is neurologically based
- People with dyslexia have not developed the neural network in the brain that is typical of successful readers
## Phonological Component in Language

<table>
<thead>
<tr>
<th>Spoken Language</th>
<th>Written Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>Reading</td>
</tr>
<tr>
<td>Speaking</td>
<td>Writing</td>
</tr>
</tbody>
</table>

Phonology - study of the speech sound system in the brain

- **Listening**: ability to identify and distinguish phonemes while listening (i.e., phonological awareness)
- **Speaking**: appropriate use of phonological patterns while speaking
- **Reading**: understanding of letter-sound associations while reading (i.e., phonics)
- **Writing**: accurate spelling of words while writing
• Impairment of learning that may affect one or more academic area, but not others
• Structural and functional difference in the brain
• Difficulties with reading print accurately with a rate that supports comprehension
• Difficulty using phonics and structural analysis to spell and read unknown words automatically
Taking a Closer Look

- Core deficit in phonological processing skills, speech sounds are poorly processed
- Unexpected difficulties in relation to intelligence, opportunities, and instruction
- Exists in individuals with talents and abilities that enable them to be successful in many domains
- Coexists with other developmental difficulties and disabilities, including problems with attention, memory, and executive function
Common Myths About Dyslexia

- Myth #1: Dyslexia causes letters or words to appear backward or out of order
- Myth #2: Dyslexia is related to problems with vision
- Myth #3: Dyslexia is a sign of below-average intelligence
- Myth #4: Dyslexia is a condition that can be cured
- Myth #5: Dyslexia will go away over time

dyslexiaresource.org
Legislation

Know fundamental provisions of federal and state laws that pertain to learning disabilities, including dyslexia and other reading and language disability subtypes. KPS 2.2
Local school districts are to make an initial determination of whether a student diagnosed with dyslexia meets the eligibility criteria under the Individuals with Disabilities Education Act (IDEA) to have an Individualized Education Program (IEP) developed to receive service.

If the diagnosis does not meet the eligibility requirements for an IEP, the district must proceed to determine a student’s eligibility for a 504 Plan.
Measurable Goals

Measurable annual goals are academic and/or functional goals that are written to meet the child’s needs that result from the child’s disability to enable the child to be involved in and progress in the general education curriculum and meet each of the child’s other educational needs that result from the child’s disability (C.F.R. §300.320(a)(2)).

- meaningful
- understandable
- accomplished within one school year
Due Process

Due process is a formal way to resolve disputes between school districts and parents about a child's education. A request for a Due Process hearing can be made to the Mississippi Department of Education’s Office of Special Education.
Public School Requirements
Public School Requirements

Adopt

- Adopt a local board policy about screening students for dyslexia

Screen

- Screen all students during the 2nd semester of kindergarten and during the 1st semester of first grade using a state board approved dyslexia screener

Ensure

- Ensure that the screener addresses the following components:
  - Phonological awareness and phonemic awareness
  - Sound symbol recognition
  - Alphabet knowledge
  - Decoding skills
  - Encoding skills
  - Rapid naming
4. Notify parents if a student fails the dyslexia screener.

5. Accept dyslexia evaluations administered by a licensed psychologist, psychometrist, or speech language pathologist.

6. Determine whether a student diagnosed with dyslexia qualifies under IDEA before proceeding to the development of a 504 Plan. If a student's diagnosis of dyslexia does not result in a disability determination, then in developing the written 504 Plan, there shall be a presumption that proficiency in spelling, reading and writing are essential for the student to achieve appropriate educational progress.
Develop interventions and strategies to provide accommodations to enable the student to achieve appropriate educational progress. The interventions and strategies developed shall include, but not be limited to, the use of the 3-Tier Instructional Model and the utilization of provisions of the IDEA and Section 504 to address those needs.
8. Screen first grade students by October 22, 2021
9. Screen kindergarten students by April 15, 2022
10. Complete the MS Dyslexia Screener Data Information Form and submit to the Office of Student Intervention Services at dyslexiadata@mdek12.org by May 6, 2022.
   * Screener Information and Forms can be accessed at http://www.mde.k12.ms.us/ESE/dyslexia
MISSISSIPPI DYSLEXIA SCREENER

Dyslexia Screener Data
2021-2022

Effective July 1, 2017, Section 37-173-15 of House Bill 1046 mandates that each local school district screen students for dyslexia in the spring of Kindergarten and the fall of Grade 1 using a State Board of Education (SBE) approved screener. Please complete the information below and submit completed forms to the Office of Student Intervention Services at dyslexiadata@mdek12.org by May 6, 2022. Contact Laurie Weathersby at Lweathersby@mdek12.org for questions concerning the completion of the form.

DISTRICT INFORMATION

<table>
<thead>
<tr>
<th>School District</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Person</th>
<th>Contact Position</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact E-mail</th>
<th>Contact Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dear Parent/Guardian:

According to Mississippi Code 37-373-1, all students in grades kindergarten and first grade are required to be screened for dyslexia using a Mississippi State Board of Education approved screener. Kindergarten students must be screened during the spring semester and first grade students must be screened during the fall semester.

The screener is designed to identify the areas of concern and components of reading that may suggest characteristics of dyslexia. The screener will be used to identify your child’s strengths and weaknesses and may be used to design specialized instruction (i.e., individual support using learning styles, student interests, and visuals), interventions (intensive instruction that is aimed at a specific identified area), and classroom supports for your child which may include the three tiers of support.

This is not a comprehensive dyslexia assessment designed to diagnose your child with dyslexia.

On (enter date), (enter child’s name) was administered the (enter screener name) dyslexia screener and did not pass the following components of the screener:

- Phonological awareness and phonemic awareness (rhyming, syllabification, manipulation)
- Sound symbol recognition (letter sounds)
- Alphabet knowledge (letter identification)
- Decoding skills (reading)
- Encoding skills (spelling)
- Rapid naming (letter, color, or object naming)

Your child’s performance indicates that additional instructional support may be needed. The following supports will be provided for your child:

- Extra classroom reading supports that target the identified areas that have been identified on the screener.
- Resources and supports that can be used at home to support your child.

Also, an Individualized Reading Plan (IRP) may be developed to plan extra supports. If you would like more information concerning this notification feel free to contact your child’s teacher at his/her school.

Phone Number:
Email address:

Sincerely,
Determining Intervention Supports

While the law specifically states that interventions, strategies, and accommodations must be provided to enable the student to achieve appropriate educational progress, the interventions and strategies are determined locally.
• How many students that failed the screener were referred to MTSS?
• How many students who failed the Dyslexia Screener were referred to MET?
• How many of those students were found eligible for Special Education Services?
• How many students failed the screener in Kindergarten and First Grade?
• Are you considering multiple sources of data?
• Has the parent been notified and expressed concern?
C. Where can you go to find if a student failed the dyslexia screener in kindergarten or first grade?
Dyslexia Screener
Dyslexia Screener 2021-2022

- Amplify Screener
  - New Customers
  - mCLASS with DIBELS 8th Edition

- Amplify Screener
  - Returning Customers
  - mCLASS with Acadience

- DIBELS 8th Edition
  - University of Oregon Center on Teaching and Learning
Dyslexia Screener 2021-2022

- FastBridge Learning
- Lexercise MS Dyslexia Screener
- Mississippi College Dyslexia Screener for K, 1, 2, and 3
- William Carey MS Dyslexia Therapy Association

Illuminate Education
Characteristics

Identify the distinguishing characteristics of dyslexia. KPS 2.3
Dyslexia affects 20% of the population
KPS 2.3

• The impact that dyslexia has is different for each person and depends on the severity of the condition and the effectiveness of instruction or remediation.

• The impact of dyslexia on a person’s life can change throughout their life.

https://dyslexiaida.org/dyslexia-basics/
Characteristics of Dyslexia: Preschool Years

• Trouble learning common nursery rhymes
• Difficulty learning names of letters in the alphabet
• Unable to recognize letters in his/her own name
• Mispronounces familiar words
• Does not recognize rhyming patterns
• Family history of reading difficulties
KPS 2.3

Characteristics of Dyslexia: Kindergarten and First

• Reading errors that show no connection to the sounds of the letters on the page (puppy – dog)
• Does not understand that words come apart
• Complains about how hard reading is
• History of reading problems in parents or siblings
• Trouble sounding out simple words (cat, map, nap)
KPS 2.3

Characteristics of Dyslexia: Second through High School

- Very slow in acquiring reading skills
- Reading is slow and awkward
- Trouble reading unfamiliar words, often making wild guesses
- No strategy for reading new words
- Avoids reading out loud
Supports
KPS 1.1

Understand the 5 language processing requirements of proficient reading and writing:

- phonological
- orthographic
- semantic
- syntactic
- discourse
Phonological – Phonology

Study of the speech sound (phoneme) including the rules for combining and using phonemes.

<table>
<thead>
<tr>
<th>Spoken Language</th>
<th>Written Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>Reading</td>
</tr>
<tr>
<td>Ability to identify and distinguish phonemes while</td>
<td>Understanding of letter-sound associations while</td>
</tr>
<tr>
<td>listening (phonological awareness)</td>
<td>reading (phonics)</td>
</tr>
<tr>
<td>Speaking</td>
<td>Writing</td>
</tr>
<tr>
<td>Appropriate use of phonological patterns while</td>
<td>Accurate spelling of words while writing</td>
</tr>
<tr>
<td>speaking</td>
<td></td>
</tr>
</tbody>
</table>

Asha.org
Orthographic – Morphology

Study of the rules that govern how morphemes, the minimal meaningful units of language, are used in a language.

<table>
<thead>
<tr>
<th>Spoken Language</th>
<th>Written Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>Speaking</td>
</tr>
<tr>
<td>Understanding morphemes when listening</td>
<td>Using morpheme correctly when speaking</td>
</tr>
<tr>
<td></td>
<td>Understanding grammar while reading</td>
</tr>
<tr>
<td></td>
<td>Appropriate use of grammar when writing</td>
</tr>
</tbody>
</table>

Asha.org
**Syntactic – Syntax**

The rules that pertain to the ways in which words can be combined to form sentences in a language

<table>
<thead>
<tr>
<th>Spoken Language</th>
<th>Written Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>Speaking</td>
</tr>
<tr>
<td>Understanding sentence structure</td>
<td>Using correct sentence structure</td>
</tr>
<tr>
<td>elements when listening</td>
<td>elements when speaking</td>
</tr>
<tr>
<td></td>
<td>Understanding sentence structure</td>
</tr>
<tr>
<td></td>
<td>while reading</td>
</tr>
<tr>
<td></td>
<td>Using correct sentence structure</td>
</tr>
<tr>
<td></td>
<td>when writing</td>
</tr>
</tbody>
</table>

Asha.org
Semantics
The meaning of words and combinations of words in a language

<table>
<thead>
<tr>
<th>Spoken Language</th>
<th>Written Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>Reading</td>
</tr>
<tr>
<td>Speaking vocabulary</td>
<td>Writing vocabulary</td>
</tr>
<tr>
<td>Listening</td>
<td>Reading vocabulary</td>
</tr>
<tr>
<td>Speaking vocabulary</td>
<td>Writing vocabulary</td>
</tr>
</tbody>
</table>
Discourse – Pragmatics
The rules associated with the use of language in conversation and broader social situations

<table>
<thead>
<tr>
<th>Spoken Language</th>
<th>Written Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>Reading</td>
</tr>
<tr>
<td>Speaking</td>
<td>Writing</td>
</tr>
<tr>
<td>Understanding of the social aspects of spoken language, including conversational exchanges</td>
<td>Social use of spoken language, including production of cohesive and relevant messages during conversations</td>
</tr>
<tr>
<td></td>
<td>Understanding point-of-view, needs of the audience, etc.</td>
</tr>
<tr>
<td></td>
<td>Conveying point-of-view, intended message, etc.</td>
</tr>
</tbody>
</table>

Asha.org
Put it all together

• All five language processing requirements are necessary to become a proficient reader and writer.

• The five basic language domains are part of a continuum which spans to higher order language skills, such as discourse, which is impacted by skills in the pragmatics domain.
Review

What is the understanding of sentence structure when listening, speaking, reading, and writing?

Syntax

What is the ability to identify and distinguish phonemes while listening (phonological awareness)?

Phonology

What is the meaning of words and combinations of words in a language?

Semantics

Asha.org
KPS 1.2

Understand that learning to read, for most people, requires explicit instruction.

ReadingRockets.org
KPS 1.2

By the time most children leave the preschool years and enter kindergarten, they have learned a lot about language. Because children have been learning language since birth, most are ready to move to the next step – mastering conventional reading and writing.
• Children build on their language discoveries to become conventional readers and writers.
• Effective readers and writers recognize letters and words, follow writing rules, and create meaning from text.
• Children develop in four interrelated areas:
  • Cognitive and language
  • Physical
  • Social
  • emotional

ReadingRockets.org
• Most children follow the same sequence and pattern for development at their own pace

• Language skills are closely tied to and affected by cognitive, social, and emotional development

• Children first learn to listen and speak, then use these and other skills to learn to read and write

• Emerging literacy is the gradual, ongoing process of learning to understand and use language

ReadingRockets.org
Successful programs to promote children’s reading and literacy development should be based on an understanding of child development, recent research on brain development, and the natural ongoing process through which most young children acquire language skills and become readers and writers.

ReadingRockets.org
Broca’s Area of the Brain

- Located in the frontal cortex, plans the process of speech by interacting with the temporal cortex where sensory information is processed and the motor cortex, which control movements of the mouth.

- New neural circuits are established to link language and visual regions to become skilled at reading.

Hopkinsmedicine.org
KPS 1.3

Understand the reciprocal relationships among phonemic awareness, decoding, word recognition, spelling, and vocabulary knowledge.

Dyslexiaida.org
An important component of beginning reading instruction is effectively teaching letters and sounds.

Related to letter and sound knowledge are *phonological awareness* (the ability to hear and manipulate sounds in oral language) and *phonemic awareness* (the ability to hear and manipulate phonemes, the smallest units of sound in oral language).

*Alphabetic knowledge* is the knowledge of individual letter names, sounds, and shapes.

Literacyforallinstrucion.ca
The *alphabetic principle* is the idea that letters and groups of letters represent the sounds of spoken language. Readers apply alphabetic principle through phonics when they use their knowledge of the relationships between sounds and letters to read both familiar and unfamiliar words.

[Link to Literacyforallinstruction.ca](http://Literacyforallinstruction.ca)
When teaching letter and sound knowledge, use a variety of approaches that encourage generalized understanding from the beginning.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read alphabet books</td>
<td>Point out letters and print in the environment</td>
</tr>
<tr>
<td>Talk about letters and their sounds when you encounter them in everyday activities</td>
<td>Provide opportunities to play with letter shapes and sounds</td>
</tr>
<tr>
<td>Explicitly reference letter names and sounds in shared reading and writing activities</td>
<td>Use mnemonics and actions</td>
</tr>
<tr>
<td>Use student names</td>
<td>Explicitly teach, model, and emphasize sounds and letters</td>
</tr>
</tbody>
</table>

Literacyforallinstruction.ca
Phonemic awareness refers to the specific ability to focus on and manipulate individual sounds (phonemes) in spoken words. Phonemes are the smallest units comprising spoken language. Phonemes combine to form syllables and words. The word mat has three sounds /m/ /a/ /t/. Acquiring phonemic awareness is important because it is the foundation for spelling and word recognition skills.

Readingrockets.org
Students may exhibit the following characteristics:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Activity</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not correctly complete blending activities</td>
<td>Put together sounds /k/ /i/ /ck/</td>
<td>To make the word <em>kick</em></td>
</tr>
<tr>
<td>Does not correctly complete phone substitution activities</td>
<td>Change the /m/ in mate to /cr/</td>
<td>To make the word <em>crate</em></td>
</tr>
<tr>
<td>Has difficulty identifying how many syllables are in a word</td>
<td>paper</td>
<td>Two</td>
</tr>
<tr>
<td>Has difficulty with rhyming, syllabication, or spelling a new word by its sound</td>
<td>Hat, cat, bat</td>
<td></td>
</tr>
</tbody>
</table>
Ways to help:

• Play word and sound games
• Use a plastic counter to count each sound you hear in a word
• Play simple rhyming (go – no) or blending games (/d/ /o/ /g/ = dog)
• Read books with rhymes
• Practice the alphabet by pointing out letters wherever you see them

Readingrockets.org
Phonemic awareness is the foundation for learning to read and spell. Without the ability to hear sounds in words, phonemic awareness and phonics cannot engage in this reciprocal relationship.

Students must understand that words are made up of individual sounds, that can be blended, segmented, and manipulated. If students can do this, they can transfer these skills to print, so they can read and spell more words.

Heggerty.org
Session 1 Handout

D. What foundational skill is necessary for learning to read and write?

a. Decoding
b. Alphabetic principle
c. Phonemic awareness
KPS 1.4

Identify and explain aspects of cognition and behavior that affect reading and writing development.
Cognitive behaviors that may be observed in the classroom

<table>
<thead>
<tr>
<th>Cognitive Behavior</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention</td>
<td>Failure to focus on important stimuli in the classroom (teacher lecturing, textbook, reading assignment, or classmate talking)</td>
</tr>
<tr>
<td>Automaticity</td>
<td>Failure to retrieve information quickly and automatically (what you need to walk, run, speak, read)</td>
</tr>
<tr>
<td>Executive function</td>
<td>Failure to manage life tasks such as organization, research, self-control</td>
</tr>
<tr>
<td>Verbal memory</td>
<td>Failure to remember information that is verbally presented, trouble with story recall, and learning sequences of paired words</td>
</tr>
<tr>
<td>Processing speed</td>
<td>Failure to take in information, understand it, and then formulate an oral, written, or physical response</td>
</tr>
<tr>
<td>Graphomotor control</td>
<td>Disconnections between a child's thought and his or her ability to write them down</td>
</tr>
</tbody>
</table>
Cognitive behaviors that may impede reading and writing development and how to address it

<table>
<thead>
<tr>
<th>Cognitive Behavior</th>
<th>Impact</th>
<th>Ways to Address It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention</td>
<td>When a student is not able to focus on a task it will impair his ability to learn</td>
<td>Provide students with a timer. Set the timer for small increments of time and when the timer goes off the student can take a short break.</td>
</tr>
<tr>
<td>Automaticity</td>
<td>When a student cannot retrieve information automatically it will slow down the learning process.</td>
<td>Provide students with a word list and have them practice rereading the familiar words. This can also be completed with pictures for younger students.</td>
</tr>
<tr>
<td>Executive function</td>
<td>A student must be able to maintain self-control and organization to be successful in the classroom.</td>
<td>Provide students with a detailed daily schedule and problem-solving steps or routines for the students to follow</td>
</tr>
<tr>
<td>Cognitive Behavior</td>
<td>Impact</td>
<td>Ways to Address It</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Verbal memory</td>
<td>When students struggle to remember information that is presented to them in class, they will not be able to complete assignments or remember information for assessments.</td>
<td>Give directions in multiple formats, teach students to use visual images, and give teacher-prepared handouts prior to class lectures.</td>
</tr>
<tr>
<td>Processing speed</td>
<td>Students need to have a quick processing speed so they can take the information and provide a response to the teacher or class.</td>
<td>Offer instruction at a slower pace and check for understanding, provide extended time, and provide a copy of the teacher's notes</td>
</tr>
<tr>
<td>Graphomotor control</td>
<td>Some students will struggle to take the information they know and understand and transfer that to paper.</td>
<td>Allow the student to write on a vertical surface (sticky paper on the wall)</td>
</tr>
</tbody>
</table>
E. Think about a student that you have previously taught or are currently teaching that exhibits one of the cognitive behaviors mentioned. Pause the video to write down that student’s name and a strategy that could be put in place to support that student.
KPS 1.5

Identify (and explain) how environmental, cultural, and social factors contribute to literacy development.
What research supports the findings that environmental factors play a role in the prediction of literacy outcomes?

**Home environment**: child’s first environment and is the foundation for tremendous cognitive growth and development. Studies show that good readers who experience success are much more likely to have a favorable home environment.

**School environment**: students with reading problems do not read as much as students who are good readers. Many times these students do not have satisfactory relationships with the adults in the schools and are perceived negatively by the teachers and principals.

*Pearson Higher Ed: Factors Associated with Reading Problems*
Social Environment: Many students with reading problems also have social difficulties. They typically have trouble making friends, interacting with others, and do not understand how to handle social situations.

Cultural Environment: Many students come from homes with diverse backgrounds where English is not their first language. They are not proficient in understanding and using English. This can impact their overall literacy outcomes over time.
KPS 1.6

Explain major research findings regarding the contribution of linguistic and cognitive factors to the prediction of literacy outcomes.
Linguistic Factors in Reading Prediction

• Linguistic abilities play a key role in predicting reading acquisition (Snel et al., 2016).

• This has been found to be true in many studies and many languages (Snel et al., 2016).

• Previous studies identified letter knowledge to be a predictor of reading success (Schatschneider et al., 2004).

• A longitudinal study explored the prediction of reading abilities from age 3 to 16, found that semantic ability and interest in books at age 3, and phonological awareness at age 6, best predicted reading abilities at 16 (Frost et al., 2005).
Cognitive Factors in Reading Prediction

• Various cognitive abilities such as Rapid Automatic Naming (RAN) and memory have been found to be a good predictor for successful reading acquisition with several studies showing difficulties with RAN predicting reading difficulties (Wolf and Bowers, 1999; Schatschneider and Torgesen, 2004).

• Research has found that children and adults with reading difficulties were found to have lower working memories which is an efficient predictor of reading abilities. Preschool children who struggle with reading showed a significant difference in performance of working memory tasks than their grade normal peers (Nevo and Breznits, 2011, 2013; Partanen and Siegel, 2014).
Executive Function in Reading Prediction

• Can be used to predict future academic achievements

• Studies have shown a correlation between a child’s ability to regulate his behavior and thoughts, and acquiring academic skills such as decoding, spelling, and numeracy.

• Executive Functions have also been linked with pre-academic skills such as early literacy and math knowledge (McClelland et al., 2007).

Frontiers in Psychology
Explain why it is important for our students to be able to name objects automatically and quickly.

F. Review the rapid automatic naming activity found on the handout.
KPS 1.7

Understand the most common intrinsic differences between good and poor readers (i.e., linguistic, cognitive, and neurobiological).
## 13 Characteristics of Dyslexia

<table>
<thead>
<tr>
<th>Difficulty in learning to read, write, spell and math</th>
<th>Difficulty in following oral and written instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cramped and illegible handwriting</td>
<td>Difficulty in staying on task</td>
</tr>
<tr>
<td>Easily distracted</td>
<td>Confusion in sequence of letters and symbols (b and d; quite and quiet; was and saw; 18 and 81)</td>
</tr>
<tr>
<td>Delayed spoken language</td>
<td>Confusion about directions in space, time, right and left, up and down, north and south, yesterday and tomorrow</td>
</tr>
<tr>
<td>High level of frustration</td>
<td>Difficulty in retaining information</td>
</tr>
<tr>
<td>More than average test-taking anxiety</td>
<td>Increased or reduced energy level</td>
</tr>
<tr>
<td>immaturity</td>
<td></td>
</tr>
</tbody>
</table>

Orton Gillingham Online Academy
Fluency deficit is the inability to read with speed, accuracy, and proper expression.

Children who do not read with fluency sound choppy and awkward. This can impact their decoding and may need more practice with speed and smoothness in reading.
Seven Signs of Reading Comprehension Problems

1. Showing no interest in reading
2. Difficulty following basic directions
3. Difficulty pronouncing or recognizing words
4. Issues understanding what was read
5. Taking long to solve basic tasks
6. Poor penmanship
7. Family history of reading comprehension problems
Types of Reading Disabilities

*Phonological deficit:* core problem in phonological processing system of oral language

*Processing speed/orthographic processing deficit:* speed and accuracy of printed work recognition

*Comprehension deficit:* specifically found in children with social-linguistic disabilities, vocabulary weakness, language learning disorders and coincides with the first two types of disabilities.
KPS 1.7

These reading difficulties can be discovered when analyzing a student’s developmental history, test performance, and reading behaviors.
Volume 1: Child Find Sped Manual
Examples of Reading behaviors:

- Applies word-solving strategies to more complex, multisyllabic words
- Reads orally with high accuracy in most instances, not stopping to self-correct errors in the interest of fluency and phrasing
- After reading longer sections of text, predicts outcomes, problems resolutions, and character changes
- Remembers details and sustains attention to meaning through a longer text

Scholastic Reading Behaviors to Notice
KPS 1.8

Know phases in the typical developmental progression of oral language, phoneme awareness, decoding skills, printed word recognition, spelling, reading fluency, reading comprehension, and written expression.
<table>
<thead>
<tr>
<th>Typical reading developmental progression</th>
<th>Oral language</th>
<th>Phoneme awareness</th>
<th>Decoding skills</th>
<th>Printed word recognition</th>
<th>Spelling</th>
<th>Reading fluency</th>
<th>Reading comprehension</th>
<th>Written expression</th>
</tr>
</thead>
</table>

**How do we support students at different points of development?**
• Process of translating print into speech by rapidly matching a letter to its sound
• Recognizing sound-symbol correspondence in order to pronounce a word correctly
• Accurate word reading depends on the ability to decode unknown words by recognizing the sounds the letters represent
Decoding real words or nonsense words

- pon
- bat
- fib
- sap
- lut
- bin
- teg
Encoding

- The foundation of reading and the greatest component of writing
- Involves translating auditory sounds into visual symbols
- Speech to print
Encoding

• Spelling
• Constructing of words
• Reverse of Decoding
  • cat
  • lip
  • met
  • pot
  • bug
KPS 1.9

Understand the changing relationships among the major components of literacy development in accounting for reading achievement.
Code-emphasis Instruction

Instruction designed to teach children skills related to cracking the alphabetic code.

Consistently demonstrate positive effects directly on children’s conventional literacy skills.

Most effective in small group or one-on-one settings.

Typically includes phonemic awareness activities.

Developing Early Literacy: Report of the National Early Literacy Panel
Code-emphasis Instruction explicitly teaches:

- phonemic awareness
- phonics
- alphabet
- print awareness

Developing Early Literacy: Report of the National Early Literacy Panel
Phonological awareness encompasses a wide range of skills that lead to and include phoneme awareness
Phonemic Awareness

- A conscious awareness of the identity of speech sounds in words and the ability to manipulate those sounds
- It does not require the use of printed words or letters
- Increases a student’s awareness of the features of speech
- Being sensitive to rhyme
Phonemic Awareness

Onset and rime – recognition and production of rhyming words depend on the ability to break any syllable into two parts.

<table>
<thead>
<tr>
<th>cat</th>
<th>dog</th>
</tr>
</thead>
<tbody>
<tr>
<td>bat</td>
<td>fog</td>
</tr>
<tr>
<td>hat</td>
<td>log</td>
</tr>
<tr>
<td>rat</td>
<td>hog</td>
</tr>
</tbody>
</table>
Phonemic Awareness

Syllables - students should be able to segment, and blend spoken syllables to remember, read, and compare longer words

• Basket
• doghouse
Phonemic Awareness

Phonemes-the individual speech sounds that distinguish words

• /s/ /m/ /ar/ /t/
• /d/ /o/ /g/
Phonemic awareness tasks

- Compare or match sounds in words
  - Which word does not begin with /h/?
    - Hat, hair, wind, house
- Isolate and pronounce separate speech sounds
  - Say the last sound in rich.
- Put words together from their separate sounds (blending)
  - /sh/ /ou/ /t/ - Say it fast (shout)
Phonemic Awareness

- Phonemic awareness tasks
  - Break words apart into their component phonemes (segmentation)
    - Say the sounds in **crash**.
      - (/k/, /r/, /a/, /sh/)  
  - Add, change, or delete phonemes from words (phoneme manipulation)
    - Say **heart**. Change /t/ to /d/. What the new word? (**hard**)  

```
fish - /f/ = “ish”  rake - /r/ + /l/ = lake
```
Session 1 Handout

G. Review the phonemic awareness activities on the handout.

Pause the video or practice the activities later with a partner or a student.
Sound Symbol Recognition

- Sound Symbol Recognition—students link the look of the letter (visual) with its sound (auditory)
- Producing the accurate sound of each letter
Alphabet Knowledge

• Alphabet Knowledge - Recognizing the 26 letters of the alphabet
• Letter Recognition - Identifying the accurate name of each letter according to its shape and structure
KPS 1.9

Language Comprehension

Once word-recognition skill (decoding) is established language comprehension can begin.
KPS 1.9

Vocabulary and Oral Language

Nurtured at an early age through reading aloud and classroom dialogue.
Preschool Years

• Make personalized books
• Increase print awareness
• Choose rhyming books with high repetition of words
• Dramatically pause to allow students to fill in the refrain as you are reading
Second through High School

• Encourage a daily routine to help develop the student’s own self-reliance and responsibilities

• Encourage good organizational skills

• Teach prefixes, suffixes, and root words to students to improve spelling, decoding, and comprehension

• Provide audio recordings when available
KPS 2.4

Understand how reading disabilities vary in presentation and degree.
Evidence-Based Reading Instruction for Dyslexia Includes Instruction in:

- Phonemic Awareness
- Phonics
- Fluency
- Vocabulary
- Comprehension

AND Must be:

- Systematic
- Explicit
- Multi-sensory
- Diagnostic
Systematic Instruction

• Skills are broken down into component parts

• As specific skills are mastered, they are applied into meaningful text that students can read.

• Students learn the elements or building blocks of more complex skills, such as how to divide a two or three syllable word to facilitate reading, or how to recognize prefixes and suffixes in multi-syllable words, before they are expected to read those words in content areas.
Explicit Instruction

A purposeful way of overtly teaching students.

- Clearly teaching the skills a student needs to know.
- Includes modeling, guided practice, and independent practice of the skill being taught.
- Eliminates student guessing.
Multi-sensory Instruction

The use of visual, auditory, and kinesthetic-tactile pathways simultaneously to enhance memory and learning.
Diagnostic Teaching

• The teacher must be adept at flexible or individualized teaching.
• The teaching plan is based on careful and continuous assessment of the individual.

https://dyslexiaida.org/multisensory-structured-language-teaching-fact-sheet/
Intensity, frequency and duration of instruction should correspond to the degree of dyslexia (mild, moderate, severe)

- Students with dyslexia are often inconsistent.
- No two people with dyslexia have the exact same issues or react to treatment in the same way.
Rapid Automatic Naming (RAN)

• Ability to quickly name aloud a series of familiar items.
• Predictor of future reading ability
• May include naming of letters, numbers, colors or objects.

Form A

Rapid Color Naming
Understand how and why symptoms of reading difficulty are likely to change over time in response to development and instruction.
• With early intervention, many children at risk for dyslexia can become skilled readers.

• Instructional priorities should change as a student’s literacy skills develop.
Language Arts Strategies

• Keep copying to a minimum, provide notes and handouts
• Allow students to make predictions while previewing the title, pictures, chapter names, and bold-faced text
Language Arts Strategies

• Encourage students to visualize a “mind movie” while reading
• Encourage multiple readings of text
• Provide a visual for students to take notes and write down key concepts as they read:
  (story line, webs, map)
Language Arts Strategies

- Encourage students to use a line guide as he/she is reading to avoid skipping lines
• Give visual pictures for commonly reversed or flipped letters b/d
Daily Strategies

• Encourage good organizational skills:
  • use folders and dividers
  • write down exactly what is required
  • ensure that the appropriate worksheets/books are with the student to take home
  • encourage a daily routine
  • provide a set of textbooks for the students to take home
Math Strategies

• Give manipulatives whenever possible to work on math related to time, money, or fractions (things to touch and move around)
  - Manipulatives are especially important for visual and tactile learners
Spelling Strategies

• Count the number of sounds in a word and then correlate the sounds with the letters
• Explicitly teach phonics rules and review them multiple times
• Group words into word families with multiple patterns of each phonetic sound
Writing Strategies

- Brainstorm key vocabulary prior to writing

- Group nouns, verbs, and adjectives together to ensure students are using a variety of words

- Emphasize the need to write in “stages” rather than completing a long narrative in one sitting
Handwriting Strategies

• Encourage students to study their handwriting and decide what needs more practice
• Discuss the advantages of good handwriting
• Improve penmanship with a larger pen, pencil grip and/or raised lined paper
• A cursive joined style is most helpful to children with dyslexia
At-Home Strategies

• Encourage cursive writing
• Practice spelling procedures
• Have good oral communication with your child
• Play games with your children; this will open up lines of communication and build self-esteem
• Practice, practice, practice
Hands-on Materials

[Image of colorful pipe cleaners forming the letters abc]
Hands-on materials
Hands-on Materials
Hands-on Materials

http://learningspecialistmaterials.blogspot.com/
Hands-on Materials
H. List two new strategies that you can implement with your students after watching this video.
Knowledge Practice Standards 1 and 2 were covered during this session.

Feel free to reach out if you have any specific questions.

Keep the Session 1 Handout for a resource.

Be on the lookout for the next Session in this series.
Resources
Resources


• Reading Rockets https://www.readingrockets.org/article/how-most-children-learn-read
Resources

• Johns Hopkins Medicine
  https://www.hopkinsmedicine.org/news/media/releases/brocas_area_is_the_brains_scriptwriter_shaping_speech_study_finds

• International Dyslexia Association
  https://dyslexiaida.org/event/a-20th-year-celebration-of-scarboroughs-reading-rope/

• Literacy for All Instruction
  http://literacyforallinstruction.ca/alphabet-phonological-awareness/
Resources

• Reading Rockets
  www.readingrockets.org/helping/target/phonologicalphonemic

• Heggerty
  www.heggerty.org/blog/phonological-awareness-and-phonemic-awareness/

• Pearson Higher Ed
  https://www.pearsonhighered.com/assets/samplechapter/0/1/3/2/0132837803.pdf

• Frontiers in Psychology
Resources

• Orton Gillingham Online Academy
  https://ortongillinghamonlinetutor.com/13-characteristics-of-dyslexia/

• Reading Rockets
  https://www.readingrockets.org/helping/target/fluency


• Reading Rockets  https://www.readingrockets.org/article/types-reading-disability
• Scholastic

• Developing Early Literacy: Report of the National Early Literacy Panel
Laurie Weathersby, Ed.S., LDT, CALT

Bureau Director of Intervention Services
lweathersby@mdek12.org