Serving students at-risk for Dyslexia
Guidance to LEA's

As stated in the Department of Elementary and Secondary Education (DESE) strategic plan, our mission is to guarantee the superior preparation and performance of every child. High-quality literacy instruction is essential in accomplishing this mission.

The purpose of this document is to provide guidance to local education agencies (LEAs) for identifying and servicing students at-risk for dyslexia or related disorders in accordance with the provisions of Section 167.950, RSMo. Nothing in this document should be used to supplant or postpone the IDEA or Section 504 eligibility determination process should a disability be suspected.

Given that Missouri is a local control state, LEAs (school districts and charter schools) have considerable autonomy with regard to which screening and diagnostic tools are used as well as what instructional methods and programs to implement. However, DESE is charged with providing definitions related to best practices for dyslexia identification and remediation. This text shall support that charge. Additional releases to this document may be necessary after feedback is received from LEAs and other pertinent stakeholders.

Several other states have recently released guidelines for identification and servicing students at-risk for dyslexia. The New Jersey Dyslexia Handbook (September 2017) and California Dyslexia Guidelines (October 2017) provide evidence-based screening and instructional information and were used to inform this
document. http://www.state.nj.us/education/specialed/dyslexia/NJDyslexiaHandbook.pdf

https://www.cde.ca.gov/sp/se/ac/documents/cadyslexiaguidelines.pdf

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Universal Screening and Early Dyslexia Identification

In the 2018-19 school year and subsequent years, each public school, including each charter school, shall conduct dyslexia screenings for students in the appropriate year consistent with the findings and recommendations of the task force created under section 633.420. "Dyslexia screening" is a short test conducted by a teacher or school counselor to determine whether a student likely has dyslexia or a related disorder in which a positive result does not represent a medical diagnosis but indicates that the student could benefit from approved support.

Purpose of Universal Screening

Data from the National Institute of Child Health and Human Development (NICHD) indicate that brain plasticity decreases over time, therefore early intervention is essential to close the gap between struggling readers and their "normally developing" peers (Stanovich, 1986).

- Identify students who are at risk for dyslexia or reading failure
- Form small groups for instruction and intervention
- Plan instruction and intervention
- Set individual goals for student achievement
- Set exit criteria for intervention window

Who should be screened?

Task Force's recommendations are that LEAs screen

- each student kindergarten through grade 3 each year.
    - Grades 1-3 should be screened within the first 30 days of the school year, with follow up at the middle and end of the year for systematic documentation of progress or lack of progress.
    - Kindergarten initial screening should occur no later than January 31st and also at the end of the year for systematic documentation and progress monitoring.
- any student K-3 who transfers from a school within the state that has not previously been screened.
- any student K-3 who transfers from another state and cannot present documentation that the student has a previous screening.
- a student in grades 4 or higher who is experiencing consistent difficulty in the areas of weakness noted previously in this report as determined by the classroom teacher or as requested by the student's parent/guardian.

- Exemptions
    - Existing diagnosis of dyslexia
    - Students with a sensory impairment (visual/auditory)
    - Severe intellectual disabilities
    - English Learner's where tools or staffing related to administration and/or interpretation, in native language is unavailable

Data Collection

- Information related to the collection of screening data will be released in a separate document.

English Learners (EL's)

- As dyslexia is neurobiological in nature, it affects all people, not just English speakers. Students for whom English is not their native language will also be potential students with dyslexia characteristics. Many times, these students are missed because the difficulties in reading can be erroneously blamed on language acquisition. Although the process can be difficult and implemented with caution, English learners (ELs) can be screened for dyslexia-related risk factors through screening in the student's native language. EL's who have been reclassified should complete the screening process accordingly.

Screening Components from the International Dyslexia Association
https://app.box.com/s/dlwc9359ba6dz89bi0i3pzsbvmithatc

https://dyslexiaida.org/universal-screening-k-2-reading/

There is no one test or tool that encompasses all the recommended skills. Any screening tool(s) selected must have evidence of adequate reliability and validity. Administration, scoring and interpretation should be completed in accordance with the directions, norms and cut points provided with the instrument. The universal screening process alone is not sufficient to identify students with dyslexia, however they can reveal specific weaknesses that are consistent with dyslexia. Monitoring a child's response to high quality reading instruction may be the best way to identify students with severe dyslexia, followed by additional screening (Torgesen et al., 2007).

Screening of the following skills is essential to identifying deficits related to dyslexia, and to guide intervention (please see appendix B;-Screening Organizer for further details).

Kindergarten

- Phonological awareness (words, syllables, rhyming, onset-rime, blending, and syllable and word segmentation)
- Sound/symbol recognition
- Alphabet knowledge (letter naming fluency)
- Phonological memory (non-word repetition)
- Rapid automatic naming
- Reading comprehension

First Grade

- Phonological awareness (segmentation, blending, isolation, manipulation)
- Sound/symbol recognition
- Alphabet knowledge (letter naming fluency)
- Phonological memory (non-word repetition)
- Word recognition fluency
- Orthography
- Reading comprehension

Second & Third Grades

- Oral reading fluency
- Word recognition
- Reading comprehension
- Orthography

LEA's should determine who best to complete student screenings. Due to variability of resources this could include; classroom teachers, reading interventionists, Title 1 teachers, reading specialists or coaches or any combination therein.

Supports and Accommodations

In the 2018-19 school year and subsequent years, the school board of each district and the governing board of each charter school shall provide reasonable classroom support consistent with the findings and recommendations of the task force created under section 633.420. "Support" is low-cost and effective best practices, such as oral examinations and extended test-taking periods.

The following is a list of example accommodations that benefit students with dyslexia. Note that not all students at risk for dyslexia will require all the possible supports. It is important to match and scaffold the supports with the student's individual need.

General

- Establish repeated exposure & review
- Check often for understanding

- Balance individual, small group and large group activities
- Provide extended time for oral responses
- Provide extended time for written responses
- Make available teacher-provided study guides
- Offer teacher-provided lecture or movie notes
- Provide taped or recorded lecture
- Reduce copying by providing information on worksheets or handouts avoid copying notes or outlines from boards or overheads, allowing students to focus on processing information instead of laboring to write it and losing the intent and meaning.
- Avoid far and near-point copying
- Avoid use of worksheets that require "page flipping," e.g. map on one side of page, questions on other side. Provide students with two sheets of paper so that questions and source material can be in the same field of vision.
- Provide chapter/subject outline of curriculum for each semester/course syllabus
- Provide list of relevant curriculum-specific vocabulary in advance
- Present new information in small sequential steps
- Present curriculum using a "top-down" approach -- provide meaning first, then fill in facts
- Present curriculum through a variety of modalities
- Use manipulatives when possible in math & science
- Provide models or examples
- Use graphic organizers
- Use visual aids
- Provide two sets of textbooks -- one for home and one for school
- Use marker to highlight important textbook sections
- Use peer readers
- Provide interesting reading material at or slightly above the student's comfortable reading level
- Maintain daily routines
- Encourage use of planners & calendars
- Provide accommodations for directions
- Use both oral and printed directions
- Chunk directions into small steps using as few words as possible
- Outline number and sequence steps in a task
- Have student repeat the directions for a task
- Show a model of the end product of directions (e.g., a completed math problem or finished quiz)
- Stand near the student when giving directions or presenting a lesson to provide proximity.
- Provide visual aids
- Consider page layout and font usage when creating classroom material; avoid script, irregular columns, break information into smaller chunks on page. Use 12 to14-point font in evenly spaced sans serif fonts such as Ariel and Comic Sans;

avoid underlining, italics, and text in bold caps. Provide ample space for written responses. Arrange work from easiest to hardest.

Environment

- Provide structured time for organization of materials (set up laptop at beginning of class; allow additional time to update planner)
- Offer preferential seating, e.g. close to positive role model, close to board, close to teacher
- Guide opportunities for student response in manner that supports memorization challenges
- Post charts, graphs, number line, etc. in class, including alphabet charts and number charts (assists with letter & number formation & working memory issues)
- Do not use round-robin reading or read out loud unless student volunteers
- Evaluate the classroom structure against the student's needs (flexible structure, firm limits, etc.)
- Keep the classroom quiet during intense learning times
- Provide noise buffers such as headphones, ear phones or ear plugs
- Reduce visual distractions in the classroom
- Keep workspaces clear of unrelated materials

Technology

- Consult with Technologist Specialist
- Provide technology tools- laptop, tablet, headphone, microphone, printer, scanner for teachers & students
- Provide training for use of technology for teachers & students
- Provide a computer for written work
- Allow student to type written work
- Provide access to digital text & materials (textbooks, workbooks, chapter books)
- Provide access to audiobooks through services like Learning Ally and Bookshare memberships
- Permit the student to record class lectures/use a Livescribe Smartpen
- Provide access to word prediction software, text-to-speech software, extensions, typewriter to edit fillable forms; PDF worksheets (teacher scans worksheet & worksheet can then be edited by student using tools; document conversion)
- Provide access to word prediction software, text-to-speech & speech-to-text software or extensions for written assignments
- Have an integrated, consistent technology "package" in place when the student begins the school year
- Provide access to assisted listening device

Social / Emotional

- Gauge frustration levels
- Provide a variety of activities in which the student can demonstrate mastery and success

- Allow for frequent breaks and vary activity (when frustrated)
- Provide frequent positive feedback and reinforcement
- Praise effort and process, not just final output
- Allow access to school counselor if needed
- Be sensitive about pull-out services; Does the child always miss gym? Is gym a class that helps the child "get through the day?"

Assignments

- Give directions in a variety of ways
- Give oral prompts or cues
- Avoid penalizing for penmanship or spelling errors
- Allow student to record or type assignments
- Offer use of scribe
- Provide extended time for completion
- Reduce pen-to-paper assignments
- Give option to give oral presentations instead of written reports
- Shorten assignments or break large assignments into chunks
- Give advance notice of assignments
- Provide clear expectations for assignments; provide rubrics
- Model or give examples of expected finished output
- Provide opportunities for interest-based projects
- Avoid word searches, crossword puzzles, letter jumbles or "fill in the letter" riddle math sheets

Tests / Exams

- Consider performance-based measures
- Use alternative test formats
    - fewer selections for multiple choice
    - Chunk matching questions into smaller sections
    - Give word bank for fill in the blank, and short answer
    - Provide word bank for "labeling tests," such as states & capitals, parts of a microscope, etc.
    - Avoid essay questions
- Allow extended time for completion
- Read test to student
- Provide alternative seating for testing (so test can be read to student away from peers)
- Allow tests to be taken in a room with few distractions (e.g., the library)
- Conduct testing over multiple days
- Avoid penalizing for spelling, punctuation or grammar
- Allow oral responses or scribe
- Allow the student to complete an independent project as an alternative test
- Give advance notice of test and exams, allowing additional time for studying

Math Assignments & Tests / Exams

- Read and explain word problems, or break problems into smaller steps.
- Allow use of times tables chart or math charts / calculator on assignments & exams
- Allow use of graph paper for working math problems or allow students to turn lined paper vertically creating columns for numbers

Practicing-teacher assistance programs (RSMo 168.400) shall offer two hours of in-service training provided by each district for all practicing teachers regarding dyslexia & related disorders.

Task Force Recommendations*:

- In-service training (required two hours) should include
  - introduction to dyslexia and dyslexia simulation;
  - key areas of literacy and reading intervention; and
  - screening/progress monitoring, data-based decision-making, fidelity, and classroom supports.
- Training for secondary-level staff should be tailored to unique needs including dyslexia characteristics over a lifetime.

*Prior to 2018-19 schoolyear, DESE will make available online training that will fulfill the mandated requirement. More information will come.

Appendix A

Definition

The following definition of dyslexia is established in MO state code:

Dyslexia, a disorder that is neurological in origin, characterized by difficulties with accurate and fluent word recognition and poor spelling and decoding abilities that typically result from a deficit in the phonological component of language, often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction, and of which secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.

Definition Components

Neurological in origin

The brain of a child with dyslexia is structurally and functionally different from the brain of a child who does not have dyslexia. These neurological differences may negatively impact abilities related to phonological processing, rapid naming, word recognition, reading fluency and reading comprehension (Shaywitz, et. al, 2006).

Characterized by difficulties in accurate and/or fluent word recognition

A child with dyslexia has difficulty with consistency in accurate word identification. Reading rate and expression may be negatively affected, which may affect the skill of reading fluency--the ability to read quickly, accurately, and with good comprehension (National Reading Panel, 2000).

A deficit in spelling and decoding abilities

A student with dyslexia does not intuitively learn to spell and decode word strictly by exposure. Direct explicit and systematic instruction in the application of phonics rules governing decoding and spelling is necessary for effective learning of print language (Torgeson, et.al, 1999).

A deficit in the phonological component of language

Children with dyslexia have a core deficit in processing skills (Torgeson, et.al, 1996)

- Phonological awareness is usually the most pronounced deficit and refers to the understanding and awareness that spoken words consist of individual sounds (i.e., phonemes) and combinations of speech sounds (i.e., syllables and onset-rime units such as f/ight, r/ight, t/ight). Two important phonological awareness activities are blending (i.e., combining phonemes to form words) and segmentation (i.e., breaking spoken words down into separate and discreet sounds or phonemes). Kilpatrick (2016) states that

phonological awareness at the advanced level (substitution/deletion/addition) is most predictive of reading acquisition and success. **Torgesen (1997) relates that phonological awareness is more closely related to success in reading than intelligence**.

- Phonological memory isthe ability to temporarily store bits of verbal information and retrieve it from short-term memory (Shaywitz, 2003).
- Rapid automatic naming (RAN) is the ability to accurately and quickly retrieve the name of a letter, number, object, word, picture, etc., from long-term memory. RAN is a skill predictive of efficacy in reading fluency, comprehension and rate (Neuhaus, et.al, 2001).

Often unexpected in relations to other cognitive abilities…

A child with dyslexia exhibits reading difficulties in spite of demonstrated cognitive abilities in other areas. A key concept in dyslexia is unexpected difficulty in reading in children who otherwise possess the intelligence, motivation, and reading instruction considered necessary for the development of accurate and fluent reading (Shaywitz, 2003). Dyslexia is not caused by low general intellectual ability, but rather by special difficulties processing the phonological and orthographic features of language that can co-exist with all ranges of intellectual ability. However, some students with dyslexia may have strong cognitive abilities that allow them to compensate for or mask their deficits on certain tasks. These intellectual and compensatory skills may enable these students to obtain reading scores in the average range yet still have dyslexia. Research shows us that there is no difference between IQ-consistent poor readers and IQ-discrepant poor readers, providing very little justification for the use of the IQ-discrepancy approach solely to identify a reading disability (Stuebing, Fletcher, LeDoux, Lyon, Shaywitz & Shaywitz, 2002).

Secondary Consequences of Dyslexia

- Difficulties in reading comprehension
- Impeded growth of vocabulary and background knowledge traced to reduced reading experiences
  (Lyon et.al, (2003) found that because students with dyslexia do not read as much as their skilled reading peers, their word and background knowledge cannot keep pace with age and grade level expectations. Without adequate reading experiences, vocabulary development and background knowledge, reading comprehension is ultimately impaired.)
- Reduced elective independent reading
- Reduced motivation and interest in school
- Reduced academic success
- Lower self-esteem
- Anxiety, anger and depression
- Impeded social and emotional development

Comprehensive Literacy for All: Key Principles

Development of Phonological Awareness

Phonological Processing

> Torgesen (1995) defines phonological awareness as "the sensitivity to, or an explicit understanding of, the sound structure of spoken words and the ability to identify, think about, and manipulate the individual sounds" within language.

This awareness has the most impact on the student's ability to understand the alphabetic principle. It is the key skill of successful readers. Deficits in this area will result in difficulty learning phonics through traditional teaching methods and require specific interventions to foster this development. Phonological awareness skills develop on a continuum (Adams et al., 1998; Gillon, 2004; Goswami, 2000; Paulson, 2004; Rath, 2001) and therefore should be taught in the following order:

- Word
- Syllables
- Onset-Rime/Rhyming/Alliteration
- Isolation
- Blending
- Segmenting
- Deletion
- Substitution

The most complex level of phonological awareness happens within the smallest units of sounds and is referred to as phonemic awareness. Students who have well-developed phonemic awareness are proficient in the abilities to recognize the number of sounds within a word, isolate and then recall or name those sounds.

Development of Phonemic Awareness progresses as follows:

- Sound blending (starting with two-phoneme words and building)
- Sound matching (initial, then final sound in a word)
- Sound isolation (initial, final, then medial sound in a word)
- Sound segmentation (starting with two-phoneme word and building)
- Sound manipulation (substitution, deletion, addition, and reordering of sounds in a word)

Phonological awareness skills continue to develop through third grade and beyond, particularly for students who struggle. It is important that explicit and systematic instruction in phonological awareness be monitored and mastered before cessation. (Kilpatrick, 2016)

Phonological Memory

- Remembering a sequence of unfamiliar sounds
- Storing intermittent sequences of sounds in short-term memory and retrieving them for the purpose of decoding multi-syllabic words
- Predictive of effective decoding skills and producing larger vocabularies
- Assistive in spelling multi-syllabic words

Rapid Automatic Naming

- The accurate and efficient retrieval of information from long-term memory
- Considered to be a highly correlated, integral part of reading fluency (Neuhaus (2002)
- Weaknesses in both phonological awareness and RAN often linked to more severe reading problems

Alphabetic principle

- Letter naming difficulty
- Weakness in letter-sound identification
- Difficulty recognizing and forming letters
- Difficulties with directionality
- Trouble with sequencing/alphabetization

Intervention: A Structured Literacy Framework

Center for Effective Reading Instruction (CERI)
https://effectivereading.org/

Elements of Instruction (*What to teach*)

- Foundational Concepts of Oral and Written Language
- Structure of Language
    - Phonology
    - Orthography
    - Morphology
    - Semantics
    - Syntax
    - Discourse Organization

Instructional Principles (*How to teach it*)

- Systematic and cumulative
- Sequential
- Explicit, direct instruction
- Diagnostic teaching
- Synthetic and analytic
- Comprehensive and inclusive

Successful intervention contains the following:

- Aggressively address and correct students' phonological awareness difficulties and teach phonological awareness to the advanced level
- Provide phonic decoding instruction and/reinforcement
- Provide ample opportunities to apply developing skills to reading connected text.

(Kilpatrick, 2016)

Appendix B

How to Use the Screening Organizer

The organizer is provided as a way to evaluate and operationalize the screening tools which are currently in place within buildings or across districts (LEAs) to determine what, if any, additional measures are needed to supplement the screening process. Every effort was made to ensure that the tools listed were easily accessible, free or at very low cost. This list is not all-inclusive, nor is it to be considered "approved or recommended." LEAs with existing universal screening protocols may be utilizing measures or products not included within this organizer.

Classroom diagnostic examples are provided as options to LEAs for gathering more in-depth information for analysis of skill deficits and to drive instruction.

Appendix C

Behavioral Indicators of Students at Risk of Dyslexia
(retrieved from http://understood.org and http://learningally.org)

Pre-K

- Delayed speech
- Mispronouncing words
- Difficulty naming objects
- Struggles learning and naming colors and letters
- Difficulty creating rhymes
- Difficulty following multi-step directions
- Uninterested in reading/books

Grades K-2

- Trouble matching letters to correct sounds
- Difficulty blending letter sounds
- Confusing letters that look similar
- Trouble with directionality (left/right, next/last)
- Difficulty learning alphabet, numbers, days of the week
- Avoids reading
- Spelling inconsistently
- Trouble remembering sight words
- Trouble with copying
- Poor handwriting
- Reading level below expectation
- Lacks confidence about school
- Exhibits anxiety

Grades 3-5

- Poor decoding and reading fluency
- Comprehension issues
- Weakening vocabulary knowledge
- Guesses or skips over words when reading
- Grammar mistakes
- Transposing letters/numbers when writing
- Poor spelling
- Trouble distinguishing similar sounds words
- Poor written expression

- Poor organization
- Poor memory for facts, sequences, dates
- Difficulty making inferences
- Poor tester

Family History and Dyslexia

There is overwhelming evidence that dyslexia is heritable and runs in families. It is considered to be a significant risk factor (Snow, Burns and Griffin, 1998) especially if a parent is affected. Collecting additional information regarding family history may reveal additional information that can be considered in a student's learning profile.

Appendix D

Student _____ Grade _____

Date of Birth _____ Date of Screening _____

Universal screening of essential reading skills and risk factors related to dyslexia was completed as part of the district assessment plan and indicates that your child needs more instruction in the following skill area(s):

_____

To help improve your child's foundational reading skills, targeted intervention will be provided ____ times a week. Each intervention session will last approximately ____ minutes. Interventions will be provided by teachers or district staff under teacher supervision. Strategies and interventions to be implemented will include the following:

_____

_____.

Progress monitoring will be completed (***frequency***) to measure your child's response to the intervention and to guide decisions about further intervention.

Note: This is a plan for intervention and not a special education or related service under the Individuals with Disabilities Education Act (IDEA) or Section 504 of the Rehabilitation Act. Screening was completed in accordance with the Missouri requirement to identify children who may be at risk for dyslexia. If your child's response to intervention indicates a long-term problem which may require special education and related services, a referral will be made for evaluation. You may also request an evaluation to determine if your child has a disability and is eligible for special education and related services by notifying your child's teacher or me.

_____ ____/ ____/____

Principal Date