

Dyslexia Resource Guide

July 2015



Additional resource documents will be added as available.

For questions or concerns please email: ADE.Dyslexia@arkansas.gov.

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Purpose of the Arkansas Dyslexia Resource Guide

The purpose of the Arkansas Dyslexia Resource Guide is to provide school districts, public schools, and teachers with guidance to meet [Ark. Code Ann. § 6-41-601 et seq.](#) This guide will clarify the Arkansas Department of Education Rules Governing How to Meet the Needs of Children with Dyslexia related to the assessment, identification, and services for these students. The Dyslexia Resource Guide will be developed and updated by a committee of ten representatives who has experience working in the field of dyslexia intervention appointed by the Commissioner of Education from the following organizations:

- i) The Arkansas Association of Educational Administrators (AAEA);
- ii) The Arkansas Department of Education, Learning Services (ADE);
- iii) The Arkansas Department of Higher Education (ADHE);
- iv) The Arkansas Education Association (AEA);
- v) The Arkansas School Boards Association (ASBA);
- vi) The Arkansas School Psychology Association (ASPA);
- vii) An Education Service Cooperative Administrator (ESC); and
- viii) Three professionals who have worked in a public school and are knowledgeable in and have expertise in dyslexia screening and interventions.

Since Arkansas is a local control state, school districts have considerable autonomy in making decisions regarding the diagnostic tools and instructional programs to use. However, the department is charged with defining the dyslexia therapy program. Information in this regard is included in this guide.

Introduction

Dyslexia refers to a learning disability that affects reading and writing. What dyslexia is, what causes it, and what can be done about it are commonly misunderstood topics. For example, a commonly held belief is that dyslexia results from seeing things reversed. When in fact, dyslexia is not due to a problem with vision, but rather a problem within language.

Although much remains to be learned about dyslexia, remarkable progress has been made in our understanding as a result of decades of research. The goal of this guide is to provide information about dyslexia that is intended to be helpful to educators, parents, and students.

Section I

Defining Dyslexia

It is important to acknowledge that students may struggle in learning to read for many reasons, including lack of motivation and interest, weak preparation from the pre-school home environment, weak English language skills, or low general intellectual ability (Snow, Burns, & Griffin, 1998). In fact, the family and socio-cultural conditions associated with poverty actually contribute to a broader and more pervasive array of reading difficulties in school-aged children than do the neurological conditions associated with dyslexia. Students with dyslexia represent a *subgroup* of all the students in school who experience difficulties learning to read.

Dyslexia is defined in Ark. Code Ann. § 6-41-602 as a learning disability that is neurological in origin, characterized by difficulties with accurate and fluent word recognition, poor spelling and decoding abilities that typically result from the phonological component of language. These characteristics are often unexpected in relation to other cognitive abilities. This definition is borrowed from the most widely accepted current definition of dyslexia that is used by the International Dyslexia Association:

Dyslexia is a specific learning disability that is neurological 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.

It is useful to consider each of the elements of this definition:

Dyslexia is a specific learning disability that is neurological in origin. Dyslexia is a term used to refer to a specific type of learning disability. It is important to understand that students can be diagnosed with a specific learning disability as defined in the Diagnostic and Statistical Manual of

Mental Disorders, Fifth Edition (DSM-V), but not automatically qualify as having a disability as defined in Individuals with Disabilities Education Act (IDEA, 2004), and the Arkansas special education rules and regulations, which govern the provision of special education services to students with disabilities. These regulations specify that each school district is responsible for ensuring that all children with disabilities, within its jurisdiction, who are in need of special education and related services are identified, located, and evaluated. The regulations make clear that having a disability in and of itself does not make a child eligible for special education services. The child must also have a need for special education and related services arising from that disability. The impact of the disability on the child must be significant enough that it adversely affects the student's access to general education curriculum, and the child's ability to make meaningful educational progress.

The statement that dyslexia is neurological in origin implies that the problem is not simply one of poor instruction or effort on the part of the student. We know that individuals with dyslexia struggle to read well despite adequate instruction and effort. We know that dyslexia tends to run in families. A child from a family with a history of dyslexia will not necessarily have dyslexia but inherits a greater risk for reading problems than does a child from a family without a family history of dyslexia. Brain imaging studies show differences in brain activity when individuals with dyslexia are given reading-related tasks compared to the brain activity shown by normal readers. However, although it is tempting to view differences in brain activity as the cause of dyslexia, these differences are just as likely or even more likely to be a consequence of the reading problem rather than the cause of it. The reason for saying this is that when individuals with dyslexia respond positively to intervention, their brain activity "normalizes" and becomes comparable to that of normal readers.

Dyslexia is characterized by difficulties with accurate and / or fluent word recognition and by poor spelling and decoding abilities. A common feature of dyslexia is difficulty with accurate and / or fluent word recognition and by poor spelling and decoding abilities. Although students with dyslexia can show a variety of subtle or not-so-subtle language problems prior to entry

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in school (Catts & Kahmi, 2005), their problems become very noticeable once they begin learning to read. They have extreme difficulties acquiring accurate and fluent phonemic decoding skills (phonics), and this interferes with their ability to read text accurately or to read independently. Students with dyslexia struggle to acquire both knowledge of letter-sound correspondences and skill in using this knowledge to “decode” unfamiliar words in text. In first grade, their difficulties with accurate word identification quickly begin to interfere with the development of text reading fluency. Difficulties decoding unfamiliar words in text interfere with the development of fluency because, to become a fluent reader in the primary grades, students must learn to recognize large numbers of words automatically, or at a single glance. Students learn to recognize individual words “by sight” only after they accurately read them several times (Ehri, 2002). Thus, the initial difficulties that students with dyslexia have in becoming accurate and independent readers interfere with the development of their “sight word vocabularies,” and they quickly fall behind their peers in the development of reading fluency.

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. The discovery that students with dyslexia experience difficulties processing the phonological features of language was important in establishing the foundations of the current scientific understanding of dyslexia (Liberman, Shankweiler, & Liberman, 1989). The phonological processing problems of students with dyslexia are usually not severe enough to interfere with the acquisition of speech, but they sometimes produce delays in language development, and they significantly interfere with the development of phonemic awareness and phonics skills for reading. Spoken words are composed of strings of phonemes, with a phoneme being the smallest unit of sound in a word that makes a difference to its meaning. Thus, the word *cat* has three phonemes, /c/-/a/-/t/. If the first phoneme is changed to /b/, it makes the word *bat*, or if the second phoneme is changed to /i/, it makes the word *bit*. When students first begin to learn to read, they

must become aware of these individual bits of sound within syllables so they can learn how our writing system represents words in print. The letters in printed words correspond roughly to the phonemes in spoken words. Once a child understands this fact, and begins to learn some of the more common letter/sound correspondences, he/she becomes able to “sound out” simple unfamiliar words in print. Skill in using phonemic analysis to identify words that have not been seen before in print (and beginning readers encounter these words in their reading almost every day) is one of the foundational skills required in learning to read text independently (Share & Stanovich, 1995).

Because of their phonological processing difficulties, students with dyslexia experience difficulties acquiring phonemic awareness, which is followed by the difficulties learning letter sounds and phonemic decoding skills that have already been described. Phonological processing skills are only moderately correlated with general intelligence, so it is possible to have average, or above average general intellectual ability and still experience the kind of reading difficulties observed in students with dyslexia. A student can also have below average general intellectual skills and have the same kind of phonological processing disabilities. Dyslexia is *not caused* by low general intellectual ability, but rather by special difficulties processing the phonological features of language, that can co-exist with above average, average, or below average general intellectual ability. Phonological processing abilities required for acquisition of early reading skills are normally distributed in the population, just like musical talent, athletic ability, or most other human abilities. It is possible to have extremely weak phonological processing skills, or to be only mildly impaired in this area. It is also possible to have above average skills in the phonological domain. If students have extreme phonological processing weaknesses, it is very difficult for them to acquire early reading skills, while students with mild difficulties in this area often require only a moderate amount of extra instruction to become good readers (Wagner & Torgesen, 1987).

Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge. One of the most serious consequences of early difficulties becoming an accurate, confident, fluent, and independent reader is that students read less. For example, a study from 1988 indicated that students reading at the 50th percentile (average) in 5th grade read about 600,000 words in and out of school during the school year. In contrast, students reading at the 10th percentile read about 50,000 words during the same period of time (Anderson, Wilson, & Fielding, 1988). Large differences in reading practice emerge as early as the beginning of first grade (Allington, 1984). In addition to directly affecting the development of reading fluency, these practice differences have a significant impact on the development of other cognitive skills and knowledge, such as vocabulary, reading comprehension strategies, and conceptual knowledge (Cunningham & Stanovich, 1998). This latter type of knowledge and skill, in turn, is important for comprehension of texts in upper elementary, middle, and high school (Rand, 2002). Of course, other “secondary consequences” to the child’s self-esteem and interest in school can be just as important as the effect on intellectual skills in determining ultimate school success.

Section II

Early Indicators and Characteristics of Dyslexia

Characteristics of students with dyslexia follow from how it is defined. Students with dyslexia are likely to perform poorly on measures of phonological processing, decoding nonwords, and developing an adequate pool of sight words.

Beginning with phonological processing, measures of phonological awareness tend to be most predictive of success at early reading. Common phonological awareness tasks include elision (saying a word after dropping a sound), blending, and identifying sounds in words. Phonological memory can also be affected, and phonological memory tasks can be particularly useful for young children who sometimes find phonological awareness tasks too cognitively complex to understand. Common phonological memory tasks include digit span and nonword repetition. Finally, learning to read involves pairing pronunciations with visual symbols. Rapid naming tasks measure the extent to which children have been able to link pronunciations with symbols. Examples of rapid naming tasks include quickly naming of objects, colors, digits, and letters.

Turning to reading, difficulty in learning the names and sounds of letters is an early indicator of dyslexia. Perhaps the most central characteristics of dyslexia are problems in word-level reading. Difficulties are found in both accuracy and speed or efficiency at decoding nonwords and sight words. Difficulty with reading words results in slow and error-prone oral reading fluency. Spelling and writing problems are common. Reading comprehension difficulties are also common, but are considered to be largely a secondary problem caused by the primary problem of difficulty in fluently reading the words on the page.

Children likely to have difficulties learning to read can be identified as early as preschool or kindergarten, but it is frequently not possible to differentiate in preschool or kindergarten between

students who have dyslexia, and students who are at risk for reading problems for other reasons. For example, the clearest early indicators of dyslexia in kindergarten are difficulties acquiring phonemic awareness, learning letter/sound correspondences, and learning to decode print using phonemic decoding strategies (Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2001). Unfortunately, many children of poverty, or those with limited exposure to Standard English in their homes, also manifest these same types of difficulties in kindergarten. An accurate diagnosis of dyslexia in preschool or kindergarten is more likely when these problems occur in students who: 1) have strong abilities in other areas of language such as vocabulary; 2) come from homes that provide a language and print rich preschool environment; and, 3) have a first or second-degree relative who experienced severe early reading difficulties. However, inherent phonological processing difficulties can also occur in children of poverty who come to school with limited vocabularies and knowledge of print. Although the phonological weaknesses of these students most likely result from a lack of certain kinds of language experience in the home, they may also be the result of biologically based, inherent phonological processing weaknesses.

Section III

Response to Intervention

Response to Intervention (RTI) is designed to ensure all students receive effective, research-based instruction to meet their needs. RTI frameworks combine prevention and intervention with ongoing assessment in a school-wide system to identify students' instructional needs and appropriate learning supports. The Individuals with Disabilities Education Act (IDEA, 2004) allows for the use of a student's response to intervention for identifying specific learning disabilities, including dyslexia. Importantly, the IDEA law requires a student be provided high-quality, research-based general education instruction to ensure a student's difficulties are not the result of inadequate instruction. Thus, RTI provides a framework to coordinate levels of instruction and intervention and to document high-quality instruction.

The most common implementation of RTI is through a multi-tiered system of support using a combination of screening tools, effective classroom instruction, intervention, and data-based decision making to support all students within a school. Within each tier, students receive instruction using scientifically based reading research. Students who make insufficient progress in initial tiers of instruction are provided more intensive and specific intervention to better meet their needs.

Tier I: Core Instruction

Tier I Core Instruction focuses on providing effective, research-based instruction to all students in general education and provides the foundation for successful RTI. Tier I, or classroom instruction focuses on the essential, grade-specific, reading standards across content areas and should meet the needs of the large majority of students, allowing them to successfully meet grade level expectations. High quality, effective reading instruction is paramount prior to screening for and identifying students who may need Tier II intervention.

As part of Tier I, all students are screened on reading measures to determine instructional needs and identify students with risk factors or reading deficits. Results may indicate a student needs supplemental intervention supports in addition to Tier I instruction. If screening results identify a large number of students with risk factors, school personnel should consider the fidelity of the administration of the screening tools, the adequacy of the core curriculum, and/or whether differentiated learning activities need to be added to better meet the needs of the students. Differentiated learning practices can involve meaningful pre-assessments, flexible grouping based on needs, instructional supports such as peer-tutoring or learning centers, and accommodations to ensure that all students have access to the instructional program.

Effective Tier I Core Instruction is the first line of defense. It is critical that classroom teachers build skills in effective, research-based reading instruction that includes the five essential components (phonemic awareness, phonics, comprehension, fluency, and vocabulary) and provides differentiated instruction to meet the needs of all students. If at any time students continue to struggle with one or more of these components, schools should follow their RTI plan.

Tier II: Supplemental Intervention

The universal screening results should potentially identify those students at risk for poor learning outcomes. Students who do not meet the cut-points for risk indicate a skill level where success would be unlikely without a supplemental or intensive, targeted intervention in Tier II or Tier III. Teachers use formative assessments and observations to place students in the appropriate tiers of intervention.

In order to provide targeted interventions at the correct level of difficulty, anecdotal notes from classroom observations and the results from additional diagnostic tools should be considered.

Diagnostic tools refer to specific tests or instruments selected to measure specific areas of concern.

For example, when students demonstrate difficulty on a phoneme segmentation screener,

administering additional phonological awareness assessments will identify the specific point of difficulty on the phonological awareness continuum. The results from these targeted assessments or diagnostic tools are critical in planning interventions focused on the student's needs. The use of diagnostic tools does not lead to a diagnosis, but identifies focus areas for differentiated instruction or a targeted intervention. This process for gathering additional data would be considered part of the Level 1 Dyslexia Screening Process.

Many students identified for Tier II may need an AIP/IRI. See Arkansas Department of Education Rules Governing the Arkansas Comprehensive Testing, Assessment and Accountability Program and the Academic Distress Program, August 2014, Section 7.0 Student Accountability regarding Academic Improvement Plans (AIPs) and Intensive Reading Improvement (IRI) plans for additional regulations regarding intervention programs for students exhibiting substantial reading difficulty which may include students exhibiting the characteristics of dyslexia. AIPs and IRI plans require parental notification and written consent. This could be one avenue for notifying parents of the results of the screeners and an opportunity to provide them with information and resource materials pertaining to dyslexia (A.C.A 6-41-604).

Progress monitoring data is used to determine when a student is or is not responding to intervention. Until a student maintains scores above the cut-point for two consecutive cycles, progress monitoring is recommended at least every two weeks. When a student is not making sufficient progress, the school-based decision making team should consider increasing the intensity of an intervention. This may be attained in several ways, such as adjusting the level of intervention, providing individualized or small group instruction, increasing the amount of time for intervention, or increasing the frequency of sessions.

Tier II intervention is in addition to the Tier I instruction. For many students, a supplemental, Tier II intervention provides the necessary support to improve reading achievement to grade-level expectations and maintains reading growth without further intervention.

If a student continues to make insufficient progress or fails to respond to intervention, the RTI committee may consider further screening, a Level II: Dyslexia Screener, to determine the nature of the reading problem and the severity of the reading difficulty. Best practice would be to obtain written parental consent before this specialized evaluation takes place.

Tier III: Intensive Intervention

Some students do not demonstrate adequate response to Tier I and Tier II intervention and continue to struggle with reading and/or fall further behind in reading achievement despite the increased supports provided by the supplemental Tier II intervention. Continued failure to reach grade-level expectations may result in a school-based decision-making team recommending entry into a Tier III reading intervention based on the needs of the student. Schools should continue to communicate and include parents in the decision process.

Students requiring a more intensive intervention (Tier III) may receive additional instructional time, individually or in a small group, with more targeted, specialized content or instructional delivery, increased practice and feedback opportunities, or attention given to cognitive processing strategies. Students receiving Tier III intervention also receive frequent and ongoing progress monitoring.

If screening indicates characteristics of dyslexia exist, then the student shall be provided dyslexia intervention services (Ark. Code Ann. § 6-41-603). Dyslexia intervention may occur at Tier II or Tier III. Dyslexia intervention is a general education component of RTI. In Tier II and Tier III, teachers continue to track student learning, establish goals, plan instruction, and make appropriate adjustments to instruction based on student progress toward achievement of state standards. Referral for Special Education may occur if a student fails to make adequate progress.

Section IV

Initial Screening

Early identification of students at risk for reading difficulties is critical in developing the appropriate instructional plan. “The best solution to the problem of reading failure is to allocate resources for early identification and prevention.” (Torgesen, 2000). Initial screening is the first step in identifying the students who are at risk for learning difficulties. (c)(1) If the initial, level I, or level II dyslexia screening indicates that a student has characteristics of dyslexia, the Response to Intervention (RtI) process shall be used to address the needs of the student (A.C.A 6-41-603).

Initial screening measures consist of short, informal probe(s) given to all students to identify those at risk or at some risk for not meeting grade-level standards. Screeners should be administered with fidelity to include without limitation, phonological awareness, sound symbol recognition, alphabet knowledge, decoding skills, rapid naming skills and encoding (A.C.A. 6-41-603). The results should be used to evaluate the effectiveness of the core instructional program and to determine which students need additional assessments and/or interventions. If screening results identify a large number of students with risk factors, school personnel should consider the fidelity of the administration of the screening tools, the adequacy of the core curriculum, and/or whether differentiated learning activities need to be added to better meet the needs of the students. Differentiated learning practices can involve meaningful pre-assessments, flexible grouping based on needs, instructional supports such as peer-tutoring or learning centers, and accommodations to ensure that all students have access to the instructional program.

While results of the initial screening will identify struggling learners, they may not provide all of the information needed to develop an instructional plan, including appropriate interventions. Additional information may be needed to pinpoint areas of basic early reading skills that need acceleration.

Who should be screened? According to Ark. Code Ann. § 6-41-603, a school district shall screen

- 1) Each student in kindergarten through grade two (K-2);
- 2) Kindergarten through grade 2 (K-2) students who transfer to a new school and have not been screened;
- 3) Kindergarten through grade 2 (K-2) students who transfer from another state and cannot present documentation that the student has had similar screening;
- 4) A student in grade three or higher experiencing difficulty, as noted by a classroom teacher.

Exemptions:

- 1) Students with an existing dyslexia diagnosis.
- 2) Students with a sensory impairment.

The screening components may not be appropriate for students with severe cognitive limitations. It is recommended that school staff work closely with district administrators to determine if the screening is appropriate for each student. Careful consideration must be given to any decision to exclude a student from screening.

The screening of students shall be performed with fidelity and include without limitation (Ark. Code Ann. § 6-41-603):

- 1) Phonological and phonemic awareness;
- 2) Sound symbol recognition;
- 3) Alphabet knowledge;
- 4) Decoding skills;
- 5) Rapid naming; and
- 6) Encoding skills.

The initial screener as defined in the Ark. Code Ann. § 6-41-603 includes the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) or an equivalent screener. Additional screening assessments will need to be administered to measure components that are not measured by DIBELS or the equivalent screener.

The performance criteria (i.e. cut-points, benchmarks) should be used to determine if the student is unlikely to achieve reading goals without receiving additional targeted intensive support. Intensive support refers to interventions that include something more or something different from the core curriculum or supplemental support. Progress should be monitored throughout to determine the effectiveness of the intervention.

Personnel administering the screener should be trained in the screening tools. School resources and enrollment will influence individual district decisions about who should give and score the screening tools. Because the data will be used to help guide instruction, classroom teachers should participate in screening, scoring, and progress monitoring.

If the screener under subdivision (a)(1) of the law shows that a student is at risk, or at some risk then a Level I Dyslexia Screener shall be administered (A.C.A. 6-41-603). The Level I Dyslexia Screener is described in Section V of the guide.

Initial screening is not required for all students in grades three and higher. However, Ark. Code Ann. § 6-41-603 states that a student in grade three or higher experiencing difficulty, as noted by a classroom teacher, in phonological and phonemic awareness, sound symbol recognition, alphabet knowledge, decoding skills, and encoding skills should be screened using assessments chosen by the school's RTI team.

Initial Screening

Required Component	Possible Screening Tools
Phonological and Phonemic Awareness	DIBELS: First Sound Fluency (FSF) (K) DIBELS: Phoneme Segmentation Fluency (PSF) (K-1) AIMSWEB: Phoneme Segmentation Fluency (K-1) Abecedarian Reading Assessment: Phonological and Phonemic Awareness Phonological Awareness Skills Screener (PASS) (K-2 & struggling learners)
Alphabet Knowledge	DIBELS: Letter Naming Fluency (LNF) (K-1) AIMSWEB: Letter Naming Fluency (LNF) (K-1) Abecedarian Reading Assessment: Letter Knowledge Lakeshore: Alphabet Letter Knowledge Assessment Reading A-Z: Alphabet Naming Assessment
Sound Symbol Recognition	DIBELS: Nonsense Word Fluency (NWF) AIMSWEB: Letter Sound Fluency College Station TX, Texas A&M: Quick Phonics Screener (K-6) Scholastic: CORE Phonics Survey (K-8) Houghton Mifflin: Phonics/Decoding Screening Test
Decoding Skills	DIBELS: Nonsense Word Fluency (NWF) (K-2) DIBELS: Oral Reading Fluency (ORF) (1-6) AIMSWEB: Nonsense Word Fluency (K-1) Abecedarian Reading Assessment: Decoding DIBELS: Oral reading Fluency (ORF) (1-6) FCRR: Oral Reading Fluency Passages (7-12)
Rapid Naming	Arkansas Rapid Naming Screener (AR-RAN) (K-2 based on times)(3-12 based on observed behaviors)
Encoding	Word Journeys: Kindergarten Inventory of Spelling (KIDS) (K) Words Their Way: Primary Spelling Inventory (K-3) Words Their Way: Elementary Spelling Inventory (1-6) Words Their Way: Upper-Level Spelling Inventory (upper elem., middle, high school, postsecondary) Gentry's Developmental Spelling Inventory (K-8) FCRR: Phonics Screening Inventory (intermediate, middle, high school)

This initial screener list is to be used as a resource and provides information to assist in research use to determine which screener would provide the most beneficial data for each subcomponent of literacy development at each grade level. The Dyslexia Resource Guide Committee is in no way endorsing any of the screeners listed here as good or bad screeners. The list is in no way all inclusive or to be considered as “approved” screeners.

Sources for additional screeners:

<https://dibels.org/dibelsnext.html>

<http://www.rti4success.org/resources/tools-charts/screening-tools-chart>

<http://www.sedl.org/reading/rad/chart.html>

http://www.sde.ct.gov/sde/lib/sde/pdf/curriculum/cali/elementary_assessments_4-9-12.pdf

http://www.sde.ct.gov/sde/lib/sde/pdf/curriculum/cali/secondary_assessments_4-9-12.pdf

Section V

Level 1 Dyslexia Screening

Once it is determined that the initial screener indicates a student is at-risk or at some risk for reading failure and a student does not adequately respond to intervention, a dyslexia screening process shall begin to determine if characteristics of dyslexia are present (Ark. Code Ann. § 6-41-603). The Level I Dyslexia Screening is a process of gathering additional information that should include progress monitoring data, work samples, formative literacy assessments, and additional dyslexia screening tools. Classroom instruction should provide appropriate differentiation and interventions tailored to meet the child's individual needs.

A school-based decision-making team should meet to review student records and progress, inform parents of concerns, and obtain parental consent when additional assessments are needed to determine if characteristics of dyslexia exist. RTI team should consider the following factors:

- The child has received effective classroom instruction;
- The student has adequate intelligence or the ability to learn;
- The lack of progress is not due to sociocultural factors such as language differences, irregular attendance, or background experiences.

The Level I Dyslexia Screening process shall include documentation of the components of literacy to include phonological and phonemic awareness, sound symbol recognition, alphabet knowledge, decoding skill, rapid naming skills, and encoding skills. The determination of existing characteristics should be based on multiple sources of data.

Section VI

Level II Dyslexia Screening

The Level II Dyslexia Screening is a more detailed process for identifying a pattern of strengths and weaknesses documenting the characteristics of dyslexia. The determination of existing characteristics may be based on performance criteria (i.e. cut-points, benchmarks) of the chosen assessments to be used as the Level II Dyslexia Screening. Norm-referenced, diagnostic assessments designed to measure the underlying cause, characteristics, and outcomes should be administered to identify the characteristics of dyslexia. The specific skills to be tested include phonological awareness, rapid naming, word reading, decoding, fluency, spelling and reading comprehension. Examples of screening tools may be found in Appendix G.

When reporting results of norm-referenced tests, standard scores should be used. Criterion-referenced and group achievement tests scores may be informative as historical or secondary information, but are considered weaker dyslexia identification tools. Individual subtests scores should be used rather than composite or cluster scores, because a skill is only as strong as the weakest subskill. For example, consider the Elision and the Blending subtest scores on the CTOPP-2 rather than the Phonological Awareness composite score.

The Luke Waites Center for Dyslexia and Learning Disorders at Texas Scottish Rite Hospital for Children created the *Characteristic Profile of Dyslexia* to aid in school-based identification of dyslexia. This profile provides five questions to consider when identifying student with characteristics of dyslexia. The questions are:

1. Does the student demonstrate one or more of the primary reading characteristics of dyslexia in addition to a spelling deficit?
2. Are the reading and spelling difficulties the result of a phonological processing deficit?

3. Are the reading, spelling, and phonological processing deficits unexpected? Does the student demonstrate cognitive ability to support age level academic learning?
4. Are there secondary characteristics of dyslexia evident in reading comprehension and written expression?
5. Does the student have strengths that could be assets? Are there coexisting deficits that may complicate identification and the response to intervention and may deserve further assessment and intervention?

The school-based decision making team may use these five key questions to determine if the student needs dyslexia intervention services. The information gleaned from these questions reflect components of the definition of dyslexia as expressed in A.C.A. 6-41-602. If the Level II Dyslexia Screening conducted by the school district indicates a student exhibits characteristics of dyslexia, the student shall be provided intervention services (A.C.A. 6-41-603) using a dyslexia program delivered with fidelity.

If it is determined that the student has functional difficulties in the academic environment due to characteristics of dyslexia, the necessary accommodations or equipment for the student shall be provided under Section 504 of the Rehabilitation Act of 1973 (Ark. Code Ann. § 6-41-603) as they existed on February 1, 2013, if qualified under the applicable federal law. In other words, having a learning problem does not automatically qualify a student for accommodations/equipment under Section 504. The impairment must substantially limit one or more major life activities in order to be considered a disability under Section 504. The determination of substantial limitation must be made on a case-by-case basis with respect to each individual student. The Section 504 regulatory provision at 34 C.F.R. 104.35 (c) requires that a group of knowledgeable persons draw upon information from a variety of sources in making this determination.

Section VII

Independent Comprehensive Dyslexia Evaluation

A dyslexia diagnosis is not required for a school to provide dyslexia intervention services, however a parent or legal guardian may choose to have an independent comprehensive dyslexia evaluation for the student. Parents are responsible for selecting the qualified individual to perform the comprehensive dyslexia evaluation and must cover the cost. The school district shall consider the diagnosis and provide the student with interventions determined to be appropriate by the school district (A.C.A. 6-41-604). Schools should consider all sources of information when determining appropriate services for students. If services are warranted then interventions will be delivered by a dyslexia interventionist at the school district .

This evaluation must be conducted by Licensed Psychological Examiner, School Psychology Specialist, Licensed Speech Language Pathologist, Certified Dyslexia Testing Specialist, or Dyslexia Therapist (A.C.A. 6-41-604 (a)(2)(C)). This professional should have a knowledge and background in psychology, reading, language education, dyslexia and other related disorders. A thorough working knowledge of how individuals learn to read and why some individuals struggle, and how to plan appropriate interventions is a must.

Section VIII

Instructional Approaches for Students with Dyslexia

Supplemental, intensive reading interventions for students with dyslexia should be individualized and focused on the student's area(s) of primary difficulty. Instruction for students with dyslexia includes a multisensory approach that includes reading, spelling, and writing as appropriate. Components of effective dyslexia intervention include instruction in phonemic awareness, graphophonemic knowledge, the structure of the English language, linguistics, language patterns, and strategies for decoding, encoding, word recognition, fluency, and comprehension. Effective interventions also consider the instructional delivery of the intervention. Instructional delivery considerations include individualization of the content and supports provided, extended time in small group instruction, explicit, direct, and systematic instruction, multisensory inputs, and a focus on meaning-based instruction. These intensive interventions differ from core instruction in that they are targeted towards the specific skills and components of instruction that are preventing students from making sufficient reading progress. In addition, the instructional delivery provides higher levels of support needed to help students accelerate their reading growth, however, no one remedial reading method works for all dyslexic students.

Students with characteristics of dyslexia should receive an appropriate, specialized dyslexia instructional program that:

- Is delivered by a professional who has completed training in a specific dyslexia program. (Ark. Code Ann. §§ 6-41-602; 6-41-605)
- Provides systematic, [research-based instruction](#) (Ark. Code Ann. § 6-41-602)
- Includes instruction that is multisensory addressing two or more sensory pathways during instruction or practice (Ark. Code Ann. § 6-41-602)

- Provides instruction in the essential components of reading in a small-group or individual setting that maintains fidelity of the program that includes [phonemic awareness](#), [graphophonemic knowledge](#), [structure of the English language](#), [linguistic instruction](#), and strategies for [decoding](#), [encoding](#), [word recognition](#), [fluency](#), and [comprehension](#) (Ark. Code Ann. § 6-41-602)

Instructional Delivery

Dyslexia Interventionists should provide [explicit, direct, systematic and cumulative instruction](#) that is [individualized](#) to support learning and focused on meaning. Additional intervention considerations include [multisensory instruction](#) to meet student needs.

The Arkansas Department of Education does not approve specific dyslexia programs. It is the responsibility of school district instructional leaders to select a dyslexia program that meets the requirements defined in Ark. Code Ann. § 6-41-602. A sample of a Dyslexia Program Review Form is included in Appendix I.

Section IX

Dyslexia Interventionist

Dyslexia interventionist means a school district or public school employee that is trained in a dyslexia program.

No later than the 2015-2016 academic year, a school district shall have individuals to serve as dyslexia interventionists. Ark. Code Ann. 6-41-607 (d)

School districts may utilize the following personnel who have been trained as dyslexia interventionists: a dyslexia therapist, dyslexia specialist, reading interventionist, certified teacher, tutor or paraprofessional under the supervision of a licensed teacher. The licensed teacher who is supervising the tutor or paraprofessional must be trained in the dyslexia program(s) the district is using.

“Dyslexia therapist” is a professional who has completed training and obtained certification in dyslexia therapy from a dyslexia therapy program defined by the Department of Education.

A “Dyslexia specialist” is a professional at each education service cooperative or school district who has expertise and is working towards an endorsement or certification in providing training for phonological and phonemic awareness, sound and symbol relationships, alphabet knowledge, decoding skills, rapid naming skills, and encoding skills. A dyslexia specialist shall be fluent in the Response to Intervention (RTI) process and provide training in administering screening, analyzing and interpreting screening data, and determining appropriate interventions that are systematic, multisensory, and evidence-based. Education service cooperatives must have a dyslexia specialist, but these are optional for school districts. The ADE will design and facilitate the program of study (professional development) for regional educational service cooperative dyslexia specialists.

Section X

Professional Awareness

Professional awareness is key to early and appropriate referrals for dyslexia evaluations. In addition, comprehensive instructional programs for students with dyslexia are dependent on informed and knowledgeable teachers, interventionists, and therapists. The law requires that no later than the 2014-2015 school year, each teacher shall receive professional awareness on:

1. The indicators of dyslexia; and
2. Evidence-based interventions and accommodations for dyslexia.

(Ark. Code Ann. § 6-41-608).

The Arkansas Department of Education (ADE) has approved a course offered through ArkansasIDEAS online professional development portal (<http://www.arkansasideas.org>). This course, *Dyslexia: A Three Part Professional Development*, meets the requirements of the law.

Alternatively, the law allows for professional awareness to be provided through education service cooperatives or at another venue approved by ADE (Ark. Code Ann. § 6-41-608). The teacher should receive written documentation when completing any approved dyslexia professional awareness.

No later than the 2015-16 school year, the Department of Education shall collaborate with the Department of Higher Education to ensure that all teacher education programs offered at state-supported institutions of higher education provide dyslexia professional awareness of the;

- (1) Characteristics of dyslexia; and
- (2) Evidence-based interventions and accommodations for dyslexia (Ark. Code Ann. § 6-41-609).

Professional development providers interested in delivering this professional awareness piece should apply for ADE approval through the Arkansas Professional Development Submission and Management System (PDSAM) at <http://arpdsam.org>.

Section XI Reporting By School Districts

The superintendent of a school district annually shall report the results of the school district screening required under Ark. Code Ann. § 6-41-603.

Superintendents will comply with this law by reporting the results through APSCN eSchool software in Cycle 7 of the state reporting system.

Section XII

Special Education and Dyslexia

Special education eligibility-

IDEA 2004 regulations related to specific learning disability (SLD) (34 C.F.R. §300.8(c)(10)(i)) define SLD as a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. IDEA 2004 regulations (34 §CFR 300.309(a)(1)) specifically designate the following areas for the determination of SLD: oral expression, listening comprehension, written expression, basic reading skill, reading fluency skill, reading comprehension, mathematics calculation, and/or mathematics problem solving.

Dyslexia is not considered one of the 13 eligible disability categories listed in the IDEA 2004 regulations (34 C.F.R. §300.8(c)). However, a student suspected of having dyslexia or related disorders who is unable to make adequate academic progress may be referred to special education for evaluation and possible identification as a child with a disability within the meaning of IDEA 2004. It should be noted that the referral committee would make the decision as to whether or not an evaluation for special education was warranted and what assessments were needed based on the child's suspected disability. If the referral committee decided against an evaluation for special education, the district would still be required by Acts 1294 and 1268 to screen for dyslexia if it had not already been conducted.

IDEA 2004 regulations related to assessment (34 C.F.R. §300.304(c)(4)) indicate that a student should be assessed in all areas related to the suspected disability. If a student is evaluated for special education and related services, according to the Arkansas Special Education Eligibility

Criteria and Program Guidelines for Children with Disabilities Ages 3-21, Part I Section I, there are three allowable methods for identifying a student as having a Specific Learning Disability:

1. Establishing a severe discrepancy between intellectual ability and achievement
2. Using a process based on a child's response to scientific, research-based Intervention
3. Using other alternative research-based procedures (such as Patterns of Strengths and Weaknesses)

Services for students with dyslexia who qualify for special education-

Students who qualify for special education have an individualized education program (IEP) developed by the IEP committee. For students with dyslexia who qualify for special education, the IEP must include, as appropriate, the reading instruction that matches the critical, evidence-based components of dyslexia instruction. If a student has previously met special education eligibility, the IEP committee should include goals that reflect the need for dyslexia instruction in the IEP, as appropriate, and determine the least restrictive environment for delivering the student's dyslexia intervention.

Appendix A

Glossary

Accommodation – a change that helps a student overcome or work around a disability. For example, allowing a student who has trouble writing to give his answers orally is an example of an accommodation. The student is still expected to know the same material and answer the same questions as fully as the other students, but he doesn't have to write his answers to show that he knows the information.

Characteristics- strengths and weaknesses in the various components of literacy associated with dyslexia. The characteristics are included in the definition of dyslexia as poor decoding, poor word recognition, poor fluency, and poor spelling.

Comprehension – understanding the intended meaning of language.

Core Instruction – the curriculum and instructional practices that are provided to all students in the general education setting.

Cut-point – a score on the scale of a screening tool or a progress monitoring tool. Educators use the cut point to determine whether the student has demonstrated adequate response, whether to administer additional assessments, whether to make an instructional change, and whether to move the student to more or less intensive services.

Decoding – to translate words, word parts, or nonwords into their corresponding pronunciation.

Diagnostic Assessment – assessments used to measure current skills and knowledge, often for the purpose of educational planning.

Differentiated Instruction – varying educational practices to meet the needs of different students.

Dyslexia – a specific learning disability characterized by difficulties with accurate and fluent word recognition, poor spelling and decoding abilities that typically result from the phonological component of language, and are often unexpected in relation to other cognitive abilities.

Elision – the ability to identify the remaining word when a specified sound is deleted.

Encoding – to translate spoken language into print.

Evaluation – procedures used to make judgments or appraisals.

Explicit, Direct Instruction - the overt teaching and modeling of the steps and processes needed to learn and apply new knowledge. Explicit, direct instruction targets the specific needs of the students without presuming prior skills or knowledge.

Fidelity - means the intervention is done as the author of the program intended.

Fluency – the ability to read the words in text effortlessly and efficiently (automaticity) with meaningful expression that enhances the meaning of the text (prosody).

Graphophonemic Knowledge - refers to the letter - sound plan of English, including knowledge of the relationship between letters and sounds.

Indicator - a sign that shows or suggests the condition of something. Indicators of dyslexia are the early warning signs that indicate a child might have dyslexia. Indicators of dyslexia may differ at different ages.

Individualized Instruction - instruction that is designed to meet the specific needs of the student in a small group setting. Individualized instruction is intensive and highly concentrated instruction that focuses on the student's area(s) of primary difficulty and the instructional delivery necessary to assist students in accelerating their learning, maximizing student engagement in the process of learning.

Individuals with Disabilities Education Act (IDEA) – the law that outlines rights and regulations for students with disabilities in the U.S. who require special education.

Intervention – activities designed to improve or remediate performance in a given area.

Learning disabilities – a disorder in one or more of the basic psychological processes in understanding or using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations.

Linguistic Instruction - instruction aimed toward improving student proficiency and fluency with the patterns of language so that words and sentences are carriers of meaning.

Meaning-based Instruction – instruction that is focused on purposeful reading and writing tasks with an emphasis on comprehension and composition.

Morphological Awareness – awareness of the semantically meaningful units and structure of words.

Multisensory Instruction – instruction that incorporates the simultaneous use of two or more sensory pathways (visual, auditory, kinesthetic, and tactile) during teacher presentations and student practice.

Norm-referenced Test – an assessment that provides an estimate of the student’s performance compared to other students in the population of the same age or grade.

Orthographic Knowledge – information in memory of how to represent spoken language in a written form.

Phonemic Awareness - enables a student to detect, segment, blend, and manipulate sounds in spoken language

Phonics – a systematic process for teaching sound-symbol relationships and their use in reading and spelling words.

Phonological Awareness – the ability to recognize and manipulate the sound system in spoken language; encompasses the entire continuum of skills related to the awareness of the phonological structure of language.

Progress Monitoring – efficient, frequent, dynamic assessment of targeted skills to examine student growth and examine effectiveness of instruction.

Research-based Instruction – instruction that is based on the findings of scientific research.

Response to Intervention – a multi-tiered decision-making process for providing effective instruction and intervention based on students’ performance and progress.

Screening Assessment – an efficient assessment given to all students to identify students who are at risk for not meeting grade-level standards.

Sensory impairment – a vision or hearing impairment, or a combination of both, that cannot be corrected to a degree that the student can receive educational benefit from print and/or auditory information.

Strategy-based Instruction – providing instruction in the step-by-step processes needed for students to independently complete complex tasks.

Structure of the English Language - English language structure consists of morphology (understanding the meaningful roots and affixes that make up words in the language), semantics (understanding how language carries meaning), syntax (understanding the conventions and rules for structuring meaningful sentences), and pragmatics (understanding how language conveys meaning in specific situations)

Systematic Instruction - sequential, cumulative instruction that follows a logical plan and progresses from easiest to most complex with careful pacing to ensure students successfully master each step in the process. Systematic instruction includes scaffolded support for accomplishing each learning step by breaking down complex skills into manageable learning steps and providing temporary supports to control the level of difficulty as students gain mastery.

Vocabulary – words understood and used when listening, speaking, reading, and writing.

Word Recognition - the ability of a reader to recognize written words correctly and effortlessly.

Appendix B

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Appendix C

Definition of Dyslexia

Dyslexia is a specific learning disability that is neurological 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 the growth of vocabulary and background knowledge. - Adopted by IDA: November 2002

Characteristics of Dyslexia

Underlying Cause:

- Deficit in the phonological processing (Phonological awareness, phonological memory, and/or rapid naming)

Characteristics:

- Difficulty reading real words in isolation
- Difficulty accurately decoding nonsense or unfamiliar words
- Poor reading fluency (rate, accuracy, labored)
- Poor spelling

Outcomes:

- Difficulty with reading comprehension
- Reduced reading experience that limits vocabulary and background knowledge

Appendix D

Early Indicator Checklist

Family History:

- Other family members experienced learning problems
Father, Mother, Sibling(s)

Oral Language:

- Difficulty understanding verbal directions
- Difficulty understanding stories read to him/her
- Difficulty correctly pronouncing phonemes or syllables of words in sequence; persistent baby talk (busgetti for spaghetti, mawn lower for lawn mower, fibe for five)
- Substitutes words with the same meaning for words in the text he/she can't pronounce, such as "car" for "automobile."
- Difficulty acquiring new vocabulary
- Difficulty finding the right words
- Unable to find the exact word; Speech that is not fluent; Pauses, hesitations when speaking; Lots of "um"s
- Imprecise language, such as vague references to "stuff" or "things" instead of the proper name of an object
- Unable to find the exact word; confusing words that sound alike: saying "tornado" instead of "volcano," substituting "lotion" for "ocean," or "humanity" for "humidity"
- Difficulty speaking in grammatically correct sentences
- Difficulty explaining ideas or elaborating on thoughts

Phonological Awareness:

- Difficulty recognizing or producing rhyming words
- Difficulty isolating sounds in the beginning, final, and/ or medial position
- Difficulty segmenting individual sounds in a word
- Difficulty blending sounds into a word

Alphabet:

- Difficulty learning or recalling the names of letters
- Difficulty learning or recalling the sounds of letters

Decoding and Word Recognition:

- Difficulty sounding out unfamiliar or nonsense words
- Difficulty reading words in isolation (lists)
- May confuse small words - at - to, said - and, does - goes

Fluency:

- Difficulty with reading accuracy in context
- Difficulty reading grade level text at expected rate
- Difficulty with reading with expression

Spelling:

- Difficulty memorizing words for spelling tests
- Difficulty spelling words in context, even after spelling them correctly on a spelling test
- Difficulty spelling words phonetically

Comprehension:

- Difficulty with reading comprehension, but not when read to
- Better understanding of words in context than words isolated in lists

Written Expression:

- Difficulty constructing sentences
- Difficulty organizing grade appropriate written compositions
- Difficulty producing sufficient written output
- Written expression does not match verbal expression (content, organization, vocabulary)

Handwriting:

- Slow with handwriting tasks
- Overall poor quality/illegible handwriting on written assignment
- Awkward, fist-like, or tight pencil grip

Cognitive/Academic Ability:

- The student appears to have intellectual ability equal to or above grade level peers.
- The student has grade level math calculation skills.
- The student appears to have grade level math reasoning skills
- The student has reading difficulties that are unexpected compared to other abilities.
- The student requires many repetitions to learn something new.
- Compensates by memorizing stories or words but cannot keep up as demands increase
- Strength in thinking skills: conceptualization, reason, imagination, abstraction
- Strength in areas not dependent on reading, such as math, computers, and visual arts, or excellence in more conceptual

Social/Emotional/Behavioral:

- Shows frustration and anxiety, as he realizes he is lagging behind his peers
- Exhibits health or behavior problems, emotional difficulties or wants to avoid school
- Avoids reading aloud

Attention:

- Difficulty attending to tasks involving print.
- Difficulty organizing time and materials
- Is easily distracted
- Does many things too quickly
- Is often overactive or fidgety
- Is inconsistent with production of classwork and homework on written assignments

Student's Academic Development:

- English is a second language.
- The student was retained in _____ grade.
- The student has been/is in special programs. (Special Education, Tiered Interventions, etc.)

Suggested work samples to include:

- The student's most recent spelling test.
- A Sample of the student's unedited writing(journal entry, creative story, etc.)
- The student's most recent progress report or report card.
- A copy of most recent literacy screeners.

Adapted from Teacher Questionnaire for Dyslexia, Texas Scottish Rite Hospital for Children.

Appendix E

Accommodations

Listed below are some accommodations to be considered for a student exhibiting the characteristics of dyslexia. Specific accommodations should be selected based on individual student needs.

Reading

- Allow audio books and/or text-to-speech software
- Utilize outlines, summaries
- Preview questions and vocabulary
- Allow shared reading or buddy reading

Writing

- Grade for content rather than spelling
- Allow students to dictate work to an adult
- Substitute alternative projects for written reports
- Utilize speech-to-text software
- Reduce written work
- Minimize copying
- Accept oral responses, reports, and presentations

Testing

- Provide extra time
- Review directions orally
- Read tests orally
- Allow dictated responses

Homework

- Reduce reading and writing requirements
- Limit time spent on homework
- Provide extra time

Instruction

- Break tasks into small steps
- Give directions in small steps

- Give examples and model behavior
- Emphasize daily review
- Provide copies of lecture notes

Classroom

- Post schedules and maintain routines
- Chart assignments on a calendar
- Use color-coding to organize materials and information
- Incorporate multisensory activities
- Coordinate preferential seating
- Avoid requiring student to read aloud in front of a group

Appendix F

Parent Resource: Questions to ask a Diagnostician

When you call, ask:

1. How long have you been testing children for dyslexia?
2. Where did you get trained to do this?
3. What does the term Dyslexia mean to you?
4. Will you use the term Dyslexia in your report?
Why or why not?
5. What are some of the tests you will use?
6. What do you charge for testing a child?
7. What is the process like? How long will it take?
8. Will you meet with us when the testing is done and explain the results?
9. Will you be able to refer us to an appropriate and qualified interventionist with experience in performing an evidenced-based program for dyslexia?
How do you know the interventionist is qualified?
10. Will you provide a written report as part of your fee? What will be in that report?
11. If my child has dyslexia, will your recommendations section be written with legal terminology that will make it easy to get a 504 Plan?
12. (If the child is in high school) Will your report include recommendations for accommodations for high stakes testing such as extra time for the ACT?
13. Will your report include recommendations for accommodations such as assistive technology to help access reading and writing materials?
14. Will you meet with my child's teacher(s) and explain the results? Is that included in your fee? If not, what would you charge?
15. Can you provide me with a list of references -- parents who have hired you to test their child?

Appendix G

Assembling a Test Battery for the Level 2: Dyslexia Screener

UNDERLYING CAUSE

PHONOLOGICAL AWARENESS

CTOPP - 2 (Comprehensive Test of Phonological Processing) - Phonological Awareness Composite - Elision, Blending Words and Phoneme Isolation or Sound Matching subtests make up this composite

PAT - 2 (Phonological Awareness Test - 2) - first six subtests

KTEA-3** (Kaufman Test of Educational Achievement - 3rd edition)**

WRMT - III (Woodcock Reading Mastery Test III) - Phonological Awareness

WJ-IV**(Woodcock-Johnson Tests of Oral Language - 4th edition) - Segmentation and Sound Blending

RAPID NAMING

CTOPP - 2 - Rapid Naming Composite

KTEA-3** - Rapid Automatized Naming, Letter Naming Facility and/or Object Naming Facility

WRMT - III - Rapid Automatic Naming

WJ-IV Tests of Oral Language** - Rapid Picture Naming

RAN/RAS (Rapid Automatized Naming and Rapid Alternating Stimulus)

Letter Knowledge

PAT - 2 - Graphemes

WRMT - III - Letter Identification

WJ-IV (Woodcock-Johnson Tests of Achievement - 4th edition)- Spelling of Sounds (Phoneme knowledge)

CHARACTERISTICS

DECODING

PAT - 2 - Decoding

KTEA-3** - Nonsense Word Decoding

WIAT - III* (Wechsler Individual Achievement Test - 3rd edition) - Pseudoword Decoding

WJ-IV Ach**- Word Attack

WRMT - III - Word Attack

WORD RECOGNITION

KTEA-3** Letter & Word Recognition

WIAT - III** - Word Reading

WJ-IV Ach** - Letter-Word Identification

WRAT - 4 (Wide Range Achievement Test - 4th edition) - Reading

WRMT - III - Word Identification

**Advanced examiner qualifications required

FLUENCY

Oral Reading Accuracy

GORT - 5 (Gray Oral Reading Test - 5th edition) - Accuracy score

Oral Reading Rate

GORT - 5 - Rate score

Oral Reading Fluency (Rate and Accuracy as a Composite only)

KTEA-3** Word Recognition Fluency, Associational Fluency, Silent Reading Fluency

TOWRE - 2 (Test of Word Reading Efficiency- 2nd edition) - Sight Word Efficiency, Phonemic Decoding Efficiency, and Total Word Reading Efficiency

WIAT- III - Oral Reading Fluency **

WJ-IV Ach** - Oral Reading Fluency, Sentence Reading Fluency

WRMT - III - Oral Reading Fluency

SPELLING

KTEA-3** - Spelling

Orthographic Processing Cluster - Spelling, Letter Naming Facility, and Word Recognition Fluency

TWS - 4 (Test of Written Spelling - 4th edition) - Spelling

WIAT - III** - Spelling

WJ-IV Ach** - Spelling

WRAT - 4 - Spelling

OUTCOMES

READING COMPREHENSION

GATES (Gates-MacGinitie Reading Tests) - Silent reading comprehension

GORT-5 - Oral reading comprehension

GSRT (Gray Silent Reading Tests) - Reading comprehension

KTEA-3** - Reading Comprehension

WIAT - III** - Reading comprehension

WJ-IV Ach** - Passage Comprehension

WRAT - 4 - Sentence Comprehension

WRMT - III - Passage Comprehension

Written Expression

KTEA-3** Written Expression

TOWL - 3 (Test of Written Language - 3rd edition) - Overall writing quotient

WIAT - III** - Written Expression

WJ-IV Ach** - Writing Samples

**Advanced examiner qualifications required

Adapted from the Characteristic Profile of Dyslexia – Revised 7/2014, Texas Scottish Rite Hospital for Children

Appendix H

Programs, Training, and Resources

This section is to be used as a resource. It provides information to assist in research for school districts, public schools, teachers, and parents. The committee that created this guide is in no way endorsing any of the programs, trainings, or resources listed here as good, bad, or “approved”. The is not an all inclusive list.

Possible programs being reviewed by public schools in Arkansas:

Alphabetic Phonics

<http://www.leadabcd.com/description.html>

Barton Reading and Spelling

<http://www.bartonreading.com>

Connections O-G in 3D Reading Intervention

<http://applegroupdyslexia.com>

Language! The Comprehensive Literacy Curriculum

<http://www.voyagersopris.com/curriculum/subject/literacy/language-4th-edition>

Phonics First

<http://rlac.com/phonics-first>

Take Flight: A Comprehensive Intervention for Students with Dyslexia

<http://www.tsrhc.org/dyslexia-take-flight>

The Sondag System

<http://www.winsorlearning.com>

Wilson Foundations

http://www.wilsonlanguage.com/FS_PROGRAM_FUN.htm

Wilson Reading Systems http://www.wilsonlanguage.com/FS_PROGRAM_WRS.htm

Training being reviewed by Arkansas public schools:

Arkansas Dyslexia Resource Guide

Updated: July 10, 2015

Barton Reading and Spelling
<http://bartonreading.com/index.html>

Connections O-G in 3D
<http://applegroupdyslexia.com>

Institute for Multi-sensory Education Comprehensive Orton-Gillingham Training <https://www.orton-gillingham.com>

Lindamood Bell Learning Processes
<http://lindamoodbell.com>

Shelton Academic Language Approach <http://www.shelton.org/page.cfm?p=1975>

Helpful websites:

[The International Multisensory Structured Language Education Council](#)

[Academic Language Therapy Association](#)

[International Dyslexia Association](#)

Appendix I

Dyslexia Program Review Form

Program: _____ Author(s): _____

Date of Publication: _____ Intended Age/Grade Range: _____

Length of Program: _____ Group Size: _____ Frequency/Duration of Sessions: _____

Information Sources: _____

School: _____ Reviewer: _____ Date: _____

Training Requirements: _____ Training Cost: _____

Cost of Materials: _____

Principles of Instruction (How)

Explicit, Direct Instruction

- Nothing assumed, everything is directly taught
- Skill or strategy is made clear
- Modeling, Guided practice, Corrective feedback, Independent Practice

Systematic, Sequential, Cumulative

- Introductions follow a logical order of the language
- Begins with easiest, and progresses to more difficult
- New concept based on previously learned concept
- Systematic review to strengthen memory

Multisensory

- Teaching is done using all learning pathways in the brain: (VAKT)
- Simultaneous in order to enhance memory and learning

Research-Based

- Instructional techniques that are grounded in research

Small Group Instruction

Content (What)

Look for lessons that explicitly teach:

Phonemic Awareness

- Detect
- Segment
- Blend
- Manipulate sounds

Graphophonemic Knowledge

- Specific sequence of letter-sound introductions
 - Consonants
 - Vowels
 - Consonant digraphs, trigraphs
 - Vowel digraphs, trigraphs, quadrigraphs
 - Diphthongs
 - Combinations

Structure of the English Language

- Syllable types
 - Closed
 - Open
 - Vowel-Consonant-e
 - Vowel teams
 - Vowel r
 - Final Stable Syllables (Consonant le)

- Syllable division patterns
 - VCCV
 - VCV
 - VCCCV
 - VV

- Morphology
 - Base words
 - Prefixes
 - Suffixes
 - Latin Roots
 - Greek Combining Forms

Linguistic Instruction

- Language Form:
 - Phonology (sounds)
 - Morphology (meaning)
 - Syntax (grammar)

- Language Content: Semantics (vocabulary)

- Language Use: Pragmatics (conversational rules)

Strategies for:

- Decoding
- Word recognition
- Comprehension
- Encoding (spelling)
- Fluency

