Dyslexia Resource Guide

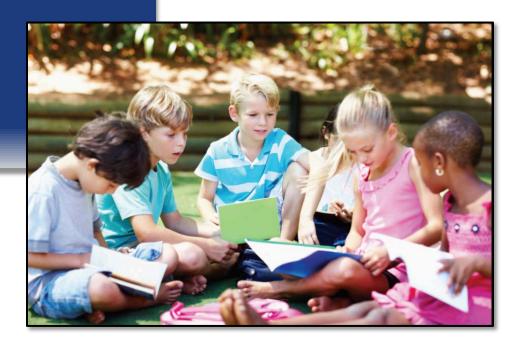# December 2017

Additional resource documents will be added as available.

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Acknowledgements

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; they have 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 screeners, diagnostic tools, and instructional programs to use. However, the department is charged with defining the dyslexia therapy training 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 in 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 for many reasons when learning to read, including lack of motivation and interest, weak preparation from the preschool 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. Individuals with dyslexia struggle to read well despite adequate instruction and effort. 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. 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 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 coexist 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 objects, colors, digits, or 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
Dyslexia Intervention and Response to Intervention (RTI)

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 (Ark. Code Ann. § 6-41-603 (c)(1)). Dyslexia intervention services fall under the RTI framework. If dyslexia screening indicates characteristics of dyslexia exist, then the student shall be provided dyslexia intervention services (Ark. Code Ann. § 6-41-603 (c)(2)(A)).

Response to Intervention (RTI) is designed to ensure all students receive effective, evidence-based instruction to meet their learning needs. The RTI process combines prevention and intervention with ongoing assessment in a school-wide system to identify a student's instructional needs and appropriate learning supports. Students exhibiting the characteristics of dyslexia are to receive dyslexia intervention. For a student with an IEP, dyslexia intervention may be delivered in the general education setting, the special education setting, or in a combination of the two. Regardless of the setting, the person delivering the dyslexia intervention must be a trained dyslexia interventionist delivering the program with fidelity. Additional information about special education and dyslexia can be found in Section XII.

A student exhibiting the characteristics of dyslexia does not have to progress through the various tiers of RTI before receiving dyslexia intervention services. Dyslexia intervention is small group instruction delivered by a trained dyslexia interventionist using the school's selected dyslexia intervention program or programs. Progress monitoring is a part of RTI and should be frequent and ongoing. The data should be used to monitor a student's progress on both the content covered during the intervention lessons and the student's progress toward meeting grade level standards. The data will drive decisions regarding details such as frequency, length, duration, intensity of sessions.

Information specific to RTI can be found on the Arkansas Department of Education website under RTI Arkansas.

http://www.arkansased.gov/divisions/learning-services/curriculum-and-instruction/rti

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. 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. The initial 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.

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

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 such as blindness or a hearing impairment. See Appendix A: Glossary for more information.

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.

A school district shall screen each student in kindergarten through grade two (K- 2) and others required by the Arkansas Department of Education rule using 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.

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.

Beginning the fall of 2017, Arkansas public schools will use Istation, NWEA, or Renaissance STAR as their K-2 assessment to meet the requirements of Act 930 of 2017. The purpose of the K-2 assessment is to provide data pertaining to a student's performance levels in reading and mathematics, **not** to meet the requirements of A.C.A. § 6-41-603. However, some products may have subtests or tools that provide information for components required by the dyslexia law. The Educational Service Cooperative (ESC) Dyslexia Specialists can provide support in identifying the strengths and limitations of specific assessment tools. If your school is not affiliated with an ESC, contact the Arkansas Department of Education Dyslexia Specialist.

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. While results of the initial screening will likely identify struggling learners, they may not provide all of the information needed to develop an instructional plan, including appropriate interventions. Additional information is needed to pinpoint areas of basic early reading skills that need acceleration. This additional information would be gathered through the Level I Dyslexia Screener.

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 (Ark. Code Ann. § 6-41-603). The level I dyslexia screener is described in Section V of the guide.

Initial Screening Tools	
Required Component	**Possible Screening Tools**
Phonological and Phonemic Awareness - the ability to recognize and manipulate the sound system in spoken language	DIBELS: First Sound Fluency (FSF) (K) DIBELS: Phoneme Segmentation Fluency (PSF) (K) AIMSWEB: Phoneme Segmentation Fluency (K) Istation ISIP: Phonemic Awareness (K-1) NWEA Skills Checklist: Phonological Awareness & Phoneme Identification (K) NWEA Skills Checklist: Manipulation of Sounds (K-2) Core Literacy Library: Phoneme Segmentation Test (K-12)
Alphabet Knowledge - the ability to automatically recognize and name the 26 lowercase and 26 uppercase letters with ease and accuracy.	DIBELS: Letter Naming Fluency (LNF) (K-1) AIMSWEB: Letter Naming Fluency (LNF) (K-1) Lakeshore: Alphabet Letter Identification (K-1) NWEA Skills Checklist: Letter Identification (K-2)
Sound Symbol Recognition -to automatically produce sound(s) or grapheme names (grade level letters or letter clusters) during recognition, production, and/or writing tasks.	DIBELS: Nonsense Word Fluency (NWF) Correct Letter Sounds (CLS) (K-2) AIMSWEB: Letter Sound Fluency (K-1) Scholastic: CORE Phonics Survey (K-8) Istation ISIP: Letter Knowledge (K-1) NWEA Skills Checklist: Phonics: Matching Letters to Sounds & Decode: Consonant Blends and Digraphs (K-2)
Decoding Skills - to translate words, word parts, or nonwords into their corresponding pronunciation.	DIBELS: Nonsense Word Fluency (NWF) Whole Words Read (WWR)(K-2) DIBELS: Oral Reading Fluency (ORF) (1-6) AIMSWEB: Nonsense Word Fluency (K-1) FCRR: Oral Reading Fluency Passages (7-12) Ultimate Phonics Reading Test (K-12)
Rapid Naming - the ability to quickly name aloud a series of familiar items	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)

- to translate spoken language into print.	Word Journeys: Developmental Spelling Analysis (DSA) Words Their Way: Primary Spelling Inventory (K-3) Words Their Way: Elementary Spelling Inventory (1-6) Words Their Way: Upper-Level Spelling Inventory (upper elementary, middle, high school, postsecondary) Istation ISIP: Spelling (1-2)

This list of initial screening tools is to be used as a resource for school districts to determine which screener or screeners will provide the most beneficial data for each subcomponent of literacy at each grade level. The Dyslexia Resource Guide Committee is in no way endorsing any of the screeners. The list is in no way all inclusive or to be considered as "approved" screeners.

Screening Options

       If a student in K-2 indicates a deficit area on the initial screener, or if a teacher notices a student in grades 3-8 experiencing difficulty, additional screening is required. The additional screening, level I dyslexia screening or level II dyslexia screening, looks more in-depth at the individual components of reading and spelling to determine if the characteristics of dyslexia are present. For K-2 students, a level I screening using curriculum-based measures and/or informal diagnostic inventories or checklists for the required six areas of foundational literacy skills may be sufficient to determine if the child is demonstrating the characteristics of dyslexia.

       Bypassing a level I dyslexia screening and proceeding to a level II dyslexia screening for older students could have many benefits. For older students, grades 3 and up, it may be more difficult to find age and grade appropriate curriculum based measures and informal diagnostic inventories or checklists for an accurate identification. Proceeding to a level II dyslexia screening using standardized norm referenced assessments allows a comparison of the student's performance on the individual components to other students the same age and grade. Administering a level II dyslexia screening for an older student, is more efficient use of the student's time and the assessment administrator's time. The level II dyslexia screening data, can provide solid justification for outlining an appropriate 504 service and accommodation plan.

Section V
Level I Dyslexia Screening

If the (initial) screener under subdivision (a)(1) of section 6-41-603 shows that a student is **at risk, or at some risk**, then a level I dyslexia screener shall be administered (Ark. Code Ann. § 6-41-603 (3)(A)). The level I dyslexia screening of a student shall be performed with fidelity and include the components listed under subdivision (a)(2) of this section (Ark. Code Ann. § 6-41-603 (3)). The level I dyslexia screening process shall include documentation of the components of literacy to include but not limited to the following:

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

The level I dyslexia screening is a process of gathering additional information that should include progress monitoring data, work samples, formative literacy assessments, parent interviews, teacher questionnaires, early indicator checklists (Appendix D) and additional age and grade appropriate dyslexia screening tools for the six areas. The determination of existing characteristics of dyslexia should be based on multiple sources of data.

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.

Both Ark. Code Ann. § 6-41-604(a) and Ark. Code Ann. § 6-41-605(a) indicate a determination that a student is exhibiting characteristics of dyslexia and the need for

dyslexia intervention services can be made through a level I dyslexia screening or a level II dyslexia screening.

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 reflects components of the definition of dyslexia as expressed in Ark. Code Ann. § 6-41-602. If the level I dyslexia screening conducted by the school district indicates a student exhibits characteristics of dyslexia (first three questions answered with a "yes"), the student shall be considered to be exhibiting the

characteristics of dyslexia and should be provided intervention services using a dyslexia program delivered with fidelity.

If a student's performance on an initial screener, level I screening, or level II dyslexia screening under § 6-41-603 indicates a need for dyslexia intervention services, the student's parent or legal guardian shall be:

(1) Notified of the results of the dyslexia evaluation; and

(2) Provided with information and resource material, including without
limitation:

(A) The characteristics of dyslexia;

(B) Appropriate classroom interventions and accommodations for
students with dyslexia; and

(C) The right of the parent or legal guardian to have the student receive
an independent comprehensive dyslexia evaluation by a:

(i) Licensed psychological examiner;

(ii) School psychology specialist;

(iii) Licensed speech-language pathologist;

(iv) Certified dyslexia testing specialist; or

(v) Dyslexia therapist. (Ark. Code Ann. § 6-41-604 (a))

Additional information about the independent comprehensive evaluation can be found in Section VII.

Level I Screening Tools	
Required Component	**Possible Screening Tools**
Phonological and Phonemic Awareness	● CORE Literacy Library: Phonological Awareness Tests (See manual) ● Phonological Awareness Skills Screener (PASS) (K-2 & struggling learners) ● Phonological Awareness Skills Test (PAST)(Kilpatrick) (PreK - Adult)
Alphabet Knowledge	● Alphabet knowledge is the one component that has a ceiling or mastery level.
Sound Symbol Recognition	● College Station TX, Texas A&M: Quick Phonics Screener (K-6) ● Scholastic: CORE Phonics Survey (K-8) ● Houghton Mifflin: Phonics/Decoding Screening Test (1-6)
Decoding Skills	● Assessing Multiple Measures: CORE Phonics Survey (K-12) ● Really Great Reading: Diagnostic Decoding Surveys (1, 2-12)
Rapid Naming	● Analysis of errors from initial screener
Encoding	● Unedited writing samples and unmemorized dictated spelling

This list of level I dyslexia screening tools is to be used as a resource for school districts to determine which screener or screeners will provide the most beneficial data for each subcomponent of literacy at each grade level. The Dyslexia Resource Guide Committee is in no way endorsing any of the screeners. The list is in no way all inclusive or to be considered as "approved" screeners.

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 subtest 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 students 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 reflects components of the definition of dyslexia as expressed in Ark. Code Ann. § 6-41-602. If the level II dyslexia screening conducted by the school district indicates a student exhibits characteristics of dyslexia (first three questions answered with a "yes"), the student shall be considered to have met the typical profile of a student with dyslexia and should be provided intervention services (Ark. Code Ann. § 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 (Ark. Code Ann. § 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 (Ark. Code Ann. § 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. Whether an individual is qualified to conduct an evaluation or provide a diagnosis is dependent upon their licensure.

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); and

- provides instruction in the essential components of reading in a small-group (see definition in Appendix A) 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 H.

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 this position is not required 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 identification. Early interventions 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 characteristics 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 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).

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.

To meet this requirement school personnel will utilize APSCN eSchoolPlus. A check mark placed in the field "Receives Dyslexia Intervention" indicates the student was screened, demonstrated one or more of the characteristics of dyslexia, and is receiving small group dyslexia intervention services from a trained dyslexia interventionist using the district's dyslexia intervention program.

Data reporters

Data reporters will flag students receiving dyslexia intervention services through APSCN eSchoolPlus. The information about who to flag will need to be gathered from building level dyslexia interventionists or building level contacts prior to the end of the school year. The individual students can be marked in eSchoolPlus at any time throughout the school year, but the recommendation is that a student is flagged as soon as they start receiving intervention. The data is collected during cycle 7 (June) of each school year. Corrections to the data cannot be made after the data has been pulled.

The menu path to the reporting screen is: Student Center>Medical>Dyslexia screen. The field to update on the Dyslexia screen is "Receives Dyslexia Intervention." A check mark placed in the field "Receives Dyslexia Intervention" indicates the student was screened, demonstrated one or more of the characteristics of dyslexia, and is receiving small group dyslexia intervention services from a trained dyslexia interventionist using the district's dyslexia intervention program.

In order to access the dyslexia screen, a user will need the following security resources: reg-maint (read-write) and med-maint-dental (read only). This combination of resources will not allow access to the information within the Medical Center folder.

Required Information to Report on the Website or in Writing

Act 1039 of 2017 amended the provisions of Ark. Code Ann. § 6-41-606 to include an additional reporting requirement. Before July 15, a public school district shall report on the website of the public school district or in writing to the parents of each student in the public school district the following information:

1. The dyslexia intervention programs used during the previous school year that were specifically responsive to assisting students with dyslexia;
2. The number of students during the previous school year who received dyslexia intervention; and
3. The total number of students identified with dyslexia during the previous school year (Ark. Code Ann. § 6-41-606 (b)).

Sample website posting:

Act 1039 of 2017 Reporting By the School District (Ark. Code Ann. § 6-41-606 (b))

Dyslexia Program

During the **20XX-20XX** school year, **Anywhere Public School District** used the evidenced-based **XYZ Dyslexia Intervention Program** in small group intervention to address the deficit areas of students identified as exhibiting the characteristics of dyslexia.

Number of Students Who Received Dyslexia Intervention

During the **20XX-20XX** school year, **## students** attending **Anywhere Public School District received dyslexia intervention services** from a trained dyslexia interventionist.

Total Number of Students Identified as Exhibiting the Characteristics of Dyslexia During the **20XX-20XX** school year, **## students** attending **Anywhere Public School District were identified as exhibiting the characteristics of dyslexia**.

Section XII
Special Education and Dyslexia

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. 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.

New Referrals

Although dyslexia is not considered one of the 13 eligible disability categories listed in the IDEA 2004 regulations (34 C.F.R. §300.8(c)), 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 specific learning disability. 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 Ark. Code Ann. § 6-41-601 *et seq.* to screen the student for dyslexia if such screening 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).

Office of Special Education and Rehabilitative Services (OSERS) Guidance

The Office of Special Education and Rehabilitative Services (OSERS) issued a Dear Colleague letter on October 23, 2015, to state and local educational agencies. This letter focuses on the "unique educational needs of children with dyslexia, dyscalculia, and dysgraphia, which are conditions that could qualify a child as a child with a specific learning disability under the Individuals with Disabilities Education Act (IDEA)." OSERs clarifies in the letter that "there is nothing in the IDEA that would prohibit the use of the terms dyslexia, dyscalculia, and dysgraphia in IDEA evaluation, eligibility determinations, or IEP documents." State education agencies and local education agencies are encouraged to "consider situations where it would be appropriate to use the terms dyslexia, dyscalculia, or dysgraphia to describe and address the child's unique, identified needs through evaluation, eligibility, and IEP documents." Further, States are encouraged to "review their policies, procedures, and practices to ensure that they do not prohibit the use of the terms dyslexia, dyscalculia and dysgraphia in evaluations, eligibility, and IEP documents."

OSERS provides further clarification, however, that "regardless of whether a child has dyslexia or any other condition explicitly included in this definition of 'specific learning disability', or has a condition such as dyscalculia or dysgraphia not listed expressly in the definition, the LEA must conduct an evaluation in accordance with 34 CFR §§300.304-300.311 to determine whether that child meets the criteria for specific learning disability or any of the other disabilities listed in 34 CFR §300.8, which implements IDEAs definition of a 'child with a disability'*."*

Finally, States are encouraged to "remind their LEAs of the importance of addressing the unique educational needs of children with specific learning disabilities resulting from dyslexia, dyscalculia, and dysgraphia during IEP Team meetings and other meetings with parents under IDEA."

The ADE joins OSERS in encouraging LEAs to consider the use of these terms, when appropriate, to describe and address a child's unique needs in evaluation, eligibility, and IEP documents. The ADE further encourages LEAs to review their policies, procedures, and practices to ensure that they do not prohibit the use of dyslexia, dysgraphia, and dyscalculia in special education due process paperwork. Finally, the ADE encourages addressing the unique educational needs of children with specific learning disabilities resulting from dyslexia, dyscalculia, and dysgraphia during IEP Team meetings and other meetings with parents under IDEA.

Under Ark. Code Ann. § 6-41-601 et seq., LEAs are required to provide dyslexia intervention services to all students who exhibit the characteristics of dyslexia, including students with IEPs. For students with IEPs, the IEP committee should determine, based on the student's individual needs, the setting where appropriately trained personnel will provide dyslexia intervention. The intervention may be delivered in the general education setting, the special education setting, or in a combination of the two.

Students with existing IEP's

A student who qualifies for special education services is not exempt from dyslexia screening or dyslexia intervention services. According to Acts 1294 and 1268, any student exhibiting characteristics of dyslexia should be provided dyslexia intervention services by a trained dyslexia interventionist in the district's chosen dyslexia program or programs. Rather than starting with initial dyslexia screening, the committee should review existing formal and informal evaluation data to determine if the student exhibits the characteristics of dyslexia. The committee may determine that additional assessments are needed.

Students who qualify for special education have an individual education program (IEP) developed by the IEP committee. The IEP should be developed to address the student's individual needs, including any needs relative to dyslexia. If a student with a disability exhibits the characteristics of dyslexia, the IEP committee would determine whether the student needs special education services in this area, if the student's needs can be met through the district's general education dyslexia intervention program, or if a combination of the two are needed.

Use of IDEA funds for dyslexia services

IDEA Part B funds can be used for dyslexia intervention delivered through the IEP. Additionally, IDEA specifies that a local educational agency (LEA) **may** use up to 15% of its IDEA Part B entitlement for early intervention services for any child in kindergarten through grade 12 who is not currently identified as needing special education or related services but who needs additional academic and behavioral supports to succeed in a general education environment. These funds are to be used as supplementary funds and should not be used to supplant local, state, or other federal program dollars.

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.

Alphabet knowledge - the ability to automatically recognize and name the 26 lowercase and 26 uppercase letters with ease and accuracy.

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).

Grapheme - a letter or letter cluster that represents an individual phoneme (i, i-e, igh, ch, tch...).

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.

Rapid Naming - or rapid automatized naming (RAN) is the ability to quickly name aloud a series of familiar items (colors, objects, letters, or numbers). Variations in rapid naming time in children provide a strong predictor of their later ability to read. For more information:
https://www.understood.org/en/school-learning/evaluations/types-of-tests/rapid-automatized-naming-tests-what-you-need-to-know

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.

Small-group - A typical classroom reading group will include a maximum of 5-6 students. If a student exhibiting the characteristics of dyslexia hasn't been successful in the typical small reading group, he or she will likely need a smaller group for the dyslexia intervention. The group size for dyslexia intervention begins with the program guidelines, but should also take into consideration the severity of the reading deficiency and may need to be adjusted based on the individual student's progress monitoring data.

Sound Symbol Recognition - to automatically produce sound(s) or grapheme names (grade level letters or letter clusters) during recognition, production, and/or writing tasks.

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
References

Allington, R. L. (1984). Content coverage and contextual reading in reading groups. *Journal of Reading Behavior, 16*, 85-96.

Anderson, R. C., Wilson, P. T., & Fielding, L. G. (1988). Growth in reading and how children spend their time outside of school. *Reading Research Quarterly, 23*, 285-303.

Catts, H., & Kahmi, A. (2005) (Eds.) *The connections between language and reading disabilities.* Mahway, NJ: Erlbaum.

Cunningham, A.E. & Stanovich, K.E. (1998). What reading does for the mind. *American Educator*, *22,* 8-15.

Ehri, L.C. (2002). Phases of acquisition in learning to read words and implications for teaching. In R. Stainthorp and P. Tomlinson (Eds.) *Learning and teaching reading.* London: British Journal of Educational Psychology Monograph Series II.

Fletcher, J.M., Denton, C., & Francis, D.J. (2005). Validity of alternative approaches for the identification of LD: Operationalizing unexpected underachievement. *Journal of Learning Disabilities, 38*, 545-552.

Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2006). *Learning disabilities*. New York, NY: Guilford.

Gersten, R., Compton, D., Connor, C.M., Dimino, J., Santoro, L., Linan- Thompson, S., and Tilly, W.D. (2008). *Assisting students struggling with reading: Response to Intervention and multi-tier intervention for reading in the primary grades. A practice guide*. (NCEE 2009-4045). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Gibbs, Denise P., (2004). *Leading the Dyslexia Challenge: An Action Plan for Schoolwide Identification and Intervention*. Horshum, PA: LRP Publications.

Good, R.H., Kaminski, R.A. (Eds.). (2002). *Dynamic Indicators of Early Basic Literacy Skills-Sixth Edition.* Eugene, OR: Institute for Development of Educational Achievement.

Good, R.H., Kaminski, R.A., Cummings, K., Dufour-Martel, C., Peterson, K., Powell-Smith, K., et al. (2011). *DIBELS Next.* Longmont, CO: Sopris West Educational Services.

Hogan, T. P., Catts, H. W., & Little, T. D. (2005). The relationship between phonological awareness and reading: implications for the assessment of phonological awareness. Language, Speech, and Hearing Services in Schools, 36, 285-293.

International Reading Association (2010). *Response to Intervention: Guiding Principles for Educators.* Newark, DE: Author.

Kolenovsky, Gladys. "School-Based Identification of Dyslexia in Texas: The Very Basics." Texas Scottish Rite Hospital for Children. Dallas, Texas. 1 July 2014.

Liberman, I.Y., Shankweiler, D., & Liberman, A.M. (1989). The alphabetic principle and
learning to read. In Shankweiler, D. & Liberman, I.Y. (Eds.), *Phonology and reading disability: Solving the reading puzzle* (pp.1-33). Ann Arbor, MI: U. of Michigan Press.

Liederman, J., Kantrowitz, L., & Flannery, K. (2005). Male vulnerability to reading disability is not likely to be a myth: A call for new data. *Journal of Learning Disabilities*, *38*, 109–129.

National Center on Response to Intervention (March 2010). *Essential Components of RTI – A Closer Look at Response to Intervention*. Washington DC: U.S. Department of Education, Office of Special Education Programs, National Center on Response to Intervention.

Quinn, J. M., & Wagner, R. K. (in press). Gender differences in reading impairment and in the identification of impaired readers: Results from a large-scale study of at-risk readers. *Journal of Learning Disabilities. Psychological Bulletin, 131,* 592-617.

RAND. (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. Santa Monica, CA: Author.

Rayner, K., Foorman, B.R., Perfetti, C.A., Pesetsky, D., & Seidenberg, M.S. 2001. How psychological science informs the teaching of reading. *Psychological Science in the Public Interest, 2:* 31-73.

Rutter, M., Caspi, A., Fergusson, D., Horwood, J. L., Goodman, R., et al. (2004). Sex differences in developmental reading disability: New findings from four epidemiological studies. *Journal of the American Medical Association*, *291*, 2007–2012.

Share, D.L., & Stanovich, K.E. (1995). Cognitive processes in early reading development: A model of acquisition and individual differences. *Issues in Education: Contributions from Educational Psychology, 1,* 1-35.

Shaywitz, S. (2003). *Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at Any Level.* New York: Alfred A. Knopf.

Snow, C.E., Burns, M.S. & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

Torgesen, J. K. (2000). Individual differences in response to early interventions in reading: The lingering problem of treatment resisters. *Learning Disabilities Research & Practice, 15*(1), 55–64.

Wagner, R.K., & Torgesen, J.K. (1987). The nature of phonological processing and its causal role in the acquisition of reading skills. *Psychological Bulletin, 101*, 192-212.

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 grade level listening comprehension 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

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.

APPLYING FOR ACCOMMODATIONS ON COLLEGE ENTRANCE TESTS

The application process for individuals planning to enter college can be a daunting experience. For individuals with disabilities who are requesting testing accommodations, this can be even more challenging, as it often requires assembling necessary documentation, completing additional paperwork, and anticipating deadlines. This IDA Fact Sheet gives a broad overview of the process in order to assist individuals who are requesting test accommodations on high stakes tests such as the SAT and ACT. It provides guidance about what forms to submit, how to provide sufficient disability documentation, and how to gather supplemental information if needed to support accommodation requests. Keep in mind that each testing agency sets its own requirements for requesting accommodations.

The Application Process

- Test takers should read the test information on the program's website. Many tests are administered on computer and incorporate functions such as a built-in calculator, clock, etc. Additionally, most testing agencies provide supplemental information or a handbook for test takers with disabilities.
- The testing agency website will give specific information about how to apply for accommodations. This should be read carefully to determine which accommodations are necessary (e.g., additional testing time, or breaks, separate room, a reader, etc.).
- Special Services and/or counseling staff in the student's high school or district may be able to assist in completing the application and acquiring the required documentation.

- Early submission of applications is important, as it's not unusual for testing agencies to request additional scores, updated testing, or clarification, which can cause delays. This is particularly true during peak application periods.
- Once the agency receives an application for accommodations, it may be two months before the applicant is notified. If additional testing or an appeal is needed, all this must be accomplished and submitted at least 60 days in advance of the test date.
- Since most testing agencies no longer "flag" scores obtained under non-standard conditions, it is important to request accommodations that are needed.

Documentation

- Typically, all documentation should be sent in one complete packet. This pertains to supporting documentation (IEP, transcripts, letters re: past accommodations).
- Testing agencies often require current documentation according to their individual "recency" criteria. For example, many testing agencies request documentation for learning disabilities to be dated within the last three to five years to reflect the test taker's need for specific accommodations. Test takers should review the documentation guidelines posted on the website.
- Often, a current, comprehensive evaluation is needed, as an adult version of some tests may be required. For example, most testing agencies will not accept a handwritten prescription-pad note from a doctor. Documentation should be

complete, dated, signed, in English, and on official letterhead. Disability documentation should address all of the following:

- o The existence of an impairment that substantially limits a major life activity, as compared to most people in the general population
- o A diagnosis of the disability and the current impact of impairment and how it limits the student's ability to take the test under standard conditions
- o A rationale for why the requested accommodations are necessary and appropriate. For example, if extra time is requested, the evaluation must say how much extended time should be provided and on what basis.
- o The accommodations that are requested should generally match those provided in the past.

- Some accommodations may not require prior approval, such as braces or crutches, eyeglasses, insulin pump, etc. Lockers that can be accessed during breaks are typically provided for storage of food, water, and/or medication, if applicable.

- If sufficient disability documentation is unavailable or outdated, it may take up to nine months in advance to find a qualified professional with a qualified professional with experience and expertise in diagnosing and documenting the disability in question. That evaluator will need relevant historical information, including:

- o Letters documenting a history of accommodations in school, such as IEPs or 504 plans, or proof of accommodations on statewide assessments.
- o A description of tutoring or coaching services provided in the past.

- o A comprehensive evaluation report for diagnosis of the disability and accommodation determination.

- Additionally, school records from elementary and high school as well as teacher comments will help support a history of a disability. High school transcripts may provide good evidence if they showed the impact of the disability on grades (e.g., dropped classes, withdrawals, incompletes, or failing grades). It is not always the case that accommodations in the past will automatically continue. An ongoing need for accommodations can be described in a personal statement.

- Many colleges and universities with strong school psychology programs perform evaluations at a reduced fee if a private evaluation is not feasible.

Types of Decision Letters

There are three basic types of decision letters that the testing agency sends:

1. **Approval**—This type of letter will list the accommodations that have been approved.
   - o Once accommodations have been approved, directions on the approval letter regarding how to schedule the test and other pertinent information.
   - o Be aware that extra time may be needed to schedule the test after approval for accommodations. For example, extra time may be needed to secure a reader or scribe.

2. **Request for Additional Information**—This type of letter is not a denial of the request. It specifies that the agency needs more information to complete the review.

3. **Denial**—If the testing agency finds the documentation insufficient to support the accommodation request, this letter will explain the decision and will include options for requesting further review.

   o Appeal Process**:** Each testing agency has established a procedure to allow an appeal of its decision. The information on how to appeal a decision is typically stated in the denial letter or on the agency's website. When the requested information is submitted, the request will be reconsidered.

Preparing for the Test

Whether or not an accommodation request is approved, it is important for the student to become familiar with the upcoming test.

- Most testing agencies have a wide range of practice materials at no or low cost available to test takers.
- Areas of particular focus are the test format, the types of questions used, and the test directions for each type of question. This can reduce the amount of time spent familiarizing oneself with instructions on the test day. Alternate-format practice materials can be requested if this is one of the desired accommodations.
- The sample test questions can be practiced with and without the requested accommodations. The goal is to increase the number of questions correctly completed within the time limit. As you practice, try to increase the number of questions you can complete correctly within the time limit.
- Test sites differ, so it is a good idea to check out the location in advance.

Resources

- **AHEAD** (Association on Higher Education and Disability) This is a professional association committed to full participation of persons with disabilities in postsecondary education. www.ahead.org
- *Students with Disabilities Preparing for Postsecondary Education: Know Your Rights and Responsibilities* www2.ed.gov/about/offices/list/ocr/transition.html
- *Rights and Responsibilities of College Students with LD* (Learning Disabilities Association of America) https://ldaamerica.org/rights-and-responsibilities-of-college-students-with-learning-disabilities-ld/
- **Educational Testing Service** http://www.ets.org/disabilities
- **ACT Test** website http://www.act.org/content/act/en/products-and-services/the-act/registration/accommodations.html

The International Dyslexia Association (IDA) thanks Loring Brinckerhoff, Ph.D., Nancy Cushen White, Ed.D., BCET, CALT-QI, and Diana Sauter, Ph.D., for their assistance in the preparation of this fact sheet.

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?
10. How do you know the interventionist is qualified?
11. Will you provide a written report as part of your fee? What will be in that report?
12. If my child has dyslexia, will your recommendations section be written with legal terminology that will make it easy to get a 504 Plan?
13. (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?
14. Will your report include recommendations for accommodations such as assistive technology to help access reading and writing materials?
15. 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?
16. Can you provide me with a list of references -- parents who have hired you to test their child?

Appendix G
Assembling a Battery for the Level 2: Dyslexia Screener

The Dyslexia Resource Guide cannot be considered a substitute for reading and understanding the manual of a test you are administering.

UNDERLYING CAUSE

PHONOLOGICAL AWARENESS

CTOPP-2 (Comprehensive Test of Phonological Processing-2) 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, 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)
WIST (Word Identification and Spelling Test) – Sound-symbol 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
WIST – Word identification

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-5 (Test of Written Spelling-5th edition) - Spelling
WIAT-III - Spelling
WJ-IV Ach - Spelling and Spelling of Sounds (spelling nonsense words)
WRAT-4 - Spelling
WIST – 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

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

Appendix H
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
- ❑ Recommended size of small group _____

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 <u>le</u>)

- ❑ 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

Appendix I
Record of Modifications to this Document

Since its original release, the Dyslexia Resource Guide has been modified on several occasions. The following list provides a running record of those modifications:

- Appendix I – Revised March 2021
- Sections III, IV, V, XI – Revised December 2017
- Appendix A: Glossary – Revised December 2017
- Section VI: Level II Dyslexia Screening – Revised January 2016
- Appendix G: Assembling a Test Battery for a Level 2 Dyslexia Screener – Revised January 2016
- Appendix H: Programs, Training, and Resources – Removed November 2015
- Section XI: Reporting by School Districts – Revised October 2015
- Section XII: Special Education and Dyslexia – Revised October 2015