Specific Learning Disability Supplementary Guide

Dyslexia:
Frequently Asked Questions

Virginia Department of Education

February 2017

Acknowledgements

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Introduction

Legislation passed by the 2016 General Assembly (House Bill 842) requires every person seeking initial licensure or renewal of a license to complete awareness training on the indicators of dyslexia and evidence-based interventions and accommodations for dyslexia. In support of the regulation, this document, *Dyslexia: Frequently Asked Questions* is designed to be a resource for teachers, administrators and parents to address the educational needs of students with dyslexia. It provides information on the resources and services available to students with dyslexia through general education, as well as any student with dyslexia who may qualify to receive services as a student with a Specific Learning Disability (SLD) under the *Individuals with Disabilities Education Act* (IDEA) or under Section 504 of the *Rehabilitation Act of 1973* (Section 504).

This document should be viewed as a supplement to the *Regulations Governing Special Education Programs for Children with Disabilities in Virginia* ("the Virginia Regulations"), at *http://www.doe.virginia.gov/special_ed/index.shtml* and the Virginia's Guidelines for Educating Students with Specific Learning Disabilities at *http://www.doe.virginia.gov/special_ed/disabilities/learning_disability/learning_disabilities_guidelines.pdf* which serves as a resource for parents and educators in addressing the needs of students with a specific learning disability.

SECTION I:

The Definition, Prevalence and Characteristics of Dyslexia

How is dyslexia defined in Virginia?

In Virginia, dyslexia is recognized as one of the conditions under the category of specific learning disability which is distinguished from other learning disabilities due to its weakness occurring at the phonological level. According to the Individuals with Disabilities Education Improvement Act (IDEA) and the Regulations Governing Special Education Programs for Students with Disabilities in Virginia ("the Virginia Regulations") at 8VAC-20-81-10,

> *"Specific Learning Disability means 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 to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia" (emphasis added).*

In the Virginia Regulations at 8VAC-20-81-10,

> *Dyslexia is distinguished from other learning disabilities due to its weakness occurring at the phonological level. Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.*

http://leg1.state.va.us/cgi-bin/legp504. exe?000+reg+8VAC20-81-10
Virginia's Guidelines for Educating Students with Specific Learning Disabilities (the SLD Guidelines) *at http://www.doe.virginia.gov/special_ed/disabilities/ learning_disability/learning_disabilities_guidelines.pdf* is an additional resources provided by the Virginia Department of Education (VDOE).

What is the prevalence of dyslexia in the school age population?

Federal and State statistics indicate that approximately 42 percent of students with disabilities are identified with a specific learning disability with a majority experiencing difficulty with reading. In the document, *The State of Learning Disabilities: Facts, Trends, and Emerging Issues*, the National Center for Learning Disabilities (NCLD, 2014) identified dyslexia as the most prevalent disorder under the subtypes of specific learning disabilities. The NCLD document can be found at *http://www.ncld.org/wp-content/ uploads/2014/11/2014-State-of-LD.pdf*. It is estimated that dyslexia affects 10-15 percent of all school aged children and 15-20 percent of the U.S. population evidence characteristics of dyslexia. (Fletcher, Lyon, Fuchs, & Barnes, 2007; International Dyslexia Association at *http://dyslexiaida.org/ dyslexia-basics/*.

What are the characteristics of dyslexia?

Dyslexia is characterized by difficulties in accurate and fluent reading and poor spelling. Inaccurate and dysfluent reading and spelling difficulties often observed in students who have dyslexia are the consequences of deficits in phonological awareness and rapid automatized naming (RAN;

i.e., the rate with which a person can name a series of visually-familiar stimuli like letters, colors, and numbers). Throughout the development from childhood to adulthood, the phonological difficulties encountered by individuals with dyslexia are manifested differently (Berninger, Richards, & Abbott, 2015; Norton & Wolf, 2012). See Appendix A for characteristics of students with dyslexia by age groups.

The following characteristics are associated with dyslexia:

- Difficulty with the development of phonological awareness and phonological processing skills

- Difficulty naming colors, objects, and letters rapidly, randomly and in a sequence (RAN)
- Difficulty accurately decoding nonsense or unfamiliar words

- Difficulty reading single words in isolation

- Inaccurate and labored oral reading

- Lack of reading fluency

- Various degrees of difficulty learning the names of letters and their associated sounds

- Difficulty learning to spell

- Difficulty in word retrieval and rapid naming (RAN)

- Variable difficulties with aspects of written composition

- Variable degrees of difficulty with reading comprehension

Additional resources:

The Dyslexia Handbook: What Every Family Should Know, from the International Dyslexia Association - *https://dyslexiaida.org/ida-dyslexia-handbook/*

SECTION II:
The Initial Screening Process For Reading Disabilities

What is the screening process for students with reading difficulties or reading disabilities, such as dyslexia in Virginia?

In 1997, Virginia required early screening for reading difficulties and the Early Intervention Reading Initiative (EIRI) was established. The purpose of this screening is to identify students at risk for reading difficulty and to reduce the number of children with reading problems through early screening and identification, and to accelerate their acquisition of early reading skills by the end of each grade level, kindergarten through third-grade through the provision of research based reading instruction. The Phonological Awareness and Literacy Screening – Kindergarten (PALS-K) was developed as part of this effort and is considered to be a reliable criterion-referenced screening, diagnostic and prescriptive tool to inform instruction.

In 2010, the Virginia General Assembly passed Senate Joint Resolution 87, requesting the Virginia Department of Education to study dyslexia screening for kindergartners. The results of the study indicated PALS-K has been shown to be a reliable and valid instrument for the identification of students with reading problems. According to the study, common predictors of reading difficulty, such as weaknesses in phonemic awareness and alphabet knowledge, can be identified using this instrument. The study indicated that a "rapid naming" (RAN) tool would be a possible addition to the PALS screening process. To read the study and review the recommendations, please see the document titled, *Study of Dyslexia Screening for Kindergartners* (SJR8, 2010) at *http://leg2.state.va.us/dls/h&sdocs.nsf/ fc86c2b17a1cf388852570f9006f1299/cbf35e67f28c8b32 8525773f005a73e6/$FILE/SD4.pdf*.

Who is screened using the Phonological Awareness and Literacy Screening (PALS) tool?

The Virginia Department of Education (VDOE) requires universal screening of all kindergarten students at the beginning of the year to detect any student who exhibits early signs of reading difficulties. Mid-year screening is encouraged, especially for those students who have borderline scores. PALS 1-3[1] and PALS Plus are used or can be used with children in the first through eighth grades to identify students at risk of reading difficulties. PALS K and PALS 1-3 (which is available free of cost) are used to satisfy this purpose, but they are also used to guide instruction and to monitor student progress. PALS Plus is also available (for purchase) for students in grades four through eight.

The PALS assessments are designed to identify students in need of additional reading instruction beyond that provided to typically developing readers. They also inform teachers' instruction by providing them with explicit information about their students' knowledge of the basic foundational skills of reading. Mid-year assessment and PALS Quick Checks allow for ongoing student progress monitoring throughout the year. It should be noted that some divisions may opt to administer additional screeners and use additional progress monitoring tools. For more information, see the Phonological Awareness Literacy Screening - *https://pals.virginia. edu/*. Additionally, the RTI Action Network, a program of the National Center for Learning Disabilities, provides information on other screening tools for K-12 and may be a useful resource. Their resources can be found at the following links:

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[1] Since 2000, through a contract with the University of Virginia (UVA), the Phonological Awareness Literacy Screening (PALS) has been provided to school divisions at no charge to identify the students to receive reading intervention, while specifying the types of deficiencies to be addressed.

http://www.rtinetwork.org/essential/assessment/ screening/screening-for-reading-problems-in-grades-1- through-3 and *http://www.rtinetwork.org/essential/ assessment/screening/screening-for-reading-problems-in- grades-4-through-12*.

What components of reading should be included in the screening process when identifying characteristics of dyslexia?

Screening instruments must address all components of reading including phonemic awareness, phonics, fluency, vocabulary, and reading comprehension.

Assessments in each area must be conducted in a manner that is appropriate to the grade level of the child (Birsh, 2011). Any screening instrument must include the assessment of the core deficits of dyslexia, such as phonological awareness and alphabet knowledge. For more information, see the International Dyslexia Association (IDA) revised fact sheet, Testing and Evaluation, which can be found at *https://app.box.com/s/43120w87h73lf16623e rio4eifbhl66t*.

SECTION III:
Addressing Reading Difficulties In General Education

What service delivery options are available for addressing reading difficulties identified in the screening process?

The Regulations Governing the Standards of Quality requires local school divisions to provide reading intervention services to students in kindergarten through grade three who demonstrate deficiencies based on their individual performance on a reading diagnostic/prescriptive assessment as indicated in *Code of Virginia* §§ 22.1-253.13:1 and 22.1-253.13:2 at *http://lis.virginia.gov/cgi-bin/ legp604.exe?121+ful+CHAP0845* and *http://lis. virginia.gov/cgi-bin/legp604.exe?131+ful+CHAP0123*.

The delivery option for reading intervention may vary and is determined by local division and school policies. Some schools may provide this instruction through a division or school specific interventionist, such as a reading specialist or Title 1 specialist, or under a tiered system of support, such as Response to Intervention (RTI) or the Virginia Tiered Systems of Support (VTSS) framework as outlined in guidance provided by the Office of Special Education and Rehabilitation Services (OSERS) at *https:// www2.ed.gov/policy/speced/guid/idea/memosdcltrs/ guidance-on-dyslexia-10-2015.pdf*. The frequency and the duration of the intervention will vary according to the individual needs of the student. Factors, such as the student's baseline performance level, response

to prior intervention, stability of the student's current school and instructional environment, the intensity of the interventions, and the fidelity with which they are implemented, must be considered in the decision-making process as addressed in *Code of Virginia* §§ 22.1-253.13:1 and 22.1-253.13:2 at *http://lis.virginia.gov/cgi-bin/legp604. exe?121+ful+CHAP0845 and http://lis.virginia.gov/ cgi-bin/legp604.exe?131+ful+CHAP0123*.

What happens if an intervention is unsuccessful or a disability such as dyslexia is suspected?

If an intervention is unsuccessful and a disability is suspected, the intervention may need to be changed. If despite the provision of appropriate reading instruction, the parents or educational professionals suspect a disability, a referral for special education evaluation may be made at any time during the intervention process. If a RTI or VTSS process is being used, the resulting progress monitoring data should be included as a component of the evaluation process. Additional information about RTI or VTSS and the special education process may be found in the following guidance document: *RTI and the Special Education Eligibility Process: Frequently Asked Questions* (PDF) at *http://www.doe.virginia.gov/support/ virginia_tiered_system_supports/response_intervention/ special_ed_eligibility_faq.pdf*.

SECTION IV:

Special Education Process For Suspected Reading Disability

What is a referral to special education?

A referral is the first step in the identification process for special education. Anyone, including the parent or legal guardian, who suspects a student has a disability that may require special education can make a referral for an evaluation in writing or by speaking to the special education administrator or the special education administrator's designee, as defined by local policy. The referring source must explain the reasons that an evaluation is requested and any efforts that have been made to address the concerns (VDOE, 2010; see link to document below). Parent's Guide to Special Education *http://www.doe.virginia.gov/special_ed/parents/parents_guide.pdf*.

What are the steps in the special education evaluation process?

Once the referral is received, in most school divisions in Virginia, a school based team, including parents, will determine whether further evaluation is needed. If an evaluation is required, assessment components will be determined by the school based team. The Local Educational Agency (LEA) must conduct a comprehensive evaluation which requires the use of a variety of assessment tools and strategies to gather relevant, functional, developmental, and academic information about the child.

For students suspected of having a specific learning disability in the area of basic skills of reading or dyslexia, the assessment should include areas considered to be indicative of difficulties in the basic skills of reading, as well as areas indicative of reading difficulties in other areas such as comprehension and/or fluency. If difficulty in basic foundational skills of reading or dyslexia is evident, Lowell, Felton, and Hook, (2014) suggest that the evaluation should consist of a complete profile of the individual student, to include observations of the student's performance in the classroom and assessment in the areas of:

- oral language comprehension and use

- processing and memory skills that include phonological awareness, phonological memory, and rapid automatic naming

- specific areas directly related to reading, including fluency of reading (orally and silently) single real words and non-words, as well as sentences and paragraphs

- specific skills directly related to spelling and writing

- information about the student's cognitive abilities

- medical, behavioral, social, and cultural factors

Findings from a recent study reiterated the recommendations from Lowell et al. (2014) and indicated that *letter naming fluency, phonological awareness, RAN or non-word repetition* accurately identified students at risk of dyslexia at the end of first grade (Catts, Nielsen, Bridges, Liu, & Bontempo, 2015). It is also recommended that in the assessment process measures of *working memory, word reading* (i.e., real words and pseudowords), and *spelling* be used to accurately identify individuals with dyslexia (Berninger et al., 2006; Berninger, Nielsen, Abbott, Wijsman, & Raskind, 2008; International Dyslexia Association, 2014).

Refer to Appendix B for the list of measurement tools for assessing those core deficits of dyslexia. This list is not exhaustive and is provided only as

a resource.[2] Additional information can be found on assessment in the IDA fact sheet: Dyslexia Assessment: What is it and How can it help? at *https://dyslexiaida.org/dyslexia-assessment-what-is-it-and-how-can-it-help/*.

How is special education eligibility determined for students suspected of having a Specific Learning Disability?

Once the evaluation is completed, the eligibility team convenes and determines whether the student is eligible for special education and related services under the disability category of Specific Learning Disability (SLD) in the area of basic reading skills. In order to find a student eligible for special education and related services, the specific disability criteria must be satisfied, including an educational need. Localities should consult these documents when establishing their criteria for SLD, under the Virginia Regulations at *http://www.doe.virginia.gov/special_ed/regulations/state/regs_speced_disability_va.pdf*. See the SLD Guidelines at *http://www.doe.virginia.gov/special_ed/disabilities/learning_disability/learning_disabilities_guidelines.pdf*, for additional information on the evaluation and eligibility process for students with a specific learning disability.

Is a medical diagnosis of dyslexia enough to make a student eligible for special education services?

No. Prescriptions, diagnosis, or reports issued by licensed medical professionals, must be considered, but are not sufficient to make an eligibility determination. According to Virginia special education regulations, the eligibility team must consider the following:

- multiple sources that document the presence of a specific learning disability;

- the adverse impact on educational performance; and

- the need for special education.

When a medical diagnosis is presented, groups should address the difference between educational identification under IDEA and the medical diagnosis while reviewing the criteria for the specific disability category as required by the Virginia Regulations. Guidance on Evaluation and Eligibility for Special Education Process can be downloaded at *http://www.doe.virginia.gov/special_ed/disabilities/guidance_evaluation_eligibility.docx*.

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[2] Disclaimer: The identification of any products of private vendors or links to websites in these *Guidelines* are only for the purpose of providing examples and information and does not constitute the Department's endorsement of such products or practices. Selection of products and implementation of practices should be based on student needs, local regulations and policies.

SECTION V:

Special Education and Section 504 Services

What happens if a student is found eligible for special education and related services?

Each student who qualifies for special education and related services has an Individualized Education Program (IEP) developed by an IEP team that includes parents, general and special education teachers, an administrator, and the student if appropriate. The OSERS has provided a guidance letter regarding the use of "dyslexia" within IEP meetings. The guidance supports the use of this terminology to focus the conversation of the team and to assist with goal development. *https://www2. ed.gov/policy/speced/guid/idea/memosdcltrs/guidance-on-dyslexia-10-2015.pdf*

The IEP of a student identified with a SLD in basic reading skills (e.g., dyslexia) must contain the components required by IDEA, such as the present level of academic achievement and functional performance, goals, supplementary aids and services, accommodations, placement, and the participation in the state and district accountability system. Because dyslexia is a disorder that affects reading decoding, word recognition, spelling, and reading fluency, the IEP of a student with dyslexia must include standards-based and/or functional reading goals that address foundational skills (and objectives if necessary) as well as accommodations to facilitate their performance in the general education curriculum.

Additional information on how to write a Standards-Based IEP can be found at *http://www.doe.virginia. gov/special_ed/iep_instruct_svcs/stds-based_iep/index. shtml* on the VDOE website. Examples of standard-based IEP goals for students with dyslexia may be found in the Appendix C of this document.

What are the service options for students who do not qualify for Special Education Services?

For those students who do not qualify for special education, but continue to need additional academic and/or behavioral supports to succeed in a general education environment, schools may support or continue to support these students through a multi-tiered system of supports, such as RTI or VTSS within the general education program. In addition, if a student who has a diagnosis of dyslexia does not qualify for special education under the IDEA criteria, the student may be considered for eligibility under Section 504 of the Rehabilitation Act of 1973. If eligible, accommodations and/or instructional supports for students with dyslexia may be provided through a 504 plan. School divisions have Section 504 policies and procedures to identify and implement accommodations for students as determined appropriate. Additional information about Section 504 eligibility can be found at *http:// www2.ed.gov/about/offices/list/ocr/504faq.html* or contact the local school or school division's student services office.

What instructional approaches are recommended for a student with dyslexia?

Students with dyslexia will benefit from evidence-based instruction that targets the development of basic reading and spelling skills. Intervention for students with dyslexia must be intensive, explicit, systematic, structured, multi-sensory, and be accompanied by frequent progress monitoring. Structured Literacy, including Orton-Gillingham based instructional approaches or programs, is recommended by the IDA and other organizations involved with dyslexia awareness. Based on the

severity of the disability and the specific needs of the student, appropriate interventions should be determined by a school or division based team. This instructional intervention may be provided one to one, through a small group, or in a whole group situation. However, the goal of instruction must be to address the specific needs of the individual student.

IDA Fact Sheet – Multisensory Structured Language Teaching: *https://dyslexiaida.org/multisensory-structured-language-teaching-fact-sheet/*

What are appropriate accommodations for students with dyslexia?

The IEP or 504 team, which includes the parent, must consider the relationship of an accommodation to the student's academic area of difficulty (Fletcher et al., 2006) and select accommodations based on the individual student's needs. Accommodations are designed to minimize the impact of the disability and reduce at least one factor that is not fundamental to the task. It should be noted that some accommodations provided in the classroom may not be allowable on state and/or national assessments. The VDOE assessment guidance document, Students with Disabilities: Guidelines for Special Test Accommodations, provides information on a four-step process for selecting and using test accommodations and a description of test accommodations currently permitted on state assessments. This document can be found at *http://www.doe.virginia.gov/testing/participation/index.shtml*.

Listed below are some accommodations that may be appropriate to consider based on the individual needs of the students.

- **Extended time on assignments.**

- **Expanding Test Time by breaking it down into Sessions:** Students with dyslexia often experience fatigue and loss of interest

during tasks requiring a high level of reading decoding skills. By breaking down the duration of a task into segments of time, students are more likely to successfully complete the assignments.

- **Read Aloud:** Students with dyslexia can benefit from the reading of proper nouns (e.g., names of people), passages, and answer options because read aloud reduces the demands of word recognition and reading decoding skills.

- **Clarify or Simplify Written Directions:** Teachers can underline or highlight the significant parts of directions.

- **Provide Graphic Organizers and Visual Clues:** Teachers can show students how to organize information by using graphic organizers. Teachers can also provide visual cues to assist students when reading directions, remembering information, and decoding text.

- **Provide Copy of Lecture Notes:** Teachers can give students with dyslexia a copy of lecture notes.

- **Change Response Mode:** Students can answer questions orally instead of giving written answers.

- **Reduce Amount of Copying:** Provide information on handouts.

- **Pre-Teach Vocabulary:** Teachers should anticipate that their students with dyslexia will have difficulty decoding long and uncommon words, and therefore, teach the new vocabulary prior to introducing the lesson.

- **Pre-Teach Grammar:** Teachers should analyze complex sentences for their students with dyslexia before requiring students to read a written text.

Is Assistive Technology recommended for students with dyslexia?

Assistive technology (AT) is a required consideration for all students with an IEP. Students with dyslexia who have 504 plans, AT is an option for consideration. The Yale Center for Dyslexia and Creativity at *http://dyslexia.yale.edu/Technology.html* sees AT as a way for students with dyslexia to save time while providing them greater access to the general curriculum and an opportunity to share their knowledge.

According to IDEA and the Virginia Regulations, "assistive technology is any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to maintain, or improve the functional capabilities of a child with a disability." Determining the appropriateness of assistive technology is the responsibility of the IEP team or Section 504 team. The selection should be based on the individual needs of the student. Examples of AT resources that may be beneficial for students with dyslexia can be found in Appendix D. For information on AT, see the VDOE's document titled, Assistive Technology: A Framework for Consideration and Assessment at *http://doe.virginia.gov/special_ed/iep_instruct_svcs/assistive_technology/framework_assistive_technology.pdf*. Refer to AIM-VA's website for more information about accessible materials and alternate format at *https://aimva.org*.

SECTION VI:
References and Resources

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SECTION VII:
Appendices

Helpful websites:

Academy of Orton-Gillingham:
www.ortonacademy.org/approach.php

AIM-VA: *https://aimva.org*

American Dyslexia Association:
www.american-dyslexia-association.com

Dyslexia Virginia: *www.vbida.org*

Dyslexia Reading Well: *http://www.dyslexia-reading-well.com/orton-gillingham.html*

Florida Center for Reading Research:
http://www.fcrr.org

Institute of Multisensory Education:
https://www.orton-gillingham.com/

International Dyslexia Association:
https://dyslexiaida.org/

Learning Ally: *www.learningally.org*

Learning Disability Association of America:
https://ldaamerica.org/types-of-learning-disabilities/dyslexia/

National Center for Learning Disabilities: *www.ncld.org*

National Institute of Neurological Disorders:
http://www.ninds.nih.gov/disorders/dyslexia/org_dyslexia.html

Orton Dyslexia Society: *www.dyslexiaconsultants.com/OrtonDyslexiaSociety.html*

Reading Rockets: *http://www.readingrockets.org/article/best-practice-rti-intensive-systematic-instruction-some-students-tier-2*

RTI Action Network: Reading Intervention
Tier 1: *http://www.rtinetwork.org/essential/tieredinstruction/tier1/effectiveteaching*
Tier 2: *http://www.rtinetwork.org/essential/tieredinstruction/tier2*
Tier 3: *http://www.rtinetwork.org/essential/tieredinstruction/tier3*

Appendix A:
Summary of Characteristics of Individuals with Dyslexia

Age	Language Characteristic(s)	Writing Characteristics	Reading Characteristics
Early Elementary	Difficulty learning alphabet, rhyming	Difficulty writing letters and numbers in order	Difficulty naming letters, and remembering printed and sight words
Upper Elementary	Problems reading at age-appropriate level, remembering new words and site word and performing math word problems	Challenges spelling words correctly consistently, writing neatly and taking notes	Challenges remembering new words, sight words and enjoying reading
Adolescent/ High School	Challenges using correct grammar, knowing the difference between similar words	Problems editing writing, organizing ideas and spelling correctly	Problems reading out loud and with confidence
Adult	Comprehension fluctuates depending on subject, becomes frustrated with long forms or sequential processes	Poor handwriting, masks spelling mistakes, may write with all capitals or mixes capitals within words	Frequently has to re-read to understand, difficulty reading unfamiliar fonts

Appendix B:
Examples of Assessments

Test Name	Focus of Assessment
Comprehensive Test of Phonological Processing (CTOPP)	Measure of phonological coding
Delis Kaplan Executive Function System (D-KEFS)	Color word form inhibition and verbal fluency letters subtests
Gray Oral Reading Test, Fifth Edition (GORT – 5)	Accuracy and rate of oral reading of connected text
Process Assessment of the Learner, 2nd Edition	Diagnostics for reading and writing (PAL-II Reading and Writing)
RAN/RAS	Rapid automatized naming and rapid alternating stimulus tests
Test of Word Reading Efficiency, 2nd Edition (TOWRE-2)	Phonemic decoding efficiency and sight-word subtests
Wechsler Individual Achievement Test, 3rd Edition (WIAT-III)	Spelling subtest
Wide Range Achievement Test 4 (WRAT4)	Spelling subtest
Woodcock Reading Mastery Tests, 4th Edition (WRMT –IV)	Word identification and the word attack subtest

Appendix C:
Examples of Standard-Based Goals:

- By the end of the school year, when given various units of speech sounds, Mark will blend and segment the sounds with 100 accuracy on 3/4 trials. **(Kindergarten)**

- By the end of the school year, when asked to decode multisyllabic words, Kristine will use her knowledge of short and long vowels, r-controlled vowel patterns, consonant blends and digraphs to read the words with 100% accuracy on 5/5 opportunities. **(Second Grade)**

- By the end of the school year, after learning about roots, cognates, and affixes, Robert will be able to use his knowledge to decode the words and identify their meanings with at least 90% accuracy on 4/5 consecutive trials. **(Seventh Grade)**

- When asked to write a persuasive product, Melissa will be able to generate, plan and organize her ideas to address a specific audience and purpose with no more than two spelling errors on 4/5 assignments. **(Eleventh Grade)**

APPENDIX D:
Assistive Technology[3] resources that may be beneficial for students with dyslexia

- **Bookshare:** It offers free digital books, textbooks, periodical, etc. and assistive technology tools (e.g., computer software applications and high-quality voices).
Website: *http://www.bookshare.org*

- **Librivox:** It provides free audiobook from the public domain.
Website: *https://www.librivox.org/*

- **Other Audiobook Sources:** Learning Ally and Audible

- **NaturalReader10:** A Text to Speech software with natural sounding voices. This free software can convert any written text into spoken words.
Website: *http://www.naturalreaders.com/indx.htm*

- **Other Text to Speech Technology:** Read & Write Gold and Voice Dream Reader

- **Livescribe Smartpen:** It facilitates note taking by recording classroom discussions.

- **Dragon Naturally Speaking for PC / Dragon Dictate for Mac:** It is a voice recognition program that allows a student to dictate his/her ideas.

- **Dragon Dictation:** It works on IPhone, IPad, IPod Touch. Available as Dragon Email for Blackberry, and FlexT9 for Android.

- **Word Prediction Software:** WordQ and Co:Writer

- **Electronic Graphic Organizers:** Inspiration, Mindomo, and Popplet.

For more assistive technology tools, visit the following websites:
- *http://www.greatschools.org/gk/articles/assistive-technology-for-kids-with-learning-disabilities-an-overview/*
- *https://www.atdyslexia.com/*
- *http://dyslexiahelp.umich.edu/tools/software-assistive-technology*

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3 See footnote 1: Disclaimer