VDOE Dyslexia Awareness Module Transcript

## 1.1 Dyslexia Awareness Training

Welcome to the Dyslexia Awareness Training Module. The purpose of this module is to provide awareness training regarding the definition, indicators, evidence-based intervention, and accommodations of dyslexia. Limited information will be provided on screening students with potential reading problems as well.

## 1.2 Dyslexia Awareness Training

This module will take approximately 40 minutes to complete. Users should complete the full module in one viewing and not plan to stop and restart at a later time. Users should complete the module from a device that is connected to a printer.

## 1.3 Dyslexia Awareness Training

You will click on the next or previous buttons to move through the module. A script of the narration is provided on the left side of the screen. There will be opportunities throughout the module that will help you review what you have learned. These are not graded.

## 1.4 Dyslexia Awareness Training

At the conclusion of this module, you will print a certificate that will serve as your only documentation of completion. The Virginia Department of Education (VDOE) does not collect historical data. Please maintain your certificate in your records for licensure renewal.

## 1.5 Dyslexia Awareness Training

This module on dyslexia awareness was created to meet the 2016 Virginia General Assembly requirement of House Bill 842. House Bill 842 requires every person seeking initial licensure or renewal of a license to complete awareness training, provided by the Department of Education, on the indicators of dyslexia, as that term is defined by the Board pursuant to the regulation, the evidence-based intervention and accommodations for dyslexia.

## 1.6 Dyslexia Awareness Training

Through this awareness training, Virginia teachers will have the opportunity to become more familiar with what dyslexia looks like and the impact it has on our students in the classroom. According to federal and state statistics, approximately 42 percent of students identified with a disability have a Specific Learning Disability (SLD), and the majority of those students experience reading difficulty.

## 2.1 Definition of Dyslexia

How do we define dyslexia in the Commonwealth of Virginia?

## 2.2 Definition of Dyslexia

First, it is important to understand that, according to the *Regulations Governing Special Education Programs for Students with Disabilities in Virginia*, dyslexia is not recognized as its own disability category, but a condition recognized under the disability category of Specific Learning Disability. A link to the *Regulations Governing Special Education Programs for Students with Disabilities in Virginia* is listed on the resource page at the end of this module.

## 2.3 Definition of Dyslexia

The federal guidelines known as the *Individuals with Disabilities Improvement Act* or *IDEIA* and the *Virginia Regulations* share a common definition of a Specific Learning Disability. A Specific Learning Disability is a disorder in one or more of the basic psychological processes, 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. This disability category includes conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.

## 2.4 Definition of Dyslexia

The definition of dyslexia contained within the *Virginia Regulations* will be presented in five parts. A brief explanation of each part will be provided.

## 2.5 Definition of Dyslexia

Part One: Dyslexia is distinguished from other learning disabilities due to its weakness occurring at the phonological level. This means that a student who has a weakness at the phonological level has difficulty manipulating units of oral language such as words, syllables, or individual sounds. One of the more complex skills at the phonological level is being able to blend and segment individual sounds. This is called phonemic awareness. An example of a student skilled in phonemic awareness is when given three sounds to blend together such as c-a-t, the student produces the word cat. A student with dyslexia may struggle with this same task and produce the word *cap* instead of *cat.* Students with dyslexia who have a significant weakness at the phonological level will have difficulty acquiring basic foundational reading skills.

***2.6 Definition of Dyslexia***

Part Two: Dyslexia is a Specific Learning Disability that is neurobiological in origin. This means that the struggles with basic early reading and language problems a person with dyslexia experiences arose from factors within that individual. Today, we have scientific evidence that supports our understanding that dyslexia is caused by a difference in how the brain processes phonological information.

## 2.7 Definition of Dyslexia

Part Three: Dyslexia is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. In the classroom, students with dyslexia may struggle with decoding or sounding out words, reading words accurately and fluently, and developing basic spelling skills. These basic literacy skills typically develop in kindergarten through second grade, but may remain a challenge for a student with dyslexia as they progress through school.

## 2.8 Definition of Dyslexia

Part Four: 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. Typically, the reading difficulty a student with dyslexia experiences is not expected in relation to the strengths the student demonstrates in other academic areas. For example, a student with dyslexia struggles with basic reading skills, but demonstrates average or above average academic ability in math or other subjects. Additionally, the difficulties a student with dyslexia experiences are not expected given the student has been provided the same effective classroom instruction as peers who are making adequate grade level progress.

## 2.9 Definition of Dyslexia

Part Five: Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge. For the student with dyslexia, the inability to decode fluently and accurately may impair the ability to comprehend text. Because of this challenge, the student with dyslexia may read less and therefore, may have less opportunity to develop vocabulary and background knowledge, as well as less practice at reading to comprehend.

## 2.10 Definition of Dyslexia

Another way to consider the definition of dyslexia is to think about the term itself. “Dys” is a prefix that means *difficulty* and “lexia” is a Greek morpheme that refers to *language* or *words.* So the term dyslexia means *difficulty with language or words.*

## 2.11 Definition of Dyslexia

Let’s review what we know about the definition of dyslexia.

## 2.12 Review of Definition of Dyslexia

True or False. In the Commonwealth of Virginia, dyslexia is recognized as a condition within the disability category of Specific Learning Disability.

**Feedback when correct:**

That's right! You selected the correct response. In Virginia, dyslexia is recognized as a condition under the Specific Learning Disability category.

**Feedback when incorrect:**

You did not select the correct response. In Virginia, dyslexia is a condition recognized under the Specific Learning Disability category.

## 2.13 Review of Definition of Dyslexia

True or False. Dyslexia is a condition that can cause secondary consequences such as a reduced reading experience that affects vocabulary and comprehension development.

**Feedback when correct:**

That's right! You selected the correct response. Dyslexia is a condition that can cause secondary consequences.

**Feedback when incorrect:**

You did not select the correct response. Dyslexia is a condition that can cause secondary consequences.

## 2.14 Definition of Dyslexia

Now that we have reviewed the definition of dyslexia, let’s move on.

## 3.1 Indicators or Characteristics of Dyslexia

The Indicators or Characteristics of Dyslexia.

## 3.2 Indicators and Characteristics of Dyslexia

According to most experts, the characteristics of dyslexia manifest differently from childhood to adulthood. Based on the book, *Basic Facts About Dyslexia and Other Reading Problems* by Louisa Moats and Karen Dakin, the progression of dyslexia from childhood into adulthood will be explored in the next set of slides.

## 3.3 Indicators and Characteristics of Dyslexia

In preschool, children with dyslexia may exhibit some common characteristics, which include, but are not limited to: late learning to talk, slow vocabulary growth, inconsistent memory for words, lists and directions, mispronunciation of words and names, poor letter-sound recall, and slow to learn the alphabet letter names or forms.

## 3.4 Indicators and Characteristics of Dyslexia

Children with dyslexia in kindergarten and first grade demonstrate difficulty with developing basic foundational reading skills which may include, but are not limited to: producing rhyming words, identifying and manipulating the individual speech sounds in spoken words (phonemic awareness), remembering the names of letters and recalling them quickly, recalling the sounds the letters represent, recognizing common words by sight or automatically, and using the sounds of letters to spell so words can be recognized by the teacher. As ”typically developing readers” in the classroom progress, students with dyslexia may progress more slowly and continue to struggle. It is not uncommon for students who struggle at this age to recognize their weaknesses with reading and begin to develop anxiety or try and avoid reading altogether.

**3.5 Indicators and Characteristics of Dyslexia**

During second and third grade, students with dyslexia may have learned some skills, but they typically continue to demonstrate difficulties with reading, writing and spelling. Identifying sight words automatically continues to be problematic as well as sounding out or decoding words. Spelling may be affected with sounds often omitted, letters used incorrectly for sounds, and misspellings of sight words such as *said, that*, and *why*.

***3.6 Indicators and Characteristics of Dyslexia***

In upper elementary grades, students with dyslexia may continue to demonstrate some of the core symptoms of dyslexia even after or while receiving appropriate instruction and intervention. The symptoms of dyslexia typically manifest in oral reading fluency tests that require a student to read aloud for one minute. Dysfluent reading is an indication of the underlying issues associated with dyslexia that still persist.

## 3.7 Indicators and Characteristics of Dyslexia

Middle and high school students with dyslexia may experience a slower reading rate which may result in an increasing amount of work load when compared to their peers without dyslexia. For many students, note-taking, time management, and organization become an issue at this stage.

## 3.8 Indicators and Characteristics of Dyslexia

College students with dyslexia typically need accommodations for slow reading rate, note-taking difficulties, and problems with written expression.

## 3.9 Indicators or Characteristics of Dyslexia

It is important to note that students with dyslexia are not the same. While they share common characteristics of dyslexia, the severity of the disability, duration of the problem, and response to the evidence-based intervention varies greatly among individuals.

## 3.10 Indicators and Characteristics of Dyslexia

Let’s review what we know about the indicators or characteristics of dyslexia.

## 3.11 Review of Indicators and Characteristics

True or False. Students with dyslexia share common characteristics of dyslexia and are not very different from one another.

**Feedback when correct:**

That's right! You selected the correct response. Students with dyslexia share common characteristics, but differ in the severity and impact of the condition.

**Feedback when incorrect:**

You did not select the correct response. Students with dyslexia share common characteristics, but differ in the severity and impact of the condition.

## 3.12 Review of Indicators and Characteristics of Dyslexia

True or False. College students with dyslexia may need support through accommodations to address slow reading rate and note-taking difficulties.

**Feedback when correct:**

That's right! You selected the correct response. Yes, college students with dyslexia may need support through accommodations to address slow reading rate and note-taking difficulties.

**Feedback when incorrect:**

You did not select the correct response. College students do typically need accommodations to address slow reading rate and note-taking difficulties.

## 3.13 Indicators and Characteristics of Dyslexia

Now that we have reviewed the characteristics of dyslexia, let’s move on.

## 4.1 Screening for Dyslexia

Screening for students with potential reading problems, such as dyslexia.

## 4.2 Screening for Dyslexia

In 1997, Virginia established the Early Intervention Reading Initiative (EIRI) to identify students at risk of reading difficulties and to reduce the number of children with reading problems through early screening and identification.

## 4.3 Screening for Dyslexia

The Phonological Awareness and Literacy Screening (PALS-K) was developed as a part of the EIRI effort and is currently a tool administered to identify kindergarten students at risk of reading difficulty throughout Virginia. Since 2000, through a contract with the University of Virginia (UVA), the Phonological Awareness Literacy Screening (PALS K-3) tool 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.

## 4.4 Screening for Dyslexia

In 2010, the Virginia General Assembly passed Senate Joint Resolution 87 and requested the Virginia Department of Education to study dyslexia screening for kindergartners. The PALS-K was found to be a reliable and valid instrument for the identification of students with reading problems such as dyslexia. Phonemic awareness and alphabet knowledge are common predictors of reading difficulty and, according to the study, are identified using this tool. The study also indicates that a possible addition to the PALS screening tool would be a rapid naming tool or RAN (Rapid Automatized Naming) assessment. This assessment measures how quickly a student can name aloud objects, pictures, names or symbols (letters).

## 4.5 Screening for Dyslexia

The PALS 1-3 and PALS PLUS may be administered with children in the first through eighth grades to identify students at risk of reading difficulties. The PALS K-3 is available at no cost for initial screening. School divisions have the option to select additional screening tools that they deem appropriate to screen for dyslexia.

## 4.6 Screening for Dyslexia

Students that fall below the benchmark of screening tools such as PALS-K and demonstrate deficits in the basic foundational reading skills receive intervention. The intervention methods are determined by the local division.

## 4.7 Screening for Dyslexia

If an intervention is unsuccessful or if a parent, teacher, or legal guardian suspects the student may have a disability and requires special education, he or she can make a referral for a suspected disability in writing or by speaking to the special education administrator.

## 4.8 Screening for Dyslexia

It is important to note that not all students with dyslexia will meet the educational criteria of a student with a Specific Learning Disability and therefore, not all students with dyslexia will be eligible for special education. Some students with dyslexia may be eligible for a 504 plan and still others may not be eligible for either special education or a 504 plan. For additional information regarding the special education or 504 process, contact your local school or school division.

## 4.9 Screening for Dyslexia

Let’s review what we know about screening students for potential reading problems.

## 4.10 Screening for Dyslexia

***True or False. Students who fall below the benchmark of a screening tool such as PALS-K receive intervention.***

**Feedback when correct:**

That's right! You selected the correct response. Students who do not meet the benchmark on a division screening tool will receive intervention provided by their school or school division.

**Feedback when incorrect:**

You did not select the correct response. Students who fall below the benchmark on a division screening tool do receive intervention provided by their school or school division.

## 5.1 Content of Structured Literacy

What is the evidence-based intervention for students with dyslexia?

## 5.2 Content of Structured Literacy

In Virginia, evidenced-based intervention for students with dyslexia begins in the kindergarten classroom with **Core** or Tier 1 instruction. **Core** instruction must include instruction in the five components of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension as identified by the National Reading Panel (NRP). The Virginia Standards of Learning include phonemic awareness and phonics standards that are systematically organized kindergarten through second grade to facilitate the acquisition of early reading, writing and spelling skills. For students identified by their school as having a reading disability such as dyslexia, receiving explicit and systematic instruction in phonemic awareness and phonics through the general education curriculum is the first step in remediating those phonological deficits that are the root cause of dyslexia.

## 5.3 Content of Structured Literacy

In addition to **Core** instruction received in the general education classroom based on the Virginia Standards of Learning, students identified with a reading disability, such as dyslexia, need evidence-based intervention or specially designed instruction to address identified basic reading, writing, and spelling weaknesses. It is important to note that students identified with a Specific Learning Disability receive specially designed instruction in addition to **Core** instruction.

## 5.4 Content of Structured Literacy

Structured Literacy is the evidence-based intervention or specially designed instruction recommended by the International Dyslexia Association (IDA) and other notable organizations dedicated to dyslexia awareness and the instructional practices appropriate to address the needs of the student with dyslexia. Structured Literacy is a very specific approach and focuses on specific content as well as specific methodology to teach the basic foundational skills that students with dyslexia need to develop in order to be efficient readers.

## 5.5 Content of Structured Literacy

The name **“Structured Literacy”** is the umbrella term adopted in 2014 by the International Dyslexia Association that is meant to be inclusive of all the programs and approaches that teach reading in an explicit and systematic manner.

## 5.6 Content of Structured Literacy

The instructional content, or what is taught within the Structured Literacy approach, includes five specific content areas directly related to the weaknesses associated with dyslexia. These component areas of Structured Literacy include: phonology, sound-symbol relationships, syllabication, morphology, semantics and syntax. In the next set of slides, we will review each of the component areas of Structured Literacy.

 **5.7 Content of Structured Literacy**

By definition, dyslexia is a disability resulting from a weakness at the phonological level. This is a deficit in a student’s ability to manipulate sounds at the sentence, syllable and word level and includes other phonological skills, such as phonemic awareness, which are the underlying skills of early reading and spelling achievement. These foundational skills are taught in preschool, kindergarten, and first grade.

## 5.8 Content of Structured Literacy

Students with dyslexia often need direct instruction in matching the appropriate sound to the symbol (letter or letters) presented. For example, when a student is presented with the letter k, the student knows to make the /k/ sound. Being able to quickly match the sound to the letter or letters is directly related to being able to blend sounds together to make a word. Matching sounds to symbols begins in kindergarten and continues into second and third grade when students are taught advanced vowel patterns.

## 5.9 Content of Structured Literacy

As students become more efficient readers, they will encounter multi-syllabic words in their reading. Many students with dyslexia benefit from a strategy called syllabication, which is a word attack strategy for decoding multi-syllabic words, based on the syllable pattern and type. This strategy helps students to read and spell complex words more accurately, easily and efficiently.

## 5.10 Content of Structured Literacy

Morphology is the study of the smallest units of language that have meaning. Through morphology, we teach students to break words into units of meaningful parts such as roots, morphemes, and affixes. For example, the word *instructor* contains the Latin root *"struct"* which means *to* ***build****,* the prefix *"in" means* ***in*** *or* ***into****, and the suffix "or" means* ***one who****. An instructor* therefore, is one who builds knowledge in his or her students. Teaching students with dyslexia to recognize the word parts and know the meaning of those word parts further assists them in decoding, building vocabulary, and becoming more efficient readers. In Virginia, the teaching of common prefixes and suffixes begins in second grade in Core instruction.

## 5.11 Content of Structured Literacy

Teaching semantics and syntax is embedded throughout all of the content areas of Structured Literacy instruction. Syntax refers to the set of principles that dictates the sequence and function of words in a sentence in order to convey meaning. For example, the appropriate word order in this sentence is *Mary rode in the car* rather than *In Mary the car rode*. Semantics is the understanding of what is written or the comprehension of language.

## 5.12 Content of Structured Literacy

Let’s review the components of Structured Literacy by completing the activity on the next slide.

## 6.1 Principles of Instruction

The instructional principles, or the "how" Structured Literacy is being taught, serve as the foundation of this approach and guides the instructor in the delivery of content. In Structured Literacy, delivery of content is explicit and direct, systematic and sequential, cumulative, multisensory and diagnostic. The consistent use of progress monitoring helps the teacher make appropriate adjustments to the instruction. In the following slides, a brief explanation of the principles will be presented. **6.2 Principles of Instruction**

So what do the instructional principles of Structured Literacy look like in the classroom? When teachers are **explicit and direct**, they are deliberate in the teaching of all concepts and provide a continuous teacher-student interaction. For example, teachers provide explicit and direct instruction when they explain to students that when a one syllable word with a short vowel ends in f,l,s or sometimes z, we double the consonant. And this is why we spell the word “pass” with two s’s.

## 6.3 Principles of Instruction

Using a Structured Literacy approach, teachers are **systematic and sequential** because they organize both the lesson and content in a logical order. Teachers use a predictable lesson plan structure that students become familiar with and the concepts taught progress from simple to complex. For example, students are taught to read and spell simple three letter words that contain a short vowel sound like in the word ***bug,*** before they are taught to read and spell longer words that contain more difficult vowel sounds and patterns like in the word ***oyster.***

## 6.4 Principles of Instruction

In the Structured Literacy approach, there is **cumulative** review of previously taught skills to provide the additional practice and reinforcement necessary to ensure mastery. An example of this principle is a teacher who provides time each day to review all or many of the letter sounds that students have been previously taught.

## 6.5 Principles of Instruction

Using a **multisensory approach** to teaching and learning is a major emphasis in Structured Literacy. Visual, auditory, kinesthetic, and tactile modalities are used in the learning process to increase the likelihood of the content being learned. For example, when students are learning their letters, they say the name of the letter, the sound the letter makes and trace the letter at the same time.

## 6.6 Principles of Instruction

Teachers are **diagnostic** and base their instruction on continuous assessment. For example, if a student misreads the word dig for dug, the teacher should note that miscue in her anecdotal notes and plan to provide additional practice with short u and i.

## 6.7 Principles of Instruction

Frequent assessment of student performance, or **progress monitoring**, must be completed to ensure learning of concepts. For example, teachers may administer formative assessments, such as a word list or a running record to gauge student progress on a weekly basis.

## 6.8 Principles of Instruction

While Structured Literacy is a specific approach and focuses on developing the weaknesses associated with dyslexia, vocabulary development, comprehension, and fluency are all supported and strengthened by this approach as well.

## 6.9 Principles of Instruction

Based on the needs and severity of the disability, Structured Literacy may be delivered one on one, in a small group, or to a whole group. This instruction can be implemented in general education or special education classrooms.

## 6.10 Check for Understanding

 *(Matching Drag-and-Drop, 10 points, 1 attempt permitted)*



**Feedback when correct:**

That's right! You matched the Principles of Structured Literacy with the appropriate definition.

**Feedback when incorrect:**

You did not correctly match the principles with the appropriate definition. Explicit and direct is deliberate teaching of concepts. Cumulative review is constant review of concepts. Systematic and sequential is taught in a logical order. Diagnostic is continuous assessment. And Multisensory is teaching with all the pathways.

**Notes:**

Let’s review the principles of Structured Literacy by matching the principles to their definition.

## 6.11 Principles of Instruction

**Notes:**

Now that you have matched the principles of Structured Literacy to their definition, let’s continue.

## 7.1 Accommodations

Accommodations and Assistive Technology (AT) are important components of a student’s Individualized Education Program (IEP) or a 504 plan. In the next few slides, the definition and purpose of both accommodations and AT will be explored and examples of each will be provided. We will begin with accommodations.

## 7.2 Accommodations

An accommodation is a change in timing and scheduling, setting, response, and presentation regarding instruction and assessment that ensures access to the general education grade level curriculum for students with disabilities. An accommodation does not change learning expectations.

## 7.3 Accommodations

Accommodations should enable students to participate more fully in instruction and assessments to better demonstrate their knowledge and skills. Accommodations should foster and facilitate independence for students, not create dependence. Accommodations should be aligned with and part of daily instruction. Accommodations should not give an advantage to a student but level the playing field. An accommodation should not alter in any significant way what the test or assignment measures.

## 7.4 Accommodations

The IEP team or 504 team, which includes the parent, must base an accommodation on the individual needs of the student and not the category of the disability, level of instruction, or program setting. Accommodations are documented in the student’s IEP or 504 plan.

## 7.5 Accommodations

Accommodations should be used regularly and not be introduced for the first time during the administration of a state assessment. Some accommodations provided for classroom instruction or assessment may not be allowable on statewide or national assessments. Information on the use of special test accommodations for students with disabilities can be found in the VDOE resource publication: *Students with Disabilities: Guidelines for Special Test Accommodations.* The link for this document is listed on the resource page at the end of this module.

## 8.1 Examples of Accommodations

Let’s review some accommodations that may be appropriate for a student with a Specific Learning Disability such as dyslexia. Examples of timing and scheduling, presentation, setting and response accommodations will be provided.

## 8.2 Examples of Accommodations

Examples of accommodations within the timing and scheduling category include extending time and segmenting or chunking time. Providing extended time on assignments is often appropriate for students with dyslexia due to slow processing. Students with dyslexia often experience fatigue and loss of interest during tasks requiring a lot of decoding skills. By breaking down the duration of the task into segments of times, students are more likely to successfully complete the assignment.

## 8.3 Examples of Accommodations

Examples of accommodations for the presentation category include graphic organizers and pre-teaching vocabulary. Graphic organizers are tools to help communicate information, concepts or ideas in a visually organized way. One of the many benefits of a graphic organizer is that text is minimized while the relationship between the information, concepts or ideas is visually presented. Students with dyslexia may have difficulty with decoding long and uncommon words. Having vocabulary pre-taught in the content areas, such as social studies and science, strengthens overall learning of content.

## 8.4 Examples of Accommodations

Note-taking for students with dyslexia can be problematic because note taking requires fluent writing and spelling. A copy of lecture notes, provided prior to a lecture, allows the student to focus on the content being presented without the added cognitive burden of the task. This is another example of an accommodation in the presentation category.

## 8.5 Examples of Accommodations

The reading of proper nouns, passages, and answer options may be appropriate for a student with dyslexia because a read aloud reduces the demands of word recognition and decoding skills. In content area classes, such as social studies and science for example, taking the demands off decoding text allows the student to focus on the content being taught. In some cases, a student with dyslexia may require the entire text to be read aloud due to the severity of the reading disability. It’s important to know that the read aloud may not be allowed on some state and national assessments.

## 8.6 Examples of Accommodations

Examples of setting accommodations include providing a room without distractions, providing a study carol or preferential seating. Allowing for verbal responses or allowing students to dictate to a scribe are examples of accommodations in the response category.

## 9.1 Assistive Technology

What is assistive technology?

## 9.2 Assistive Technology

According to Virginia Special Education 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."

## 9.3 Assistive Technology

An IEP team must consider a student’s needs for assistive technology, while a 504 team should consider a student’s needs for assistive technology. Both the IEP team and the 504 team are responsible for determining the type of assistive technology appropriate for individual students. All decisions regarding AT should be based on a student’s individual needs.

## 9.4 Assistive Technology

According to the Yale Center for Dyslexia and Creativity, AT provides greater access to the general curriculum and is a way for a student with dyslexia to save time as well as show their knowledge. The link to the Yale Center for Dyslexia and Creativity is provided on the resource page at the end of this module.

## 9.1 Examples of Assistive Technology

What are some examples of assistive technology?

## 10.2 Examples of Assistive Technology

Electronic graphic organizers are a visual representation of concepts, knowledge or information that can incorporate both text and pictures and are accessed through technology such as a laptop or a tablet. For students with dyslexia, the electronic graphic organizer combines the value of an instructional tool or accommodation with the accessibility of technology. These organizers can be used across the curriculum including writing.

## 10.3 Examples of Assistive Technology

A word prediction software provides assistance to students who have difficulty writing by predicting the target word as the student types in the first letter or letters of the word. One of the most popular uses of word prediction software is for those students who have difficulty with writing due to spelling deficits. So, for some students with dyslexia, word prediction software may be assistive technology the IEP team or the 504 team considers.

## 10.4 Examples of Assistive Technology

Text to speech software is a tool that can be very helpful for students with dyslexia. This software reads the written word aloud. This technology allows students to see text and hear it read aloud at the same time. For students who need a "read aloud," this technology allows them to be independent rather than rely on a peer or adult to assist them when needed.

## 10.5 Examples of Assistive Technology

Speech recognition, or speech-to-text software is designed to transcribe spoken language into text format. This assistive technology may be appropriate for students with dyslexia who struggle with writing classroom assignments and assessments.

## 10.6 Examples of Assistive Technology

AIM VA (Accessible Instructional Materials in Virginia) provides accessible instructional materials at no cost to eligible K-12 Virginia students. Accessible instructional materials are alternative print materials (Braille, electronic files, etc.) that can be delivered to and used by students who are not able to use traditional print formats. For example, a student with dyslexia may struggle with reading classroom study guides. AIM VA is able to make that study guide an accessible document that can be read aloud using a text-to-speech reader. A link to AIM VA is available on our resource page at the end of this module.

## 10.7 Examples of Assistive Technology

In Virginia, a student with dyslexia is eligible for AIM VA if they have 1) an IEP that states that they will benefit from alternate print materials, and 2) have medical documentation that they have a reading disability resulting from organic dysfunction. The AIM-VA eligibility document can be found following this link:

<https://aimva.org/>.

## 10.8 Examples of Assistive Technology

Learning Ally and Book Share are national nonprofit organizations dedicated to helping students with print disabilities, including blindness, visual impairment and Specific Learning Disabilities, such as dyslexia. Eligible students benefit from audio books that include textbooks and best selling novels. Audio books support comprehension, build confidence, and save time on school work. A link to both Learning Ally and Bookshare are provided on the resource page at the end of this module.

## 10.9 Review

Let’s review some of what we have learned regarding accommodations and assistive technology by completing the activity on the next slide.

## 10.10 Review

 *(Drag and Drop, 10 points, 1 attempt permitted)*



**Feedback when correct:**

Examples of Accommodations are 1) Extended Time; 2) Copy of Lecture Notes; and 3) Read Aloud.

Examples of Assistive Technology are 1) Electronic Graphic Organizer; 2) Text to Speech; and 3) AIM Virginia.

**Feedback when incorrect:**

Examples of Accommodations are 1) Extended Time; 2) Copy of Lecture Notes; and 3) Read Aloud.

Examples of Assistive Technology are 1) Electronic Graphic Organizer; 2) Text to Speech; and 3) AIM Virginia.

Determine whether each item listed is an example of an accommodation or an example of assistive technology by dragging each item into the appropriate category.

## 11.1 Conclusion



You have completed the Dyslexia Awareness module on the characteristics, evidence-based intervention, and accommodations for dyslexia. Click next and personalize your certificate. Please maintain your certificate in your records for licensure renewal.

## 11.2 Certificate



## 11.3 Printing Directions



**Notes:**

If you have successfully printed your certificate, click on the next button.

## 11.4 Certificate of Completion



**Notes:**

If you have successfully printed your certificate, click on the next button.

## 11.5 Resources



## 11.6 Thank you



**Notes:**

The Virginia Department of Education would like to thank the Virginia legislators, parents, and community for their work and support on this dyslexia initiative.