TN Department of Education

Dyslexia Advisory Council Annual Report

2017-18 Report to the Education Committees

Tennessee Department of Education | December 2018

2017-18 Dyslexia Advisory Council Members

Dr. Candice McQueen, commissioner, Tennessee Department of Education

Theresa Nicholls, assistant commissioner of the division of special populations and student support, Tennessee Department of Education

Eileen Miller, advocate, Decoding Dyslexia Tennessee

Allison McAvoy, special education teacher, Hamilton County Department of Education

Melissa Miller-Benson, elementary school teacher, The Bodine School

Mercedes Chartrand, middle school teacher, Clarksville-Montgomery County School System

Briana Patrick, high school teacher, Lauderdale County Schools

Anna Thorsen, parent

Morgan Ashworth, speech language pathologist, Loudon County School District

The council also includes three ex-officio members with expertise in dyslexia: Emily Dempster with the International Dyslexia Association; Erin Alexander, a school psychologist and assistant director for clinical services at the Tennessee Center for Dyslexia; and Susan Porter, a district lead coach of instruction with Metro Nashville Public Schools.

Executive Summary

The “Say Dyslexia” law, (Chapter 1058 of the Public Acts of 2016) requires the department of education to develop guidance for identifying characteristics of dyslexia and to provide appropriate professional development resources for educators in the areas of identification and intervention methods for students with dyslexia. This law also requires the creation of a dyslexia advisory council to advise the department on matters related to dyslexia. This council is comprised of nine appointed members that include the commissioner of education, or the commissioner's designee; an education specialist from the department; a representative from a dyslexia advocacy group; a special education teacher with an understanding of dyslexia; an elementary school teacher; a middle school teacher; a high school teacher; a parent of a child with dyslexia; and a licensed speech pathologist. The council also appointed three additional ex officio members that have expertise in dyslexia. The council is tasked with reporting to the Education Committee of the Senate and the Education Instruction and Programs Committee of the House of Representatives on the following topics:

- the number of students screened and the number of students provided with dyslexia intervention services;
- information about specific accommodations needed for students who are provided dyslexia intervention services taking the annual state-mandated assessment or other state or district-mandated assessments;
- descriptions from the districts that provided dyslexia intervention services of the intervention services provided to students; and
- the TVAAS growth data, when available, for the students receiving dyslexia intervention services.

What is dyslexia?

Dyslexia is a specific learning disability that is neurological in origin and is characterized by difficulties with accurate and 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. Dyslexia is a language-based condition rather than a vision-based condition. Students with dyslexia struggle with the relationship between letters and sounds. Because of this, they have a hard time decoding, or sounding out, unfamiliar words, and instead often misread them based on an overreliance on their sight-word memory. Deficits are unexpected relative to cognitive abilities in that the student’s skills are lower than their overall ability and are not due to a lack of intelligence. Screening for characteristics of dyslexia is a proactive way to address skill deficits through appropriate interventions. Screening results that reflect characteristics of dyslexia do not necessarily mean that a student has dyslexia nor can dyslexia be diagnosed through a screening alone.

Characteristics of Dyslexia

The "Say Dyslexia" law identifies the following characteristics of dyslexia:

- Phonological awareness: a broad category comprising a range of understandings related to the sounds of words and word parts;
- Phonemic awareness: the ability to notice, think about, and work with the individual sounds in spoken words;
- Alphabet knowledge: understanding that letters represent sounds, which form words;
- Sound/symbol recognition: understanding that there is a predictable relationship between phonemes (sounds in spoken language) and graphemes (the letters that represent those sounds);
- Decoding skills: using knowledge of letters and sounds to recognize and analyze a printed word to connect it to the spoken word it represents (also referred to as "word attack skills");
- Encoding skills: translating speech into writing (spelling); and
- Rapid naming: ability to connect visual and verbal information by giving the appropriate names to common objects, colors, letters, and digits (quickly naming what is seen). Rapid naming requires the retrieval of phonological information related to phonemes (letter/ letter combination sounds), segments of words, and words from long-term memory in an efficient manner. This is important when decoding words, encoding words, and reading sight words.

Table 1: Common Characteristics of Dyslexia[1]

Age Group	Difficulties	Strengths
Grades K–1	▪ Reading errors exhibit no connection to the sounds of the letters on the page (e.g., will say "puppy" instead of the written word "dog" on an illustrated page with a dog shown) ▪ Does not understand that words come apart ▪ Complains about how hard reading is, or "disappears" when it is time to read ▪ A familial history of reading problems	▪ The ability to figure things out ▪ Eager embrace of new ideas ▪ Gets "the gist" of things ▪ A good understanding of new concepts ▪ A large vocabulary for the age group ▪ Excellent comprehension of stories read aloud (i.e., listening comprehension)

[1] Taken from The Yale Center for Dyslexia and Creativity, Signs of Dyslexia. http://dyslexia.yale.edu/EDU_signs.html

Age Group	Difficulties	Strengths
	▪ Cannot sound out simple words like *cat*, *map*, *nap* ▪ Does not associate letters with sounds, such as the letter b with the "b" sound	
Grades 2+	▪ Very slow to acquire reading skills; reading is slow and awkward ▪ Trouble reading unfamiliar words, often making wild guesses because he cannot sound out the word ▪ Does not seem to have a strategy for reading new words ▪ Avoids reading out loud ▪ Confuses words that sound alike, such as saying "tornado" for "volcano," substituting "lotion" for "ocean" ▪ Mispronunciation of long, unfamiliar, or complicated words ▪ Avoidance of reading; gaps in vocabulary as a result	▪ Excellent thinking skills: conceptualization, reasoning, imagination, abstraction ▪ Learning that is accomplished best through meaning rather than rote memorization ▪ Ability to get the "big picture" ▪ A high level of understanding of what is read aloud (i.e., listening comprehension) ▪ The ability to read and to understand highly practiced words in a special area of interest ▪ Sophisticated listening vocabulary ▪ Excellence in areas not dependent on reading

Universal Screening

School districts were required to implement screening procedures in order to identify students exhibiting characteristics of dyslexia through the universal screening process required by the existing Response to Instruction and Intervention (RTI²) framework.

The universal screening process involves three steps:

Step One: In grades k–8, districts should administer a nationally normed, skills-based universal screener as part of the universal screening process. Universal screeners are not assessments in the traditional sense. They are brief, informative tools used to measure academic skills in six general areas (i.e., basic reading skills, reading fluency, reading comprehension, math calculation, math problem solving, and written expression). If a standards-based assessment is used to screen all students instead of a skills-based universal screener, a skills-based screener is still necessary to identify more specific

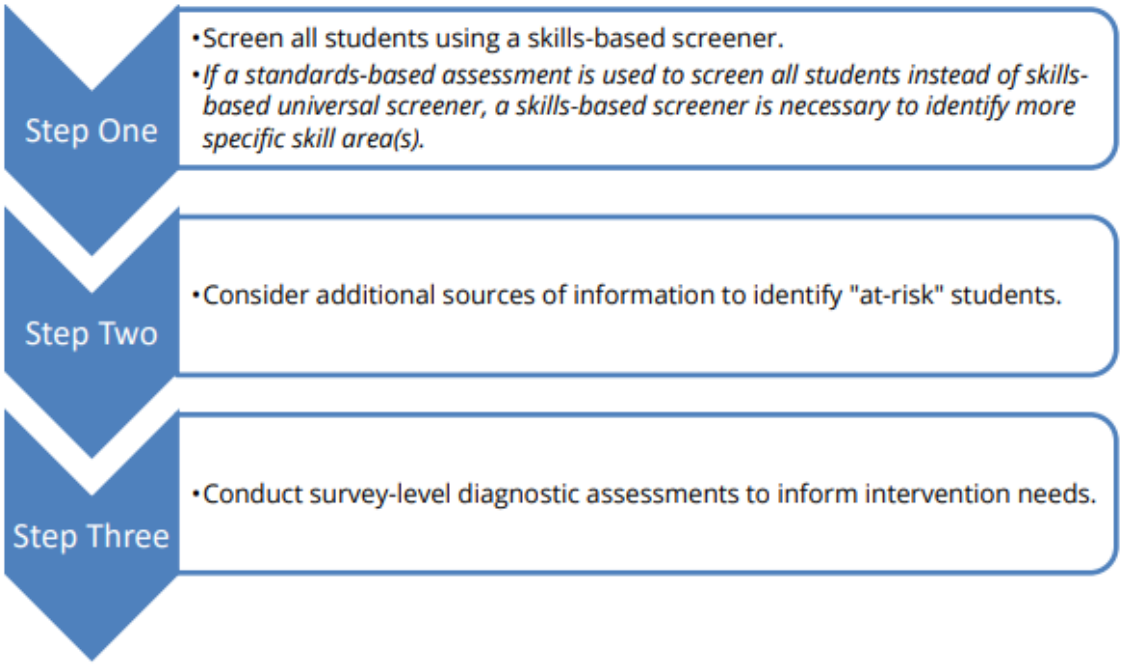
skill area(s) of focus and to determine alignment of interventions for students identified as "at risk." When considering characteristics of dyslexia, screening in the areas of basic reading, reading fluency, and written expression help identify students who may need additional assessment to determine possible deficits related to the characteristics of dyslexia and the need for intervention.

In grades 9–12, schools should collect multiple sources of data that can be incorporated into an early warning system (EWS). The EWS may include data from universal screeners, achievement tests (from both high school and grades K–8), end of course (EOC) exams, student records (e.g., grades, behavioral incidents, attendance, retention, past RTI² interventions), the Tennessee Value-Added Assessment System (TVAAS), and the ACT/SAT exam or other nationally normed assessments. A template can be found on the department's RTI² Resources webpage. Districts will establish criteria for identifying students who are at risk using this EWS by determining appropriate thresholds for each indicator (e.g., missing 10 percent of instructional days may be a flag for attendance) and weighting each indicator appropriately based on local context.

Step Two: In grades k–12, school teams should consider the results of the skills-based universal screener or EWS compared to other classroom-based assessments. These may include but are not limited to: standards-based assessments, grades, formative assessments, summative assessments, classroom performance, and teacher observations, in addition to any other relevant information such as medical or family history. This information should be used to corroborate performance on the skills-based universal screener. School teams should also consider sources that measure early risk factors or indicators of dyslexia. The school team should also consider a parent's request for additional screenings if there are concerns beyond the results of the universal screening process.

Step Three: In grades k–12, students identified as "at risk" based on multiple sources of data should be administered survey-level and/or diagnostic assessments to determine student intervention needs. As required by the "Say Dyslexia" law (T.C.A. § 49-1-229), these survey-level assessments for reading must explicitly measure characteristics of dyslexia to include: phonological and phonemic awareness, sound symbol recognition, alphabet knowledge, decoding skills, rapid naming, and encoding skills.

Figure 1 Universal Screening Process



Dyslexia-Specific Interventions

School-based problem-solving teams analyzed screening data and identified students that demonstrated the characteristics of dyslexia and thus required dyslexia-specific intervention as defined by T.C.A. § 49-1-229. Districts were provided guidance on how to report the number of students receiving dyslexia-specific intervention through in-person regional trainings and conferences, written communications (See "Say Dyslexia" Reporting Requirements Flowchart in Appendix A), and follow-up technical assistance by regional department of education intervention specialists. The data below represent the total percentage of students within each district who were reported to receive dyslexia-specific intervention during the 2017-18 school year. **It should be noted that the data collected for the 2017-18 school year is considered baseline data. As districts spent the past year working on screening procedures and intervention development, many reported that they were hesitant to identify students receiving intervention. It is expected the number of student reported will increase in the 2018-19 school year.**

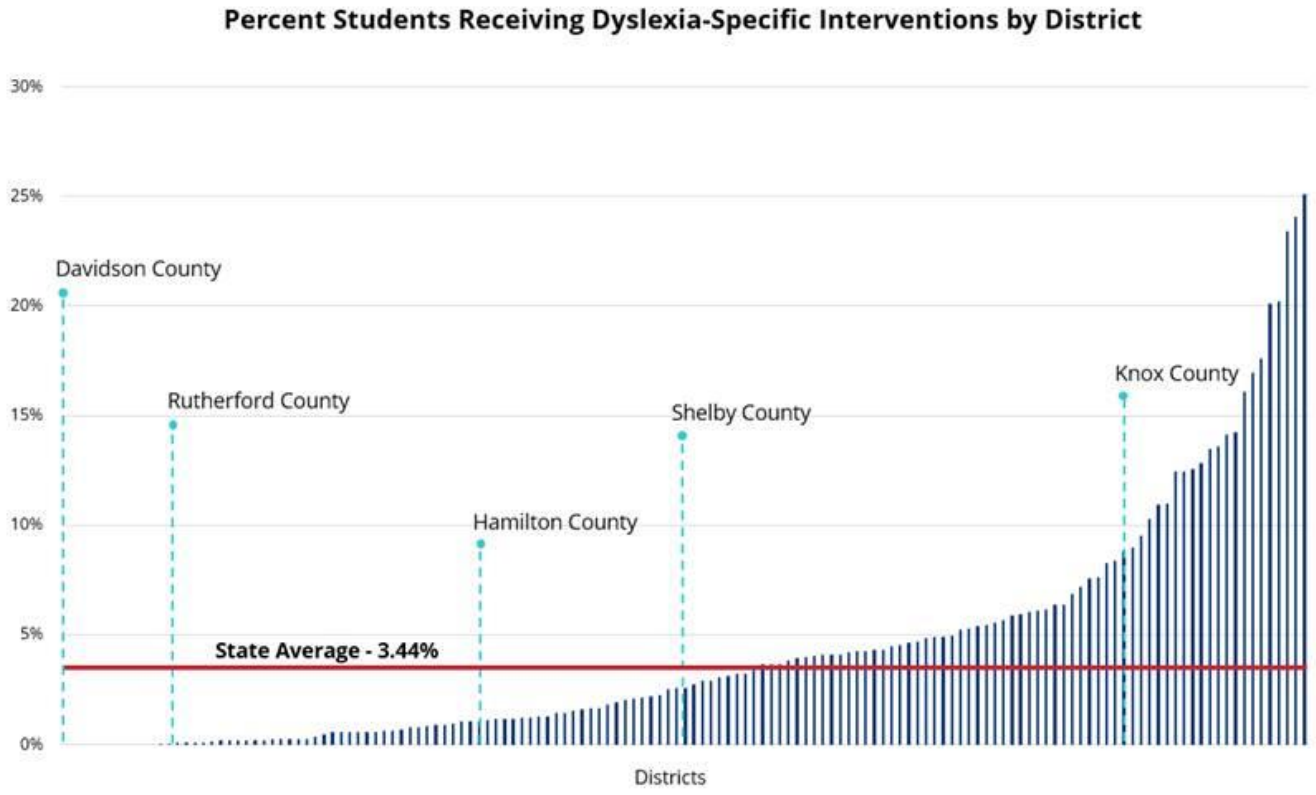
State-Level Data

Based on the Oct. 1, 2017 federal membership file, the total student population (pre-k–12) for 2017-18 school year was 973,582 with 33,474 students in grades k–12 reported by districts to have received dyslexia-specific intervention. This data was pulled from the department's education information system (EIS) and captures any student coded as receiving a dyslexia-specific intervention at any point in the 2017-18 school year.

District Data

Figure 2 below shows the percent of students within each district reported as receiving dyslexia-specific interventions. Each black bar represents a school district while the red line represents the statewide average. The reported statewide average is 3.44 percent of the overall student population receiving dyslexia-specific interventions. The five largest districts have been identified within the figure to show the extremes between districts that fall into similar size categories and comprise roughly 35 percent of the entire student population in Tennessee. The five large districts include Davidson County (0 percent reported), Rutherford County .08 percent reported), Hamilton County (1.08 percent reported), Shelby County (2.53 percent reported), and Knox County (8.37 percent reported). A total of 18 districts reported 10 percent or more of their students as receiving dyslexia-specific interventions, 42 districts reported at least 5 percent, and a total of 135 districts reportedly provided dyslexia-specific interventions. A breakdown of the percent of students in each district reported to receive dyslexia-specific intervention can be found in Appendix B.

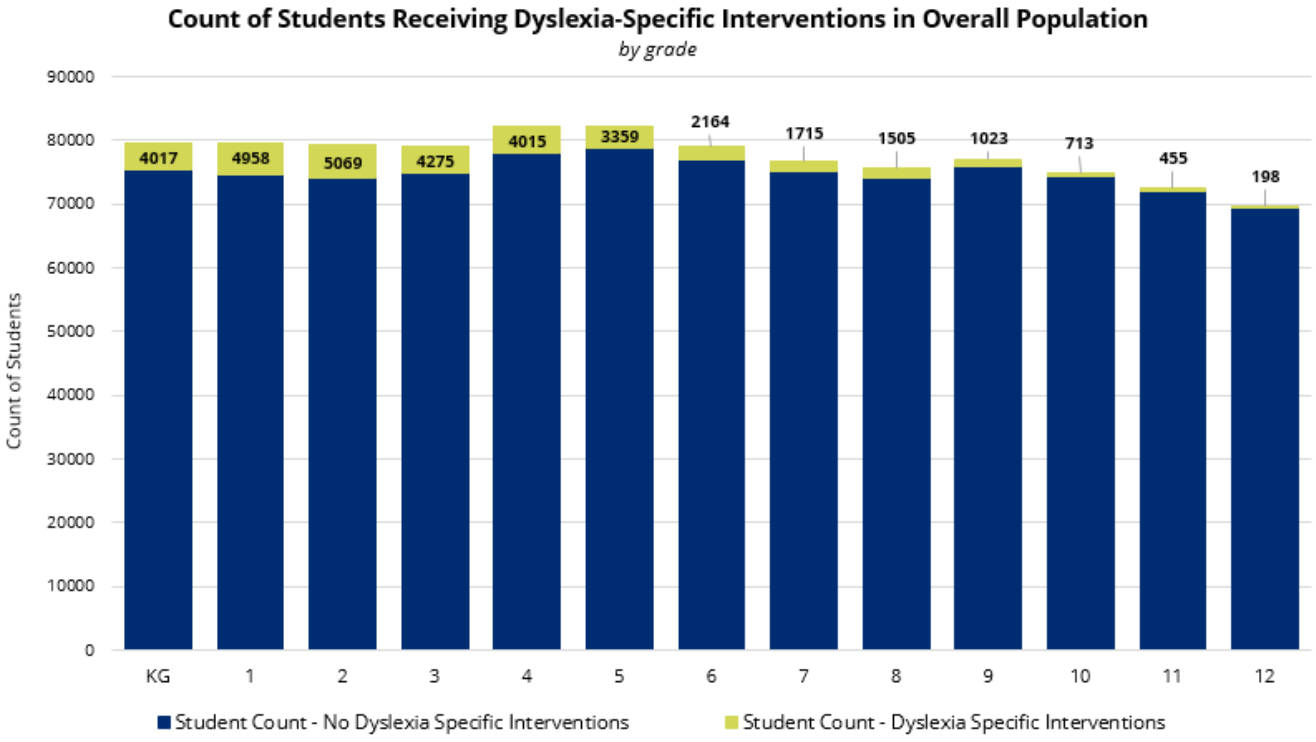
Figure 2



Student Count

Figure 3 reflects the counts of students receiving and not receiving dyslexia-specific interventions, broken out by grade. The sum of the counts of both groups equals the total population of students.

Figure 3

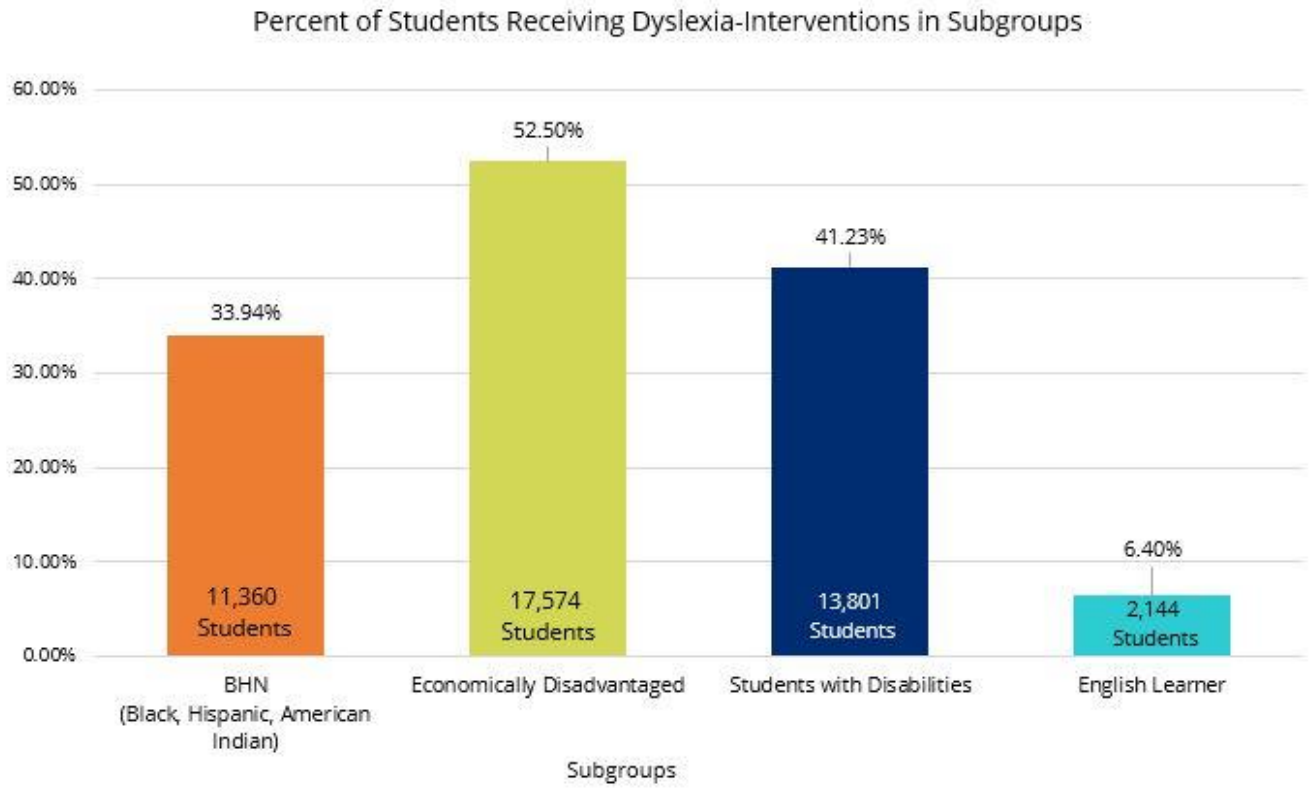


The majority of students who reportedly received dyslexia-specific interventions were in grades K–4. This is not surprising given the progression of literacy skill development and the deficits the interventions address. The characteristics of dyslexia include foundational early literacy skills which students are first exposed to in early grades. Intervention in early grades increases the likelihood of closing the achievement gap as students progress. However, some students may continue to need interventions throughout their school career and/ or new needs may be identified through improved screening processes and targeted measures.

Student Subgroups

Figure 4 reflects the percent of students receiving dyslexia-specific interventions falling into particular subgroups. The subgroups are: BHN (i.e., Black, Hispanic, American Indian), economically disadvantaged, students with disabilities, and English learners; students may be included in multiple subgroups.

Figure 4



According to district reports, 33.94 percent of students receiving dyslexia-specific interventions are Black, Hispanic, or American Indian; 52.50 percent are economically disadvantaged; 41.23 percent are students with disabilities, and 6.4 percent are English learners.

Accommodations

Information was also collected regarding the accommodations used for students who were provided dyslexia intervention services in the 2017-18 school year on the state assessments (i.e., TN Ready and EOC). It should be noted that accommodations are only provided on state assessments for students eligible under Section 504 of the Rehabilitation Act of 1973 and/or the Individuals with Disabilities Education Act (IDEA). It should not be assumed that the reason the student received an accommodation on state testing did so solely due to characteristics of dyslexia. A student may have a 504 or special education services due to an unrelated disability and require accommodations due to his/her other needs.

The specific accommodations used by students demonstrating the characteristics of dyslexia included: adult transcription, assistive technology, extended time, rest/breaks, and word-to-word dictionary. In grades 3–8 and the high school EOCs, extended time was the most commonly used accommodation. A

breakdown of accommodations used on English language arts (ELA), math, and science assessments, can be found below:

TN Ready Grades 3-8 Percentage of students with dyslexia-specific interventions who received specific accommodations			
Accommodation	**ELA**	**Math**	**Science**
Adult Transcription	1.2%	.8%	.8%
Assistive Technology	.2%	.1%	.1%
Extended Time	33.8%	32.0%	31.7%
Rest/Breaks	12.1%	11.4%	11.4%
Unique Accommodations	.1%	.06%	.07%
Word-to-Word Dictionary	.9%	.8%	.9%
Visual Representation for Math	N/A	.3%	N/A

EOC Percentage of students with dyslexia-specific interventions who received specific accommodations			
Accommodation	**English I, II, and III**	**Algebra I, Algebra II, and Geometry**	**Biology**
Adult Transcription	0.1%	.1%	0%
Assistive Technology	0%	0%	0%
Extended Time	40.1%	34.9%	40.5%
Rest/Breaks	6.2%	3.6%	3.7%
Unique Accommodations	0%	0%	0%
Word-to-Word Dictionary	0.3%	.2%	0%
Visual Representation for Math	N/A	0%	N/A

Dyslexia-Specific Interventions Reporting

As part of the district planning process, districts were required to describe their universal screening process for characteristics of dyslexia as well as the dyslexia-specific interventions they utilize for students in need. A review of district reporting over the past two years indicates an improvement in the depth and accurate identification of dyslexia-specific interventions. Initial reporting during 2016-17 demonstrated limited district awareness of dyslexia-specific interventions; current responses indicate an increased understanding of what districts need to employ to support students with the characteristics of dyslexia. Eighty-six percent of districts identified specific programs and/or evidence-based practices being utilized as dyslexia-specific interventions. Strong examples are present in many districts, including the identification of specific programs and practices and clear district review of

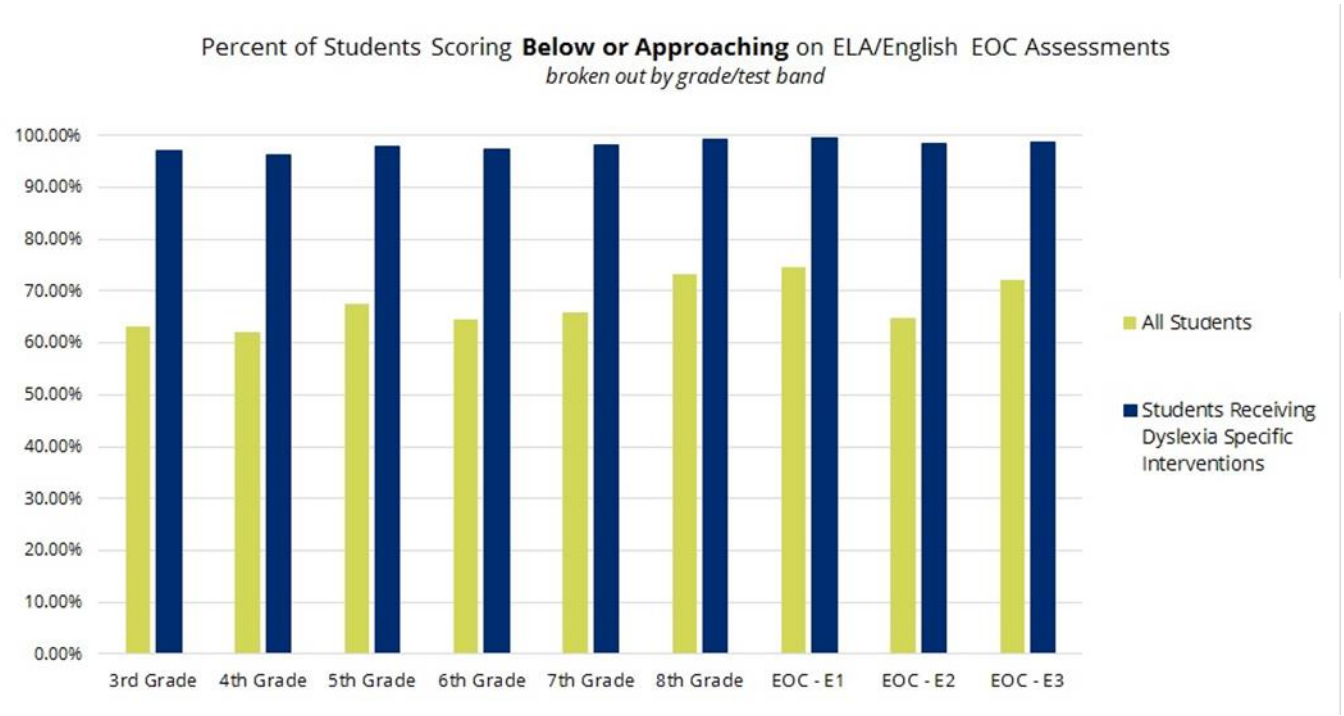
reading intervention materials to determine if they meet the needs of students. Some district responses, however, indicate limited understanding of what types of interventions they should be providing to address the characteristics of dyslexia. For example, some districts generically restated the characteristics of dyslexia-specific interventions or reported a list of intervention programs utilized. Districts will continue to refine and improve the supports they are providing to students by deepening their understanding of dyslexia-specific interventions. The department will support improvement in this area by providing professional learning opportunities that allow districts to build knowledge around dyslexia-specific interventions and critically analyze the resources and instruction that is occurring for students receiving dyslexia-specific interventions.

Student Achievement Data

The TVAAS growth data, when available, is to be reported for students receiving dyslexia intervention services. TVAAS data is not based on individual students' growth; therefore, specific student-level data was collected for each grade based on achievement scores as defined by scores indicating *below*, *approaching*, *on track*, or *mastered* assessed standards.

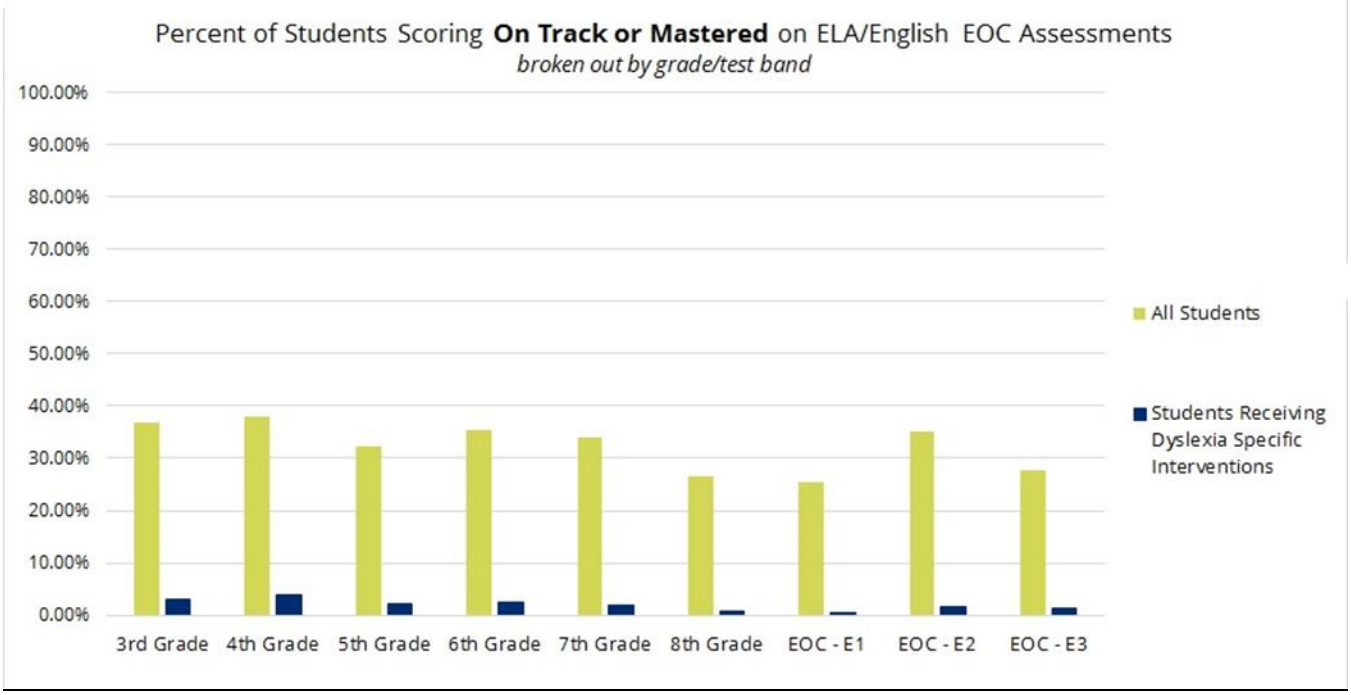
Figures 5 and 6 reflect the percent of students receiving dyslexia-specific interventions scoring in a particular category on the ELA and EOC English I (EI), English II (E2), English III (E3) assessments as compared to those not receiving dyslexia-specific interventions. This data is broken out by grade for the ELA 3–8 assessment and by E1, E2, and E3 for the EOCs. Overall, the average of all students scoring *on track* or *mastered* on all assessments outscored students receiving dyslexia-specific interventions by approximately 30.4 percent.

Figure 5



For the ELA 3–8 assessment, the average percentage of students scoring *below* or *approaching* was approximately 66.1 percent for all students, but approximately 97.6 percent for students receiving dyslexia-specific interventions. For the English EOC assessments, the average percentage of students scoring *below* or *approaching* was approximately 70.6 percent for all students, but approximately 98.9 percent for students receiving dyslexia-specific interventions.

Figure 6



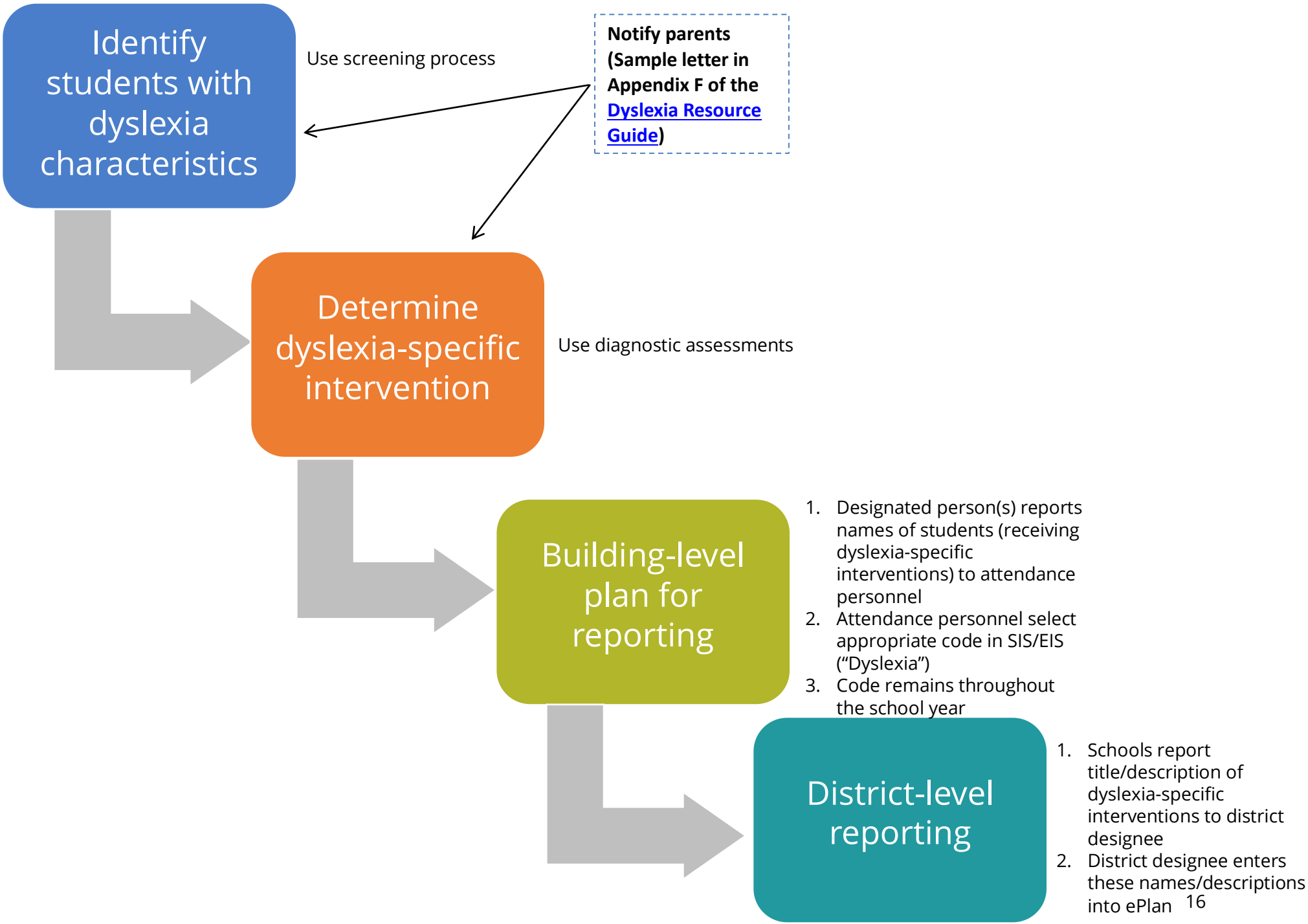
For the ELA 3–8 assessment, the average percentage of students scoring *on track* or *mastered* was approximately 33.8 percent for all students, but approximately 2.35 percent for students receiving dyslexia-specific interventions. For the English EOC assessments, the average percentage of students scoring *on track* or *mastered* was approximately 29.4 percent for all students, but approximately 1.1 percent for students receiving dyslexia-specific interventions.

Conclusion

District reporting requirements as part of the "Say Dyslexia" legislation provides a wealth of information regarding how districts are identifying and supporting students in need of dyslexia-specific interventions and accommodations. Over time, this information will allow the council to recommend best ways to support districts in meeting the needs of students with the characteristics of dyslexia. Currently, many districts report small percentages of students receiving dyslexia-specific interventions compared to average rates of prevalence of dyslexia. In addition, students with characteristics of dyslexia are more likely to perform in the *below* range on state assessments compared to students without the characteristics of dyslexia. District reporting of dyslexia-specific interventions has improved, indicating potential improved use of interventions being provided to students with characteristic of dyslexia. The department will continue to provide guidance and support around the importance of accurately reporting students receiving dyslexia-specific interventions and accommodations along with clarification and technical assistance. While districts have improved the quality of reporting dyslexia-specific interventions, they would benefit from continued guidance and

support around analyzing intervention materials and instruction for dyslexia-specific interventions. As districts continue to refine and improve their screening and dyslexia-specific intervention delivery, students will receive effective interventions in a timely manner, allowing them to make progress and ultimately successfully embark on their chosen path in life.

Appendix A: "Say Dyslexia" Reporting Requirements Flowchart



Appendix B: District-level Reporting

The table below provides a breakdown of the percentage of total students who received dyslexia-specific interventions reported by each district.

District	Percent Students Receiving Dyslexia-Specific Interventions
Achievement School District	0.87%
Alamo City	0.57%
Alcoa	5.67%
Alvin C York	0.00%
Anderson County	5.23%
Arlington	1.91%
Athens	14.26%
Bartlett	1.15%
Bedford County	0.57%
Bells	7.63%
Benton County	4.25%
Bledsoe County	0.24%
Blount County	3.22%
Bradford	0.58%
Bradley County	3.41%
Bristol	0.25%
Campbell County	4.62%
Cannon County	2.73%
Carter County	0.18%
Cheatham County	10.26%
Chester County	12.44%
Claiborne County	0.78%
Clay County	1.42%
Cleveland	10.99%
Clinton	4.26%
Cocke County	1.26%
Coffee County	2.09%
Collierville	2.20%
Crockett County	0.65%
Cumberland County	2.91%
Davidson County	0.00%

District	Percent Students Receiving Dyslexia-Specific Interventions
Dayton City	0.00%
Decatur County	2.27%
DeKalb County	16.10%
Dickson County	0.78%
Dyer County	4.33%
Dyersburg	0.24%
Elizabethton	10.95%
Etowah City	0.00%
Fayette County Public Schools	0.15%
Fayetteville	0.87%
Fentress County	4.11%
Franklin County	0.02%
Franklin SSD	2.57%
Germantown	0.60%
Gibson County Special School District	2.15%
Giles County	4.51%
Grainger County	12.82%
Greene County	0.45%
Greeneville	1.16%
Grundy County	7.59%
Hamblen County	0.21%
Hamilton County	1.08%
Hancock County	1.46%
Hardeman County Schools	4.47%
Hardin County	3.92%
Hawkins County	0.18%
Haywood County	0.96%
Henderson County	5.46%
Henry County	4.11%
Hickman County	1.22%
Hollow Rock - Bruceton	28.41%
Houston County	20.11%
Humboldt City Schools	23.40%
Humphreys County	1.29%
Huntingdon Special School District	4.92%
Jackson County	20.21%

District	Percent Students Receiving Dyslexia-Specific Interventions
Jefferson County	4.90%
Johnson City	0.55%
Johnson County	0.66%
Kingsport	0.27%
Knox County	8.37%
Lake County	25.10%
Lakeland	1.55%
Lauderdale County	4.34%
Lawrence County	3.99%
Lebanon	6.37%
Lenoir City	0.09%
Lewis County	1.22%
Lexington	3.11%
Lincoln County	0.38%
Loudon County	6.87%
Macon County	2.02%
Madison County	8.81%
Manchester	3.85%
Marion County	5.97%
Marshall County	3.66%
Maryville	4.69%
Maury County	24.07%
McKenzie	3.65%
McMinn County	3.06%
McNairy County	1.58%
Meigs County	12.59%
Milan	4.13%
Millington Municipal Schools	6.18%
Monroe County	3.21%
Montgomery County	5.42%
Moore County	8.26%
Morgan County	5.30%
Murfreesboro City Schools	13.47%
Newport	6.13%
Oak Ridge	4.03%
Obion County	9.53%

District	Percent Students Receiving Dyslexia-Specific Interventions
Oneida	6.05%
Overton County	2.90%
Paris	17.63%
Perry County	0.20%
Pickett County	1.68%
Polk County	0.04%
Putnam County	3.67%
Rhea County	0.00%
Richard City	0.00%
Roane County	2.61%
Robertson County	9.00%
Rogersville	12.46%
Rutherford County	0.08%
Scott County	1.82%
Sequatchie County	1.20%
Sevier County	7.18%
Shelby County	2.53%
Smith County	1.09%
South Carroll	14.16%
State Board of Education	0.00%
Stewart County	0.20%
Sullivan County	0.64%
Sumner County	0.20%
Sweetwater	6.40%
Tennessee School for Blind	0.00%
Tennessee School for Deaf	0.00%
Tipton County	0.11%
Trenton	16.96%
Trousdale County	4.95%
Tullahoma	5.56%
Unicoi County	1.63%
Union City	0.06%
Union County	13.59%
Van Buren County	4.18%
Warren County	4.83%
Washington County	0.26%

District	Percent Students Receiving Dyslexia-Specific Interventions
Wayne County	0.55%
Weakley County	1.06%
West Carroll SSD	0.00%
West Tennessee School for Deaf	0.00%
White County	5.88%
Williamson County	0.92%
Wilson County	1.04%