Failure to Meet State Standards in Basic Reading or Reading Fluency: **Are All These Students Dyslexic?**

Edward K. Schultz Ph.D. Midwestern State University Tammy L. Stephens, Ph.D. C-SEP Assessment & Training Academy Jayme Winters, M.Ed, LDT, CALT Waxahachie ISD

Abstract

The number of students identified with dyslexia in Texas has increased by 79.01% between the 2017-2018 school year and the 2022-2023 school year despite the student population growing by only 2.1% (Public Education Information Management System [PEIMS], 2023). This substantial increase has significantly increased the workload of educational diagnosticians and other evaluators. Recent changes to Texas policy and the process for assessing dyslexia have contributed to this increase and left Texas evaluators confused and frustrated. Much of the confusion surrounds the question as to whether a student's failure to meet state standards in basic reading or reading fluency automatically indicates dyslexia. Specifically, this article will chronicle significant changes regarding dyslexia identification in the Corrective Action Plan (CAP) era and explore the relationship between the condition of dyslexia and not meeting standards in basic reading and reading fluency.

The number of students identified with dyslexia in Texas has increased by 79.01% between the 2017-2018 school year and the 2022-2023 school year despite the student population growing by only 2.1% (Public Education Information Management System [PEIMS], 2023). This significant increase has significantly increased the workload of educational diagnosticians and other evaluators. This growth is related to a variety of factors, including the implementation of a federally mandated corrective action plan (CAP), several revisions to the Dyslexia Handbook, changes in the roles and responsibilities of evaluators, inconsistent early intervention, new special education policies, and the lingering effects of COVID-19. In addition to evaluators facing heavier workloads, the information they receive regarding dyslexia identification is often confusing and inconsistent.

The purpose of this article is to document significant changes in dyslexia identification during the CAP era and to explore the correlation between dyslexia and not meeting state standards (Texas Essential Knowledge and Skills; TEKS) in basic reading and reading fluency in Texas. The article is divided into two parts. The first part will discuss the events of the past five years in the CAP era that have

impacted the identification of dyslexia. Part two of the review will examine policies and research related to the root causes of basic reading difficulties. The primary question being addressed is whether the classification of dyslexia applies to all students who are not able to meet the standards for basic reading proficiency and fluency or if dyslexia is a specific condition that can account for a student's failure to meet these standards. In simpler terms, we aim to determine whether dyslexia is the sole condition responsible for a student's inability to achieve the state's basic reading and reading fluency standards.

Part 1: Corrective Action Plan Era

In 2016, an investigative reporter for the Houston Chronicle wrote a series titled "Denied: How Texas Keeps Tens of Thousands of Children out of Special Education (Rosenthal, 2016)." This prompted an investigation from the United States Department of Education (USDOE) in late 2016, which found that "some school districts took actions specifically designed to decrease the percentage of children identified as children with disabilities under the IDEA to 8.5 percent or below." Consequently, the Texas Education Agency (TEA) was cited for not fulfilling the child find requirements and required TEA to take corrective action (United States Department of Education[USDE], 2023; see full report https://www2.ed.gov/ fund/data/report/idea/partbdmsrpts/dmstx-b-2017-enclosure.pdf).

The Office of Special Education Programs (OSEP) conducted numerous listening sessions with stakeholders (e.g., parents, teachers, and administrators) and concluded that response to intervention (RTI) was being used to deny or delay evaluations. It is clear in the findings that this denial or delay was not because RTI was systematically being implemented using best practices, as evidenced by the contents of the report (USDE, 2023):

Across the twelve ISDs that OSEP visited, teachers could not always define what level of progress would be sufficient for a child to stop receiving interventions provided through an elevated tier of RTI. In different schools within the same ISD and across different ISDs, staff expressed a lack of clarity as to which children enter tiers two or three, how long children are served in each tier, and when children move from one tier to the next within the RTI framework. School staff often explained that a child moves beyond tier one when the child does not meet the teacher's established academic benchmarks. Once the child receives services under tier two of RTI, some school staff noted that the child's progress is generally monitored against individual RTI goals. Teachers indicated that a child moves to an elevated tier of intervention (tier three, or in one instance, tier four) when the child is not making enough progress against such individual RTI goals. Through interviews, school staff explained that if a child demonstrates progress through RTI interventions, the child may either continue to receive RTI interventions, sometimes receiving

a new intervention within the same tier, or return to general classroom instruction. While ISDs certainly have flexibility in implementing RTI, the lack of clarity in LEA- and schoollevel implementation contributed to the delay or denial in the identification and evaluation of children suspected of having disabilities and needing special education and related services (p 7).

While relatively little statewide improvement activities are evident for RTI, the same cannot be said for dyslexia, as dyslexia seems to be in a state of evolution. The findings also showed that the way Texas structured its dyslexia program, primarily using Section 504, also caused Child Find violations. The report also states that dyslexia is a condition that could qualify a child for special education under a specific learning disability category under the Individuals with Disabilities Education Act of 2004 (IDEA, 2004). The Dyslexia Handbook (2018) was also scrutinized during this review (see below):

OSEP's understanding of the Dyslexia Handbook—clarified through conversations with teachers and other staff across the State—is that a child must not only have difficulties related to reading (which would indicate a potential need for dyslexia services in Texas) but also must present a second, potentially disabling condition in order for school staff to refer the child for an evaluation under the IDEA. This practice violates IDEA child find requirements to the extent that there are students in Texas whose only disability is dyslexia, who are suspected to need special education and related services under the IDEA because of dyslexia, and yet are not referred for an evaluation for special education and related services (p. 11)

Since the CAP's inception, there have been significant modifications to the Dyslexia Handbook. The inclusion of new state regulations, screening mandates, clarification letters from OSEP regarding "standard protocol dyslexia instruction (SPI; OSEP Letter to Porter, November 14, 2021)," and handbook revisions have resulted in the movement of dyslexia identification and treatment under two systems (section 504 and IDEA) to a "single pathway" system where dyslexia is identified and treated under IDEA. This merging of systems has resulted in misinformation, confusion, and conflict regarding best practices in evaluating and serving students with basic reading problems including those with the condition of dyslexia. Throughout these changes, it is important to note that the definition of specific learning disability (SLD) and the condition of dyslexia have remained unchanged.

The Evolution of the Texas Dyslexia Handbook

The Texas Dyslexia Handbook(s) underwent numerous changes and revisions from 2018 to 2023. While these changes have impacted many instructional aspects of dyslexia, this section will focus on changes that impact decisions regarding proper identification. The reader is encouraged to access the handbooks to obtain more context to review the other changes.

The 2018 Texas Dyslexia Handbook (DH 18), released in November, has undergone significant revisions since replacing the 2014 Dyslexia Handbook (DH14). The DH14 contained the following statement as part of considering whether or not the student had the condition of dyslexia, "Do the data show a pattern of low reading and spelling skills that is unexpected for the student in relation to the student's other cognitive abilities and provision of effective classroom instruction (p. 23)?" The first publication of the DH18 retained this language and included the same statement on page 32. This suggests that "unexpectedness" is relative to a "cognitive ability" which in practice typically meant the students low reading ability scores were compared to brief IQ score or single score such as listening comprehension. This practice, when scrutinized, is a quasiachievement/ability discrepancy model. In addition, it set up situations where a single score could be used as the deciding factor. This is inconsistent with the IDEA Regulations [300.304 (b)(2)], stating evaluators may "Not use any single measure or assessment as the sole criterion for determining whether the child is a child with a disability and determining an appropriate education for the child."

The DH18 was again updated in 2021, which, among many changes, removed the word "cognitive" from the list of questions that must be considered when making a determination regarding dyslexia. The 2021 Texas Dyslexia Handbook (DH21) states, "Do the data show a pattern of low reading and spelling skills that is unexpected for the student in relation to the student's other abilities and provision of effective classroom instruction (p. 31)?" This statement was retained in the most recent guidance provided by TEA in the new SLD comprehensive evaluation guidance document released in October 2023 (TEA, 2023, p. 23).

Legal language is intentional, and removing the word "cognitive" has practice implications that have been confusing and controversial for evaluators.

Another significant event of 2021 was the OSEP letter to Porter (11/15/2021), which essentially stated that "standard protocol instruction" could be considered "specially designed instruction (SDI)." One particular issue was the exclusion of SPI as SDI because it was "programmatic instruction delivered to a group of students." The position of OSEP was that nothing in IDEA precludes SDI from being delivered in a small group. They also pointed out the description in the DH 18 and DH 21 of SDI suggests that it was intended to meet a student's "unique needs" and cited language from the handbook (p. 42), such as "differentiate" and "teachers must be adept at prescriptive and individualize teaching "to reinforce their position that SPI meets the definition of SDI.

The DH21 will undergo additional changes in response to House Bill 3928 (Log 3928; 2023), which did not change the definition of Dyslexia or the evaluation itself. However, this law did several things that may impact the process of identification. Three things of note include a) ensuring the most highly qualified/ trained individual in dyslexia is involved in the evaluation, b) reinforcing the handbook, and c) adding "dyslexia" as a "stand-alone" special education eligibility area. In the past, teams would most likely describe the student as "eligible in basic reading with the condition of dyslexia." A team can now say the student is eligible for special education with "dyslexia." This uncoupling of basic reading and dyslexia implies that "eligibility in basic reading" differs from "dyslexia." What constitutes this difference is debatable and will be addressed in this article.

Removal of Significant Variance

During the same time the DH21 was published, significant changes were made to the Texas Legal Framework regarding the cognitive testing aspects of SLD, specifically the pattern of strengths and weaknesses (PSW) language in the law that stated, "as indicated by significant variance among specific areas of cognitive function, such as working memory and verbal comprehension, or between specific areas of cognitive function and academic achievement." This section of code was removed because Admission, Review, and Decision (ARD) committees misinterpreted this as requiring significant variance, thereby creating an overreliance on cognitive scores and calculations. This change was intended to give ARD committees

more space to view the other data sources when determining a PSW (TEA, 2021a; TEA, 2021b). The recent SLD comprehensive evaluation guidance document (TEA, 2023) provides further clarity and guidance on the responsible use of tests. Some direct quotes from the document include:

...it is not required that a student demonstrate a specific normative cognitive weakness on standardized assessments as demonstrated by achieving below a certain threshold to otherwise display a PSW relevant to the identification of an SLD. For example, some students with SLD in basic reading, including with the condition of dyslexia, may not demonstrate a normative deficit in cognitive processing testing but rather within their academic performance and achievement data (p.23)

and

Evaluators must select, administer, and interpret norm-referenced instruments in conjunction with other relevant data from the student's performance. Consider all data collectively and ensure that one score or calculation is not superseding the preponderance of data gathered when determining if a PSW is relevant to identifying an SLD (p. 23).

Recent changes in DH21 and the removal of significant variance language by TEA suggest an over-reliance on norm-referenced tests and insufficient emphasis on other data sources. The best practice for determining SLD is to use and integrate multiple sources of data to make decisions, however, evaluators often encounter challenges in collecting this data. According to a study by Stephens et al. (2023), 75% of evaluators in Texas report missing and incomplete data in referral packets. Consequently, evaluators spend significant time collecting data, with 86% of respondents reporting a 2-hour or longer time commitment. It is concerning that 7% of evaluators do not have enough time to collect the necessary data, resulting in full evaluations being conducted with missing data. This situation challenges evaluators who must complete and comprehensive evaluations within time constraints while avoiding an overreliance on norm-referenced data.

COVID Implications

The COVID-19 epidemic undoubtedly affected Texas students' learning, especially in the early elementary grades. Kuhfeld and Lewis (2022) reported first and second grade reading achievement at the end of 21-22 was

lower (6 to 7 percentile points), as well as math (3-8 percentile points) when compared to prepandemic trends. According to TEA 2023 STAAR results (Lopez, 2023), the reading and math scores on the STAAR exam for grades three through eight have shown improvement despite the pandemic. However, most Texas students still require help with math, with a decrease in mastery compared to the previous year. During the previous academic year, there was a 3% increase in special education students achieving grade level in math, totaling 16%; however, this is 1% lower than in 2019. As for reading, 17% of students have met the grade level, which remains unchanged from the previous year but is 5% higher than 2019.

This STAAR data suggests that older students, most of whom had consistent instruction in early grades (K-3), are on the pathway of recouping lost and delayed learning. While older students missed the content, the young students (K-3) during COVID-19 missed "brain programming." Chyl et al. (2021) reviewed longitudinal neuroimaging studies and presented evidence that reading instruction results in increased structural integrity and functional specialization of the left-hemispheric language areas of the brain. During COVID-19, arguably, most young students did not receive the necessary instruction to build these brain functions. While content learning can be accelerated, brain development cannot. The issue of COVID-19 was addressed in the new recent SLD comprehensive evaluation guidance document (TEA, 2023):

Students may have experienced extended school closures or other disruptions to instruction due to pandemics, natural disasters, or other events. Unfortunately, learning loss is often the result. MDTs are challenged to distinguish between learning loss and learning disabilities. A careful review of performance before the disruption, comparisons with peer performance, and consideration of any intervention data will help teams determine if the student received appropriate instruction (p. 16).

Instructional Response Data

COVID-19 did not cause learning disabilities, but it did temporarily disrupt and delay learning. Regarding students who are behind in the state standards, it is general education's responsibility to provide and show data indicating appropriate instruction in general education and provide data-based documentation of repeated assessments during instruction (Legal Framework, 2023; Dyslexia Handbook, 23). In addition, the Every Student Succeeds Act of 2015 (ESSA) reauthorized the Elementary and Secondary Education Act (ESEA) and addresses the needs of "at-risk" students. To align with ESSA requirements, schools must provide students who are at risk for dyslexia or other reading difficulties with comprehensive literacy instruction. This instruction should feature age-appropriate, explicit, systematic, and intentional teaching of phonological awareness, phonic decoding, vocabulary, language structure, reading fluency, and reading comprehension.

Besides ESSA, the Texas Administrative Code (TAC § 89.1011) states, "Students experiencing difficulty in the general classroom should be considered for all support services available to all students, such as tutorial, remedial, compensatory, response to evidence-based intervention, and other academic or behavior support services." This includes accelerated instruction due to COVID-19 and or failure to meet STAAR standards. Students with dyslexia, by definition must struggle "despite "conventional instruction" to be identified and according to the DH21, students whose screening results in an "at-risk" status must be provided an accelerated reading program. Appropriate general education and data-based student progress documentation must occur before or during the evaluation. These general education supports are designed for all students regardless of disability status and provide "instructional response data," which is vital to ascertain learning.

According to a recent survey by Stephens et al. (2023), 73% of evaluators in Texas reported missing instructional response data, making such data difficult to obtain. This missing data puts evaluators in a challenging ethical and legal position. Most respondents (58%) indicated that retrieving this data is the most time-consuming aspect of their work. Not having this data readily available forces evaluators to generate "artificial" data (i.e., norm-referenced testing) and exasperates the problem of "overreliance on norm-referenced test". When facing increasing caseloads and pressure to qualify students, diagnostic precision may be compromised, leading to a higher risk of false positives.

The preceding paragraphs outlined the major events occurring in the CAP era in Texas that contributed to the confusion surrounding dyslexia identification. Other factors also contribute to the confusion, primarily the fact that there is no consensus on exactly what constitutes dyslexia and if it can be differentiated from a basic reading problem. The new

HB3928 FAQ document (TEA, 2023) expects consensus in the admission, review, and dismissal committee (ARD) committee process:

"...TEA expects the member to sign the evaluation report conducted by the MDT. Signatures from the professionals serving on the MDT indicate consensus with the overall interpretations and conclusions contained within the evaluation. In situations where members of the MDT have different interpretations, they must work collaboratively to review the various sources of data and gather additional information as necessary to complete a single comprehensive evaluation report that is compliant with state and federal requirements and present the results for ARD committee consideration" (p.5).

Part 2: Policy and Research

In order for ARD committees to achieve consensus, they must have a common understanding of the condition of dyslexia and its relationship to basic reading. Part two of this article will answer this very important question: Do all students who are not meeting gradeapproved standards (TEKS) in basic reading and reading fluency have the condition of dyslexia? This question will be examined through a policy lens, followed by a brief literature review on the underlying causes of basic reading and fluency problems. It is the position of the authors that the high majority of students who fail to meet the reading TEKS have the condition of dyslexia; however, there are instances when a child is not developing appropriate reading skills due to an underly cause not considered a correlate of dyslexia.

Currently, no TEA or federal policy says that all of these kids who are not meeting basic reading standards have the condition of dyslexia.

A significant body of research indicates that most early reading problems are related to deficits in the phonological component of language (Fletcher, 2009; Kuppen & Goswami, 2016; Meisinger et al.; Pennington et al., 2012;2021 Shaywitz & Shaywitz, 2005; Vellutino, 2004) which characterizes the condition of dyslexia, however this is not "settled science." Alternate explanations of poor basic reading exist that would not warrant the "dyslexia" label but instead, be considered a child with an SLD in basic reading.

Policy

In 1975, the Education for All Handicapped Children Act was passed, which included dyslexia in the definition of specific learning disability (SLD). Since then, this definition has remained essentially unchanged. When SLD was included in the law, there was a fear that too many children would be identified in this category. To address this concern, Congress proposed a cap on the number of children who could be identified as SLD, limiting it to one-sixth (16%) of the special education population in each state. This proposal was put forth out of fear that students with SLD would "swamp the special education system." However, the proposal was ultimately rejected (Colker, 2013). Current estimates (2021-22) of SLD indicate the number of students in this category nationally is 32% (National Center for Educational Statistics, 2023).

In a Dear Colleague Letter (Office of Special Education and Rehabilitation [OSERS], October 23, 2015) the issue at hand was the use of the words "dyslexia, dysgraphia, and dyscalculia" in the evaluation and individualized education plan (IEP). This letter clarified that nothing in IDEA prohibited the use of these terms and went on to say:

Therefore, there could be situations where the child's parents and the team of qualified professionals responsible for determining whether the child has a specific learning disability would find it helpful to include information about the specific condition (e.g., dyslexia, dyscalculia, or dysgraphia) in documenting how that condition relates to the child's eligibility determination (34 CFR §§300.306(a)(1), (c)(1) and 300.308).

The letter went on to discuss why the IEP team might consider using "dyslexia" and provides a scenario that links the condition of dyslexia with specialized instruction:

Therefore, if a child's dyslexia, dyscalculia, or dysgraphia is the condition that forms the basis for the determination that a child has a specific learning disability, OSERS believes that there could be situations where an IEP Team could determine that personnel responsible for IEP implementation would need to know about the condition underlying the child's disability (e.g., that a child has a weakness in decoding skills as a result of the child's dyslexia). Under 34 CFR §300.323(d), a child's IEP must be accessible to the regular education teacher and any other school personnel responsible for its implementation, and these personnel must be informed of their specific responsibilities related to implementing the IEP and the specific accommodations, modifications, and supports that must be provided for the child in accordance with the IEP. Therefore, OSERS reiterates that there is nothing in the IDEA or our implementing regulations that would prohibit IEP Teams from referencing or using dyslexia, dyscalculia, or dysgraphia in a child's IEP.

The condition of dyslexia has significant implications for instruction, and identifying the reasons behind a student's learning difficulties is a fundamental goal of the full and individual evaluation (FIE). For dyslexia, the recommended treatment is explicit and systematic phonics instruction, previously known as standard protocol dyslexia instruction (SDI). This treatment specifically targets the phonological aspect of language, which is the root cause of dyslexia. The need for special education or a second prong for eligibility is linked to the evaluation data. If a student struggles in basic reading without a phonologically based cause and does NOT need dyslexia treatment, does the student have the condition of dyslexia? When referring to the OSER's letter, it does not seem like this would be a situation where using the word dyslexia would be necessary as it does not inform instruction.

A recently published TEA FAQ document (TEA 2021, p. 3-4) answered this question: How is dyslexia similar to a specific learning disability in the area of basic reading or reading fluency? The response did not indicate that they were synonymous and explicitly stated that "areas of qualifications" (i.e., basic reading and reading fluency) were not "conditions." The complete response is below:

The IDEA recognizes eight areas in which a student may qualify with an SLD. Basic reading skill and reading fluency are two of these areas. The other six areas include oral expression, listening comprehension, written expression, reading comprehension, mathematics calculation, and mathematics problem solving. These are not specific conditions rather; they describe areas where the student does not achieve adequately for his or her age or meet state-approved grade-level standards. The federal regulations identify dyslexia, on the other hand, as a condition that may cause a student to achieve inadequately in one or more of the areas identified above-typically basic reading skills and/or reading fluency. Under this framework, a student with dyslexia would likely be described as having a specific learning disability in basic reading skills and /or reading fluency with the condition of dyslexia (p. 4)

The new SLD comprehensive evaluation guidance document released in October 2023 (TEA 2023, p. 23) addresses dyslexia. Nothing in this document deviates from the DH 21 regarding dyslexia identification nor states that all basic reading/reading fluency eligibilities area also the condition of dyslexia. It is important to note that all state standards (i.e., TEKS) related to basic reading do not involve the phonological component of language, which is a key attribute of the condition of dyslexia. As of this writing, there is no IDEA or TEA policy that states all students who qualify under basic reading/ reading fluency have the condition of dyslexia.

Definitions and Prevalence

According to the recent TEA SLD guidance document (TEA, 2023, p.4), Texas has 236,687 students (33.6%) categorized as SLD with approximately 80% with reading problems. However, this number does not include the 302,615 students who are coded as having Dyslexia (TEA PEIMs data, 2023). When these numbers are combined, the true picture of the number of students identified with SLD in Texas will beco apparent. When this occurs, Texas will surpass Utah, which has the highest percentage (43%) of students in this category (National Center for Learning Disabilities [NCLD], 2023). Prevalence rates for dyslexia vary, with some estimates ranging from less than five percent to as high as twenty percent. One reason for this is different operational definitions of what constitutes dyslexia (Wagner et al., 2020).

Each state must follow the IDEA 2004 Act but can operationalize the definitions of disabilities, including dyslexia, as they see fit. This essentially means that dyslexia is a policy construct defined by the state. Dyslexia means "difficulty with words" (Catts & Kamhi, 2005), and if strictly adhering to this definition, all word reading problems will fall under the term dyslexia. When used in his manner, dyslexia becomes an "umbrella" term. Prominent researchers refer to any word-level reading disability (WLRD) as synonymous with dyslexia (Fletcher et al., 2019; Shaywitz & Shaywitz, 2005). Researchers must operationalize their variables, but they are not bound by each state's criteria. Evaluators must be careful not to conflate research operational definitions of dyslexia with TEA criteria.

To measure a construct, it must be defined. Operational definitions help facilitate a process for identification and classification systems (Kavale et al., 2009). The DH 21 defines dyslexia used by TEA as well and provides

procedures for identification. Texas Education Code (TEC) §38.003 defines dyslexia and related disorders in the following way: "Dyslexia" means a disorder of constitutional origin manifested by a difficulty in learning to read, write, or spell, despite conventional instruction, adequate intelligence, and sociocultural opportunity. To properly identify and classify dyslexia a list of questions must be answered when determining dyslexia. Specifically, when determining dyslexia, we must see if the data show the following characteristics: a) difficulty with accurate and or fluent word reading, b) poor spelling skills, and c) poor decoding ability. We also have to answer whether these difficulties result from the phonological component of language. It is important to note that per the DH 21, average phonological scores alone do not rule out dyslexia. Evaluators should examine historical data to determine if phonological deficits were previously present and if PA has been a focus of intervention efforts. Then, finally, we must answer whether these difficulties are unexpected in relation to their age or other abilities despite the provision of effective instruction (Dyslexia Handbook, 31). This criterion is specific to the condition of dyslexia and reflects decades of research indicating dyslexia stems from a deficit in the phonological component of language (Cabbage et al., 2018; Nithart, 2009; Shaywitz & Shaywitz, 2005; Vellutino et al., 2004; Wagner et al., 2020).

The DH 21 focuses on all components of dyslexia. However, it does not address reading disabilities in general or provide alternate explanations for why a student may struggle with basic reading skills. If examiners do not consider other underlying causes for poor reading and spelling, they may fall prey to confirmation bias (Watkins, 2009) and use faulty heuristics (Lilienfeld, 2012). To enhance diagnostic precision, it is important to take into account both internal and external factors that could be contributing to a student's failure to meet basic reading standards.

Dyslexia and Poor Reading

Since there is no Texas policy that states that all students who meet the basic reading qualification have the condition of dyslexia, it is important to review research to examine not only the condition but also alternate possible explanations of why a student is not meeting stat standards on basic reading/fluency. This section of this paper will discuss how a student might meet the criteria for SLD in basic reading/fluency and NOT have the condition of dyslexia. However, is important to begin this discussion under the premise that the high majority of students who struggle in basic reading have a phonologically based disorder (i.e., dyslexia) according to decades of research.

Consistent with the criteria outlined in the DH 21 for dyslexia identification, the phonological component of language is typically a defining feature of dyslexia. The International Dyslexia Association identifies a deficit in the phonological component of language is the principal cause of dyslexia (International Dyslexia Association [IDA], 2020; Ring & Black, 2018) and is necessary for dyslexia identification. This is consistent with the research (Fletcher, 2009; Gabrieli, 2009; Kuppen & Goswami, 2016; Meisinger et al.; Pennington et al., 2012; 2021 Shaywitz & Shaywitz, 2005; Vellutino, 2004) and the position of professional organizations (IDA, 2020; Scottish Rite for Children, 2023). Stoker et al. (2019) outlined the key attributes of dyslexia in a report conducted for TEA:

(a) difficulty with word reading; (b) difficulty with spelling, including efficiently writing letters and remembering the order of letters in words; (c) phonological processing difficulties that affect the way they connect sounds of language to print; and (d) reading is often slow and laborious (p. 7).

There is a consensus that the root cause of dyslexia is in the phonological system and general agreement that it is usually accompanied by deficits in rapid automatic naming tasks ([RAN]; Gerst et al., 2021; Papadopoulos et al., 2016; Vander Stappen & Reybroek, 2018) and struggles in orthography (Harm & Seidenberg, 2001; Georgiou et al., 2021; Richlan, 2014). There is an extensive body of research on the phonological cause of dyslexia. However, alternate explanations can explain a student having a basic reading/reading fluency learning disability and not having the condition of dyslexia.

Alternate Explanations

According to Catts and Petscher (2022), dyslexia is a complex learning disorder that can't be defined by a single underlying condition (e.g., phonological processing) due to the wide range of factors that can contribute to reading difficulties. Researchers have traditionally focused on specific factors, such as sensory, linguistic, or cognitive processing, as the primary cause of dyslexia. However, recent research shows that these single-factor models don't fully explain the varying symptoms of dyslexia. Instead, reading difficulties likely

result from differences in individuals and their experiences across various linguistic, cognitive, socioemotional, orthographic, and instructional factors that interact in different ways. For example, visual attention span (VAS; Bosse at al., 2007; Franceschini, 2012; Perry & Long, 2022; Valdois et al., 2019; Valdois et al., 2021) and cortical visual impairments ([VI; Bennet, 2023; Chokron, 2021) have been shown to inhibit early reading/reading fluency.

Valois et al. (2021) conducted a study examining the correlation between visual attention span (VAS), rapid automatized naming (RAN), and Phonological Awareness (PA). Their findings indicated that nearly 18.2% of the 110 poor readers in their sample had a unique VAS deficit, while 20% had a significant PA deficit, and 15.5% had a distinct RAN deficit. These data suggest that no single profile exists for a student struggling with basic word reading. In a separate study conducted by Valois et al. (2019), they explored the role of VAS in young children at the end of their first grade and its potential to predict future reading problems and contribute to later reading fluency. Their research suggests that some reading difficulties may have a visual component that can occur independently or co-occur with RAN and PA.

Another condition, developmental auditory imperception (DAI), has been shown to be associated with students who struggle with basic reading/reading fluency. It is described as related to or similar to dyslexia (Stoker et al., 2019). DAI is characterized by difficulty in hearing the sounds of words (e.g., "I resemble that remark"). DAI is also referred to as a central auditory processing disorder (CAPD), and according to the American Speech and Language Association (ASHA; 2023), is characterized by poor performance in sound localization, auditory discrimination, and auditory pattern recognition. These auditory processing disorders are broader than phonological processing deficits and can interfere with a student's ability to meet state standards in basic reading. CAPD, along with other cognitive and linguistic abilities, needs to be considered during a comprehensive evaluation as an underlying cause of poor reading and to avoid misclassification.

Difficulties with basic reading usually involve more than one factor, and no single profile emerges for dyslexia; therefore, methods that rely on profile sheets must be abandoned. Gokulua et al. (2019) conducted a study examining the auditory processing, visual attention, digit memory, phonological processing, and receptive language abilities of children who

experience difficulties reading words. The study involved 24 children with word reading difficulties and 28 with good word reading skills as a control group. The assessment of phonological processes was also included in this study. The results indicated that, as a group, children with word reading difficulties performed significantly worse than the control group on tasks related to auditory processing, phonological processing (elision), receptive language (vocabulary), visual attention, and digit memory. The study also highlighted the significant individual variability that exists among children with word reading difficulties.

Research has also shown that poor word reading is related to executive functions such as working memory (WM) and inhibition. According to Booth et al. (2014), WM is related to both word reading and reading comprehension. Their research found that WM and inhibition were able to discriminate children with reading difficulties from the matched control group. Additionally, sustained attention and WM have been studied together in the context of their impact on reading comprehension. Studies have suggested that attentional processes play a fundamental role in translating print into speech or word-level reading. These findings highlight the comorbidity of dyslexia (characterized by difficulties in accurate and/ or fluent word reading) and attention deficit hyperactivity disorder (ADHD), as noted by Slattery et al. (2021).

The process of learning and recognizing sight words involves intricate cognitive functions, as emerging readers rely on their understanding of the connection between graphemes and phonemes to focus on the sub-lexical aspects of a word. By repeatedly doing so, they gradually build up the whole word in their memory (Ehri, 2014). Research has shown that having a good grasp of a word's semantic properties and word familiarity can help facilitate the sight word acquisition process (Steacy et al., 2020). Furthermore, the frequency of a word in the English language, which is known as phonotactic probability, and the density of similar words, or "neighbors," also play a significant role in facilitating word acquisition (Vitevitch, 2003; Vivetich & Rodriguez, 2004; Hogan et al., 2011). Since our written language is "sightword" rich, a logical relationship exists between poor sight word acquisition/memory and poor basic reading skills.

Reading fluency is also a very complex cognitive process, relying on the ability to decode rapidly and mediating language comprehension to reading comprehension (Kim et al., 2021). The syntactical aspects of language have been studied in relation to reading fluency and reading comprehension. Mokhtari and Thompson (2012) examined syntactic awareness as a source of difficulty in reading fluency and reading comprehension among 5th graders. Their findings indicated that lower levels of syntactic awareness correspond to poor reading fluency and reading comprehension. Since reading fluency is considered a "bridge" (Hsu et al., 2023; Pikulski & Chard, 2005) between basic reading and reading comprehension, children with intact basic reading skills may struggle with fluency because of the syntactical language demands of the task.

Conclusion

As the preceding paragraphs indicate, there are many cognitive and linguistic factors that may explain why a student is not meeting the reading TEKS. Language factors (syntax, semantics, auditory imperception) and cognitive factors (visual attention, working, working memory, auditory processing) have all been shown to have a role in acquiring basic reading skills and fluency. To improve diagnostic precision, evaluators must examine alternate explanations for not meeting the reading TEKS rather than identify all of these students with dyslexia. The phonological component of language and rapid automatized naming are not the only areas of cognitive processing that can impede reading development. Remediation for students with strengths in these areas [phonological processing and RAN] could incorporate some of the same instructional practices. However, it will likely need to be more individualized to address the constellation of factors evident in their profile.

For example, a student who struggles to meet state standards in basic reading who does not have a phonologically based deficit but does have visual attention and working memory problems (cognitive efficiency) along with some social problems (contributing but not exclusionary factors) may very well meet the criteria for a student with a SLD and NOT have the condition of dyslexia. The hallmark of special education is "individualized instruction based on the unique needs of a child." Statements such as all students who qualify in basic reading/ reading fluency have the condition of dyslexia are incompatible with the words "individualized" and "unique," which are hallmark special education principles.

This article hopes to encourage continued professional conversation among evaluators in Texas to establish concrete policy and practice

guidance. Although most students who struggle with basic reading have dyslexia, evaluators must consider each student's unique profile and not narrow their view to only dyslexia when other underlying causes are evident. Proper treatment begins with proper identification, and while using the term dyslexia may inform instruction, linking other underlying causes to instruction is equally important. The field is currently undergoing a transition, and under the previous 504 system, services for students with dyslexia were label-driven instead of service-driven. Essentially, students with dyslexia received SPI, while students who qualified for SLD in basic reading received an IEP with various interventions that usually did not include an "as structured" and "as systematic" phonics program. With all reading disabilities being served in the special education domain, there is an opportunity to provide a continuum of reading supports instead of a binary choice under the previous system. With that transition, using the word "dyslexia" as an umbrella term for all students who are not meeting basic reading standards or using the term "dyslexia" to describe a condition may become irrelevant.

References

- Bennett, R. (2023). 6 ways CVI impacts the reading process Perkins school for the blind. Perkins School for the Blind. https://www.perkins.org/6-ways-cvi-impacts-the-reading-process/
- Booth, J. N., Boyle, J. M., & Kelly, S. W. (2013). The relationship between inhibition and working memory in predicting children's reading difficulties. *Journal of Research in Reading*, *37*(1), 84–101. https://doi.org/10.1111/1467-9817.12011
- Bosse, M., Tainturier, M. J., & Valdois, S. (2007). Developmental dyslexia: The visual attention span deficit hypothesis. *Cognition*, 104(2), 198-230. https://doi. org/10.1016/j.cognition.2006.05.009
- Cabbage, K. L., Farquharson, K., Iuzzini-Seigel, J., Zuk, J., & Hogan, T. P. (2018). Exploring the overlap between dyslexia and speech sound production deficits. Language, Speech, and Hearing Services in Schools, 49(4), 774–786. https://doi.org/10.1044/2018_lshss-dyslc-18-0008
- Carroll, K., & NWEA. (2023, May 15). New research: Nation's youngest students deeply impacted by pandemic disruptions to schooling. Teach. Learn. Grow. https://www.nwea.org/blog/2022/new-research-nations-youngest-students-deeply-impacted-by-pandemic-disruptions-to-schooling/

- Catts, H. W., & Kamhi, A. G. (2005). *The connections between language and reading disabilities*. Psychology Press.
- Central auditory processing disorder. (2023).

 American Speech-Language-Hearing
 Association I ASHA. https://www.asha.
 org/practice-portal/clinical-topics/centralauditory-processing-disorder/
- Chokron, S., Kovarski, K., & Dutton, G. N. (2021). Cortical visual impairments and learning disabilities. Frontiers in Human Neuroscience, 15. https://doi.org/10.3389/ fnhum.2021.713316
- Chyl, K., Fraga-González, G., Brem, S., & Jednoróg, K. (2021). Brain dynamics of (a)typical reading development—a review of longitudinal studies. *Science of Learning*, 6(1). https://doi.org/10.1038/s41539-020-00081-5
- Colker, R. (2013). *Disabled education: A critical* analysis of the Individuals with Disabilities Education Act. NYU Press.
- Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, *18*(1), 5–21. https://doi.org/10.1080/10888438.2013.819356
- Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2019). *Learning disabilities:* From identification to intervention (2nd ed.). Guilford Publications.
- Franceschini, S., Gori, S., Ruffino, M., Pedrolli, K., & Facoetti, A. (2012). A causal link between visual spatial attention and reading acquisition. *Current Biology*, *22*(9), 814-819. https://doi.org/10.1016/j.cub.2012.03.013
- Gabrieli, J. D. (2009). Dyslexia: A new synergy between education and cognitive neuroscience. *Science*, *325*(5938), 280-283. https://doi.org/10.1126/science.1171999
- Georgiou, G. K., Martinez, D., Vieira, A. P., & Guo, K. (2021). Is orthographic knowledge a strength or a weakness in individuals with dyslexia? Evidence from a meta-analysis. *Annals of Dyslexia*, 71(1), 5-27. https://doi.org/10.1007/s11881-021-00220-6
- Gerst, E. H., Cirino, P. T., Macdonald, K. T., Miciak, J., Yoshida, H., Woods, S. P., & Gibbs, M. C. (2021). The structure of processing speed in children and its impact on reading. *Journal of Cognition and Development*, 22(1), 84–107. https://doi.org/10.108 0/15248372.2020.1862121
- Gokula, R., Sharma, M., Cupples, L., & Valderrama, J. T. (2019). Comorbidity of auditory processing, attention, and memory in children with word reading difficulties. Frontiers

- *in Psychology, 10.* https://doi.org/10.3389/fpsyg.2019.02383
- Harm, M. W., & Seidenberg, M. S. (2001). Are there orthographic impairments in phonological dyslexia? *Cognitive Neuropsychology*, 18(1), 71-92. https://doi. org/10.1080/02643290125986
- Hogan, T. P., Bowles, R. P., Catts, H. W., & Storkel, H. L. (2011). The influence of neighborhood density and word frequency on phoneme awareness in 2nd and 4th grades. *Journal of Communication Disorders*, 44(1), 49–58. https://doi.org/10.1016/j. jcomdis.2010.07.002
- Hsu, L. S., Chan, K., & Ho, C. S. (2023). Reading fluency as the bridge between decoding and reading comprehension in Chinese children. *Frontiers in Psychology, 14*.https://doi.org/10.3389/fpsyg.2023.1221396
- Individual's with Disabilities Education Act. (IDEA, 2004). 20 U.S.C. § 1400.
- International Dyslexia Association (2020, March 27). *Dyslexia assessment: What is it and how can it help?* https://dyslexiaida.org/dyslexia-assessment-what-is-it-and-how-can-it-help-2/
- Kavale, K. A., Spaulding, L. S., & Beam, A. P. (2009). A time to define: Making the specific learning disability definition prescribe specific learning disability. *Learning Disability Quarterly*, 32(1), 39–48. https://doi. org/10.2307/25474661
- Kim, Y. G., Quinn, J. M., & Petscher, Y. (2021). What is text reading fluency and is it a predictor or an outcome of reading comprehension? A longitudinal investigation. *Developmental Psychology*, 57(5), 718-732. https://doi.org/10.1037/dev0001167
- Kuhfeld, M., & Lewis, L. (2022, October). COVID-19 in the early elementary years: A comparison of achievement in spring 2019 and spring 2022. NWEA NWEA. https://www.nwea.org/uploads/2022/10/COVID-19-in-the-early-elementary-years.pdf
- Kuppen, S. E., & Goswami, U. (2016). Developmental trajectories for children with dyslexia and low IQ poor readers. *Developmental Psychology*, 52(5), 717-734. https://doi.org/10.1037/a0040207
- Learning disabilities: Implications for policy regarding research and practice. (2023). LD OnLine I All About Learning Disabilities and ADHD. https://www.ldonline.org/ld-topics/special-education/learning-disabilities-implications-policy-regarding-research-and
- LegiScan. (2023, June 10). Texas HB3928 I 2023-2024 I 88th legislature. (n.d.). https://legiscan.com/TX/bill/HB3928/2023

- Lilienfeld, S. O., Ammirati, R., & David, M. (2012). Distinguishing science from pseudoscience in school psychology: Science and scientific thinking as safeguards against human error. Journal of School Psychology, 50(1), 7-36. https://doi.org/10.1016/j. isp.2011.09.006
- Lopez, B. (2023, August 16). Despite post-pandemic improvements, STAAR scores show Texas students are still struggling with math and reading. The Texas Tribune. https:// www.texastribune.org/2023/08/16/texasstaar-scores-math-reading/
- Meisinger, E. B., Breazeale, A. M., & Davis, L. H. (2021). Word- and text-level reading difficulties in students with dyslexia. Learning Disability Quarterly, 45(4), 294-305. https://doi. ora/10.1177/07319487211037256
- Mokhtari, K., & Thompson, H. B. (2006). How problems of reading fluency and comprehension are related to difficulties in syntactic awareness skills among fifth graders. Reading Research and Instruction, 46(1), 73-94. https://doi. org/10.1080/19388070609558461
- National Center for Education Statistics (NCES), a part of the U.S. Department of Education. (2023, December 12). COE - Students with disabilities. https:// nces.ed.gov/programs/coe/indicator/cgg/ students-with-disabilities
- National Center for Learning Disabilities. (2023, June 23). State snapshot of students with learning disabilities. https://ncld.org/ wp-content/uploads/2023/06/Snapshot-SoLD-06102023-web_ut.pdf
- Nevo, E., & Breznitz, Z. (2013). The development of working memory from kindergarten to first grade in children with different decoding skills. Journal of Experimental Child Psychology, 114(2), 217-228. https://doi. org/10.1016/j.jecp.2012.09.004
- Nithart, C., Demont, E., Majerus, S., Leybaert, J., Poncelet, M., & Metz-Lutz, M. (2009). Reading disabilities in SLI and dyslexia result from distinct phonological impairments. Developmental Neuropsychology, 34(3), 296-311. https://doi. org/10.1080/87565640902801841
- Papadopoulos, T. C., Spanoudis, G. C., & Georgiou, G. K. (2016). How is RAN related to reading fluency? A comprehensive examination of the prominent theoretical accounts. Frontiers in Psychology, 7. https:// doi.org/10.3389/fpsyg.2016.01217
- Pennington, B. F., Santerre-Lemmon, L., Rosenberg, J., MacDonald, B., Boada, R., Friend, A., Leopold, D. R., Samuelsson, S.,

- Byrne, B., Willcutt, E. G., & Olson, R. K. (2012). Individual prediction of dyslexia by single versus multiple deficit models. Journal of Abnormal Psychology, 121(1), 212-224. https://doi.org/10.1037/a0025823
- Perry, C., & Long, H. (2022). What is going on with visual attention in reading and dyslexia? A critical review of recent studies. Brain Sciences, 12(1), 87. https://doi. org/10.3390/brainsci12010087
- Pikulski, J. J., & Chard, D. J. (2005). Fluency: Bridge between decoding and reading comprehension. The Reading Teacher, 58(6), 510-519. https://doi.org/10.1598/rt.58.6.2
- Reading Rockets. (2024, January 1). Auditory processing disorder in children. https:// www.readingrockets.org/topics/speechlanguage-and-hearing/articles/auditoryprocessing-disorder-children
- Richlan, F. (2014). Functional neuroanatomy of developmental dyslexia: The role of orthographic depth. Frontiers in Human Neuroscience, 8. https://doi.org/10.3389/ fnhum.2014.00347
- Ring, J., & Black, J. L. (2018). The multiple deficit model of dyslexia: What does it mean for identification and intervention? Annals of Dyslexia, 68(2), 104-125. https://doi. org/10.1007/s11881-018-0157-y
- Rosenthal, B. M. (2016, September 10). Denied: How Texas Keeps Tens of Thousands of Children out of Special Education. Houston Chronicle.
- Scottish Right for Children. (2023, December 15). Dyslexia. https://scottishriteforchildren. org/care-and-treatment/dyslexia
- Shaywitz, S. E., & Shaywitz, B. A. (2005). Dyslexia (Specific reading disability). Biological Psychiatry, 57(11), 1301-1309. https://doi. org/10.1016/j.biopsych.2005.01.043
- Slattery, E. J., Ryan, P., Fortune, D. G., & McAvinue, L. P. (2021). Contributions of working memory and sustained attention to children's reading achievement: A commonality analysis approach. Cognitive Development, 58, 101028. https://doi.org/10.1016/j. cogdev.2021.101028
- Steacy, L. M., Fuchs, D., Gilbert, J. K., Kearns, D. M., Elleman, A. M., & Edwards, A. A. (2020). Sight word acquisition in first grade students at risk for reading disabilities: An item-level exploration of the number of exposures required for mastery. Annals of Dyslexia, 70(2), 259-274. https://doi. org/10.1007/s11881-020-00198-7
- Stephens, T., Gardner, R., Schultz, E., Holman, S., Moon, G., & Rueter, J. (2023). The state of the special education referral and assess-

- ment process. Dialog, 51(2), 4-9.
- Stoker, G., Drummond, K., Massengale, C., Bahr, C., Lin, S., & Vaughn, S. (2019). Dyslexia and Related Disorders Reporting Study. American Institutes for Research.
- Texas AFT. (2023, August 18). TEA releases STA-AR test results revealing continued post covid improvement. https://www.texasaft.org/policy/ testing/tea-releases-staar-test-results-revealing-continued-post-covid-improvements/
- Texas Education Agency. (2021, September 23). Special Education Director Webinar [Video]. YouTube. https://www.youtube. com/watch?v=zIOpBFxxA34
- Texas Education Agency. (2023). Updates: 19 TAC Chapter 89, Adaptations for Special Populations, Subchapter AA, Commissioner's Rules Concerning Special Education Services.
- Texas Education Agency. (2023, January 10). Guidance for the Comprehensive Evaluation of Specific Learning Disabilities. https://spedsupport.tea.texas.gov/ sites/default/files/2023-11/Guidance%20 for%20the%20Comprehensive%20Evaluation%20of%20SLD.pdf
- Texas Education Agency. (2023). 2022-2023 Student Program and Special Populations Reports. Texas Educational Agency.
- Texas Education Agency. (2023, June 21). OSEP letter. https://tea.texas.gov/academics/special-student-populations/specialeducation/osep-letter-to-morath.pdf
- Texas Education Agency. (2021, January 20). Dyslexia FAQ. https://tea.texas.gov/ academics/special-student-populations/ special-education/dysleixafaqjan2021.pdf
- Texas Education Agency. (2023, November 15). HB-3928 FAQs. https://tea.texas.gov/ academics/special-student-populations/ special-education/hb-3928-fags.pdf
- Texas Education Agency. (2023, January 20). Public education information management system. https://tea.texas.gov/reports-anddata/data-submission/peims
- Texas Education Agency. (2021, September 23). Updates: 19 TAC Chapter 89, Adaptations for Special Populations, Subchapter AA, Commissioner's Rules Concerning Special Education Services. https://tea.texas.gov/system/files/ch_89_updates_0.pdf
- Texas Legal Framework. (2023, January 10). Legal framework home. https://fw.escapps.net/
- U.S. Department of Education. (2023, November 23). Texas part B 2017 monitoring visit letter. https://www2.ed.gov/fund/ data/report/idea/partbdmsrpts/dms-tx-b-2017-enclosure.pdf

- Valdois, S., Reilhac, C., Ginestet, E., & Line Bosse, M. (2020). Varieties of cognitive profiles in poor readers: Evidence for a VAS-impaired subtype. Journal of Learning Disabilities, 54(3), 221-233. https://doi. org/10.1177/0022219420961332
- Valdois, S., Roulin, J., & Line Bosse, M. (2019). Visual attention modulates reading acquisition. Vision Research, 165, 152-161. https:// doi.org/10.1016/j.visres.2019.10.011
- Vander Stappen, C., & Reybroeck, M. V. (2018). Phonological awareness and rapid automatized naming are independent phonological competencies with specific impacts on word reading and spelling: An intervention study. Frontiers

- in Psychology, 9. https://doi.org/10.3389/ fpsyg.2018.00320
- Vellutino, F. R., Fletcher, J. M., Snowling, M. J., & Scanlon, D. M. (2004). Specific reading disability (dyslexia): What have we learned in the past four decades? Journal of Child Psychology and Psychiatry, 45(1), 2-40. https://doi.org/10.1046/j.0021-9630.2003.00305.x
- Vitevitch, M. S. (2003). The influence of sublexical and lexical representations on the processing of spoken words in English. Clinical Linguistics & Phonetics, 17(6), 487-499. https://doi. org/10.1080/0269920031000107541
- Vitevitch, M. S., & Rodríguez, E. (2004).

- Neighborhood density effects in spoken word recognition in Spanish. Journal of Multilingual Communication Disorders, 3(1), 64-73. https://doi. org/10.1080/14769670400027332
- Wagner, R. K., Zirps, F. A., Edwards, A. A., Wood, S. G., Joyner, R. E., Becker, B. J., Liu, G., & Beal, B. (2020). The prevalence of dyslexia: A new approach to its estimation. Journal of Learning Disabilities, 53(5), 354-365. https://doi. org/10.1177/0022219420920377
- Watkins, M. W. (2009). Errors in diagnostic decision-making and clinical judgment. In Handbook of School Psychology (4th ed.) (4th ed., pp. 210-229). Wiley.