

# Dyslexia Dilemma

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**Abstract:** More than 70 million Americans have learning and thinking differences, like ADHD and dyslexia - that's 1 in 5 people who learn and think differently (The Understood Team, 2014). Dyslexia is a disorder characterized by reading below the expected level for one's age. Problems may include difficulties in reading, rhyming, spelling, identifying common words, phonetic pronunciation and comprehension, or struggle with writing assignments. This paper will examine the history of dyslexia, successful intervention programs for dyslexic learners, and discuss the need for adequate training programs for teaching personnel.

## Introduction

*Jordan is my daughter and a junior in high school. When she was in preschool, letter and phonics retention were extremely difficult for her. She qualified for an IEP for speech and language in kindergarten. With support, she made progress. However, by second grade, she continued to struggle with reading. She said, "My brain is broken." At a young age, she could recognize that her peers understood reading at a higher level than she did. To avoid the third-grade reading guarantee pressure, Jordan went from a public school to a private school. The next few years continued to be challenging for Jordan to read. By fifth grade, assessment still only indicated a 2nd grade reading level. After pressure to gain intervention, new assessments were completed by a remediation specialist at her school who identified her as dyslexic. After nearly seven years of reading challenges, Jordan finally qualified for more intensive reading support utilizing the Orton-Gillingham approach to phonics instruction and Wilson Reading System [WRS] (a multisensory approach using visual, auditory, kinesthetic, and tactile sense to help make connections between sounds and words). Daily support services and intervention specialists helped Jordan close gaps in reading and comprehension. She was placed in a class with dual teacher instruction, one general education teacher and one intervention specialist, for core English and Math classes. The general education teacher was responsible for providing typical classroom instruction, while the intervention specialist focused on providing individual support and strategizing instruction to meet the needs of struggling learners. With daily WRS and dual led classrooms, Jordan soared in comprehension and gained tools to teach her how to advocate for herself. As an eleventh grader, she is now independent in general education classes and works hard to be a good reader and writer. Intervention specialists keep track of her progress and support her as needed. She often has to advocate for herself and her needs, which she will continue to do so as she pursues higher education in college. She hopes to be an intervention specialist to help other struggling readers with dyslexia and other disorders.*

As a parent of a student who struggles with literacy skills and as an early childhood educator, it is important to better understand dyslexia, how it affects developmental literacy, and the best ways to intervene. Jordan and other dyslexic learners are as intelligent as their peers, but are often misunderstood, and, without help, face more challenges.

Despite the vast proliferation of scientific research, the understanding of dyslexia is marked by serious weaknesses of conceptualization, definition, and operationalization. This has resulted in impoverished practices in schools, social inequity in both understanding and provision for many struggling readers, and ultimately, reduced life chances for millions of students worldwide (Elliott, 2020, p. 561).

There is still a perception that dyslexia is simply the flipping of words and/or letters. Research debunks this simplicity. Instead, dyslexia umbrellas those who have difficulty reading, rhyming, spelling, identification of common words, read very slowly, have difficulty with phonetic pronunciation and comprehension, or struggle with writing assignments.

This paper will examine the strains of dyslexia, highlight intervention modalities used with Jordan's literacy challenges, and call for higher levels of teacher support and training.

## Definition

Over 130 years ago, Rudolf Berlin, a German ophthalmologist, coined the term “dyslexia” in his observations of patients with no vision problems who were unable to read. As early as the late 1800s cases of youngsters without sensory or intellectual disabilities who experienced “word blindness” appeared in the medical literature (Kirby, 2018).

Dyslexia is widely understood to be a specific learning disability characterized by difficulties with accurate and/or fluent word recognition and spelling. Much research in cognitive neuroscience, genetics, developmental psychology, and education has demonstrated that dyslexia is neurobiological in origin and heavily determined by genes, while also benign and influenced by environmental factors (Fletcher et al., 2018).

Teachers should understand that dyslexia presents in multiple facets. Four different conceptions of the dyslexia construct are presented in the article, *It's Time to Be Scientific About Dyslexia* (Elliott, 2020). He discusses the dyslexia strains teachers may see in their classrooms. While Jordan could decode words, her comprehension of text severely lacked, having little recall of language, or meaning after reading passages. Understanding that dyslexia presents in multiple ways helps teachers recognize challenges and work to meet the literacy needs of their students. Following are strains for teachers to consider and respond to:

- Dyslexia 1 is word-level difficulty. Students may be able to cognitively identify text but have severe persistent decoding difficulties. If educators were able to demonstrate a consistent pattern in word decoding challenges, and based on that patterning, advocate for support for their students it would aid struggling readers. Despite the pattern of decoding difficulties and teacher knowledge of poor perfor-

mance, Jordan did not meet specific testing criteria for reading support until the end of fifth grade (Elliot, 2020).

- Dyslexia 2 is neurobiological, characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. “Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge” (Lyon & Shaywitz, 2003, as cited in Elliott, 2020, p. 563).

- Dyslexia 3 is characterized by, “struggling readers who have failed to respond to high-quality and increasingly individualized educational inputs over a lengthy period of time” (Fletcher & Miciak, 2017, as cited in Elliott, 2020, p. 570).

- Dyslexia 4 students’ literacy challenges may extend beyond reading difficulties. “Commonly sought cognitive indicators include difficulty with memory, processing speed, attention, concentration, time management, self-organization, and the capacity to express oneself orally” (Asghar et al., 2019, as cited in Elliott, 2020, p. 564).

## Identification and Intervention Programs for Dyslexia

Phonics interventions in the preschool years are beneficial for early reading and spelling development and may be effective interventions for dyslexia. Such remediation may include support for sound knowledge, which may include kinesthetic and auditory aids and strategies to fill in phonological awareness gaps such as letter substitution, deletion, and blend recognition. Programs, such as *Hooked on Phonics*, allows teachers to use auditory supports and sound recognition cards as phonics tools. Early and correct diagnosis is important for correct intervention to begin.

At later stages, a learner has already gained insight into the phonemic structure, and those interventions may lose their efficacy in improving reading and spelling skills (Bus & van Ijzendoorn, 1999). It took Jordan eight years to be appropriately diagnosed. By sixth grade, she had already gained insight and habits that wired her brain for what I call, “late brain barrier” and she had developed thoughts that her brain was broken versus different. When intervention is introduced at late stages, the learner may have already developed a psychological negative sense of their learning ability and low self-confidence, which must be changed in tandem with relearning foundational letters and phonological structure in a way that makes sense to the different brain. Combining morphological and phonological supports to phonics can benefit spelling performance at this stage.

Galuscha et al. (2020) investigated spelling interventions for the remediation of dyslexia and spelling deficits. Thirty-four controlled trials that evaluated spelling interventions in children, adolescents and adults with dyslexia and spelling deficits were included. The aims of the study were fivefold:

1. To present an up-to-date overview of controlled trials of all available spelling interventions evaluated on children, adolescents, and adults with dyslexia or spelling deficits.
2. To advance towards a theory of spelling that describes how spelling performance of learners with dyslexia and spelling deficits can be improved.

3. To investigate interaction effects between treatment approaches and age as well as the severity of reading and spelling disorders.
4. To contribute to an understanding of how orthographic consistency influences the implementation and effectiveness of spelling interventions.
5. To investigate whether effect sizes are affected by sample (age, grade level, severity of reading and spelling disorder) and intervention characteristics (amount of intervention, setting computer use, implementer), in an explorative way (pp. 11-13).

The study showed that orthography, understanding the principles of how letters combine to represent sounds and form, is beneficial for learners with dyslexia or spelling deficits and presents key components for effective spelling intervention. The study also pointed out that adding morphological and orthographic interventions to phonics would be appropriate since phonics alone was not found to be more effective in the early years of formal literacy instruction or for more severe spelling deficits.

### ***Orton-Gillingham***

Jordan made strides to combat her literacy challenges through specified, small group interventions that were multisensory through special training including Wilson Therapy, which incorporates the Orton-Gillingham approach.

Dr. Samuel T. Orton (1897-1948) was a neuropsychiatrist and pathologist who was particularly interested in the causes of reading failure and related it to language-processing difficulties. Anna Gillingham (1878-1963) was an educator and psychologist who had a deep understanding of language. Dr. Orton encouraged Gillingham to publish instructional materials in the 1930s (Gillingham & Stillman, 1936). The Orton-Gillingham approach explicitly teaches students elements of language (phonological, syllabification, morphology) and facilitates students' automaticity in applying this knowledge to the decoding (reading) and encoding (spelling) of language. Their approach to reading instruction was based on breaking down the components of language into individual overlapping skills and then creating instructional activities designed to promote mastery and automaticity of those skills for students with dyslexia (Uhry & Clark, 2005).

Orton-Gillingham has distinguishing features (Sayeski et al., 2018). These include:

1. Direct, systematic, incremental, and cumulative lessons (The instructor models, the student engages, and feedback is given. The teacher determines the pace of the instruction).
2. Cognitive explanations (The instructor explains rules for spelling).
3. Diagnostic and prescriptive methods (All responses are monitored, and subsequent lessons are built for each student collected during previous lessons).
4. Linguistic-based instructions (Decoding and spelling work that progresses to include instruction on syllables, morphemes, syntax, semantics, and grammar. Reading, writing, and spelling instruction are integrated with each lesson).

5. Multisensory engagement. (Supports decoding, encoding, breaking words into their root words/affixes, dividing words in syllables, and orthography, which is studying the written system that represents language).

Orton-Gillingham features are in alignment with many national syntheses of research, including the National Early Literacy Panel (2008) and the National Reading Panel (2000). For students with literacy challenges like dyslexia, a knowledgeable and skilled teacher, utilizing strategies such as Orton-Gillingham can make a substantial difference.

### ***Wilson Reading System***

The Wilson Reading System is an intensive Tier 3 program for students who do not make progress in initial literacy interventions (Wilson Language Training, 2023). Students, like Jordan, may require multisensory language instruction or require more intensive reading instruction when diagnosed with dyslexia. Wilson extends phonics support by systematically teaching English language structure. Students learn fluent decoding and encoding skills in an extremely rigorous systematic approach. Knowledge of word structure, word recognition, word understanding, prosody, listening comprehension, reading comprehension, organizational skills, proofreading, and self-monitoring for word recognition accuracy are explicitly taught.

Jordan started Wilson therapy in sixth grade. It was introduced as a two-three year program depending on progress. Unfortunately, COVID-19 interrupted the program for two years when schools went remote, and she fluctuated between live and hybrid systems. After five years, she finally completed Wilson therapy at the end of her sophomore year.

### **Adequate Teacher Training and Support**

Phonics, orthographic, and morphological interventions are effective components in treating the reading and spelling of learners with dyslexia (especially in early intervention years before age 13) (Galuschka et al., 2020). Moreover, spelling and reading interventions that involve the application of phonological, as well as the explicit instruction of graphotactic or orthographic-phonological spelling rules, and morphological instruction help dyslexic learners.

Prior to her dyslexia diagnosis, Jordan was in a general education classroom with typical peers. In that setting, classroom sizes and increasing teacher demands may have made it difficult for her general education teachers to be effective in inclusive educational programs, which mix learners with and without special needs. In that setting, Jordan's literacy progress was dismal.

Once identified as dyslexic, Jordan qualified for more support. Her school placed her in a general education setting with dual-led teachers for all core subjects. This type of setting allowed her general education teacher to focus on content standards and typical students, while the special education teacher could aid Jordan and other struggling learners with targeted support. The collaboration was an effective support for Jordan. Her literacy scores, along with other subjects, soared.

When general education teachers have support, it affects their attitude and ability to support students. Small-group aid from intervention reading specialists and the type of dual-led classrooms Jordan was exposed to was imperative to close her literacy gaps. More positive teachers' attitudes and intentions will lead to more fruitful teacher-student interactions while barriers that stand between teachers and learners with dyslexia will be reduced (Stampoultzis et al., 2018).

## Conclusion

Basic consensus must emerge to combat literacy challenges. In January of 2021, House Bill 436 of the 133rd General Assembly was signed into law by Ohio Governor DeWine. The law created requirements for all Ohio schools to universally screen for dyslexia and/or dyslexic tendencies and to subsequently provide identified students with Structured Literacy intervention and remediation services (Ohio Department of Education, 2022).

Strategies, such as Orton-Gillingham and Wilson Therapy, will continue to lead to more fruitful classroom interactions, reducing barriers that stand between teachers and learners struggling to read. And, finally, providing more reading intervention specialists to aid general education teachers will close literacy gaps for struggling learners.

Agreeing on a definition for dyslexia continues a complex debate. Instead of continuing to argue over a distinct definition, education professionals, who are often the first to identify patterns of persistent decoding or encoding ability or comprehension, must respond. Students who have literacy challenges, especially those diagnosed, should be supported with targeted, explicit learning strategies.

Teachers in all educational settings, at all grade levels must learn about literacy challenges and effective strategies to help their students. They are their students' best resource and advocate. As demonstrated by Jordan, intervention, especially in small group educational settings, is essential to make strides against dyslexia. Once she entered structured therapy with trained reading specialists, her confidence, encoding, and decoding abilities improved. When paired with dual taught classrooms, Jordan made even greater strides in her approach to reading and her ability to comprehend text. She is excited about her ability to use the tools she's learned to achieve success in the classroom and is making plans to attend college and become an intervention specialist.

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## 20 Cook

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### About the Author

Monica Cook received her Bachelor of Arts in Public Relations Communication from the University of Toledo. After teaching and administering preschool for ten years, Monica returned to UT to earn a Master of Education degree. She lives in Perrysburg, Ohio and plans to continue as an administrator in Early Childhood Education.