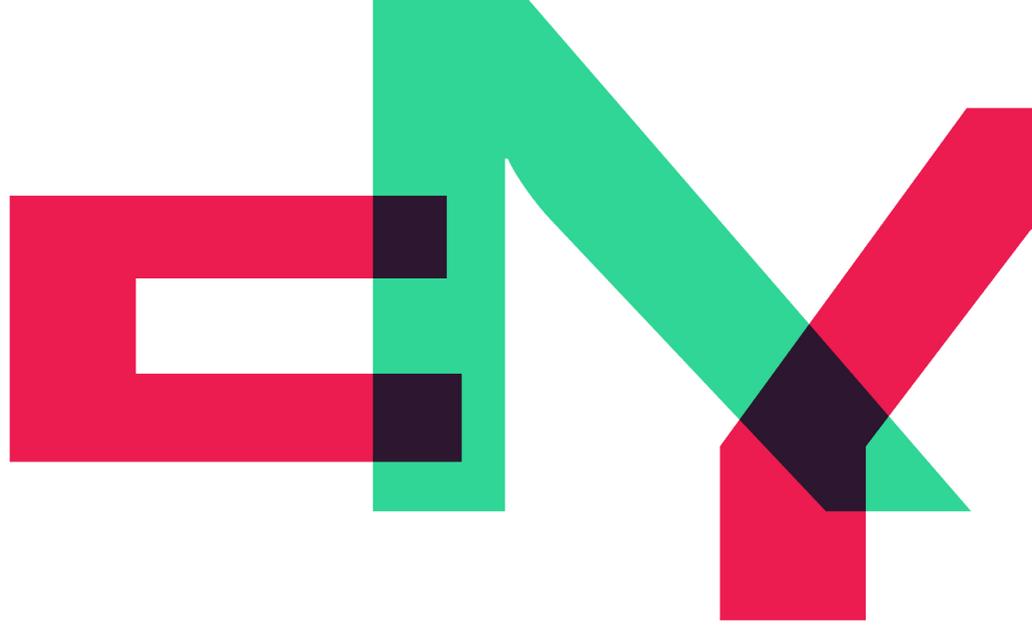


MindShift
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MINDSHIFT GUIDE TO UNDERSTANDING DYSLEXIA

by Holly Korbey





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INTRODUCTION



Dyslexia occurs in every language and in children from every background, regardless of race or socioeconomic status.

WHO IS THIS GUIDE FOR?

- Adult caregivers of children/young people who are or may be dyslexic
 - Parents and adult family members
 - Public and private school educators (K-12 teachers; instructors at colleges, community colleges, and universities)
- Teachers who work with non-native English language speakers of any age
- Therapists and those in helping professions who seek a basic understanding
- Workplace managers who may be supervising dyslexic adults
- Adults who are diagnosed with dyslexia
- Adults who think they may be dyslexic or who have a friend who might be
- Anyone who is interested in an introductory level of understanding about dyslexia, wants to understand some of the issues better, or is interested in resources curated for this level of discussion

WHY UNDERSTANDING DYSLEXIA MATTERS

Stubborn. Not working to potential. Lazy. Unintelligent.

For many students sitting in classrooms right now struggling to read, they have already heard these words, or thought them about themselves. Yet no matter how hard they try, when these same students look at the page of a book or worksheet, the letters seem to move around and shift. Was the word *pit* or *tap*? *Their* or *through*?

For others, words come together so slowly to form coherent sentences, the first test question is barely answered when the rest of the class is nearly finished.

This is the daily given for students with **dyslexia**, a biological, brain-based reading condition connected to speech and language that makes reading words and sentences extremely difficult.

Experts estimate that anywhere between 5 and 20 percent of school children have a form of dyslexia. Dyslexia is, in fact, the root of 80 percent of all learning disabilities, and yet in many families, schools, and even businesses, it's still profoundly misunderstood.

Dyslexia shows up most often inside schools, where most children learn to read. But because of the complex intersection of individual brains, scientific research, state legislation, district requirements and teacher education, there's no universal understanding of how to recognize and identify dyslexia, screen for it, and aid students who struggle to read because of it.

Due to the host of identifying and diagnosing issues, many kids slog through school not knowing they have a learning difference, and an estimated [40 million](#) American adults suffer from dyslexia, though experts guess only 2 million are aware of it.

Yet, understanding, recognizing, and providing intervention for students with dyslexia has never been more important than right now.

Ours is an age of rapid acceleration of technological, demographic, and economic changes that are overturning industries and cultures. And until dyslexia-supportive technologies (discussed in Chapter 5) are fully accepted, embraced, and utilized in workplace environments, being able to read and write will continue to be a crucial skillset for success not only in school but also in life beyond school:

- As more and more jobs rely on computers, workers need basic literacy skills even to do such work as operating and repairing machinery.
- As more [learning systems migrate online](#), workers who must learn new skills to keep their current positions will need sufficient literacy to use systems that may not be dyslexia-supportive.

- CEOs and experts have said that higher-order thinking skills like creativity, problem-solving and critical thinking are now critical to success—and absent supportive technologies. Such higher order skills will still require the involvement of visual reading comprehension.

And for those who don't have the benefit of early intervention? Many face a lifetime of debilitating consequences: statistically, students who can't read at grade level by third grade are [four times more likely](#) not to finish high school; one in five students with a learning disability will drop out.

Dropping out of high school, coupled with reading disability, especially for poorer students, can be a cocktail of negative effects. Nearly half of incarcerated adults don't have a high school diploma, and 60 percent of the prison population is functionally illiterate. According to a study performed on inmates in Texas, about 48 percent of inmates have dyslexia.

And, at the most basic level, dyslexics are more vulnerable to mental illness—an [estimated 60 percent](#) of dyslexic children and adolescents also have a mental or emotional disorder, most commonly ADHD, depression, and anxiety—and have a higher incidence of [suicide attempts](#).

Understanding dyslexia can enable people to find the help and support they need. You can learn more about how some individuals learned about their dyslexia and how they successfully advocated for help in Chapter 6, "Possibilities."

WHAT YOU MIGHT NOT KNOW ABOUT DYSLEXIA

We've discussed the overarching and compelling WHY, now let's discuss some broad strokes of WHAT:

- Dyslexia occurs in every language and in children from every background, regardless of race or socioeconomic status.
- Many dyslexics become successful adults, whether it's because of their different brain, or in spite of it. Having a learning difference doesn't doom a student to failure. Dyslexics are doctors, lawyers, professors and business people as well as artists, musicians, nurses and firefighters.
- For years, state special education laws refused to use the word "dyslexia," though it's not entirely clear why.

- Experts have pointed out that dyslexia was once thought (wrongly) to be a medical condition, and others have said that dyslexia was often left out of laws because the “treatment” is both expensive and needs a specially trained teacher to administer correctly.
- Dyslexia awareness and understanding is growing, thanks in large part to passionate activism on the part of frustrated parents and teachers who are moving schools and districts toward change.
- The awareness and activism is slowly changing the omission of dyslexia from law: [thirty-nine states](#) have passed dyslexia laws surrounding learning disabilities in the past few years, slowly making their way down into districts.
- The state of California, along with Tennessee and a few others, have in the past couple of years issued first-ever specific guidance for schools and educators on how to assess and provide resources for those diagnosed with dyslexia.
- There is no “cure” for dyslexia. But when reliable, research-based interventions are methodically applied, students can go on to read, they can be academically successful, and they can go on to live fulfilling lives doing whatever they choose.

But the earlier parents and teachers can recognize the signs of dyslexia and get help, the faster those students can halt feelings of failure and begin on the path to success.

This *MindShift Guide to Understanding Dyslexia* is meant to serve as a primer to:

- Better understand, recognize and identify dyslexia
- Discover new tools and teaching strategies to support dyslexic students in improving their reading skills
- Be aware of resources that can support dyslexics of every age in living their best lives, maximizing their gifts and talents

In this Guide, you will find:

- A scientific definition of what dyslexia is (and isn't), possible causes, and how it's most often manifested
- A discussion of how dyslexia is most often recognized, assessed and treated
- What dyslexia intervention entails
- Some successful teaching/learning strategies for those who work with dyslexics
- Technology that specifically aids dyslexics
- Resources designed to serve as a point of departure for further investigation

Let's get started.

CHAPTER ONE

DYSLEXIA IS A DIFFERENT BRAIN, NOT A DISEASE



No one with dyslexia needs to sell themselves short, because there is a world of possibilities. ”

– Sheryl Rimrodt-Frierson

As a frame of reference, the act of reading is a human invention that's only a few thousand years old. In Europe and the United States, mass literacy—meaning more than 50 percent of the population knows how to read—has only been around for about 150 years. In other areas of the world, such as most of Asia, the Middle East, and Africa, it's much more recent.

THE READING BRAIN

Because the human brain doesn't come already wired to read, there is no "reading center" of the brain and there are no "reading genes." As *Proust and the Squid* author Maryanne Wolf writes, each individual brain must learn how to read on its own.

In learning to read, the brain performs an amazing feat: it creates a specialized circuit that's just for reading, forging a new circuit by combining parts of the brain that were originally designed to serve other functions, such as retrieving names. This new "reading circuit" combines processes from different areas of the brain and then runs at a speed so fast it's nearly automatic.

But not all brains forge a flowing reading circuit easily. This is the case with dyslexia. Rather than being a disease or a medical condition (the common misperception), dyslexia is a [different brain organization](#)—one in which the brain's reading circuit has been disrupted or re-routed in at least one way, and sometimes in two or three ways.

This re-routing slows down critical parts of the reading process:

- attaching the right sound to a letter happens more slowly and
- forming words or sentences takes longer, then comprehending what was just read also takes longer

Dyslexia can additionally [affect memory](#), especially working memory, making it harder for students to remember what they just read, or directions and learning sequences.

It's important to note that dyslexia is **NOT caused by visual problems**, and it isn't the flipping of letters, or reading letters backwards, or mispronouncing words—and it's not related to motivation or intelligence. It's merely the result of a brain with a different organization that makes reading and writing more difficult.



Students, parents, and teachers must understand that the dyslexic's brain isn't "broken" or deficient, just organized in a different way.

READING CIRCUIT ISSUES

In the dyslexic brain, the reading circuit can be interrupted in several areas and cause problematic development. Because each brain is unique, there isn't a singular form of dyslexia, but there *are* common issues:

ISSUE #1: Phonemic Awareness — identifying individual units of sound is a major challenge in the dyslexic brain.

There are 44 sounds, or phonemes, in the English language. The main problem for kids with dyslexia is the ability to notice and work with all the sounds, and then be able to match those sounds to the right letters. In younger children, this is why not being able to rhyme words is an important early sign of dyslexia—often dyslexic kids don't recognize the ways two rhyming words sound alike. English is an irregular language so there are many different combinations of letters that match to phonemes, making reading and spelling really hard for kids with challenges working with and remembering speech sounds.

ISSUE #2: Fluency, or getting the reading circuit to work together quickly, is the second-biggest issue. Even when children can process all the phonemes, they can still have trouble associating the sounds with the right letters, perhaps due to the right hemisphere's control over the left hemisphere-centered language processing. This makes reading even the simplest words very slow, and then automaticity doesn't develop properly.

ISSUE #3: Comprehension is the third (but no less crucial) issue in reading. Once letters and sounds are matched together, some children will have trouble putting the words together to form sentences and meaning. Often, this kind of dyslexia doesn't show up until children are older, around third grade and up, when there is a switch from learning to read to reading to learn.

For dyslexics, the work of reading is slow and laborious, so often otherwise bright and intelligent students who haven't received proper intervention never become fluent readers. Many dyslexic students can get by for years by memorizing words without actually reading them, but by the third or fourth grade, when learning switches from learning to read to reading

to learn, struggling students can't read fast enough to keep up. They often experience repeated failure.

Yet, with explicit and systematic specialized instruction specifically for the different brain structure, the reading circuit can be re-trained to work toward fluidity. But first, students, parents, and teachers must understand that the dyslexic's brain isn't "broken" or deficient, just organized in a different way.

DO DYSLEXICS HAVE SPECIAL TALENTS?

Special [gifts and talents](#) can emerge from dyslexic brains, and whether this happens because of the unique setup of the dyslexic brain or in spite of it continues to be an ongoing subject of research and discussion.

Dyslexics quickly learn that very successful people, some considered geniuses in their field, like Pablo Picasso, Thomas Edison, Steven Spielberg, Octavia Spencer, Erin Brockovich and Nobel Prize-winner Elizabeth Blackburn, also struggled to read and write, and it didn't affect their ability to achieve.

Does the dyslexic brain connote certain talents or even an advantage over a more typical reading brain? Some experts and writers like Malcolm Gladwell even call dyslexia an [advantage](#) or a [desirable disadvantage](#)—a disadvantage that ends up being at least partly responsible for a person's success.

But the research behind whether or not dyslexia is an actual advantage, or whether special talents emerge from dyslexic brains, is complex—it's difficult to tease out causes and correlations.

"It's certainly possible that some dyslexics have special abilities in areas not related to reading, just as other kids could have special abilities in one or two areas but struggle in other areas," says research scientist and speech-language pathologist Peggy McCardle, former branch chief at the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), U.S. National Institutes of Health.

"We know that there are gifted children in the world, and that

some of them are dyslexic. What we don't know —and to date there is no real evidence of this—is whether the dyslexia and the giftedness or talent are connected, or just happened to co-occur in that person. People are looking at ways to study that, with good research designs and solid methods, but so far it has not been done.”

A FINE LINE

For practitioners who work with dyslexic students, it's often a fine line between encouraging students to use their non-reading talents to succeed, and for not short-changing themselves on what they are able to do.

Dr. Sheryl Rimrodt-Frierson, who runs the pediatric clinic at the Vanderbilt Kennedy Center Reading Clinic, says that reading and writing are still vital skills that need to be addressed, and she's cautious about dyslexic kids selling themselves short when it comes to academic work. “I will make sure they know there are plenty of good people out there who have done plenty—academic work, medical school, law school.” Rimrodt-Frierson says that kids need to understand there is a world of possibilities.

As cognitive neuroscientist Maryanne Wolf writes in her book *Proust and the Squid*, “The single most important implication of research in dyslexia is not ensuring that we don't derail the development of a future Leonardo or Edison; it is making sure that we do not miss the potential of any child. Not all children with dyslexia have extraordinary talents, but every one of them has a unique potential that all too often goes unrealized because we don't know how to tap it.”

CHAPTER TWO**RECOGNIZING DYSLEXIA
IN CHILDREN**

Using the right terminology means that the student is much more likely to get the right kind of help.

THE CHALLENGE OF DETECTION

One of the most challenging aspects of properly addressing the different brains of dyslexic children is recognizing them in the first place.

Dyslexia occurs on a continuum and there is no “[sharp dividing line](#)” between having dyslexia and not having it. In the early years of elementary school, all children are learning to read, and all are developing their reading skills at different rates. “The behaviors of 4-to-6 year-olds who are at risk for dyslexia are not very different from those of children who are not,” writes professor Mark Seidenberg, cognitive scientist at the University of Wisconsin, in *Language at the Speed of Sight*. “Typically developing children learn to read at different rates for constitutional and environmental reasons.”

Further, because dyslexia’s symptoms and manifestations can change over time, families, teachers, and schools understandably struggle to identify dyslexia in children.

But the way dyslexia presents itself in young readers is far from the only hurdle: sometimes elementary teachers haven’t been given the proper tools to recognize the early warning signs, and many who recognize the symptoms of reading trouble ahead don’t know how to address those issues.

For example, when Dr. Martha Youman [first began](#) her career as a second grade teacher, she knew that some of her students simply couldn’t read but she didn’t know what to do about it: “I kept them busy. Truly, there were interventions they needed,

I just didn't know how to help them," says Youman, who now treats kids with dyslexia. "I had a master's in teaching, and didn't know how to deal with these students."

Often the diagnosis of dyslexia comes after months or years of exhausting frustration and failure for students, parents, and teachers. It's **common** for dyslexic children to avoid reading and become angry or upset in class or when it's time to do homework or read aloud in front of others. Sometimes these students are seen as smart but lacking motivation or not working hard enough. To make things more complicated, dyslexic children often have another **developmental disorder like ADHD** alongside their reading challenges.

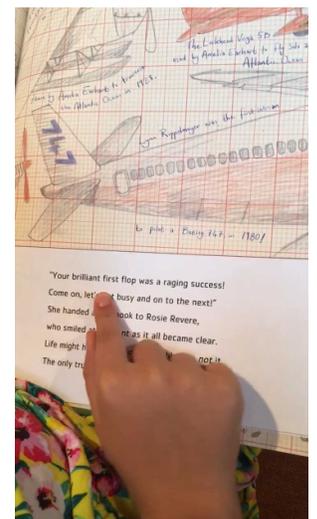
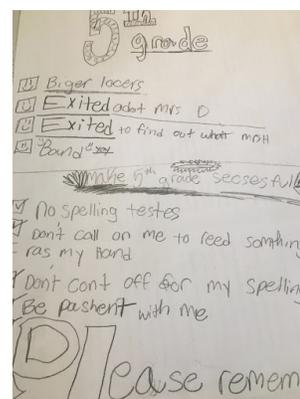
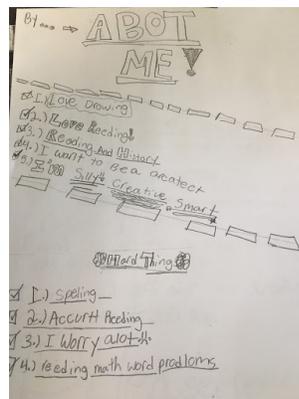
The key to preventing reading failure is early detection.

WHAT DOES DYSLEXIA LOOK LIKE?

Though dyslexia can take on many forms, two common areas where differences can be clearly seen and heard are **slow reading** and **difficulty with handwriting and spelling**.

Also, in some cases, certain speech patterns can be an early indicator of dyslexia, like mispronouncing familiar words or using "baby talk."

In the following video, a fourth grader with dyslexia reads from *Rosie Revere, Engineer*, and then writes what she's looking forward to when she gets to fifth grade (see picture below). At the time when this video was taken, she had already had 1.5 years of targeted **Wilson dyslexia tutoring**, and her reading had improved significantly.



WHAT'S IT LIKE TO READ WITH DYSLEXIA? (INTERVIEW)

For kids who are entering school, according to the Yale Center for Dyslexia and Creativity, [signs of dyslexia](#) in kindergarten and elementary school children include:

- Difficulty sounding out simple words like cap, map, nap
- Difficulty associating letters with sounds, and can't break words apart
- Talks about how hard reading is and/or resists reading
- Family history of reading difficulties
- Difficulty speaking

In second grade and up, signs of dyslexia might include:

- Avoids reading out loud
- Exhibits slow and awkward reading, and difficulty in acquiring new reading skills
- Makes wild guesses when sounding out a word
- Has no strategy for sounding out unfamiliar words
- Relies on vague language when searching for a word, like "things" or "stuff"
- Mispronounces long or unfamiliar words
- Uses lots of pauses, hesitation, and "umm's" when speaking
- Seems to need extra time to answer questions
- Has extreme difficulty learning a foreign language
- Has messy handwriting

For more signs of dyslexia in younger children and adults, including particular dyslexic strengths, visit the [Yale Center's Signs of Dyslexia page](#).

DYSLEXIA IN ENGLISH LEARNERS: EXTRA HURDLES

According to Pew Research Center, there are about [5 million](#) English Language learners in American public schools, or nearly 10 percent of the school population. While the vast majority (77 percent) of American English learners' first language is Spanish, the top five are rounded out by Arabic, Chinese, Vietnamese and Somali. Among states, California has the highest number of English learners, with more than 20 percent of school children speaking a different language at home.

For schools, teachers and parents, diagnosing dyslexia in English learners can present an extra set of hurdles.

Dr. Kelli Sandman-Hurley, co-founder of the Dyslexia Training Institute in San Diego, California, says dyslexics learning English can sometimes be overlooked for two reasons: first, there's not a lot of research on the topic and often educators don't know what to look for, and second, reading difficulties can often be attributed to learning a new language.

ENGLISH LEARNERS AND RECOGNIZING DYSLEXIA: INSIGHTS AND SUGGESTIONS FROM TWO EXPERTS

According to Sandman-Hurley, students who have trouble with phonemic awareness in their first language will also find learning letters and sounds in English difficult. But if it's not possible to screen kids' phonemic awareness in their first language, educators can look for other clues that children are struggling.

Sandman-Hurley says it's often important to check and see if English learners are having trouble in other subjects—that is, if a child learns math quickly and relatively easily, then a reading disability might be at play.

Sandman-Hurley makes two recommendations to educators trying to spot reading difficulties in English learners:

1. If possible, provide screening in the child's native language

2. Dig into what’s going on at home—since dyslexia tends to run in families, find out if other family members also had difficulties with reading, or if children had displayed some of the early warning signs, like an inability to rhyme words or learn the alphabet.

Speech-language pathologist Dr. Elsa Cardenas-Hagan has spent 25 years working with biliterate and bilingual students at the Valley Speech Language and Learning Center in Brownsville, Texas, and says that educators should look to see if the English learner has trouble learning the English alphabet or has trouble with writing. Even if they’re still learning English as a new language, those should be considered warning signs.

“We want to give English learners plenty of listening, speaking, reading and writing opportunities. To do any writing you have to be aware of sounds, so if a child is having trouble being able to sound out a word and write it, that should be a red flag.”

Cardenas-Hagan also agrees that looking into family history can help teachers who don’t speak the child’s first language. Because dyslexia tends to run in families, asking if anyone else in the family had troubles with reading and writing when they were growing up might provide indicators.

She says it’s also helpful to ask about when the child developed language. “Did the child speak on time? Did they start using words on time, did they produce the words with clarity and precision? We watch those kids very carefully, because if you have trouble hearing and speaking sounds in whatever language you learned, you’re going to have that same trouble reading and writing,” she says.

DETECTION/ASSESSMENT TOOLS

Universal Screening. Requirements vary wildly between states and even between districts. Beginning in kindergarten many schools use universal screeners like the RAN/RAS (Rapid Automatized Naming) test and the PAR (Predictive Assessment of Reading/Rapid Alternating Stimulus) to assess children’s knowledge of phonemes, letter recognition, and vocabulary.



Spanish-speaking dyslexics have a small advantage in that Spanish is “transparent,” or the letters and sounds make consistent and recognizable patterns. Because letter-sound patterns are easier to detect, dyslexia in Spanish often presents itself more in reading fluency and spelling.

However, not all screeners are created equal and often do not provide a complete picture of a child's talents and deficiencies, according to Drs. Brock and Fernette Eide at [Dyslexic Advantage](#). For a more complete picture, students who aren't reading at grade level most often need a full evaluation by a school psychologist in order for parents and the school to implement the proper intervention.

Find out [each state's approved reading assessment tools](#), courtesy of Dyslexic Advantage.

To learn more about screening standards and what to look for in high-quality assessments and screeners, read Literate Nation's white paper on how to select screening instruments.

RTI—Response to Intervention. Another way for teachers to recognize reading trouble is through the [Response to Intervention](#) (RTI), a multi-tier reading program designed in the 1990s to determine whether a child has a Specific Learning Disability (SLD) like dyslexia.

RTI has been mandated in 14 states and is widely used among others. The program aims to identify who is at risk for reading failure and to provide targeted instruction to those students through different tiers:

- **Tier 1** interventions involve a blend of high-quality classroom instruction, adequate screening and group interventions that typically last around 8 weeks.
- **Tier 2** Students who don't make adequate progress in Tier 1 move to Tier 2, where intervention is more targeted and intensive, where instruction can last up to a grading period.
- **Tier 3** When students don't progress in Tier 2 they are moved to Tier 3, where they receive one-on-one targeted and intensive instruction and often a full evaluation to determine whether they qualify for special education services.

Curriculum and instruction aren't uniform but designed by schools or districts individually.

Due to the varying quality of programs, response to RTI has been mixed. A comprehensive [2015 RTI evaluation](#) by the National Center of Education Evaluation found that first



“It creates confusion,” says Nancy Mather. “The parents are told their child has an ‘SLD’ but they don’t realize their child has dyslexia.”

graders who participated in the RTI program did worse than those who didn’t receive any targeted assistance.

“RTI is thoughtful, logical, well-designed program. It has only one flaw: it has to be implemented in real-world environments that are often inhospitable,” Seidenberg writes in *Language at the Speed of Sight* that “How well the RTI program works depends on how well it’s implemented, which is left to the school districts or system to decide.”

Full Evaluation. Even when schools provide universal screeners and assessments to identify at-risk students, if reading doesn’t progress, students need more complete evaluations to determine the cause of the reading failure and then a way forward. In most cases, that means an **Individualized Education Program (IEP)** for special reading services.

THE CHALLENGE OF ASSESSMENT: DYSLEXIA TERMINOLOGY

Most schools offer an evaluation through the school psychologist, but these evaluations can be complicated for several reasons.

First, school psychologists are often overworked and backlogged, so testing and a full evaluation can often involve long wait times. This is often why families with the financial means to do so will take their child to a private psychologist to be evaluated and speed up intervention.

Next, complete evaluations can be complicated and difficult to understand, because different states, districts and psychologists use more than one term to describe reading difficulties. Terms like ‘Specific Learning Disability’ (SLD), ‘reading deficit,’ or ‘language learning deficit’ are often used interchangeably with other terms, like ‘dyslexia.’

But according to dyslexia expert Nancy Mather, professor emeritus in the Department of Disability and Psychoeducational Studies at the University of Arizona, the different labels create undue confusion for parents and students, since more than 80 percent of reading disabilities are in fact dyslexia.

“It creates confusion,” she says. “The parents are told their

child has an ‘SLD’ but they don’t realize their child has dyslexia.”

But using the right terminology means that the student is much more likely to get the right kind of help, because dyslexics need a very specific kind of reading intervention and a specially trained teacher in order to read.

For that reason, some families have their children evaluated outside the school, like a university or private testing center, where the cost of testing can be very high. Universities sometimes offer free or low-cost testing, but families might spend six to nine months on a waitlist.

CHAPTER THREE

EDUCATORS AND DYSLEXIA



Some students decide that it’s better to end up in the principal’s office than face another humiliating failure.

Educators can’t handle serious reading issues alone.

Children who cannot read and can’t figure out why can face unbearable difficulty in classrooms. There are students who know something is wrong but can’t say what and may assume that adults might not believe them. When faced with homework, such kids will fidget, distract, cry or rage, or act out when it’s their turn to read in front of the class. Some students decide that it’s better to end up in the principal’s office than face another humiliating failure.

Sometimes it’s the classroom teacher who recognizes and identifies a student who is struggling. But because some misconceptions about dyslexia persist and often permeate [teacher training programs](#), it’s not uncommon that highly-educated and hard-working teachers haven’t been given the proper training to address the struggles of dyslexic readers.

MISCONCEPTIONS ABOUT DYSLEXIA: THE STUMBLING BLOCK

As we've seen, dyslexia isn't a disease. It's not a visual problem nor is it related to low intelligence. Yet these are persistent misconceptions about dyslexia that often keep students who experience biologically-based reading difficulties—a different brain that requires extra attention and special intervention—from getting the help they need.

Reading expert Mark Seidenberg, author of *Language at the Speed of Sight*, says there's a large gap between beliefs about how reading works and what research says, and that gap is what works to keep kids from getting the proper interventions in a timely manner. In that gap are two persistent reading misconceptions/myths:

Misconception #1: Kids' reading problems are connected to vision. Dyslexia is a language-based disorder, not a visual one. Vision is involved with reading, but the first signs of trouble for many dyslexics often show up in their speech.

As discussed before, though it seems counterintuitive, reading problems are most often connected to **matching letters to sounds**, not “flipping” letters backwards or other vision issues.

Misconception #2: Reading is more like a sophisticated guessing game, in which students use what they already know about the topic and about language in general to guess at printed words instead of sounding them out. “This theory was sold for decades,” Seidenberg says, “that the best readers are those who spend the least amount of effort on the actual text. That you only have to sample the text and use the things you know to guess most the words. By this theory, good reading is more like skimming.” Research shows otherwise, however: to achieve fluency and understanding, good readers sound out each word individually and then put the words together to form coherent sentences.

Correcting these misconceptions about reading can go a long way for teachers in spotting possible struggling readers early.

NEXT STEPS

Universal screening for every child does help flag children who may be at risk for developing dyslexia, says Seidenberg. But what happens next is much more important—getting the child the help they need.

After a child has been identified as having a phonological or comprehension challenge, classroom teachers have an opportunity to get the student the help they need—but only if the teacher knows what to do. According to Seidenberg, one of the most important next steps for educators is to **step outside the classroom to get the at-risk student the intense intervention needed from a trained reading specialist**—realizing that educators can't handle serious reading issues alone. It is not realistic for a single classroom teacher to be able to address the needs of an entire class as well as the specialized needs of children who need lots of individualized attention.

The end of this section includes a brief overview of a research-backed intervention that educators should know about, one that can teach nearly all dyslexics to read.

But one other step teachers can take in the classroom is to learn more about the techniques used to [minimize reading differences](#) early. For teachers who have diagnosed dyslexics in class, there are strategies to help students get the most out of class time, even when reading and writing is a struggle.

Strategies include

- allowing more time for assignments and tests
- supporting vocabulary development
- avoiding contests or prizes for amount of material read instead of time spent reading

But these ideas are only the tip of the iceberg, as the needs of dyslexic students change throughout school years. Check out these expert resources for a more robust understanding of teaching strategies for dyslexic students:

- A Dyslexic Child in the Classroom, [Davis Dyslexia Association International](#)

- Knowledge and Practice Standards for Teachers of Reading, [International Dyslexia Association](#)
- Dyslexia Strategies for Teachers, [University of Michigan Dyslexia Center](#)
- Information on Dyslexia for Teachers, [Yale Center of Dyslexia and Creativity](#)
- Eight Things Every Teacher Should Know about Dyslexia, [We Are Teachers](#)
- Understanding Dyslexia Online Course for Educators, [MindPlay](#)
- [Understood.org](#)

A RESEARCH-BACKED INTERVENTION THAT TEACHES DYSLEXICS TO READ

Fortunately, scientific research supports a specific kind of reading intervention that can teach nearly all dyslexics to read: **structured literacy**. Although it often appears under different brand names, like Orton-Gillingham, Wilson, SPIRE or others, structured literacy is a blanket term for the evidence-based, multisensory and explicit reading instruction that is based on six specific language areas determined by the International Dyslexia Association.

The method is often more repetitive and intensified for students with dyslexia, but the tenets of structured literacy—which have a strong basis in phonics and word structure—benefit all readers. In structured literacy, students

- Begin with phonics, learning the most basic units of sound and how those sounds make up words
- Learn word structure and how word structure guides spelling and pronunciation
- Then learn word syntax (the arrangement of words and phrases to create well-formed sentences in a language) and comprehension
- And most importantly, students review key concepts many times while also adding new material

According to the International Dyslexia Association, the core of structured literacy instruction, which accounts for its success, is that it is

1. Explicit and focused on direct instruction
2. Systematic and cumulative, following a logical sequence that builds on previous concepts, and
3. Diagnostic and individualized, based on a student's particular needs

CHAPTER FOUR

PARENTS AND DYSLEXIA

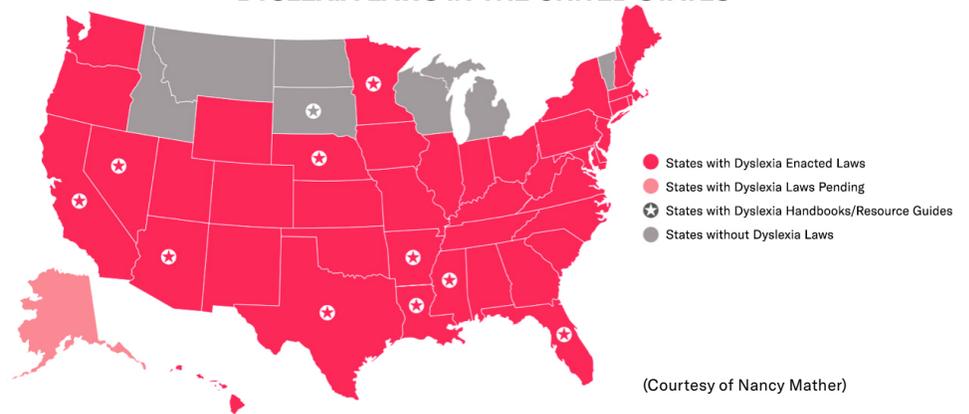
Never go to an IEP meeting alone. Bring an advocate, a spouse or a friend.

Experts know that the only effective help for students with dyslexia is targeted, specific intervention that addresses each student's issues. How students receive that intervention largely depends on where they live.

Federal law guarantees those with dyslexia a free and appropriate education under the [Individuals with Disabilities Education Act](#) (IDEA). However, the patchwork condition of state laws means there's a lack of uniformity in defining dyslexia and how students are to be accommodated. As recently as a few years ago, some states had put 'Say Dyslexia' or 'Dyslexia Awareness Week' laws into effect in order to create consistency around dyslexia accountability in schools—but the laws didn't have much impact.

That's beginning to change, according to dyslexia expert Nancy Mather, as states update existing laws to include language for dyslexia specifically, instead of using more general terms like 'learning disability,' 'reading deficit,' etc.

DYSLEXIA LAWS IN THE UNITED STATES



[Texas](#) and [Arkansas](#) in particular have comprehensive laws, and recently California made headlines as it beefed up its universal screening and issued a high-quality, [comprehensive guidance guidebook on dyslexia](#) (Tennessee and a handful of other states have also issued dyslexia guidance).

A comprehensive list of dyslexia laws from state to state can be [found here](#).

But parents of dyslexic students say that having the laws on the books is just the first step to getting help, according to Mather. Getting schools and districts to pay attention is more important. “Hopefully this increased spotlight on dyslexia will result in many more students getting the kind of help and support that they need to become avid, fluent readers,” she says.

ADVOCATES FOR NECESSARY SUPPORT: THE CRUCIAL ROLE OF PARENTS AND CAREGIVERS

After several years of advocating for her dyslexic daughter in school settings, Nashville, Tennessee, parent Anna Thorsen began to realize **how crucial parents and caregivers were to helping students get the interventions they need.**

A former lawyer, Thorsen now spends her days advocating for dyslexic students through the Dyslexia Advisory Council for the state of Tennessee and is a member of Decoding Dyslexia Tennessee. The parent role is complex, Thorsen says, and collaborating with the school requires both strength and understanding, knowing when to push and when to hold back.

As a parent advocate, you have to be fierce and tireless. Many parents of children with special needs say they feel so much stress because they are their child’s caregiver, IEP

case manager, tutor, advocate and lawyer, all wrapped into one. With all of the other demands of work and family life, these roles can be overwhelming and many parents don't have the luxury of time at the end of a busy work week to dedicate themselves to being the all-around expert on their child's education. After years of playing all these roles, parents get worn out and really must struggle to work to build collaborative relationships with schools.

Thorson offers the following advice and tips for parents and caregivers of dyslexic children who may be facing the same issues.

5 TIPS TO BUILD A COLLABORATIVE RELATIONSHIP WITH YOUR CHILD'S SCHOOL By Anna Thorsen

Building a collaborative relationship takes a lot of work, and it is not easy. I certainly do not always do a good job at it myself, especially when I am tired, angry and stressed out. But what I always tell parents is that you are stuck working with your school, your teachers and your school administration for a year or many years. You do not need them to write you off as a crazy parent. Here are my tips to build a strong relationship.

1. When it comes to your dyslexic child, don't be one-dimensional

It's crucial to keep communication flowing with your child's school, so don't strain communications by only talking about your child's problems or harass teachers about something that went wrong in class. If you are "that" parent, teachers and administrators will begin to avoid you. Instead, I advise parents to say hello to your child's teacher when you see them, tell a funny story or ask how they are doing. If possible, try not to make every encounter about your child's reading problems; it goes a long way in building a trusting relationship with your child's teacher.

2. Make yourself invaluable

If possible, become a part of the school in some way, by donating your time. Volunteer, mentor, or do something to show teachers and administration that you want to be part of the school. If it's not possible to spend more time at school, then ask teachers or administration how you can help. Forming relationships with your school will build trust and only help your student.

3. Don't be a bull in a china shop

Instead of demanding action, connect with teachers and administrators on an emotional level. After all, they are humans, too, and many have kids of their own. Describe what's really happening in your family and don't be afraid to share your emotions—there's nothing wrong with saying “I am scared for my child,” or “I have been losing sleep worrying.”

4. Bring conversations back to your child

In meetings, remind people that you are talking about a real, live child, and not a data point. Bring a picture or video of your child. Ask for your child to come by the meeting to tell the school group things are going well and things that are hard. Tell the school about your child's dreams and abilities outside of school. Once the team connects with you and your child, you will be more successful. We, as humans, help people we know and have a harder time denying someone what we have a connection to.

5. When all else fails, don't be afraid to be a bull in a china shop

If nothing is working, then you have to be willing to take it to the next level until you get what your child needs. I always advise parents to use force as an absolute last resort, and try to assume that schools will do the right thing.

Thorsen, along with Eileen Miller, founding member of Decoding Dyslexia, TN, and of Ignite Dyslexia, offer the following hard-won wisdom regarding Individualized Education Program (IEP) meetings:

12 Tips to Remember in an IEP Meeting

1. Never sign the IEP document in the meeting. You may sign that you were present at the meeting, but don't sign off on the IEP itself. Go home and read it. Make sure it is what you want before you sign.
2. Never go to an IEP meeting alone. Bring an advocate, a spouse or a friend.
3. If possible, record the meeting. It's difficult to understand everyone at once.
4. Ask that people in the room at the IEP meeting introduce themselves and what their role is. Write down everyone's name and position. You may need to follow up with them.
5. Take your time and have the IEP team meeting go at your pace. Don't feel rushed.
6. Ask for clarification of acronyms and educational terms.
7. Get everything in writing. If it is not in writing — it never happened.
8. Be prepared and know what you want. Do your homework on your child's disability, be familiar with the law and know your rights.
9. It helps to have a binder to keep all the information on your child.
10. Ask the team to go over documents with you.
11. Consider bringing your child to a portion of the meeting. It helps the team to hear from them.
12. Never give up. You are the parent and you know your child better than anyone.

More Parent Resources Can be Found Here:

- How You Can Help Your Child with Dyslexia, Understood.org
- Support and Resources for Parents, [Learning Disabilities Association of America](http://LearningDisabilitiesAssociationofAmerica.org)
- 10 Things Parents Need to Know to Help a Struggling Reader, [Yale Center for Dyslexia & Creativity](http://YaleCenterforDyslexiaandCreativity.org)
- Dyslexia: Three Strategies for Parents, [NPR](http://NPR.org)
- Six Ways Parents Can Help, Nessy.com

CHAPTER FIVE

TECHNOLOGY AIDS FOR DYSLEXICS

Listening to a book and reading it are basically the same thing.

TECHNOLOGY HELPS—BUT ONLY IF IT CAN BE USED

Even after years of intensive intervention and tutoring, dyslexic students can continue to struggle with reading and writing. That's why advances in technology have been invaluable to students who read and write slowly.

Dyslexic students are finding they can complete assignments faster when they employ special features on a laptop or iPad that help work around their dyslexia-related issues. **But to fully maximize how technology can help students with learning differences, educators' expectations may need to be shifted.**

For struggling readers, assistive technology such as reading with [audiobooks](#) is a way for students to fully participate in assignments instead of just focusing on the laborious task of reading, writing and spelling.



Eric McGehearty says he figured out early that, for him, listening was the key to learning. He used audio books and listening techniques to complete his school-work, and eventually graduate from high school as class valedictorian.

According to cognitive scientist Daniel Willingham, author of *Raising Kids Who Read*, listening to books is still reading and [isn't cheating](#). For most books, and for most purposes, he writes, listening to a book and reading it are basically the same thing: "Listening to an audio book might be considered cheating if the act of decoding were the point; audio books allow you to seem to have decoded without doing so."

Also, most dyslexic students don't have a problem understanding information— so allowing them to record a class instead of painstakingly take notes, or to speak an essay into a tablet instead of writing it down can change the game completely.

TECH TOOLS AND ASSISTIVE TECHNOLOGY FOR DYSLEXICS: A SAMPLING

Although the following is not a complete list, it can provide the basis for further discussion and investigation.

Speech-to-Text. Students can turn their speech into text using apps like [Dragon Dictation](#), Google's [VoiceNote](#), [Easy Dyslexia Aid](#) or just speaking into the microphone of a phone, tablet or laptop. Some speech-to-text devices are sensitive to different kinds of voices and will require some experimentation.

Google Chrome Extensions. Extensions are small software programs that customize a user's web browsing experience. Users can tailor functionality and behavior to individual needs or preferences. The programs are built on technologies such as HTML, JavaScript, and CSS. Chrome offers several extensions for free or low cost that can help struggling readers and writers.

- [Read&Write](#) offers text-to-speech, speech-to-text, and word prediction
- [Snap&Read](#) will begin reading aloud from a click
- [SpeakIt](#) lets students highlight a piece of text and have it read to them
- [Read Mode](#) removes ads and images from websites so students can focus on the text

Kurzweil. Kurzweil educational software offers study skills features and Texthelp Read&Write, plus highlighting, sticky and voice notes. Notes can be compiled into a separate study guide, and files can be imported into sound files for easy listening.

WhisperSync. This [Amazon app](#) allows readers to switch between reading and listening to a book. For those whose slow reading can be exhausting, this app allows them to switch to audio to listen for a while.

Audiobooks with Accompanying Readers. Amazon's Immersion Reading and [VOICEText](#) by Learning Ally both allow readers to read and listen to a story at the same time. Each comes with a highlighted text feature that helps dyslexic students follow along, allowing them to read books at the level of their peers.

Livescribe Smartpen. Livescribe offers a [computerized pen](#) that doubles as a recording device, recording what's being said as well as what the student is writing. The student can tap the pen on any written note to replay what was said while they were writing.

Franklin Speller. These [mini electronic dictionaries](#) provide

- handy lists of confusable words
- context-sensitive help text
- spellcheck
- print and cursive options for words
- an arithmetic tutor

Free apps like [Speller](#) and [Grammarly](#) also correct spelling.

As for reading print books, some early research has suggested that certain fonts like Dyslexie and Open Dyslexic make it easier for dyslexics to read by adding extra space between letters and weighting the letters at the bottom.

Although experts have encouraged caution in using the dyslexic-friendly fonts—studies haven't been peer-reviewed and there is still much to learn about their effectiveness—some dyslexics say special fonts do help, and experts like Mather at the University of Arizona say they might be worth a try.

CHAPTER 6**POSSIBILITIES**

I don't want kids to sell themselves short about going to college. ”

—Dr. Sheryl Rimrodt-Frierson

Since the large bulk of schoolwork involves reading and writing, dyslexics often experience anxiety around schooling, especially when called on to read aloud or expected to read or write large amounts of material. Many report feeling low self-esteem and believing that they are unintelligent or will never have the skills to succeed. Even when the proper diagnosis is handed down and intervention works, school life continues to be difficult for dyslexics.

Further, discussion of the complex idea of dyslexia's hidden gifts or special talents can give students the idea that academic work—heavy in reading and writing—simply isn't for them.

That's not the case, says Dr. Sheryl Rimrodt-Frierson, who runs the pediatric clinic at the Vanderbilt Kennedy Reading Center.

She says that when she identifies kids as dyslexic, she doesn't want them to close off their options. "I don't want kids to sell themselves short about going to college," she says. "So I will make sure that they know there are plenty of people out there who have done plenty—academic work, medical school, law school. I want them to understand that there's a world of possibilities."

For many dyslexics, the road to academic and career success isn't off-limits but more about taking a different path.

VOICES OF DYSLEXIA: FOUR DIFFERENT PATHS TO SUCCESS

The spread of information and advocacy is increasing awareness around dyslexia, and many who have experienced reading struggles are beginning to find their way through school—and life beyond it—more easily.

Here are the stories of four dyslexic adults who found success in different ways. **Notice how the themes of this guide have played out in their lives**—by managing their anxiety and passing on their learning to support others with dyslexia to succeed; by advocating for themselves; by perfecting the art of listening; and by finding creative forms of self-expression.



DONNA GARGETT, SOCIAL WORKER, HEAD OF A NONPROFIT SUPPORTING DYSLEXICS, AGE 41

When Donna Gargett was growing up in California in the 1980s, she remembers watching an episode of the television show “The Cosby Show” where the character Theo realizes he has dyslexia. Gargett thought to herself, “that’s me.”

Now 41, Gargett is a social worker and head of a nonprofit that recruits and trains tutors in the Orton-Gillingham teaching method to help dyslexics in and around Jacksonville, North Carolina, where she lives. But even though she’s learned to manage her dyslexia over time, memories of reading and writing in school bring back anxiety. She often thinks about how she knew she had the same condition that Theo had, even though she wasn’t identified as dyslexic until college.

In grade school and high school, Gargett always felt “less than.” She struggled so much, once she even asked her parents if she was mentally disabled and they were hiding it from her. In elementary school, “I didn’t understand what was going on,” she says. “I was trying as hard as I could and still wasn’t getting it.”

Years of failure in school caused Gargett extreme anxiety, and she says it made her introverted. She spent most classes trying not to make eye contact with the teacher, hoping she wouldn’t be called on and instead would just “melt away.”

But Gargett found some relief once she reached college. “I found college to be much easier, knowing there wasn’t any reading out loud anymore was a huge relief for me personally,” she says. In college, she could record lectures and go home and listen to them over and over if she needed.

Gargett still finds it extremely stressful to read aloud, and avoids it at all costs, even in her work as an adult. Even though she finds it extremely rewarding to work with people who need help, the paperwork involved in social work case management is time-consuming and causes stress. She admits that she still makes a lot of mistakes, spells poorly, and takes a lot of time and energy to make sure documents are legible and correct.

But when both Gargett's daughters, who are six and eight, were identified as dyslexic (the condition has a genetic component and tends to run in families), she knew she had to do something to try and change the stigma and provide an environment for them that didn't contain so much anxiety.

That's how she got started helping tutors get certified in Orton-Gillingham near her home. The tutors are able to help the students who are just like she once was—afraid that there was something wrong with them. The nonprofit, Blank Canvas, has spread to include Eastern North Carolina. Gargett is hoping that she's breaking the stigma of dyslexia and dispelling the anxiety that haunted her.

"Parents come to me now, knowing that something is wrong, but they can't put their finger on it," Gargett says. "Because of my own personal story, and now as a parent, I can help guide these parents through the process. Self-esteem is the root of a lot of the problems caused by dyslexia, and [with the nonprofit] we are striving to build students' individual strengths."



MACKENZIE FANATICO, SENIOR AT ANGELO STATE UNIVERSITY

Mackenzie Fanatico remembers her early elementary years as "chaotic," because all her friends could read, and she couldn't. She believed there was something wrong with her, that she was "stupid," until a third grade teacher at her public school in Philadelphia asked her mother whether Mackenzie had ever been tested for dyslexia. She finally got tested and was diagnosed with dyslexia.

But it wasn't until the fifth grade, after she'd endured a long illness and her family moved to the suburbs outside of Dallas, Texas, when she finally learned to read. There, an in-home

tutor came to her house as she recovered, and Fanatico finally received the one-on-one attention she needed to learn to read.

Even as her reading got stronger through middle and high school, Fanatico still required so much extra time to complete the same amount of work as other students, she realized that if she was going to succeed at all, she had to start talking to her teachers about what she needed to complete assignments and take tests.

She'd explain what was happening inside her dyslexic brain, and that she needed help taking notes by using a computer with voice-to-text and recording lectures so she could listen to them later. She needed lenience on hand-written tests, too, because she knew she would "butcher the spelling." By forming relationships with her teachers, Fanatico did well in high school and made it to college.

Now a senior at Angelo State University in the West Texas town San Angelo, she has used the same strategy to succeed in college—by forming relationships with her professors.

"I still need a whole lot of repetition," Fanatico says. "My friends might study two hours for a class, but it takes me four or six hours to be able to 'get' the same material." She often arrived an hour early to her college math class to go over work with her professor. Then she'd also spend an additional two or three hours afterward with professors as well, if possible, to go over homework. Teacher relationships, she says, have become a vital part of her learning.

Fanatico also developed a close relationship with the learning disability center staff on campus, who helped her write a list of accommodations she could give to professors. Her college accommodations include permission to record lectures, take notes on a computer, lenience on spelling, and permission to use a special blue overlay on top of papers that helps her see letters and words more clearly.

Those relationships have helped her succeed: Fanatico earned straight A's in both fall and spring semesters of her sophomore year of college. She plans to graduate with a degree in special education, hoping to form those special relationships with kids who struggle in school the way she did.



ERIC MCGEHEARTY, ENTREPRENEUR, AGE 41

Eric McGehearty says he has never once read a book with his eyes. Though the forty-year-old entrepreneur was identified as dyslexic when he was only five years old, the Dallas, Texas, native says all the books he has ever finished, he read by listening to audiobooks.

McGehearty says he figured out early that, for him, listening was the key to learning. He used audio books and listening techniques to complete his schoolwork, and eventually graduate from high school as class valedictorian.

“Audio books were a big piece of my success as a student,” he says. “Through Learning Ally, I’ve been listening to audio books a couple of hours a day, every day, for 35 years. I am a very good ‘ear reader’.”

Like many dyslexics, elementary school was difficult for McGehearty, and he called himself at that time a “depressed and unhappy little kid.” By middle school, he was beginning to catch on to how to learn, and by high school, he says, everything clicked— he began asking for what he needed from his teachers so he could get the material.

He says that unlike many dyslexics, recording lectures didn’t help his learning nearly as much as focused listening did. Through a lot of trial and error, he developed a ‘listening system’ that ensured he would remember what the teacher was saying. He did it by always participating in the conversation the teacher was having.

“If I speak it, I will remember it. In college, when the professor would get to the main idea, about every five to ten minutes I would ask a question, reframing the information in a way so that I would remember it,” he says. “I’d boil it down to the essential point. If the professor agreed, then I knew that I learned it.” McGehearty says that he raised his hand constantly in class so he could ask the questions essential to his learning, and some students teased him, accusing him of showing off. But he didn’t care.

“I’d say, no, I’m actually trying to learn today.”



NATHAN SPOON, POET AND TEACHER, AGE 45

Poet Nathan Spoon recalls always loving books and has special memories of sitting on his father’s lap in rural Tennessee, listening to his father read the Bible as he followed along.

Though he read constantly and loved his books so much he kept them in a special place in his room, he knew that something wasn’t quite right—his reading was slow and “the letters always seem to wiggle on the page.” School was difficult, and he had to repeat fifth grade. According to Spoon, his high school education was ‘saved’ by his high grades in art that pulled up his GPA.

Spoon wasn’t diagnosed with dyslexia, autism, and ADHD until recently, when he was 44 years old. But his reading difficulties had never stopped him from devouring tons of reading material, which he’s not afraid to read slowly and often reads aloud to himself, which seems to help. And the difficulties never kept him from the poetry he’s been writing—he calls it ‘making language collages’—since he was seventeen, publishing in well-heeled journals and anthologies. He classifies his poetry as experimental, and instead of seeing his trouble with phonemes as a hindrance, he uses them like notes in constructing a piece of music.

The poetic form, Spoon says, especially modern and post-modern poetry, are perfect forms for dyslexics to work in, since they’re not bound by the rules of grammar or even syntax. In poetry, expressing emotions and the sound of the words provide the pleasure.

“Poetry is magical in that kind of way,” he says. “If a person writes two plus two equals green, then two plus two equals blue is a different kind of feeling.”

Spoon says his success in writing poetry, a field that requires so much reading and writing, comes from an extreme willingness to fail and defy stereotypes. “I think there are all kinds of ways to approach the learning process. Getting into poetry, there’s this notion that the autistic person can’t understand poetry, that they’re too literal and will miss the nuance. There may be some truth to that—but there’s also truth to the notion that there are all kinds of ways to write poetry.”

Recently, he also began writing for academia to explore the topics of poetry and neurodiversity, and how slow processing might benefit comprehension.

For both McGehearty and Spoon, there's a theme having to do with the importance of art education—both say that **art classes saved their schooling experience in more than one way.**

For Spoon, when art became available at his rural Tennessee school, he found something he could excel in, and the A's he received in art helped to boost his GPA. "My academic performance was always very mixed, and I always did the absolute worst in math," he says. "I graduated with a C-minus GPA only because I made A-pluses in art."

For McGehearty, his passion for art began with a fifth grade art teacher who he still remembers by name, Ms. Mary Dallas. McGehearty had just broken his right arm and he was unable to write because of the cast, but Dallas told him about artists who had great physical disabilities who learned to paint with their mouths, or their feet. These artists learned to express themselves despite their physical disability, Dallas told him, and he should try it.

"Every day, I went to that art class and made art with a different part of my body," he says. "I made some of the coolest stuff. It didn't look that great, but it was so much fun. And it was the greatest lesson to me, because I couldn't read. And just because I couldn't read didn't mean that I couldn't be successful in a different way." That defining moment in McGehearty's life changed his perspective, and he decided that he would become an artist. He took Ms. Dallas's art class for the next four years and can't thank her enough for her willingness to allow the open expression of his creativity.

"Art was a safe place for me," he says. "I didn't have to read." McGehearty eventually earned a graduate degree in art and worked professionally as an artist for a decade before launching his own startup marketing company.

These four lives bring into high relief the main points of this guide:

SCHOOL IS CHALLENGING FOR THOSE WITH DYSLEXIA AND THEIR SELF-ESTEEM SUFFERS

- For Nathan, “the letters always seem to wiggle on the page,” and school was so difficult he had to repeat fifth grade.
- Donna felt extreme anxiety and became more introverted, trying not to get her teacher’s attention for fear she’d have to read aloud.
- Mackenzie believed that she was “stupid” and even with reading support, knew she had to put in a lot of extra time just to keep up.
- Eric called himself a “depressed and unhappy little kid” in elementary school.

EARLY DETECTION OF DYSLEXIA CAN MAKE A DIFFERENCE

- Eric was diagnosed at five years of age. Although his elementary school years were difficult, he was able to discover ways to help himself learn effectively as early as middle school.
- “The Cosby Show” helped Donna recognize that she was not alone in her challenges.

RELATIONSHIPS ARE IMPORTANT BETWEEN STUDENTS, TEACHERS AND PARENTS

- Mackenzie got the one-on-one tutoring she needed as a child to learn to read.
- She developed relationships with her teachers and professors, creating a list and explaining what she needed to be successful.
- Mackenzie also got personal accommodations, such as lenience on spelling and extra time with her teachers to review her homework.
- Eric’s teachers accommodated his need to verbally communicate his understanding of lecture material by asking frequent questions.

- Donna's daughters inherited dyslexia, so she has worked to provide learning environments without the stigma she felt as a child.
- Donna now trains teachers and supports parents through the process of getting help for their children.

FINDING PLEASURE IN BOOKS, STORIES AND INFORMATION IS POSSIBLE FOR DYSLEXICS

- Nathan never lost his love for books that he learned from his father, and difficulties didn't stop him from "devouring tons of reading material" in his own way.
- Eric found a way to read by listening all he needed to graduate at the top of his high school class.

TECHNOLOGY CAN SUPPORT DYSLEXICS IN THEIR LEARNING AND ACADEMIC SUCCESS

- Self-advocacy allowed Mackenzie to get the technological accommodations, such as voice-to-text note-taking, lecture recordings, and blue overlays for reading texts.
- Eric's teachers understood that he would be listening to all written material via audiobooks.

CREATIVE EXPRESSION HELPS DYSLEXICS USE THE POWER OF THEIR RIGHT BRAINS WELL

- As a poet, Nathan has found a good match between the way his brain loves to use words and writing poems—his "language collages," in which he can loosen the rules of grammar and syntax.
- Eric found art as early as fifth grade as a way he could "go with the grain" of his brain in expressing himself visually.

THOSE WITH DYSLEXIA OFTEN "GIVE BACK" TO SUPPORT OTHER DYSLEXICS TO REACH THEIR POTENTIAL THROUGH ACTION AND ROLE-MODELING.

- Donna has created a non-profit called Blank Canvass which supports parents and trains teachers in the Orton-Gillingham method, which gives learners with dyslexia the one-on-one, intensive attention many have found effective.

- Nathan has begun doing academic writing about the relationship between poetry and brains that exhibit neurodiversity, such as those with dyslexia.
- Mackenzie intends to get her degree in special education, so that she can support other children who learn differently.
- Eric has found success as both an artist and an entrepreneur.

These stories offer a window into the complex inner and outer worlds of people with dyslexia, and each story proves that what Sheryl Rimrodt-Frierson said can indeed be true:



No one with dyslexia needs to sell themselves short, because there is a world of possibilities. ”

ADDITIONAL RESOURCES

[“What is dyslexia” TED-Ed video by Kelli Sandman-Hurley](#)

[HBO The Big Picture: Rethinking Dyslexia](#)

[Unlocking Dyslexia by NPR](#)

Dyslexia series

[Understood.org](#)

[EIDA.org](#)

[LearningAlly.org](#)

[Decoding Dyslexia](#) – Grassroots Parent-Led Movement for Dyslexia

[Nessy.com](#)

[Dyslegia.com](#) – dyslexia laws from state to state

[Dyslexic Advantage](#)

[Literate Nation](#)



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