|| The Sam List | **Dyslexia**

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Introduction

This study was conducted to create a list of teaching strategies and classroom adjustments for educators and parents to benefit dyslexic learners. Although the main target for this work is mainstream elementary school teachers, all teachers and consumers can benefit from reading this information. In addition to an extensive literature review, 25 dyslexic students were interviewed, along with 5 teachers, to provide first hand accounts from dyslexic learners and those who help them learn. Furthermore, additional research was done, included collecting feedback from dyslexia experts, to verify the legitimacy and robustness of the data collected. The goal is to decrease the frustration felt by dyslexic learners and mainstream teachers, and create a more positive and effective learning environment for all students. Below you will find a variety of easy and inexpensive suggestions for resources and accommodations that can benefit not only students with dyslexia, but a variety of students.

General Information - What is Dyslexia?

"Dyslexia is my Superpower"

What is dyslexia? Many people do not know the proper definition, let alone that it exists. The dictionary definition is "a variable often familial learning disability involving difficulties in acquiring and processing language that is typically manifested by a lack of proficiency in reading, spelling, and writing" (Merriam Webster, 2022). Dyslexia is a learning difference that affects around 15-20% of the population (Wagner, 2020). Although dyslexia is normally associated with the struggle to read, write, and spell, it can affect people in all aspects of learning. However, it is important to understand that dyslexia isn't necessarily a negative. With the proper tools and intervention, dyslexics can lead extremely successful lives. Dyslexics are often extremely intelligent people who can experience strengths in a variety of areas that are creative, allowing them to think "outside the box." There are dyslexics who are accomplished scientists, journalists, actors, athletes, politicians, architects, engineers, and every career in between. Examples of successful people with dyslexia include Albert Einstein, Pablo Picasso, Jennifer Aniston, Gavin Newsom, Richard Branson, Steven Spielberg, and so many more.

Although dyslexia diagnoses are more common today than in the past, only about 5% of people with dyslexia know they have it (Wagner, 2020). This suggests that most dyslexia goes undetected in classrooms, and dyslexic learners are put through countless years of education that hurts more than helps. These dyslexic children may not only struggle with academics, but social and emotional well-being as well. Years of school without effective interventions, and well-intended teachers who don't understand what is going on, can be frustrating, humiliating and demeaning. This is why an inclusive classroom environment is extremely important. Not every dyslexic will be able to be tested, but classrooms can make simple and easy changes to help dyslexic learners without negatively impacting non-dyslexic students.

The Science Behind Dyslexia

Dyslexia isn't something that people can "catch" or grow into, as it is genetically passed down; 15-20% of people are born with dyslexia (Wagner, 2020). Dyslexic brains are constructed differently (see images below). Through MRIs and research studies, it has been determined that "the areas that play the most significant role in reading are the left parietotemporal system and the left occipitotemporal area...these areas are slightly different in people with dyslexia" (Read Source, 2020). In a non-dyslexic brain, multiple areas are activated to assist with reading. "Individuals without dyslexia engage the middle area of the brain, or temporal lobe, to support phonological awareness for decoding and discriminating sounds. Recognizing familiar words is controlled by an area in the back of the brain known as the occipital lobe. And when considering how to pronounce words, individuals use the frontal lobe located at the front of the brain" (Read Source, 2020). However, "in the dyslexic brain, there is more activity in the frontal lobe and less activity in the parietal and occipital areas of the brain...[including] the parietal lobe and the [occipital lobe]" (Read Source, 2020). The inactivity in these sections of the brain are partly responsible for why dyslexics process information differently, and struggle in a traditional learning environment. MRIs have also shown structural differences in dyslexic brains. "Scientists have found individuals with dyslexia tend to have less gray matter and white matter in the left parietal area compared to their peers without dyslexia. Reduced gray matter in this particular area may affect how dyslexic individuals process the different sounds of language, also known as phonemic awareness, while the decreased white matter may impact the reading and processing efficiency of the dyslexic brain" (Read Source, 2020). There are currently no ways to change these structural differences. However, with the correct intervention and education, dyslexic brains can be trained to read.

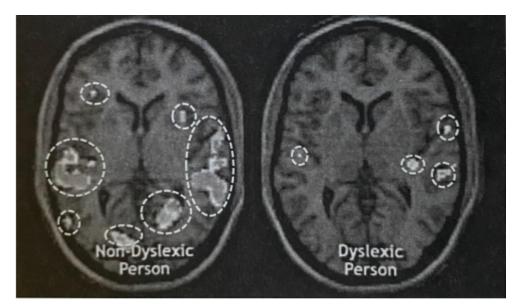


Photo from The Dyslexia Empowerment Plan by Ben Foss

Common Misconceptions

"It is so stereotypical that dyslexics just **hate reading**, but no, I love it so much."

"Some teachers don't really understand what dyslexia is. They think it is a disability."

Dyslexics are lazy.	It is the opposite. Dyslexics are often working harder than peers, especially while reading, writing, or spelling.
Dyslexics can't read.	Dyslexics can read when taught properly, although reading may be slow or slower than average.
Dyslexics hate reading.	Although reading can be frustrating for dyslexics, many enjoy it, especially once they have the right support.
Dyslexia means words and letters are arranged in a different order or backwards.	Words appear the same to dyslexics as to anyone else.
Dyslexics read everything flipped.	Words and numbers appear in the same order as printed.
Words bounce around the page.	The words stay in place.
Dyslexia is a disability.	Although dyslexia is defined as a disability, it is better to call it a learning difference.
Dyslexics are naturally not as intelligent.	Dyslexics are extremely intelligent, if not more than the average person.
Dyslexics can't pronounce words properly.	Although dyslexics can have speech issues, dyslexia does not affect speech.
Dyslexics can only have jobs that don't involve reading.	Dyslexics can have any job. Just look at all the famous people with dyslexia in high literacy jobs.
You can grow into it.	Dyslexia is something you are born with.
Dyslexia goes away.	Dyslexia is for life.
Dyslexia is more common in boys than girls.	Dyslexia is equally common in boys and girls, boys are just diagnosed more often.

The Sam List: Dyslexia Edition

Overview

Student Materials

Multisensory Materials

Classroom Materials

Classroom Environment

Student-Teacher Conversations

Learning Strategies

What to Avoid

Overview

Overview

A few notes for teachers:

- 1. Everything on this list is based on open-ended interviews with dyslexic students and teachers. Everything has also been reviewed and approved by dyslexia experts.
- 2. I recognize it can be hard to change classroom systems. My hope is that a few things below might resonate.
- 3. I encourage you to go beyond what is written below, either through personal research or discussion, to further your understanding.
- 4. Please recognize that every dyslexic learns differently. Not everything suggested will work for every student.
- 5. For some of the suggestions, items may need to be purchased. I have linked a few things from Amazon. For teachers with Amazon or teacher wish lists you could create a dyslexia section and add some of the materials found in this list.

Wilson Learning & Slingerland Programs

"Implement the Wilson program. Every student can benefit from it." - Charles Armstrong School Teacher

The Wilson Learning Program is arguably the best reading program for dyslexics. Used at Charles Armstrong School (a leading school for students with dyslexia in Belmont, CA) and other dyslexia-focused schools, Wilson gives students foundational skills needed for school success.

Wilson has a plethora of resources, print outs, and other tools. Many of these come from Wilson Fundations, the materials for elementary school. However, Wilson is expensive and not widely available to the public. Below is the link to the Wilson website along with the Fundations program.

Wilson Reading System Wilson Fundations

Another program similar to Wilson is Slingerland. This is also highly credited and comes recommended by many dyslexia experts.

Slingerland Method

**Both programs are rooted in the Orton Gillingham approach. More information on this below.

Orton Gillingham approach

Student Materials

"Give everyone the resources they need that will help them. The little things really make a big difference." - Dyslexic Student

Assistive Technology

What is it:

Assistive technology consists of programs and tools designed to support learners. Speech-to-Text, Audible, and <u>Grammarly</u> are just three examples.

Why it's Helpful:

"[Technology is] the most helpful thing" - Dyslexic Student

It allows dyslexic learners to demonstrate their best abilities without having to worry about spelling, processing time, etc.

Suggestions for Implementation:

There are many assistive technology options, many of which are built into Google docs (such as speech-to-text, spell check) or can easily be installed on a computer.

Access to Resources

What is it:

Allowing dyslexics access to resources such as a calculator, spelling help, the alphabet

Why it's Helpful:

"Give everyone the resources they need that will help them. The little things really make a big difference." - Dyslexic Student

One of the most common responses to the question "What do you wish was different in mainstream classrooms?" was "I wish I was allowed to use my resources" or "more access to resources." Having a calculator while doing math or the alphabet on the board can make a huge difference. Additionally, letting dyslexics use any of the Wilson Learning materials, for example nine-lines (a multiplication table resource), can allow them to present their best work without having to worry about mistakes that can be a result of their dyslexia.

Suggestions for Implementation:

It is understandable why a student doesn't get a calculator on a times-tables test. However, as a dyslexia expert points out, "If there is higher order thinking, a support would be helpful." In other words, allow students to use resources in order to demonstrate higher-order thinking.

Another option is printing small numbers lines, along with the alphabet, to place on every

child's desk. This way, each child has what they need in front of them. Not only is this convenient, but avoids the awkwardness of asking to go to the board.

Ability to Draw While Learning

What is it:

Allowing a child to doodle, draw, or color while learning and during class lectures/activities

Why it's Helpful:

Drawing while learning is a tool for students who lose focus when listening to a teacher talk. Teachers who teach dyslexics note, "There are students who doodle because it helps them focus."

Suggestions for Implementation:

A good place to start is to let students draw to help them process what they are learning. Drawing not only can help students focus, but it can support them while learning. Many dyslexics are visual learners, so having the ability to draw what they hear can increase comprehension (Terada, 2019).

Make drawing an option for students, especially if they advocate for it. If a teacher is worried about distraction, just like any other material, make sure the student clearly understands the purpose.

Water Bottle at Desk

Why:

Having a water bottle at each desk is simple, but often overlooked. Kids need to be hydrated to learn, and oftentimes students who don't consume enough water in the day can get dehydrated. Additionally "drinking water improves memory and attention" (CDC, 2021). Making it a requirement to have a water bottle by your desk should become a classroom norm. Additionally, if possible, have extra water bottles on hand for kids who forget.

Multisensory Materials

Fidgets

What is it:

A sensory tool used to help students regulate their need for movement or touch.

Why They are Helpful:

Fidgets often help dyslexics, especially those with ADHD, to focus.

Out of 25 dyslexic students interviewed for this study, 95% said fidgets in some form are

helpful and would recommend them.

Furthermore, they provide students a way to self-regulate without distracting their peers. Research suggests that fidgets add sensory stimulation, which children can be deprived of when sitting in class for extended periods of time.

Suggestions for Implementation:

Fidgets are not for all students. However, as one dyslexia-specialized teacher noted, all children should be allowed to try them.

The best fidgets are those that are small, quiet, and don't distract others. These can be called *stealth fidgets*.

Suggested fidgets (affordable, not loud, not messy):

- → Stress ball
 - Ones that can't break
- → <u>Tangle fidget</u>
- → Fidget cube
- → <u>Sensory velcro taped on desk</u>

When allowing a student to use fidgets, some ground rules need to be set

- 1. The fidget is a material, not a toy.
- 2. If the fidget becomes a distraction, it will be taken away.
- 3. The fidget is not to share.

Additionally, there should be a classroom understanding that fidgets are tools and can only be touched by those assigned a fidget. There is nothing wrong with using them, and we all need different things to help us learn.

Gum

Details:

Chewing gum

- → Non-bubble gum
- → Not extremely easy to blow/pop

Why it's Helpful:

Gum is a sensory material that can help learners, especially dyslexics, while processing information.

A dyslexic expert said that, although a debated topic, gum can be extremely effective and should be allowed in classrooms for those who need it.

A study found that "evidence has indicated that chewing gum can enhance attention, as well as promoting well-being and work performance" (Allen, 2015).

Suggestions for Implementation:

Before introducing gum to your classroom, it is important to establish rules, similar to fidgets. Gum can get caught in things, so clear guidelines on how to use gum is important. Students who advocate for gum to help them focus should be allowed to try and use it.

Classroom Materials

Audio Books - aka "Ear Reading"

Why They are Helpful:

Audio books quickly allow dyslexics to comprehend what they are reading and process the information without having to worry about reading a word wrong. It allows their focus to be on the content of the story and not each individual word (Learning Ally, 2014).

"[Audio books] also enhance your vocabulary better than just reading the word." - Dyslexic Student

Suggestions for Implementation:

Oftentimes you can find audio renditions of books for free on YouTube. <u>Audible</u> is a fantastic resource with thousands of audio books; however there is a monthly subscription fee. Audible would be a tool to recommend to parents at home. Your public library is also a great resource and often has audio books available through programs like <u>Libby</u>, <u>Hoopla</u>, and <u>Overdrive</u>.

Certain students with dyslexia do struggle with auditory processing. A dyslexia specialist recommends having students follow along with a text version of a book while listening to increase comprehension.

Flexible Seating

What is it:

Flexible seating refers to seating options in the classroom that are non-traditional. This includes pillow seats, sitting on the floor, wiggle chairs, standing, etc.

Why it's Helpful:

Many dyslexic students, especially those with ADHD, struggle to concentrate and sit still in a traditional classroom seat. Allowing students to move around or change positions while learning can increase their attention span and focus (Wright, 2020).

Suggestions for Implementation:

Flexible seating, especially different types of wiggle stools and chairs can be expensive. An

easy, inexpensive way to incorporate flexible seating into a classroom is to give students the option to stand or sit on the floor on a pillow that is brought in from home.

Many students also like wiggle cushions which can be bought on Amazon - <u>Wiggle Cushions</u>. These can also be purchased at <u>Lakeshore</u>.

Graphic Novels

What are They:

Books with pictures or drawings that compliment the story.

Why They are Helpful:

According to a dyslexia expert, graphic novels are "great [because they] actually chunk the sections and make [reading] more exciting." Additionally, she stressed the fact that graphic novels "are still reading." Graphic novels are especially helpful for dyslexics because they can use the photos as context clues for what they are reading.

"Graphic novels made me feel empowered that I was getting through a book quickly like all the other kids." - Dyslexic Student

Suggestions for Implementation:

Have graphic novels in your classroom, and highlight them in your school library. Furthermore, allow your students to read graphic novels, and help them understand they are still reading and learning, just like a chapter book.

Reading Guides

What are They:

A tool used to cover sections of a page while reading.

Why They are Helpful:

Reading guides are helpful as they isolate the line on a page that you are reading. This is especially helpful for dyslexics as it allows their brains to only focus on one line of text. It also helps avoid skipping lines.

Suggestions for Implementation:

A cheap and easy way to implement this is by using index cards or half sheets of paper. Simply start with the index card at the top of the page and move it down as you read each line.

Books with Dyslexic Characters

What are They:

Children's picture books or chapter books that have dyslexic characters or other learning differences.

Why They are Helpful:

Books with dyslexic characters give dyslexic children relatable characters that normalize their learning difference. This can help them understand they are not alone.

Suggestions for Implementation:

Below is a list of suggested books with dyslexic characters:

- → Thank you, Mr. Falker Patricia Polacco
- → Tom's Special Talent Kate Gaynor
- → The Alphabet War Diane Burton Robb
- → It's Called Dyslexia Jennifer Moore-Mallinos
- → Hank Zipzer Series Henry Winkler
- → My Name is Brain Brian Jeanne Betancourt
- → Fish in a Tree Lynda Mullaly Hunt
- → Percy Jackson Series Rick Riordan
- → Ben & Emma's Big Hit Gavin Newsom

Word Games

Why They are Helpful:

Teaching words and spelling through games is not only more fun and engaging, but can make it easier for dyslexics to remember what they are learning. They can associate the word with a movement, sound, etc., ultimately giving helpful context to a word.

Easy options are using a scrabble board or anagrams to work on building words the student just learned.

Resources on the Board

What is it:

Easily visible posters, charts, and diagrams with helpful reminders, and tools for students to look at while learning.

Why it's Helpful:

Many students pointed out how asking for help with spelling, or simple math facts can be embarrassing when done repeatedly. By placing charts and helpful reminder posters on the board, dyslexic students can have the resources they need without disturbing the class or teacher.

Suggested Resources:

→ Vowels highlighted in red vs. consonants in blue

- → Suffixes
- → The alphabet
 - Both Wilson and Orton Gillingham replace the Q in the alphabet with Qu. The letter Q is never taught alone.
- → Basic times tables
- → Reminders about punctuation and grammar

White Board Set

What is it:

A class set of personal white boards

Why it's Helpful:

Some dyslexics have anxiety from having to do a problem on the board in front of the class, or being called out to perform a problem. Give each student a white board, and have them all perform the problem individually and then hold up their answers. This allows students to make mistakes without everyone watching them.

"Whiteboards also help the teacher see where everyone is instead of students just nodding their head saying they understand." - Dyslexic Student

Suggestions for Implementation:

While spelling or doing math problems, have each student write their answer on a white board. Then have all students hold them up. This avoids all eyes being on one student's answer, as all students are engaged.

Amazon White Board Set

Area to Calm Down/Break

What is it:

An area in the classroom designated for a break or a cool down.

Why it's Helpful:

If a student is struggling to focus, or is getting overwhelmed with what they are learning, a moment to calm down can help that student refocus.

A break area can also help students with self regulation, and advocating for themselves when they feel overwhelmed or stressed (Child Mind institute, 2022).

Suggestions for Implementation:

Create a space in a corner of the classroom that is inviting and gives a child a chance to take a breath. Ensure it is a welcoming space that feels inviting.

You could include:

- → Pillows
- → Picture books
- → Fidgets
- → Coloring materials

Hands-on Math Materials

What are They:

Counters, cubes, ones, tens, & hundred blocks, etc

Why They are Helpful:

Tools such as the ones listed above can help make math tangible. Dyslexics are often visual learners and can understand math concepts such as counting, adding, subtracting, etc., more easily when they can touch and visualize what is happening.

Suggestions for Implementation:

While teaching simple math, give each student blocks or counters so they can "touch" and interact with the problems.

Classroom Environment

Brain Breaks

What are They:

Brain breaks are mental breaks away from a current task or lesson. They are usually 2-5 minutes long with some sort of movement or physical exercise involved.

Why They are Helpful:

Brain breaks are one of the most helpful tools for dyslexics. They allow time for the brain to reset and take a rest from extended concentration. They also increase information input. In other words, giving the brain a rest makes it possible for it to process new information to the best of its ability.

80% of interviewed dyslexic learners mentioned brain breaks as being beneficial to them.

Suggestions for Implementation:

A dyslexia expert says, "Think about being in a meeting, and think about how long you can sustain someone talking at you or doing work in the same seat. How do you regulate your body? Now times that by 1,000 for kids with dyslexia and ADHD, so you have to chunk how you access the info."

When to implement them:

→ Mid-lessons or after around 30 minutes of structured learning

Examples of brain breaks:

- → Yoga
- → Skip down the hall and back
- → Jumping jacks or other dynamic movement

No Cold Calling to Read

Why:

Calling on a student to read in front of the class without warning or option, also known as "cold calling," can be traumatic for a dyslexic. Not only does it produce anxiety, but it causes them to only focus on reading smoothly rather than understanding what is being read. Furthermore, Sara Fox, a credited dyslexia specialist, warns that this is a practice that causes harm.

"What dyslexics do is they figure out which paragraph they are going to have to read and try to memorize that. This causes them to miss everything else. Furthermore, they sit there stressed about having to read out loud and can't focus on the content." - Dyslexic Student

"I don't get much from reading out loud because I am only thinking about trying to read smoothly." - Dyslexic Student

"Reading, especially when the teacher would call on me, was super stressful. The thing with dyslexia is that some things are more challenging than others. I was really struggling with English. Getting called on unexpectedly was super hard." - Dyslexic Student

Suggestions for Implementation:

The first option is to just stop cold calling.

However, if you need participation, one dyslexia specialist recommends "previewing." This can look something like, "You are in my class and I need you to participate. I'm going to ask you a question about this tomorrow, so be prepared."

Encouraging Posters. But not too Many!

Why:

Having encouraging posters in the classroom, especially if there are some that relate to learning differences such as "Dyslexia is my superpower" can be really comforting to certain students. However overcrowding the classroom can actually cause more harm than good. It is important to understand overcrowding. Multiple dyslexia specialized teachers mentioned how "less is more" and too much happening on the walls can be distracting for kids with ADHD. Suggested places for posters are on classroom doors or in the back of the classroom.

Celebrate and Acknowledge Learning Differences

Why:

It is extremely important to recognize learning differences, acknowledge there is nothing wrong with them, and celebrate students who have them.

Suggestions for Implementation:

- → Read books aloud with dyslexic characters
- → Have class discussions about learning differences
- → Celebrate & understand talents held by dyslexic students
- → Share stories of famous dyslexics
- → Normalize learning differences in the classroom
 - October is Dyslexia Awareness Month so that is a perfect time to talk about it

Allow Time for Questions

Why it's Helpful:

It's simple. Allowing time for questions, and making it routine, gives dyslexic students the option to clarify anything they are confused about. It slows the class pace down, which also helps students reset their brains (almost as a brain break or brain reset).

Suggestions for Implementation:

Routinely build in 2-5 minutes after any new concept is learned for questions or discussion on what is happening. This could even be a time for clarifying questions on directions.

Plan Review Time

Why it's Helpful:

Planning review time before assessments or after learning new material can be extremely helpful for dyslexics (and all students). Sometimes, a student might need more repetition, or more time to digest material. Review time can also be a great way to mix up the way you are teaching. Do a review outside or have the kids make a song about the content they are learning.

Give an Option to Express Thoughts Verbally, not Just Written

What is it:

Providing options to respond to questions out loud or through drawing instead of written words.

Why it's Helpful:

Writing assignments can often be very daunting for dyslexics. Not only is spelling hard, but articulating thoughts through written words is challenging. Dyslexics can feel limited by what they are able to communicate through writing. Oftentimes, a dyslexic has more to say than they can write, so allowing them to respond verbally or through pictures or actions can

provide a more inclusive option.

Suggestions for Implementation:

When not assessing spelling or writing, provide multiple other options for responses to questions or assignments.

Options could include:

- \rightarrow Drawing picture(s)
- → Making a video
- → Answering out loud or talking with a partner
- → Acting through motions or dance
- → Art projects

Allow Different Spaces to Learn

What is it:

Change locations for learning. Move around the classroom. Allow for different learning environments, such as outside.

Why it's Helpful:

Changing where you teach can help dyslexics who need to move and are stimulated by different environments. Studies have proven that "taking classes outside can increase focus, creativity, and productivity" (Suttie, 2018).

Suggestions for Implementation:

- → Going outside as a class
- → Standing in different parts of the classroom
- → Allowing individual students to pick where to work
 - This includes letting dyslexics choose their permanent seat where they feel they learn best

Student-Teacher Conversations

General Information

What is said to a dyslexic student can have a huge impact on their growth and social-emotional wellbeing. Teachers unintentionally can say harmful things without understanding the impact of their words.

Below are examples and suggestions for positive versus hurtful conversation.

**All examples are direct quotes from dyslexic students or dyslexic-specialized teachers

Positive Conversation

- → "Dyslexia is a super power."
- → "1 in 5 students are dyslexic."
- → "I'm proud of you."
- → "Focus on the part of dyslexia that makes you great."
- → "Come talk to me this is great and we can talk about it."
- → "We know you are struggling, but we are here for you and here to help you."
- → "Really nice job."
- → "I can see you are doing your best."
- → "I will help you."

Hurtful Conversation

- → "You'll get there eventually."
 - "That made me crazy; you keep saying that and I'm not getting there and I don't know how." Dyslexic Student
- → "Your stuff is a hot mess."
- → "You are so disorganized."
- → "Your spelling is sloppy."
- → "Why can't you do this?"
- → "Okay, everyone, hurry up."
- → "You just spelled it yesterday. What's the matter?"
- → "We worked on that word yesterday. You can remember."

It is important to recognize that for a dyslexic, statements about being disorganized, being slow or behind, and questioning their abilities can be extremely hurtful. Oftentimes, dyslexics are working as hard as they can, so comments that they are "not trying hard enough" or "slow" can hit really hard.

Learning Strategies

Hands-on Learning & Project Based Learning (PBL)

Why:

Adding multisensory materials is extremely important. This gives students the opportunity to explore learning through different mediums. Dyslexics often learn best through hands-on projects and experiences rather than a lecture.

Additionally the Yale Dyslexia Center asks the question "So what does [PBL] have to do with dyslexics? A lot, as it turns out. Project Based Learning is distinguished by its focus on 'big picture thinking' and rewarding students for expressing their understanding in a variety of ways. Project-Based Learning measures a student's ability to learn in depth. It doesn't rely on timed tests or multiple-choice tests to measure understanding" which is key for dyslexics.

Furthermore "Not surprisingly, the components that make Project Based Learning effective for teaching dyslexics are the same elements that make it a powerful instructional method for all students" (Redford, 2022).

Don't Give Unnecessary Timed Assessments

Why:

"Timed assessments make you rush and not do your best work." - Dyslexic Student

"Timed tests stress me out and make me work faster than I need to." - Dyslexic Student

There is no reason for timed assessments, unless you are testing processing speed. As a dyslexia-specialized teacher pointed out, "Fast does not equal intelligence." Timed assessments can punish dyslexics and not give them the chance to demonstrate their best work. This can cause dyslexics to come across as less intelligent or lazy when, in reality, they just need more time to read the problems.

Use Dyslexic-Friendly Font & Formatting

Why:

Using the Dyslexie font can make reading more comfortable for dyslexic learners. It is designed to help the dyslexic eye. "Dyslexia fonts use thicker lines in parts of letters. The letters are slanted a bit. And letters that have sticks and tails (b, d, and p) vary in length. Some people with dyslexia like this and find it helpful." (Understood Team, 2022)

The Dyslexie Font can be purchased <u>here</u>

Another free font suggested by a dyslexia expert is Comic Sans. Other options based off of a study are Helvetica, Courier, Arial, Verdana and Computer Modern Uni- code (Baeza-Yates, 2013).

A dyslexia expert also points out that it is important to make the font relatively large, and increase the spacing between the letters, words, and lines.

Check for Understanding Frequently

Why:

If a student isn't grasping concepts, checking for understanding helps prevent them from being moved to the next level before they are ready. Furthermore, checking for understanding frequently can "catch" learning disabilities or lead teachers to question if a student might need extra help or to possibly be tested.

Grouping Reading and Math

Why:

Grouping students in math and reading by ability can benefit their learning and self-esteem. If a child is with other students at their level for subjects where everyone learns at different rates, it will not only make them more comfortable, but will especially benefit those with dyslexia who learn in a different way.

It is important to set a tone in the classroom that no group is better or smarter than another.

Explain that everyone is in the right group for them. Furthermore, don't rank the groups. Instead, give the groups fun names (ex. penguins, lemurs, & otters).

Tapping Method

Why:

The Tapping Method is a technique that helps teach the fundamentals of reading, sounding out words, and spelling through physical movement. On a basic level, tapping is using your fingers to sound out letters and form words.

Here is a video explaining how to tap.

Allow for Reading Options

Why:

If a child is allowed time to free read, allow options. Let students read graphic novels or books with subjects they are interested in. Reading is already hard enough for a dyslexic, so make it a little less tortuous with books they are interested in. Teachers can coordinate with the librarian or parents to make sure the student has books at their desk that excite them.

Build in Extra Reading Time

Why:

When having students read a section of something individually in class, make sure to add in more reading time than how long it would typically take the average student to finish. If you are unsure how much more time to add, pay attention to who finishes reading last, and set the time to that student's pace. This will allow time for dyslexic students to read without feeling rushed or less intelligent than their peers.

Be Patient

Why:

Patience is key with any student. If the student notices you trying to rush them, it can add stress and anxiety and lead them to not do their best work. Additionally, for dyslexics, some things, like reading, might take longer. Be patient with them and allow them time to work things out.

Be Encouraging and Supportive

Why:

During interviews, most dyslexic students said they learn best when a teacher is encouraging and believes in them. School can be difficult, but if a teacher is supportive and demonstrates to the student they are behind them, it can really help the student's motivation.

Let Students Express Themselves in Different Mediums

Why:

Dyslexics are often very creative and can see the world in different ways. Allowing students to express themselves in different mediums can help with self expression and let them demonstrate their strengths.

Suggestions of different mediums

- → Art projects
- → Drawing
- → Building
- → Videos
- → Singing
- → Dancing

Suggest and Encourage Brain Breaks

Why:

Having a positive attitude when it comes to brain breaks helps students understand they are important and not a waste of time. Furthermore, encouraging students to advocate for brain breaks not only teaches them how to self regulate but gives them independence.

Repeat Directions Several Times

Why:

As previously mentioned, dyslexics process words and information in different ways. For some, many directions given really fast can be overwhelming and hard to remember. It is important to give directions slowly and in simple steps. Additionally, repeat these directions several times.

What to Avoid

Speeding Through Directions

Why:

Speeding through directions can easily add stress to a dyslexic. It is important the information is clear and concise. Additionally, if a child has ADHD it can be hard for them to focus on many directions at once.

Alternatives:

- → Go through directions in small, clear steps
- → Write directions on the board
- → Repeat directions multiple times
- → Have kids repeat directions back to you

Pulling Students Out In Front of Peers

Why:

Pulling a student out for a specialty class or to go work one-on-one in a reading center can be humiliating for the student. A number of the dyslexics interviewed recalled hating being "pulled."

"It made me feel separated, and I already felt like an outcast, but being separated even more made it worse." - Dyslexic Student

Many studies have been conducted on the effects of the "classroom pull-out." Although specialized instruction is important for students with special learning needs, getting pulled out in front of peers can have emotional and social repercussions. More on the specifics can be found <u>in this study</u>.

Alternatives:

- → Set a classroom expectation that everyone learns in different ways and needs different supports
- → Pull students out during activities where other students are distracted
- → Word toward students excusing themselves and knowing what time to leave without having to be "pulled" by a teacher

An Uninclusive Classroom

Why:

It is extremely important to have an inclusive classroom community. If there is a culture that students with learning differences are "less than" their classmates, it can make them feel like an outsider. Furthermore, it sets a precedent for all students that people with learning differences will always be inferior to them.

Alternatives:

- → Openly discuss learning differences and how they have positives
- → Make sure students understand everyone learns differently
- → Allow students to ask questions about learning differences
- → Educate all students about them from a young age
- → Celebrate role models who are dyslexic

Making a Child Complete a Problem in Front of the Class

Why:

When a child is forced to complete a problem in front of the class, they can feel unnecessary pressure and stress. Going to the board can be terrifying, and when a dyslexic is asked to spell a word in front of their peers, trauma and anxiety builds.

Alternatives:

- → Have several students work together to solve a problem
- → Allow students to work the problem out individually, and check they have the correct answer before calling them up.

Calling on Kids to Read or Spell Out Loud

Why:

This is a dyslexic's worst nightmare. Reading and spelling is already hard enough, but when a dyslexic has to process the information in their head and then say it out loud, it is extremely stressful. Furthermore, they can often experience teasing or laughter from their peers if they are struggling to read. Cold calling a student to read, dyslexic or not, can cause hurt and increase anxiety.

Alternatives:

- → Only take volunteers to read
- → Have students read out loud in groups of 2-4 of their choosing
 - This is less stressful
 - They are with people they trust

Getting Noticeably Frustrated with a Student

Why:

Noticeably getting frustrated with a student can cause them to become insecure of their learning, or have more incentive to give up. When you are working with students who are struggling with reading, you might not realize they are dyslexic. Getting frustrated with them will only make them feel more frustrated themselves, as reading is already hard.

Alternatives:

Make sure to stay patient and positive. It is not always easy, especially during a long day, but getting frustrated with a dyslexic student will only make them feel worse.

Resources & Links

California Department of Education Dyslexia Resources

International Dyslexia Association

Decoding Dyslexia

British Dyslexia Association

UCSF Dyslexia Center

Yale Center for Dyslexia & Creativity

Dyslexia Training Institute

Made by Dyslexia

Wilson Learning

Charles Armstrong School

California Dyslexia Bill

About the Author



Sam lives in Burlingame, California, located in the SF Bay Area. She will be graduating from high school in the spring of 2023. The inspiration for this project came from her brother, Jack, who is dyslexic, and her frustration with the lack of resources and awareness provided to mainstream schools regarding dyslexia. Sam wanted to use this interest to try to help dyslexic students, similar to her brother.

Questions? Email <u>thesamlistdyslexia@gmail.com</u> For more information visit thesamlistdyslexia.com

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