Indiana DEPARTMENT OF EDUCATION

Spread the Word

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Dyslexia, Dysgraphia, Dyscalculia

Dyslexia, Dyscalculia and Dysgraphia Introduction

Dyslexia, Dyscalculia and Dysgraphia are distinct learning differences that may stand alone or intersect in an individual, and if left unaddressed, will adversely impact learning. Identification, and early, appropriate, research-based intervention are imperative in helping the student experience success in the classroom and beyond.

Students with Dyslexia, Dyscalculia and Dysgraphia may be found eligible for special education and related services under the category of Specific Learning Disability if the student's Case Conference Committee determines the disability or impairment adversely affects the student's educational performance and by reason thereof the student needs special education and related services. 7-32-34, 7-41-12

In the October 23, 2015 *Dear Colleague* letter, OSERS explained that there is nothing in the IDEA that prohibits districts from using terms such as dyslexia, dyscalculia, and dysgraphia in IDEA evaluations, eligibility determinations, or IEP documents.

Understanding the Role of Accommodations

It is very important to remember that, according to **IDEA Sec. 300.172 (b) (3),** all children who need instructional materials in accessible formats, receive them in a timely manner, regardless of their qualifications as a student with a print disability.

Specialized formats of print instructional materials, including digital text, accessible PDFs and ePubs, and audio files are available through the Indiana Center for Accessible Materials (ICAM) for students with documented print disabilities. The ICAM also coordinates with the Indiana Education Resource Center (IERC) to provide braille, large print and tangible aids and equipment for students who are blind or have low vision. Please contact the **ICAM staff** for more information.

PATINS PATINSPROJECT.COM

PATINS Project website

Dyslexia: what are some strategies we can begin to incorporate in our schools and classrooms?

WHAT IS DYSLEXIA?

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition, poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include difficulties with reading comprehension, which can impede acquisition of vocabulary and background knowledge. https://dyslexiaida.org/do-we-need-a-new-definition-of-dyslexia/

*PATINS-ICAM provides access to specialized formats of textbooks and core related materials as well as Learning Ally human voice recorded popular fiction for students in Indiana public schools who have documented print disabilities, including reading disabilities resulting from organic dysfunction, such as dyslexia.

SUPPORTING STUDENTS with Dyslexia

* Use accessible materials and assistive technology, such as word prediction, speech-to-text and text-to-speech software.

* Teach with visuals, stories, and hands-on activities.

* Avoid asking student to read aloud in class.

* Break information into smaller steps and allow extra time to process.

* Dyslexia affects reading and writing.

* Allow verbal responses.

DYSLEXIA Facts

Dyslexia is the result of differences in the way the brain receives and organizes information, making decoding words and reading sentences very difficult. Dyslexia is a diagnosis that can present itself with multiple symptoms which will vary in each individual. The National Institute of Health (NIH) has determined that 1 in 5 individuals have dyslexia. Dyslexia is a lifelong condition that cannot be "cured." However, early intervention with researched-based instruction methods can help students succeed and even excel academically. NIH Results Released in 1994

Dyslexia presents in levels, or degrees: mild, moderate, severe and profound. Some will struggle more than others and need more support. Research supports that the most effective instruction here is systematic, explicit, multi- sensory and phonetic.

Some common misperceptions that often exist: he will outgrow it, she just needs to practice more reading, he is being lazy, etc. Increased assigned reading without correct interventions leads to frustration, a strong dislike of reading, and reading avoidance. This is a serious effect since every school subject requires reading.

When students are unable to access printed material, they can experience a lack of success in many different sectors of a school environment. Even though they may possess average to above average intelligence and brilliant creativity, students unable to access printed materials can face poor self-esteem, less satisfying social interactions, deficient grades, behavior problems, early drop-out, lower levels of employment, lower socioeconomic status, and criminal activity. Schools have a responsibility as well as a unique opportunity to help identify students with Dyslexia and to intervene early, which can dramatically improve the outcomes for these students. Struggles with Dyslexia can mask students' intended writing output.

* How Do I Explain Dyslexia?
* Dyslexia Definitions: Global Perspectives
* Unidentified Dyslexia Takes Heavy Toll
* Understanding Dyslexia
* International Dyslexia Association
* Famous People with the Gift of Dyslexia
* ICAM: Dyslexia Resource
* House Enrolled Act No. 1108
* Bright Solutions for Dyslexia

Dyscalculia: what are some strategies we can begin to incorporate in our schools and classrooms?

WHAT IS DYSCALCULIA?

Dyscalculia is a specific learning disability defined as a failure to achieve in mathematics commensurate with chronological age, normal intelligence, and adequate instruction. It is marked by difficulties with: visualization; visual-spatial perception, processing and discrimination; counting; pattern recognition; sequential memory; working-memory for numbers; retrieval of learned facts and procedures; directional confusion; quantitative processing speed; kinesthetic sequences; and perception of time. http://www.dyscalculia.org/dyscalculia

SUPPORTING STUDENTS with Dyscalculia

* Encourage use of assistive technology such as speech-to-text, digital manipulatives, digital graph paper, calculators.
* Do not rely on rote learning; use manipulatives/digital manipulatives.
* Allow student to have the math formulas.
* Allow the student to verbally express how to solve the problems.
* Allow the student to use graph paper to assist in organization of numbers.
* Ensure that the student has mastered previous skills.
* Allow extra time.
* Break down assignments into sections and allow the use of calculator.
* Highlight keywords in word problems.

DYSCALCULIA Facts

Dyscalculia refers to a wide range of learning disabilities involving math. There are two main types of dyscalculia: developmental dyscalculia which indicates a genetic cause, and acquired dyscalculia which occurs as a result of a stroke or traumatic brain injury. There are differences in the ways and the speed at which children will assimilate new math skills, so dyscalculia is difficult to identify early.

When a child sees that they do not understand math yet and their peers are "getting it", they may experience a lowered self-esteem (as with dyslexia), which will hold the child back in several areas including social situations. In fact, dyscalculia is often concurrent with dyslexia and ADHD, and similarly occurs in individuals with average and above average intelligence. The student with dyscalculia may not be able to tell time on an analog clock and may not seem to have a concept of time at all. They may not remember rules of math, such as how to add to find the sum and subtract to find the difference, even though they have successfully performed these tasks in the past. They may get lost or disoriented even in a place that should be familiar. Choreographed routines such as aerobic or other exercises and dance may be a struggle. They may always count using fingers and fail at most or all levels of mental math.

* Dyscalculia.org
* 11 Facts About the Math Disorder
* 4 Ways Dyscalculia Can Affect Your Child's Social Life
* About Dyscalculia
* Skills That Can Be Affected By Dyscalculia
* The Difference Between Dyslexia and Dyscalculia
* Dyscalculia Checklist

Dysgraphia: what are some strategies we can begin to incorporate in our schools and classrooms?

WHAT IS DYSGRAPHIA?

Dysgraphia is a specific learning disability that affects organization, motor skills, and information processing skills. Dysgraphia is a neurological disorder that becomes evident when children are learning to write. Writing examples will show inconsistent spacing, poor spatial planning, poor spelling, and the child will experience difficulty in thinking and writing at the same time. Dysgraphia is distinct from dyslexia and dyscalculia, but often is concurrent.

http://www.education.act.gov.au/__data/assets/pdf_file/0004/714334/Learning-Difficulties-Factsheet-3.pdf

SUPPORTING STUDENTS with Dysgraphia

* Encourage use of assistive technology such as word prediction software and text-to-speech.
* Allow extra time for students.
* Allow recorded lectures/notes.
* Offer examples of completed projects.
* Allow students to use graphic organizers/digital graphic organizers.
* Allow students to dictate work to a scribe and allow them to correct later.
* Allow and encourage keyboarding.
* Do not grade on neatness of written work.
* Primary students should use raised line paper with bold margins.
* Use pencil grips; everyone should have access to pencil grips.
* Stress quality over quantity.

Dysgraphia Facts

Dysgraphia can make writing an agonizing task for a child and results in handwriting that is illegible and messy. When so much effort is put into the act of writing, it should not be surprising that the content of their writing seems confused or unimaginative. Students with dysgraphia struggle to organize ideas, to compose sentences and paragraphs, and to use punctuation correctly.

There are 3 types of dysgraphia:

Type 1 is called Dyslexia Dysgraphia. A student with dyslexia dysgraphia does not necessarily have dyslexia. In Type 1, spontaneous written work is not readable. The student may copy work that is more legible, however spelling will probably be incorrect. Notice the similarities here with dyslexia: messy handwriting, poor spelling, and laborious copying. However, this student may be an on-grade reader.

Type 2 is Motor Dysgraphia. This type may be the result of low muscle tone and poorly developed fine-motor skills. Spontaneous and copied written work will be unreadable, yet isolated formation of individual letters may be somewhat more legible, if the student concentrates deeply on the task. Usually, spelling skills are typical.

Type 3 is Spatial Dysgraphia, which is a result of a lack of spatial awareness. Children with spatial dysgraphia are not inclined to regard lines or margins and have inconsistent spacing between letters, words, lines and letter size, including the sizing of upper and lower case letters.

Often, other subtypes of dysgraphia are identified.

https://www.learningsuccessblog.com/blog/dysgraphia/dysgraphia-video

* Dysgraphia
* Special Ed. Support Service: Dysgraphia
* What is Dysgraphia?
* Dyslexia Reading Well: Dysgraphia