



# Dyslexia, Dysgraphia, Dyscalculia

## What is Dyslexia, Dysgraphia, and Dyscalculia?

- **Dyslexia:** A learning disability that affects an individual's reading and language-based processing skills. This can present in many ways, such as letters "jumping around" on the page, misreading letters, or having difficulty segmenting words into individual parts phonetically.
- **Dysgraphia:** A learning disability that affects an individual's handwriting and fine-motor abilities. This can present in many ways, such as the inability to write by hand for long periods of time, hand cramps from holding pens or pencils too tight, or difficulty spacing text and forming letters by hand.
- **Dyscalculia:** A learning disability that affects an individual's ability to understand mathematical concepts. This can present in many ways, such as transposing or misunderstanding written or spoken numbers, difficulty reading sheet music and analog clocks, and struggling with mental math.

## What Should I Keep in Mind?

- A learning disability (such as Dyslexia, Dysgraphia, or Dyscalculia) is life-long, but with proper supports, people with LDs can have great academic success.
- Individuals with learning disabilities have above average intelligence. That said, there is typically a gap between their potential and actual achievement, which can be severely disheartening to those affected..
- People with learning disabilities are not lazy. Many people with learning disabilities must work harder than their peers, but their results do not match the amount of work put into them.
- While more men are diagnosed with learning disabilities than women, women are more likely to have their learning disabilities overlooked. Just because someone doesn't have a diagnosis doesn't mean that they aren't struggling.

## What are Some of the Signs and Symptoms of Dyslexia, Dysgraphia, and Dyscalculia?

- Experiencing challenges or barriers when facing mathematical concepts, handwriting, and/or reading and writing.
- Difficulty remembering things
- Sometimes finds it difficult to pay attention
- Following directions can be challenging
- Organization can sometimes be difficult
- Can have difficulty writing by hand
- Some people can be easily distracted
- Difficulty understanding written words or concepts
- Tend to read slowly
- Difficulties with spelling, grammar, and punctuation
- Transposing numbers, or having mathematical work correct but the answers wrong.

## How Can You Make a More Inclusive Classroom?

- Include Accessibility Services on the class syllabus and encourage students to reach out for support if necessary.
- Consider providing course material in advance to give plenty of times for students to review the material before class. Consider using Accessible pdfs when material is presented electronically.
- Use multi-modal methods to present lecture material, such as oral, verbal, and kinesthetic. Consider reading aloud whatever is written on the board.
- If using recorded videos, try to make sure that videos are captioned, as multi-modal learning tends to benefit students with learning disabilities.
- Consider having multiple options available for course assessment, such as alternative forms of assessment, like podcasts or Powerpoints, or oral examinations.
- Encourage all students to use Adaptive Technology.

## Examples of Accommodations for Students with Dyslexia, Dysgraphia, Dyscalcula:

- Allowance for spelling and grammar
- Noise cancelling headphones
- Computer for note taking and exams
- Alternative paper formats
- Use of a calculator, dictionary, thesaurus
- Extra time for exams/assignments
- Tutor, educational attendant, student mentor
- Alternate forms of:
  - Group work
  - Presentations
  - Classroom participation
  - Textbooks
- Distraction-reduced environment
- Low lighting for tests/exams

\*All accommodations are based on individual needs and recommendations.

## For more information:

- **LDonline** . "LD Basics: What is a Learning Disability?" Retrieved from <http://www.ldonline.org/ldbasics/whatistld>
- **Canadian Psychological Association**. (2021). "Psychology Works" Fact Sheet: Learning Disabilities in Children. Retrieved from [https://cpa.ca/docs/File/Publications/FactSheets/PsychologyWorksFactSheet\\_LearningDisabilitiesInChildren.pdf](https://cpa.ca/docs/File/Publications/FactSheets/PsychologyWorksFactSheet_LearningDisabilitiesInChildren.pdf)

