

Problems

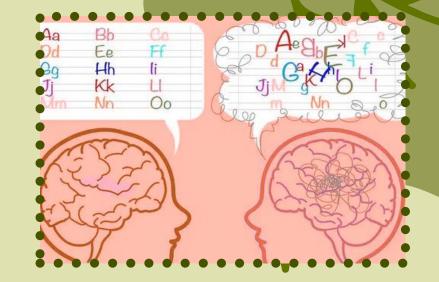
Dyslexia is a lifelong learning disorder that affects the brain's ability to process written language, making reading and related tasks challenging. It affects about 7% of the population, regardless of gender or ethnicity, and is usually identified in childhood. In classrooms, dyslexia can hinder academic progress, as students may struggle with reading, comprehension, and related skills, often falling behind their peers in subjects like reading and math. Without inclusive teaching methods, these difficulties can accumulate over time, leading to learning gaps and reduced academic success. Beyond academics, dyslexia can also impact social and emotional well-being, causing low self-esteem, frustration, and difficulties in communication and building relationships, which may result in withdrawal or disruptive behavior. We mainly focus on addressing difficulty in reading and comprehension.

Dysgraphia is a learning difficulty where a person struggles with the physical act of writing and organizing thoughts on paper, despite having normal intelligence. The major problem lies in the disconnect between their ideas and the ability to express them in written form. This can cause messy or illegible handwriting, inconsistent spelling, slow writing speed, and difficulty structuring sentences or paragraphs. These challenges often lead to frustration, lower academic performance, and reduced confidence, as the person may understand the material but cannot easily convey it through writing. We will mainly focus on addressing inconsistent spelling, difficulty structuring sentences, and clearer handwriting by example.



Our mission is to create a inclusive, and user-friendly platform specifically designed to empower individuals with dyslexia and dysgraphia. By focusing on enhancing reading and writing skills, our solution aims to bridge critical learning gaps and foster a supportive environment that boosts confidence. We are committed to unlocking the full academic and personal potential of every user, ensuring they are equipped to succeed and thrive in all aspects of their lives.





Individuals with dyslexia often read at a slower pace, which can make skimming or scanning text more challenging. Large, uniform blocks of text may feel overwhelming and hinder comprehension. To enhance text readability, the following strategies are recommended:

- 1. Highlight key phrases in bold to draw attention to essential information.
 - 2. Incorporating text-to-speech functionality
- 3. Including a panel of all alphabets and digits to help the user differentiate between them, and get more comfortable with their usage.

This can help reduce cognitive load and alleviate anxiety related to spelling. While dyslexia is not a visual impairment, the visual presentation of text can influence processing speed. Warm background tones, such as light cream, may also aid in processing, though they should generally be avoided in formal or standard documents.

Bibliography

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