Inclusive Education From Guide: Dyslexia and learning Understand: Understanding dyslexia Date 09 May 2024 Link inclusive.tki.org.nz/guides/dyslexia-and-learning/understanding-dyslexia

# Understanding dyslexia

Dyslexia affects approximately one in ten people. It always influences learning.

## What is dyslexia?

Dyslexia is a brain-based learning difference. Learners don't outgrow dyslexia.

New Zealand researchers Tunmer and Greaney (2009) describe developmental dyslexia as:

- a persistent reading and writing difficulty in otherwise typically developing children, which
- occurs despite exposure to high quality, evidence-based literacy instruction and intervention, and
- is due to an impairment in phonological processing skills required to read and write.

## Dyslexia is often hereditary

Teachers need to:

- be sensitive when working with parents and whānau who may have had negative learning experiences during their time at school
- pay careful attention to students with siblings who have dyslexia.

### (Schultz, 2008)

## Dyslexia and the brain

Neuroscience research shows the brain functions differently in people with dyslexia.

Providing a multi-sensory approach, within a structured phonics-based programme, strengthens the neural pathways needed for reading (**Shaywitz & Shaywitz, 2004**).



Video hosted on Youtube http://youtu.be/zafiGBrFkRM

Kelli Sandman-Hurley describes how the brain functions for a person with dyslexia. Intensive multi-sensory interventions that break language down and teach the reader to decode can make a difference.

**Closed Captions** 

Source: TED-Ed (US) https://ed.ted.com/lessons/what-is-dyslexia-kelli-sandman-hurley#watch

## **Dyslexia and Developmental Language Disorder**

Developmental Language Disorder (DLD) is a term that describes persistent difficulties with learning and using spoken language.

Current evidence suggests that dyslexia and DLD are distinct but frequently occur together.

- Learners with dyslexia have difficulties with word reading. Many also find reading comprehension challenging.
- Learners with DLD, have difficulties with language comprehension. Many also find word reading and reading comprehension challenging.

Regardless of the specific diagnostic label, intervention should target the learner's strengths and specific needs across all domains of language (Adlof & Hogan, 2018).

## How dyslexia affects learning

Dyslexia affects learners in many different ways. The age of the student, the situation, and their emotional state also affect learning.

Dyslexia primarily affects the skills involved in accurate and fluent word reading and spelling. Learners with dyslexia need more intensive instruction of longer periods (**Tunmer & Greaney, 2009**).

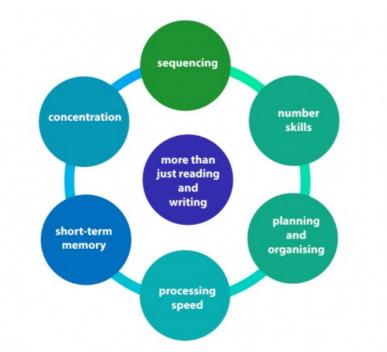
Support learners by providing:

- explicit, systematic teaching of phonological awareness
- explicit teaching of other important components of literacy such as vocabulary, comprehension, and writing (International Dyslexia Association, 2019).

Take an inclusive approach that meets the specific needs of your learners by:

- using Universal Design for Learning (UDL) principles identify barriers to learning, plan specific supports, and make these available to all students
- providing time for consolidation, with frequent revision
- taking a multi-sensory approach, where two or more senses are simultaneously engaged to support long-term memory acquisition, for example saying the sounds of a word as the student writes it, or looking and feeling how a sound pattern is articulated in the mouth.

## Dyslexia affects more than reading



Students with dyslexia often need support with concentration, short-term memory, organisation, and verbal processing speed.

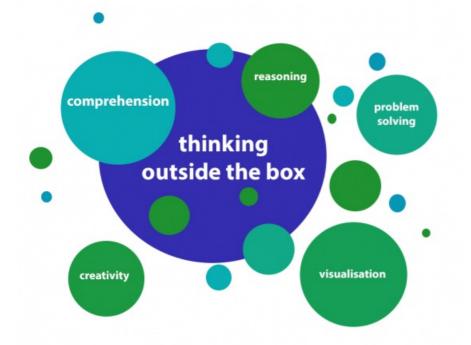
### Source:

National Centre of Literacy and Numeracy for Adults https://ako.ac.nz/assets/Knowledge-centre/ALNACC-Resources/Dyslexiaresources/e343a207ae/Dyslexia\_What\_is\_dyslexia.pdf

View full image (58 KB)

## Take a strength-based approach

Build an environment that fosters the varying capabilities of your students and their different strengths.



Keep in mind that each child has a unique pattern of strengths and weaknesses.

### Source:

National Centre of Literacy and Numeracy for Adults https://ako.ac.nz/assets/Knowledge-centre/ALNACC-Resources/Dyslexiaresources/e343a207ae/Dyslexia\_What\_is\_dyslexia.pdf

#### View full image (61 KB)

Look for opportunities to complement and support a student's strengths and capabilities.

- Use praise and positive language emphasise the strengths of the student's work, with specific feedback.
- Support manageable target setting and celebrate the student's success.
- Encourage the student to take a role of responsibility where they can use their strengths.
- Provide a range of options (not just written) for all students to demonstrate their abilities.
- Identify barriers to learning. Make whole-class accommodations that allow all students to participate in the programme.

## The importance of early identification

The earlier a student's needs are recognised and supports are put in place, the more successful the intervention.

Teachers play an essential role in:

- identifying students who need support
- planning high-quality, evidence-based interventions to meet specific learning needs
- monitoring student progress
- creating an inclusive environment, providing accommodations and modifications to reduce barriers to learning.

Teachers are not responsible for the formal identification of dyslexia. The Ministry of Education does not fund a formal diagnosis of dyslexia, and there is no expectation for parents to fund this. Support for learners is not dependent on a formal diagnosis.

As a teacher, you are more important than any programme or tool will ever be. Keys to success include:

- the ability to develop relationships with your students and truly know them
- accepting that students may process information differently and that associated behaviour is often because of their challenges
- learning the science behind reading and applying learnings to your practice.

Effective teachers are the most important factor contributing to student achievement (Stronge & Hindman, 2003).

## Accommodations and modifications support learning

# Accommodation (or adaptation) – something that helps students complete their work

Accommodations are adjustments that allow a student to demonstrate knowledge, skills, and understanding. Student learning or what is being measured remains the same.

Examples of accommodations:

- audio books or text-to-speech tools
- visuals to support instruction
- breaks between tasks
- concrete materials that can be manipulated.

An accommodation is not a substitute for appropriate intervention-remediation.

### Modification (or differentiation) - a change to the task or assessment

Modifications involve a change in curriculum content, homework assignments, or assessments so a student can demonstrate their understanding.

Examples of modifications:

- oral testing
- no penalty for spelling errors
- shortened tasks
- extra time to read or write
- presenting information in creative ways, rather than in written form.



Video hosted on Youtube http://youtu.be/abZDII4tluM

Peter Groth explains the difference between accommodations and modifications.

No captions or transcript

Source: DyslexiaConnect (US) https://www.youtube.com/channel/UCHtoaQzCDk4EldKEdNA-rig Build accommodations and modifications into your programme to reduce barriers to learning and cognitive overload.

Take a **Universal Design for Learning** approach. Plan to remove barriers from the outset to make learning easier and help maintain student engagement and self-esteem. Make accommodations available to all students.

Dyslexics think differently and so, naturally, prefer to receive, process, and present information in the way that makes more sense to them.

### Source:

Dyslexia Foundation NZ http://www.4d.org.nz/edge/get\_it\_right.html

## Social and emotional considerations

How a child or young person thinks about themselves, positively or negatively, influences their attitudes, behaviour, and success in learning. Learners with dyslexia can easily develop low self-esteem and anxiety, so it is vital that you support them to experience success and develop a positive outlook towards learning.

It's important students feel that you:

- know what it is like to have dyslexia ask older students with dyslexia what it is like, upskill yourself so you understand what dyslexia is, and use specific teaching approaches that will support learning
- understand how much hard work is involved in the classroom recognising and understanding text reduce the cognitive load, break tasks into smaller steps, and provide visual supports and graphic organisers.

Empathy is the key. When a student feels understood and supported, they can be encouraged to take learning risks.

#### Source: Dyslexia Foundation NZ http://www.4d.org.nz/edge/notice\_adjust.html



Video hosted on Youtube http://youtu.be/FevLAIGrCG8

Students at Kapiti College share their experiences of dyslexia and their expectations of inclusive teaching environments.

No captions or transcript Source: Dyslexia Action New Zealand https://www.youtube.com/channel/UCVjWIr5SVl7S-klABo5httA

Useful resources

### A day in the life of a child with dyslexia

A visual guide to understanding the experience of young people with dyslexia.

Publisher: Understood

Visit website

### Accommodations for students with dyslexia

### Read time: 9 min

Accommodations ensure equal access to the full school experience for students with dyslexia or other learning disabilities. An explanation of accommodations and examples of these in the classroom and in assessments.

Publisher: International Dyslexia Association

### Visit website

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