

Designing for neurodiversity

Creating inclusive learning and teaching environments to nurture and support neurodivergent learners in the tertiary sector.

Introduction

This paper highlights the need for better support of neurodivergent tertiary learners, provides an overview of Ako Aotearoa initiatives to enhance educator capability, and includes recommendations for systemic change.

Defining neurodiversity and neurodivergence

Neurodiversity acknowledges the fact that the brain is different in every individual, and that every brain processes information differently. An individual can be said to be 'neurodivergent' if they think differently from the dominant societal standards of 'normal'.¹

Examples of neurodivergence include, but are not limited to, autism, ADHD, dyslexia, dyscalculia, dyspraxia, and dysgraphia, which may co-occur.

Studies suggest that approximately 15 to 2% of the population is neurodivergent.² The extent to which this will impact individuals' everyday lives and educational experiences can vary. For educators, it's important to value and respect this variability, and take a learner-centred approach, focusing on learners' strengths and potential, and tailoring the teaching to suit individual learner needs.

A strengths-based approach

Neurodivergent learners often have distinct patterns of strengths and challenges and a unique way of learning and processing information. As an educator, a good understanding of these differences is key, as it can help identify a learner's strengths and learning preferences.

A neurodiversity-affirming, strengths-based teaching approach can then be used to design a learning environment that is targeted to the learner's needs, where any barriers to learning are removed or reduced and where the learner's strengths are harnessed to help them engage with the learning and experience success.³

1: https://ako.ac.nz/manako/manako-resources/what-is-neurodiversity
2: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7732033/pdf/ldaa021.pdf
3: https://theeducationhub.org.nz/a-strengths-based-approach-to-teaching-diverse-learners/



Building educator capability

The Ako Aotearoa Manako team has developed a suite of offerings to support tertiary educators and organisations in raising awareness of neurodiversity and building educational capability. These include:

» The neurodiversity Community of Practice (CoP)

The <u>neurodiversity CoP</u> is for anyone with an interest and/or expertise in neurodiversity and currently has 557 members. Regular hui are held, where guest speakers present on a range of topics and members can exchange experiences, ideas and resources.

» Professional Learning and Development (PLD) opportunities
Our neurodiversity | Supporting learner success series includes workshops
and courses on autism, ADHD, dyscalculia and dyspraxia, facilitated by sector
experts. Neurodiversity is also a key feature of our <u>Tapatoru Ako Professional</u>
Practice Award programme, including self-directed and facilitated options.

» Neurodiversity resource collection

We have collated a resource collection in our Knowledge Centre on <u>neurodiversity in tertiary education</u> with links to PLD opportunities, resources and research and will continue to build this collection.

» Dyslexia Friendly Quality Mark (DFQM)

We offer the New Zealand Dyslexia-Friendly Quality Mark (DFQM) to support TEOs in becoming dyslexia-friendly. Educators can learn more about dyslexia through our Introduction to dyslexia or Reading Toolbox courses. A resource collection on dyslexia is also freely available on the Ako Aotearoa website.

» Universal Design for Learning (UDL)

Universal Design for Learning (UDL) is a framework to support educators in creating flexible and inclusive learning opportunities to meet the diverse needs of all learners. We offer a free, <u>self-directed course</u> on UDL and a complementary <u>UDL workshop</u>.

The following feedback from PLD participants illustrates the impact of the professional learning opportunities on educators' teaching practice:

"Wonderful to have programmes for such topics, to help 'demystify' neurodivergence, understand other perspectives and look at ways for everyone to use practical steps to support. Positive steps forward..."

"When I do the LNAAT, or get results showing low numeracy scores I will be more able to ask the person about how exactly maths is difficult for them. I will also be better able to support people I think might have dyscalculia and work on getting the foundation skills firmly established. I now know specific areas to focus on. I can also use the information I got to help inform others who may be working with this learner."



"I enjoyed the session. It was very informative. It will help me to be more patient and clear with instruction and information when tutoring dyspraxic learners. I was always unclear about how it differentiates from dyslexia. I feel I have a better understanding now."

Future directions and recommendations

The Government's Tertiary Education Strategy (TES) puts learners at the centre, promoting barrier-free access and inclusive learning environments.⁴ A cohesive, systemic approach is needed to achieve the TES Objectives and drive sectorwide sustainable change. Our recommendations for this approach include:

1. Leadership

Strong leadership by Government to:

- » Set policy including clear expectations and accountability measures to reduce barriers to education and ensure safe and supportive learning environments (TES Objectives 1 and 2)
- » Incentivise collaboration collaborative networks of schools, TEOs, whānau, communities, agencies, industries, employers and Government will help ensure a shared responsibility, facilitate learner transitions, and improve access to support (TES Objectives 2 and 4)
- » Ensure adequate funding for PLD in neurodiversity to develop educator and whole-organisation capability (TES Objective 3).

2. Research

Add to the research base on neurodiversity in Aotearoa New Zealand, including Māori and Pacific worldviews of neurodiversity and identifying effective approaches for supporting neurodivergent learners. (TES Objective 5)

» The neurodivergent learner voice

Initiatives for improved support are informed by neurodivergent learners' experiences and feedback (TES Objective 1).

 $^{4: \}underline{\text{https://assets.education.govt.nz/public/Documents/NELP-TES-documents/FULL-TES-2020.pdf}\\$

