An introduction to Developmental Language Disorder School resources

This guide will explore what Developmental Language Disorder (DLD) is and what it means across a student's learning journey at school, as well as considering a whole-class approach to supporting students with DLD.

What is Developmental Language Disorder?

Language is an innate skill we have the ability to learn from birth, but understanding and expressing language is an effortful task with which some people struggle in everyday contexts. The nature and subsequent definition of language disorders have been less understood than other childhood neurodevelopmental differences such as autism or ADHD, largely due to the complexities that lead to the disruption of typical language development. Previously, language disorders were diagnosed using various terminology such as language delay, primary language impairment, specific language impairment, and language learning impairment, irrespective of risk factors or co-occurring disorders¹. Our understanding of language development is continuously expanding in terms of what, how, and why language difficulties occur, and what this means for an individual's speech, language, and communication abilities and needs.

Recently, the term developmental language disorder (DLD)² was introduced to refer to individuals who experience difficulties with the comprehension and expression of meaning through language. People with DLD may have trouble finding the words to express themselves, organising sentences, having conversations, and telling a story. They may also struggle with understanding words, following instructions, answering questions, and remembering what someone has said. In addition, they may have difficulty paying attention and learning to read and write³. These difficulties may range from mild to severe.

DLD is referred to as developmental because it emerges during the course of development, and not as the result of an accident or pre-existing medical condition. In contrast, the term 'language disorder' is used when there is a language impairment associated with a known biomedical condition, such as autism, intellectual disability, or sensorineural hearing loss⁴. It is one of the most common neurodevelopmental conditions in childhood, affecting approximately one in every 14 people. DLD commonly co-occurs with other difficulties in learning, attention, motor skills, speech sound disorders, and behaviour, as well as writing and reading disorders. It is sometimes referred to as a 'hidden condition', as it may often be mistaken for a behavioural or attentional difficulty. Students with DLD need ongoing support to succeed and thrive in the classroom, and to navigate the challenges of language across their lifetime at school, university, and beyond ⁵.

DLD at school

The prevalence of DLD within a student population is approximately 7% across primary and high school settings, although it could be as high as 16%. In a school of 1000 students, this translates to 70 or more students likely to present with DLD or, at the classroom level, at least one student, and frequently more. These students may have experienced challenges in preschool years which continue as they begin formal schooling⁶. Students with DLD struggle with comprehension and expressive language, although secondary behaviours often present first, and students may be forgetful, disorganised, apparently



disengaged, and disruptive. Other signs of DLD include poor work completion and literacy outcomes. The longer a student struggles in a school learning environment, the poorer their social, academic, and emotional outcomes may be. This can also significantly impact their mental health and wellbeing, and stay with them into adulthood, so it is important that the appropriate adjustments and supports are provided as early as possible⁷.

The relationship between vocabulary, DLD, and learning

Understanding the link between oral language and learning is important to supporting a student with DLD. From the beginning, words create a foundation for accessing and understanding the knowledge that enables students to progress and advance in their learning⁸. Strong oral language skills and a robust vocabulary are stepping stones to accessing learning opportunities like engaging in classroom discussions, making inferences, mapping unfamiliar words to existing knowledge, and accessing curriculum knowledge⁹. Children typically develop proficiency in their listening and speaking skills first. Then, as their reading and writing skills start to mirror their oral language skills, it becomes a two-way street with reading and writing also enhancing language growth: words beget words¹⁰. A typically developing child starts school using approximately 2500 to 3500 words and understanding up to 10,000 words. By high school, this increases to between 40,000 and 50,000 words.

Without support, a student with DLD entering school will struggle to establish this essential oral language foundation. They find it much more difficult to access and store new words, which in turn restricts their access to vocabulary for efficient learning and storing of new information¹¹. A limited vocabulary, paired with understanding and expression difficulties, makes it much more difficult for students with DLD to navigate language-rich classrooms and keep up with typical classroom expectations. By upper primary and high school, they may be two to three years behind their peers across multiple learning areas¹².

How language impacts different aspects of learning and development

In the toddler and preschool years, language difficulties may be subtle and hard to pinpoint due to the different rates at which children move through the stages of early development. Under three years, children's language development is highly variable but indicators of early language difficulties include the inability to join words together at 24 months, comprehension problems, and poor imitation of body movements and use of gesture. A delay in vocabulary development at 18 to 24 months or being a 'late talker' is a less reliable factor of long term language challenges, as these children often catch up. Indicators of DLD between three and five years old present as persistent language difficulties in their primary language across a range of language areas, and often poor comprehension and lower non-verbal ability (such as the use of gesture). A family history of language or literacy problems are also risk factors to consider.¹³

When a child with DLD enters school, they may initially appear to be learning and progressing by using strategies to manage their constraints. This might include mimicking peers' during learning tasks, avoiding participation in classroom discussions, or following other students when instructions are given. These become less effective as the classroom and language demands become more sophisticated, and increased linguistic competence is connected with and required for social interaction, academic progress, and cognitive development¹⁴.

Socially, language is core in peer relationships, and it changes and adapts as children learn and develop in early childhood and in the school setting. Social skills are fundamental to early language, and vice versa¹⁵. In the first years of school, social language is marked by two-way conversation rules, asking for clarification, following topic changes, adapting to new social environments, and discussions and



debates. As students move into middle primary and high school, they need more complex inferencing skills and more sophisticated language to actively engage in their social environment. This might include understanding slang, jokes, and sarcasm, being adaptive to various social situations, and interpreting verbal and nonverbal cues. Poor language skills often pair with social difficulties such as making and maintaining friendships. In turn, poor social connection and a lack of acceptance by their peers puts young people at risk of mental health issues and self-esteem issues, which may continue into adulthood¹⁶.

Academically, as students' progress through their schooling, they shift from learning to read to reading to learn, increasing the need for them to be independent and proficient readers. There are five areas that are essential to literacy development: phonemic awareness (spoken structure of a word), phonics (link between sound and a written symbol), reading fluency (accuracy and rate), vocabulary, and comprehension. Given the importance of these connections and the key role of oral language, it is unsurprising that as many as half of students with DLD have a comorbid reading disability and encounter significant difficulties acquiring and developing their reading skills¹⁷. The demand on written language expression moves from simple, connected ideas to complex ideas, longer sentences, and a range of genres that switch formats across different subjects. Academic language becomes more abstract and technical, especially in secondary school as curriculum content becomes more advanced and specialised. A student with DLD will struggle with this academic load, and lack efficient strategies to maintain the same learning pace as their peers, although they often show strengths in areas with less of a reading and writing load, such as sports, art, drama, design, and technology¹⁸.

Cognitively, students progress from being reliant on the teacher to being increasingly independent learners. When they start school, students depend on the teacher to set their learning at the right level, to interpret content and learning tasks, and to support joint participation. Cognition shifts between the ages of nine and twelve years, as students become increasingly aware of their own thinking (metacognition), and engage more in abstract thought, problem solving, making predictions (including logic and forward thinking), and processing events outside real time (such as planning). These cognitive shifts are related to the development of higher order language skills, which present a challenge for students with DLD in relation to figurative language, 'reading between the lines', inferencing, and deciphering body language and tone of voice. Executive functioning skills also develop as students mature, as they are required to organise their belongings, plan and organise their time, meet goals, and initiate and complete tasks. A student with DLD will find managing these responsibilities and deadlines between school, home, and co-curricular schedules difficult to do independently¹⁹.

Classroom observation check points

Teachers have a key role advocating for children with language difficulties. Often this will start with awareness and observations of learning, especially if there are challenging behavioural issues linked with a student's learning behaviours. Students at risk of DLD may:

- be unable to respond to classroom instructions and follow through with the task
- make errors and repeated mistakes despite appearing to be compliant and understand instructions
- · be unable to follow a discussion or task and contribute ideas
- use little detail in an explanation, or include irrelevant information that does not fit the topic
- express written or verbal thoughts that are jumbled, out of order, or confused
- · use sentences that are shorter and lack connected ideas and vocabulary



- · produce narrative writing that appears less complex, with less depth of structure or story line
- seem disorganised with their belongings, time, and self-management²⁰.

A teacher's role

When teachers observe students with these characteristics, they can apply principles to modify listening and speaking tasks that will benefit all students while providing essential support for students with DLD (and often other neurodivergent students). When teachers apply strategies through a whole classroom approach, the modifications become integrated into how they teach, rather than additional work load requirements²¹. Teachers are also key advocates for requesting specialist support such as speech therapy or learning support, which supports a collaborative framework and usually results in better outcomes for a student.

Supporting students in the classroom

An effective way for teachers to support students with DLD is to shift language away from being abstract and temporary, and towards being concrete, permanent, and tactile. For example:

- · using descriptors and context for new words rather than definitions
- · providing visual cues, charts, graphs, and tables to connect words with a mental image
- demonstrating mind maps and word associations to link new knowledge with existing knowledge
- using a range of contexts to expose new words, such as worksheets, videos, brainstorms, and word webs

Teachers can also employ a range of strategies and scaffolds related to tasks, vocabulary, and listening, designed to reduce cognitive load for students²².

Task strategies:

- · Write key words on the board during verbal instructions
- Use visuals to support verbal instructions
- · Show or model an example of what is required
- · Provide step-by-step instructions and put information in chronological order
- · Break tasks into smaller sequenced steps

Vocabulary strategies:

- · Explicitly teach or pre-teach topic-specific words
- · Create visual aids for words such as a visual word wall, word webs, and visual images
- Build up definitions of new words to link with familiar words (for example: biodiversity diverse)
- Highlight morphological features (for example, reinforcing suffix and prefix patterns, as in the word 'deforestation')
- · Encourage exposure to and use of synonyms and antonyms
- Repeat and reinforce new vocabulary over time, as students need between 5 and 12 repetitions to learn a new word



Listening strategies:

- Provide strategies to make sure information has been understood and retained by repeating back verbal instructions, using a visual planner, and summarising key information
- Encourage self-advocacy and allow opportunities for students to seek clarification and ask questions
- · Allow enough processing time before adding more information
- Speak and give information more slowly, with written instructions that support the verbal request or task
- · Reduce the auditory information load by keeping sentences short, with one idea per sentence
- Use cuing strategies such as using the student's name before asking them a question
- · Always pair verbal information with non-verbal (such as gestures, signs, pointing, and labels)

A collaborative approach to supporting students with DLD

The key to supporting and advocating for students with DLD is the collaboration between parents, teachers, speech language therapists, and other professionals who provide essential roles in a student's DLD journey. It is also essential to involve the student in discussions and decision-making so that they can share what works for them in the classroom, what they find challenging, and what they think might help. A collaborative, whole-class approach ensures that students can participate in the life of the class and engage in crucial learning opportunities. It also reduces the possibility of them being pulled out of class for additional support, which is less desirable as it means that students are likely to miss out on important curriculum content. Supporting students to engage fully in all aspects of the classroom positively impacts their social and mental wellbeing, and promotes better academic outcomes²³.

Endnotes

- 1 Bishop, D.V.M, Snowling, M.J., Thompson, P.A., Greenhalgh, T., CATALISE consortium (2016). CATALISE: A multinational and multidisciplinary Delphi Consensus Study. Identifying language impairments in children. PLoS ONE 11(7); RCSLT briefing paper on Language Disorder with a specific focus on Developmental Language Disorder (2020).
- 2 In Aotearoa New Zealand, we continue to work towards a reference that reflects our cultural diversity. Importantly, for Māori whanau and indigenous people who have tamariki with DLD, the professional approach should lead to mana-enhancing practice through awareness, shared understanding, korero, and aroha for families. To learn more, see Newbury, J. (2022). Developmental Language Disorder (DLD) should this label be applied in Aotearoa. Communication Matters, 47(Autumn), 6-9.
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- 4 Ziegenfusz, S., Paynter, J., Flückiger, B. & Westerveld, M. (2022). A systematic review of the academic achievement of primary and secondary school-aged students with developmental language disorder. Autism & Developmental Language Impairments, 7, 1-33; Bishop et al., 2016.
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- 11 Starling, 2020a.
- 12 Starling, 2020a.
- 13 Bishop, 2016.
- 14 Starling, 2016; Starling, 2020b.
- 15 Snow, 2021; Starling, 2020a.
- 16 Snow, 2016; Starling, 2016; Starling, 2020b.
- 17 Ziegenfusz et al., 2022; Starling, J. 2020a
- 18 Starling, 2016; Starling, 2020b; Starling et al., 2011.
- 19 Starling, 2016; Starling, 2020b.
- 20 Forward & Ziegenfusz, 2022; Starling, 2020a.
- 21 Starling, 2016; Starling, 2020b.
- 22 Forward & Ziegenfusz, 2022; Starling, 2020a; Beck et al., 2013.
- 23 Starling, 2020b; Snow, 2016.

PREPARED FOR THE EDUCATION HUB BY



Vanessa Leaver

Vanessa Leaver is a Speech Language Therapist, business owner, and mum to two young children. Over the last 10 years she has been the founder of private practice clinics in Tokyo and Sydney, where she led teams undertaking clinical practice in early childhood settings as well as primary and high school settings. Now based in Auckland, Vanessa is passionate about using her knowledge in executive functioning with literacy and language to work alongside teachers, parents, caregivers, and professionals to support a child or young person's development.

