

Learning Difficulties Australia

Learning Difficulties Australia is an association of teachers and other professionals dedicated to assisting students with learning difficulties through effective teaching practices based on scientific research.



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Shaun's work spans research, teaching, and advocacy, with a focus on equitable access to education and services for children with DLD. He leads collaborative, cross-sector initiatives and is actively involved in professional leadership through Speech Pathology Australia. Shaun is passionate about translating research into practical tools that support clinicians, educators, families, and communities.





Developmental Language Disorder: Strategies for Inclusive Teaching

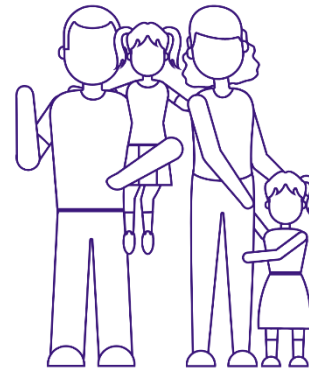
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ACKNOWLEDGEMENT OF COUNTRY



In the spirit of reconciliation, I acknowledge the Traditional Custodians of country throughout Australia and their connections to land, sea and community. I pay my respect to their elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

ABOUT ME



LEARNING OBJECTIVES



By the end of this professional learning, you will be able to:

- **Understand the characteristics and diagnostic criteria of DLD.**
- **Identify the challenges students with DLD experience at school.**
- **Contrast the different perspectives of stakeholders and students with DLD.**
- **Evaluate potential educational supports and classroom strategies to enable access to the curriculum.**



**A classroom had 30 students and
20 ate sandwiches.**

How many didn't?

LANGUAGE DEVELOPMENT



understanding



talking



WHAT IS DLD?



DLD

is a neurodevelopmental ~~condition~~ that causes difficulties with understanding and/or talking for no known reason

disability

WHAT IS DLD?



- Many terms have previously been used to describe these difficulties, including: language delay, specific language impairment, and language learning impairment.
- This has significantly impacted advocacy, practice and research.
- In 2016 and 2017, an international group of experts published two papers:
 1. Consensus for identification
 2. Consensus for terminology

Bishop et al., 2016; 2017

WHAT IS DLD?

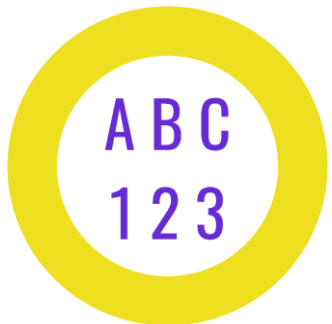


Calder et al., 2022; Norbury et al., 2016; Tomblin et al., 1997

THE IMPACTS OF DLD



- DLD is a lifelong condition. It will persist into adulthood.



- Language is a critical skill for learning. Students with DLD will need support at school.



- DLD can impact on social communication. Students can find it harder to make friends and join conversations.

THE IMPACTS OF DLD



- **Students with DLD may behave differently.**



- **DLD often co-occurs with other conditions, including: ADHD, developmental coordination disorder, dyslexia, behaviour difficulties, social/emotional etc.**



- **Public awareness of DLD is very low, so many people haven't heard of it.**

Disorder	Prevalence per 100 ^a	Mean severity ^a	No. of pubs (2000–2009)	No. of pubs (2010–2019)	% Change ^b	No. of cases in U.S. (2019) ^c	Pub index ^d
Lesch–Nyhan syndrome	0.0005	4	76	73	–3.95	369	19.78
Lowe syndrome	0.0005	4	72	111	54.17	369	30.08
Rubinstein–Taybi syndrome	0.0008	3.5	116	203	75.00	590	34.38
Cornelia de Lange syndrome	0.0014	4	220	323	46.82	1,033	31.26
Cri du chat syndrome	0.002	4	60	89	48.33	1,476	6.03
Galactosemia	0.002	2.5	305	336	10.16	1,476	22.76
Angelman syndrome	0.004	3.79	349	543	55.59	2,952	18.39
Williams syndrome	0.0044	3.31	787	1,125	42.95	3,247	34.65
Marfan syndrome	0.0067	1.5	930	1,598	71.83	4,945	32.32
Prader–Willi syndrome	0.0067	3.17	970	1,209	24.64	4,945	24.45
Rett syndrome	0.008	3.94	946	1,524	61.10	5,904	25.81
PKU	0.01	2	1,276	1,641	28.61	7,380	22.24
Duchenne muscular dystrophy	0.0143	2.5	1,436	3,929	173.61	10,553	37.23
Tuberous sclerosis	0.0167	2.69	1,432	2,464	72.07	12,325	19.99
Trisomy 18	0.025	3.7	251	347	38.25	18,450	1.88
Velocardiofacial syndrome	0.025	2.72	589	1,062	80.31	18,450	5.76
Turner syndrome	0.04	1.94	1,017	1,548	52.21	29,520	5.24
XYY	0.0545	2	86	101	17.44	40,221	0.25
XXX	0.055	1.5	31	35	12.90	40,590	0.09
Noonan syndrome	0.0571	2.5	399	687	72.18	42,140	1.63
Fragile X syndrome	0.0615	3.57	937	2,554	172.57	45,387	5.63
Klinefelter syndrome	0.086	1.83	430	805	87.21	63,468	1.27
Fetal alcohol syndrome	0.1	2.58	576	748	29.86	73,800	1.01
Cerebral palsy	0.15	2.5	4,367	9,226	111.27	110,700	8.33
Down syndrome	0.1667	3.44	5,224	7,677	46.96	123,025	6.24
Neurofibromatosis type 1	0.308	2	1,028	1,994	93.97	227,304	0.88
Tourette syndrome	0.5	1.25	952	1,480	55.46	369,000	0.40
Autism spectrum disorder	0.65	2.9	12,267	38,110	210.67	479,700	7.94
Developmental dyscalculia	3	1.56	81	137	69.14	2,214,000	0.01
ADHD	5	1.95	10,686	19,992	87.09	3,690,000	0.54
Intellectual disability	5.5	2.75	7,792	11,338	45.51	4,059,000	0.28
Developmental dyslexia	6	1.9	2,151	3,047	41.66	4,428,000	0.07
Developmental coordination disorder	6.5	1.5	291	764	162.54	4,797,000	0.02
Developmental language disorder	7.4	2.15	861	1,388	61.21	5,461,200	0.03
Speech sound disorder	10	1.69	280	523	86.79	7,380,000	0.01



DIAGNOSING DLD



- In Australia, speech pathologists diagnose DLD.
- There are three criteria for diagnosis:
 1. Significant difficulties with language development.
 2. The difficulties have a functional/everyday impact.
 3. The difficulties are ongoing and likely to be lifelong.



DIAGNOSING DLD



- People with DLD have average (low to above average) cognitive abilities/IQs.
- DLD will impact all languages spoken. Speaking multiple language **does not** cause DLD.
- Parents/caregivers **do not cause** DLD, but can be a great support.
- There is **no known cause** for DLD. The genetic factors are unclear.
- If there is a known cause for the language difficulties (e.g. autism, hearing loss, intellectual disability), the term Language Disorder is used instead of DLD.



WHAT TO LOOK FOR



- **Understanding (Receptive)**
 - **Difficulty following instructions (especially multi-step)**
 - **Needs repetition or watches others to work it out**
 - **Struggles to understand questions**
 - **Appears not listening or disengaged**
- **Speaking (Expressive)**
 - **Uses short or simple sentences**
 - **Struggles to find words or uses incorrect ones**
 - **Difficulty explaining ideas or retelling events**
 - **Speech may be hard to understand**

WHAT TO LOOK FOR

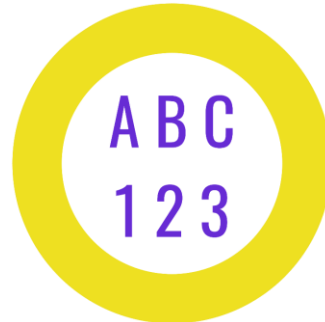


- **Learning & Language**
 - **Difficulty learning new vocabulary**
 - **Struggles with reading and writing**
 - **Needs extra time, repetition, and support**
 - **Difficulties across multiple subjects**
- **Social & Classroom Participation**
 - **Avoids talking in class or group work**
 - **Struggles to keep up with classroom discussion**
 - **Difficulty organising ideas or telling stories**

DLD & SCHOOL



- Language is the default modality for accessing the curriculum.
- DLD impacts long term outcomes in communication, education and employment (Conti-Ramsden et al., 2018).
- People with DLD are vulnerable to mental health conditions (Durkin & Conti-Ramsden, 2010).
- Students with DLD demonstrate challenges in all areas of academic achievement compared to their peers without DLD (Ziegenfusz et al., 2022).
- Awareness of DLD is low and few teachers feel confident to provide support (Kim et al., 2022; Glasby et al, 2022).
- Despite the high risk of academic failure, there is limited information available for teachers to support educational practices for students with DLD.



ACADEMIC ACHIEVEMENT



- **Reading, spelling & writing** – students with DLD presented with skills similar to their younger typically developing peers.
- **Narratives** – students with DLD had more difficulties with understanding, generating and retelling stories.
- **Numeracy** – students with DLD demonstrated greater success when the language load was reduced




ACADEMIC ACHIEVEMENT


• • • • •



Students with DLD
are at risk of
failing at school



They have difficulties
across all areas
of the curriculum



Some achieve within
the average range in
academic tasks



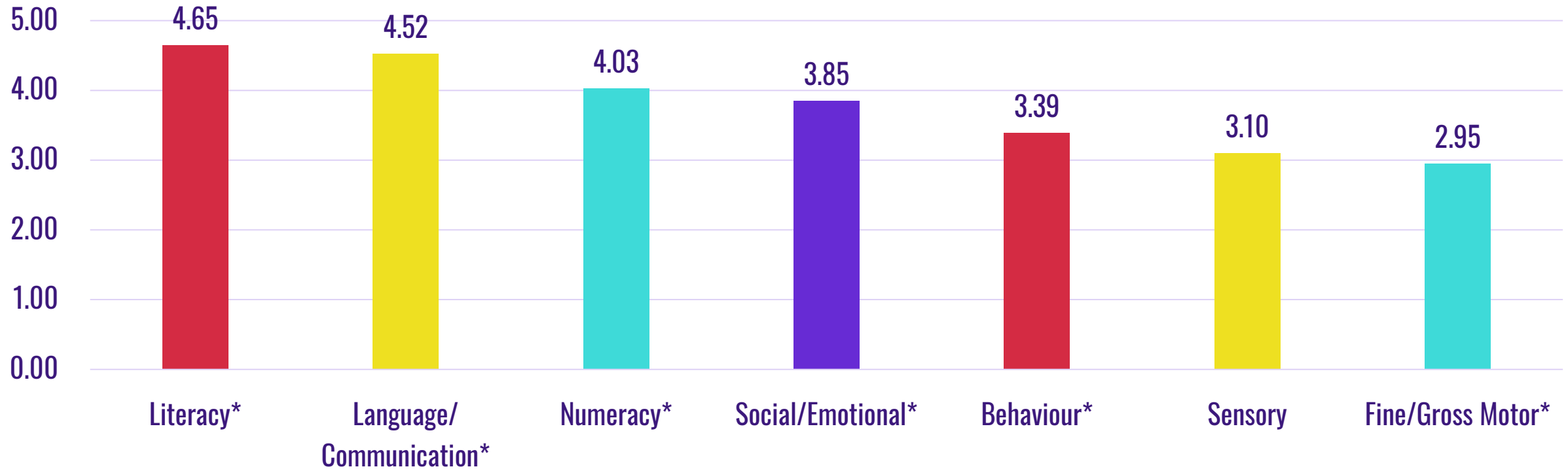
Ziegenfusz et al., 2022

STAKEHOLDER PERSPECTIVES – AREAS OF FUNCTIONING



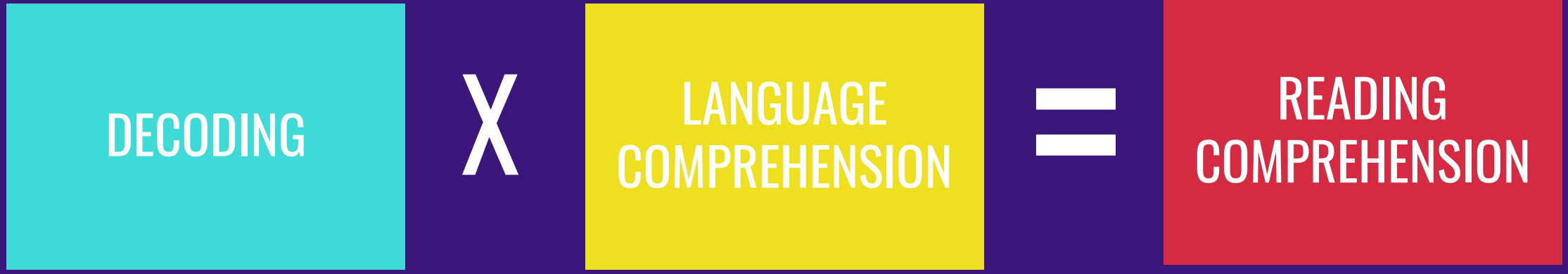
The **areas of functioning** rated to most impact learning by all participants.

(5 = very high level of support, 1 = very low level of support)



* indicates statistically significant differences for between stakeholder comparisons.

SIMPLE VIEW OF READING

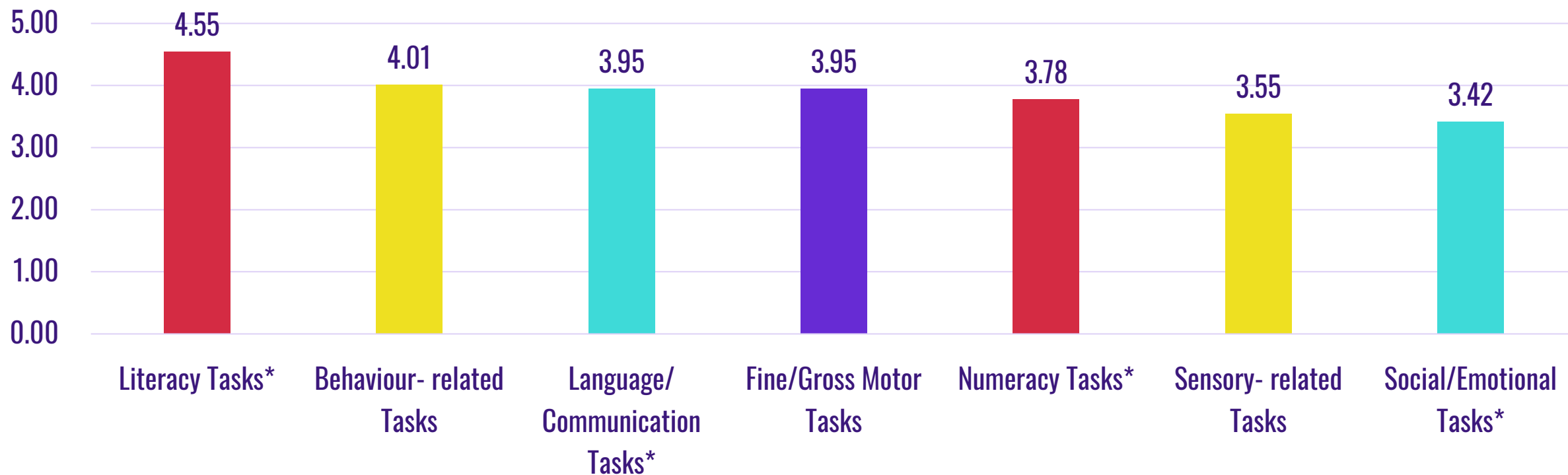


STAKEHOLDER PERSPECTIVES - SCHOOL-BASED TASKS



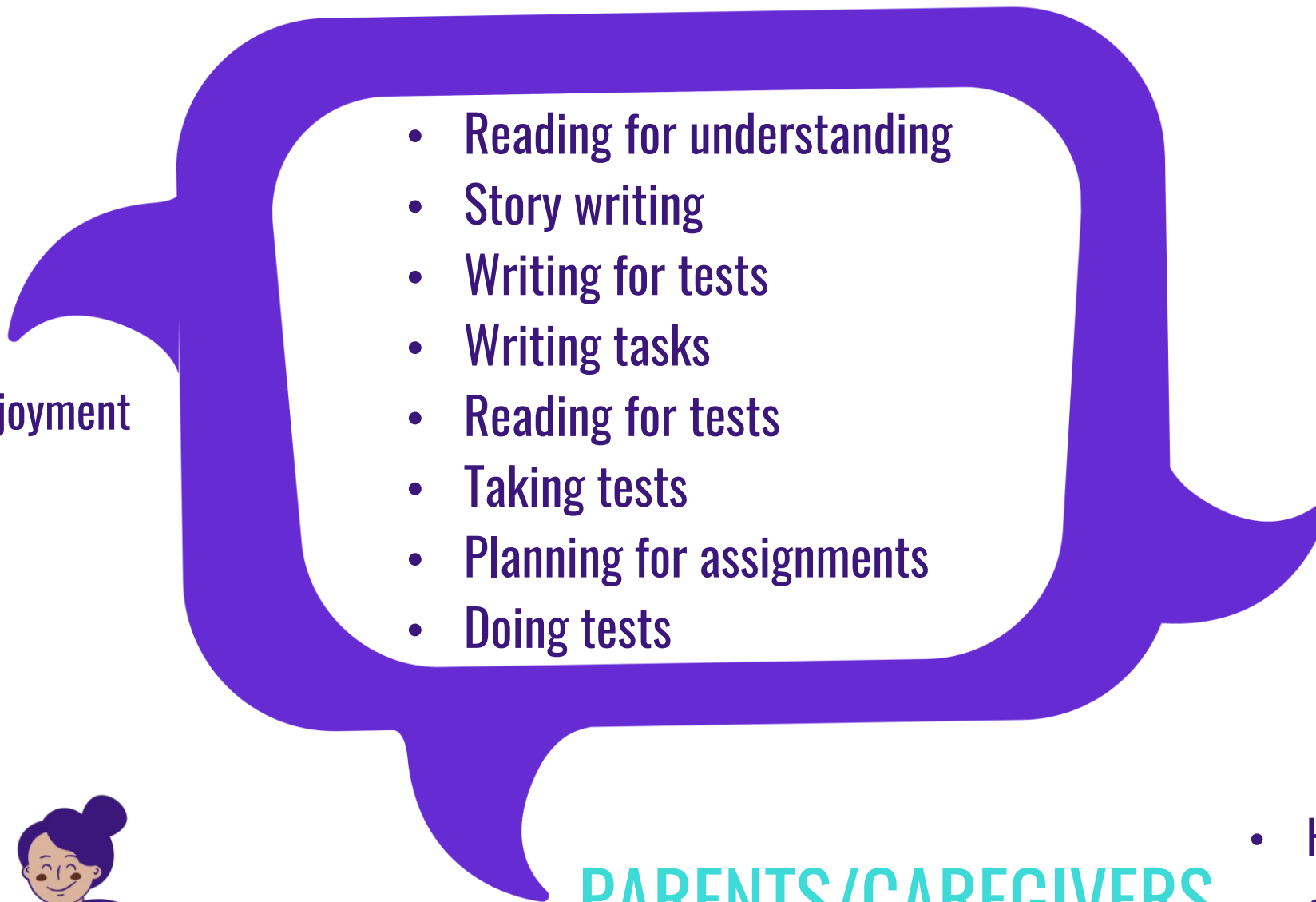
The **school-based tasks** rated by difficulty by all participants.

(5 = very hard, 1 = very easy)



* indicates statistically significant differences for between stakeholder comparisons.

TOP 10 MOST DIFFICULT TASKS



- Reading for understanding
- Story writing
- Writing for tests
- Writing tasks
- Reading for tests
- Taking tests
- Planning for assignments
- Doing tests

TEACHERS

- Reading for enjoyment
- Handwriting

ALLIED HEALTH

- Reading for enjoyment
- Doing homework

PARENTS/CAREGIVERS

- Handwriting
- Completing tasks

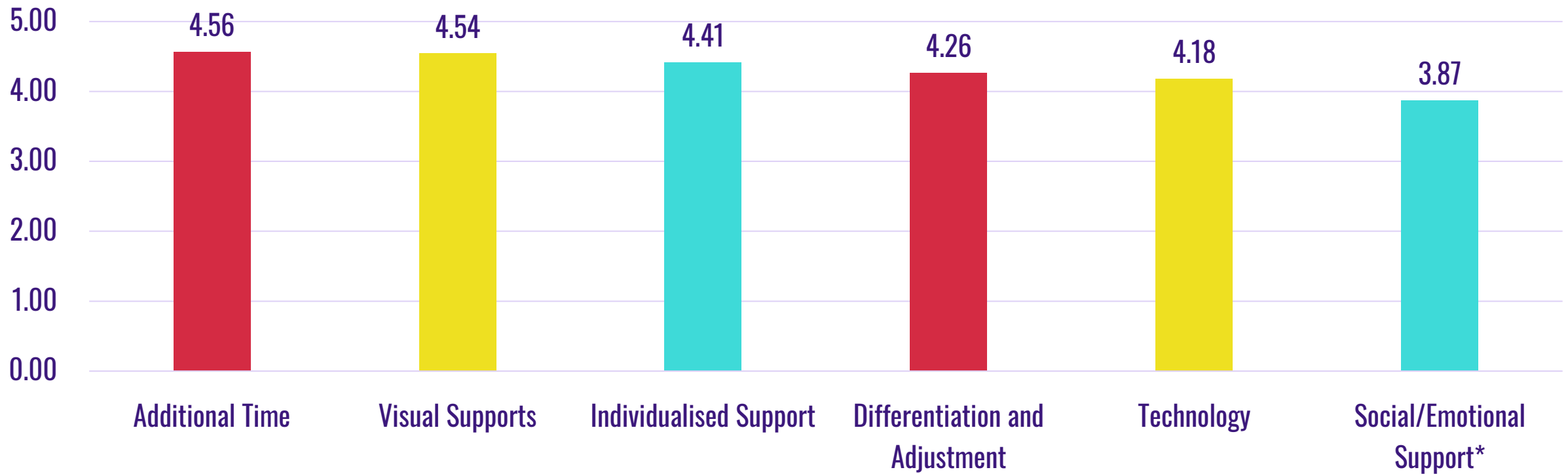


STAKEHOLDER PERSPECTIVES - EDUCATIONAL SUPPORTS



The **educational supports** rated for helpfulness by all participants.

(5 = very helpful, 1 = very unhelpful)



* indicates statistically significant differences for between stakeholder comparisons.

TOP 10 MOST HELPFUL SUPPORTS



TEACHERS

- Help to organise themselves
- A quiet space to do assessment

- One on one help with an adult
- Extra help from a teacher or teacher aide
- Visual timetables
- Extra time for exams
- Help to organise their assignments
- Getting a copy of the things the teacher writes on the board
- Extra time for assignments
- Help with homework

ALLIED HEALTH

- Checklists for tasks
- Help to organise themselves

PARENTS/CAREGIVERS

- Checklists for tasks
- Setting goals for tasks



TOP 10 MOST HELPFUL SUPPORTS



“For ALL teachers
to understand DLD
and the needs of
the child” – PC48

TEACHERS

- Help to organise themselves
- A quiet space to do assessment

ALLIED HEALTH

- Checklists for tasks
- Help to organise themselves

PARENTS/CAREGIVERS

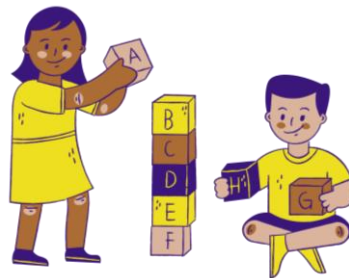
- Checklists for tasks
- Setting goals for tasks



STAKEHOLDER PERSPECTIVES



- All **areas of functioning** are impacted for students with DLD, particularly literacy and language/communication.
- All **educational supports** were rated as helpful, particularly additional time, visual supports, and individualised support.
- Parents/caregivers frequently rated **areas of functioning** and **school-based tasks** lower (i.e., less support, easier) than teachers and allied health professionals.
- Differences in perspectives may be explained by different roles.
- While literacy was prioritised, social/emotional needs and supports were ranked lowest with greater variability across stakeholder groups.



BEHAVIOURAL AND EMOTIONAL NEEDS



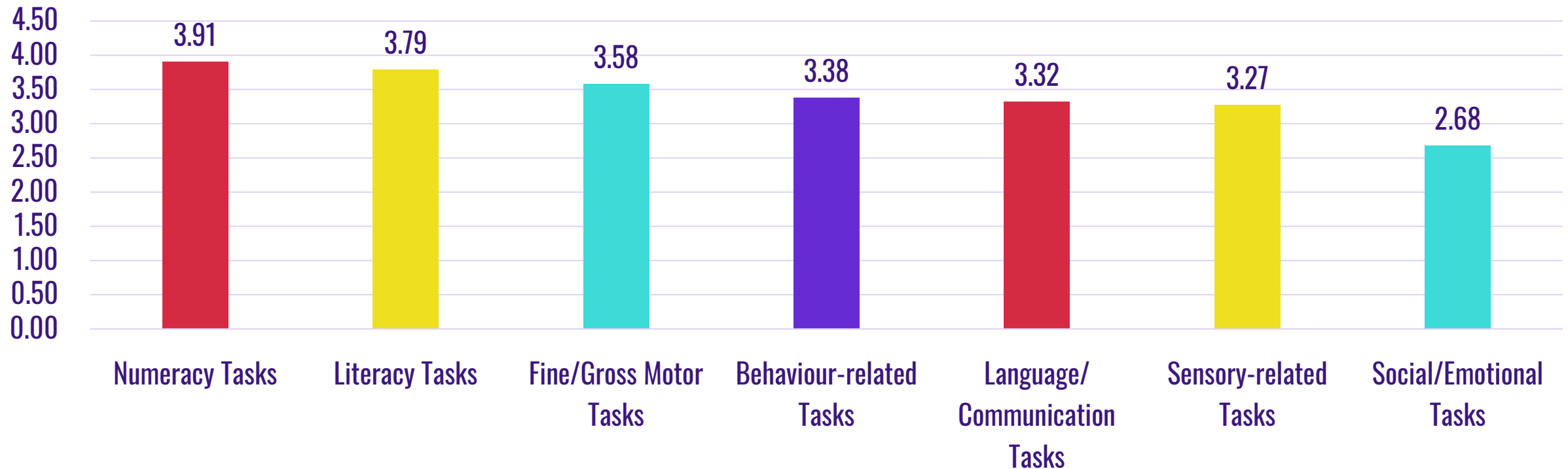
n = 11	Median	Mean (SD)	Range
Emotional Problems Scale	5.00	4.45 (2.22)	1.00 – 9.00
Conduct Problems Scale	1.00	.91 (.83)	.00 – 2.00
Hyperactivity Scale	4.00	4.09 (1.51)	2.00 – 7.00
Peer Problems Scale	3.00	4.09 (2.42)	.00 – 7.00
Prosocial Scale	8.00	7.36 (1.85)	5.00 – 10.00
Total Difficulties Score	15.00	13.55 (3.88)	8.00 – 21.00

STUDENT PERSPECTIVES - SCHOOL-BASED TASKS



The **school-based tasks** rated by difficulty by adolescents with DLD.

(5 = very hard, 1 = very easy)

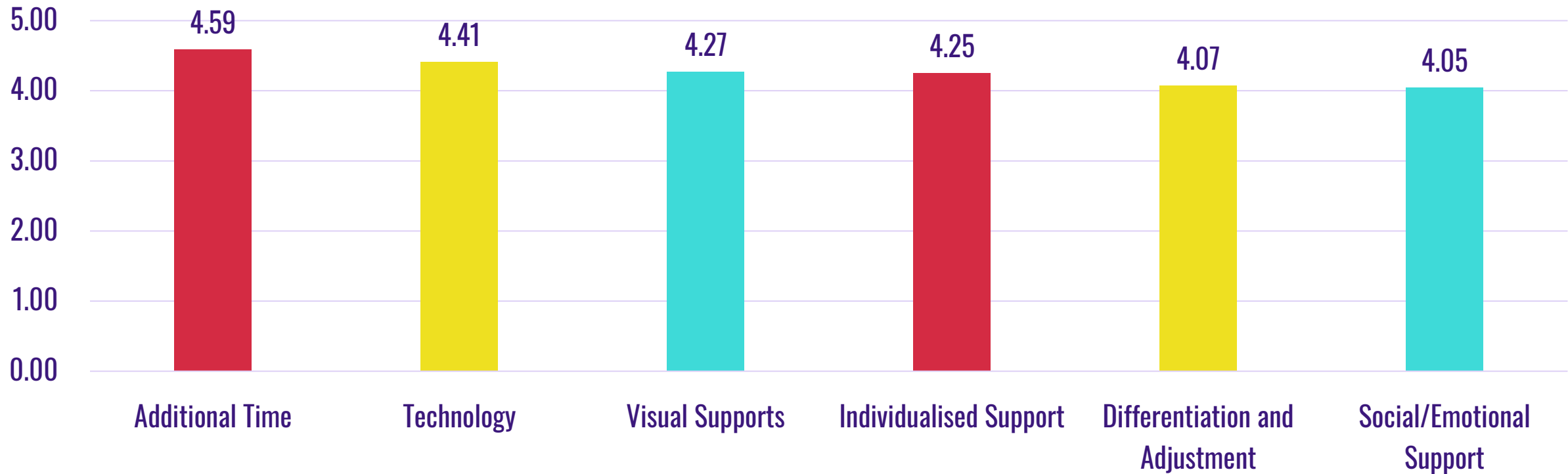


STUDENT PERSPECTIVES - EDUCATIONAL SUPPORTS

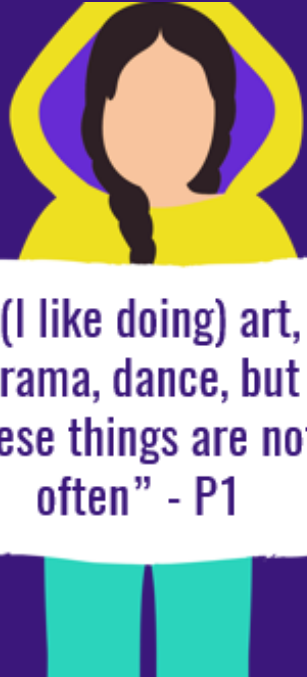


The **educational supports** rated by helpfulness by adolescents with DLD.

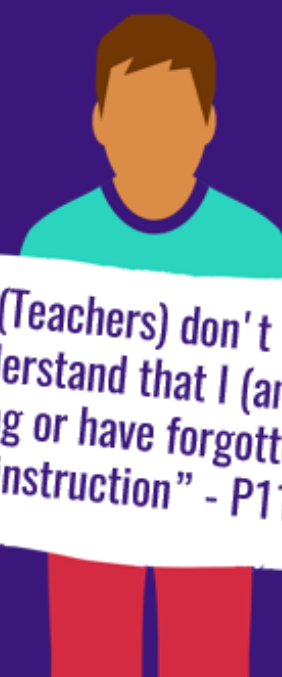
(5 = very helpful, 1 = very unhelpful)



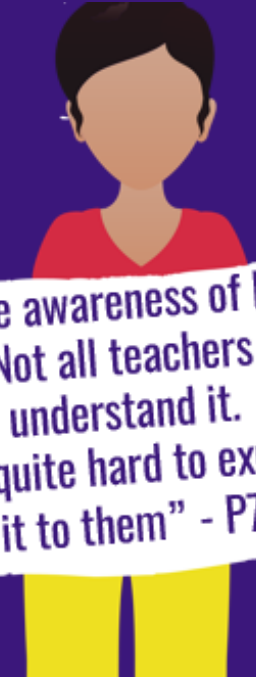
STUDENT PERSPECTIVES



“(I like doing) art,
drama, dance, but
these things are not
often” - P1



(Teachers) don't
understand that I (am)
trying or have forgotten
an instruction” - P11

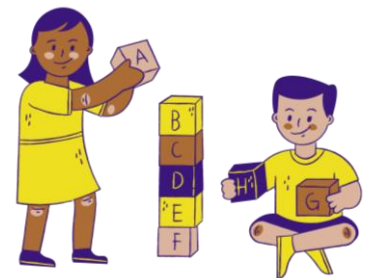


“More awareness of DLD.
Not all teachers
understand it.
It's quite hard to explain
it to them” - P7

STUDENT PERSPECTIVES



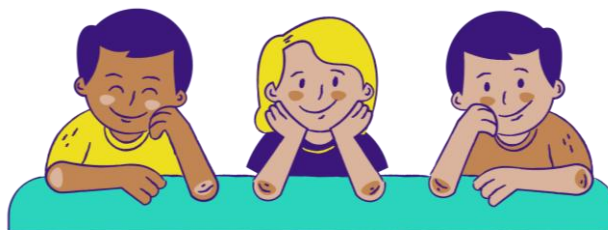
- Consistent with previous research, high school students with DLD reported **prosocial behaviours**, which were perceived as a strength in their social functioning.
- However, individual participants reported a spectrum of behavioural and emotional needs with some scores in the clinical range, particularly **peer relationships**.
- **Literacy** and **numeracy** were prioritised by students with DLD as the most difficult school-based tasks.
- **Language/communication** and **social/emotional tasks** were rated 'easier' than predicted.
- **Additional time, visual supports,** and **individualised support** were rated as most helpful, however high school students rated technology as more helpful than adult stakeholders.
- Social/emotional needs and supports were ranked lowest.
- **Positive sense of school connectedness** despite educational needs.



WHAT CAN WE LEARN?



- Integrating the perspectives of high school students is essential for evidence based, inclusive educational practices.
- Teachers and therapists can gather students' perspectives using consultative processes
- Student consultation enables teachers and therapists to implement individualised supports.
- Teachers need to be aware of DLD and access training to ensure they have the necessary skills to provide support.



CLASSROOM STRATEGIES



- Make language as tactile and visible as possible
- Giving instructions:
 - Use cuing strategies to ensure they are listening
 - Slow down your rate of delivery (slightly)
 - Chunk information
 - Put information in chronological order
 - Be specific and concise
- Give students more time to process and respond
- Encourage them to ask for repetitions or clarification
- Make the implicit, explicit (e.g. describe what is happening)



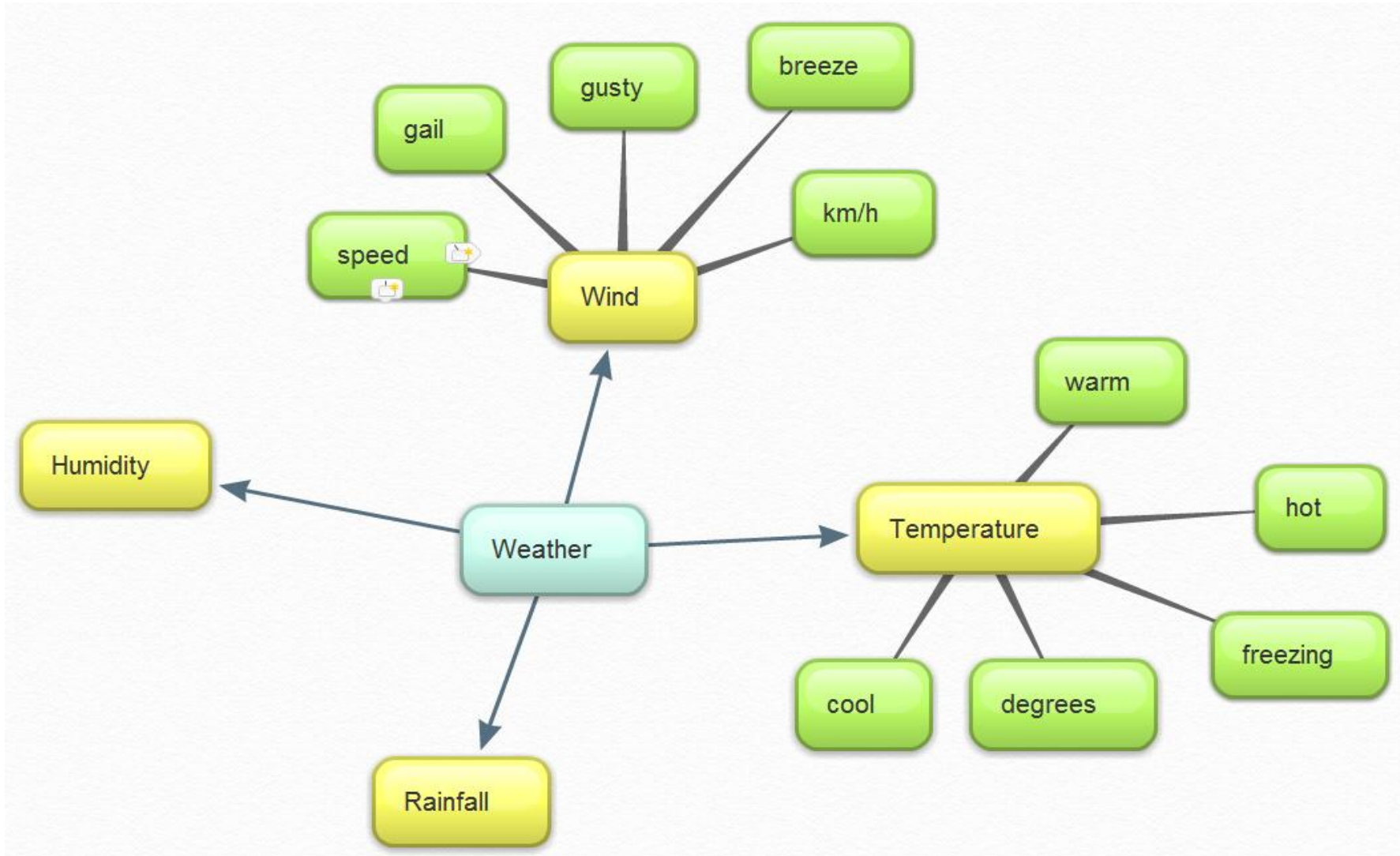
CLASSROOM STRATEGIES



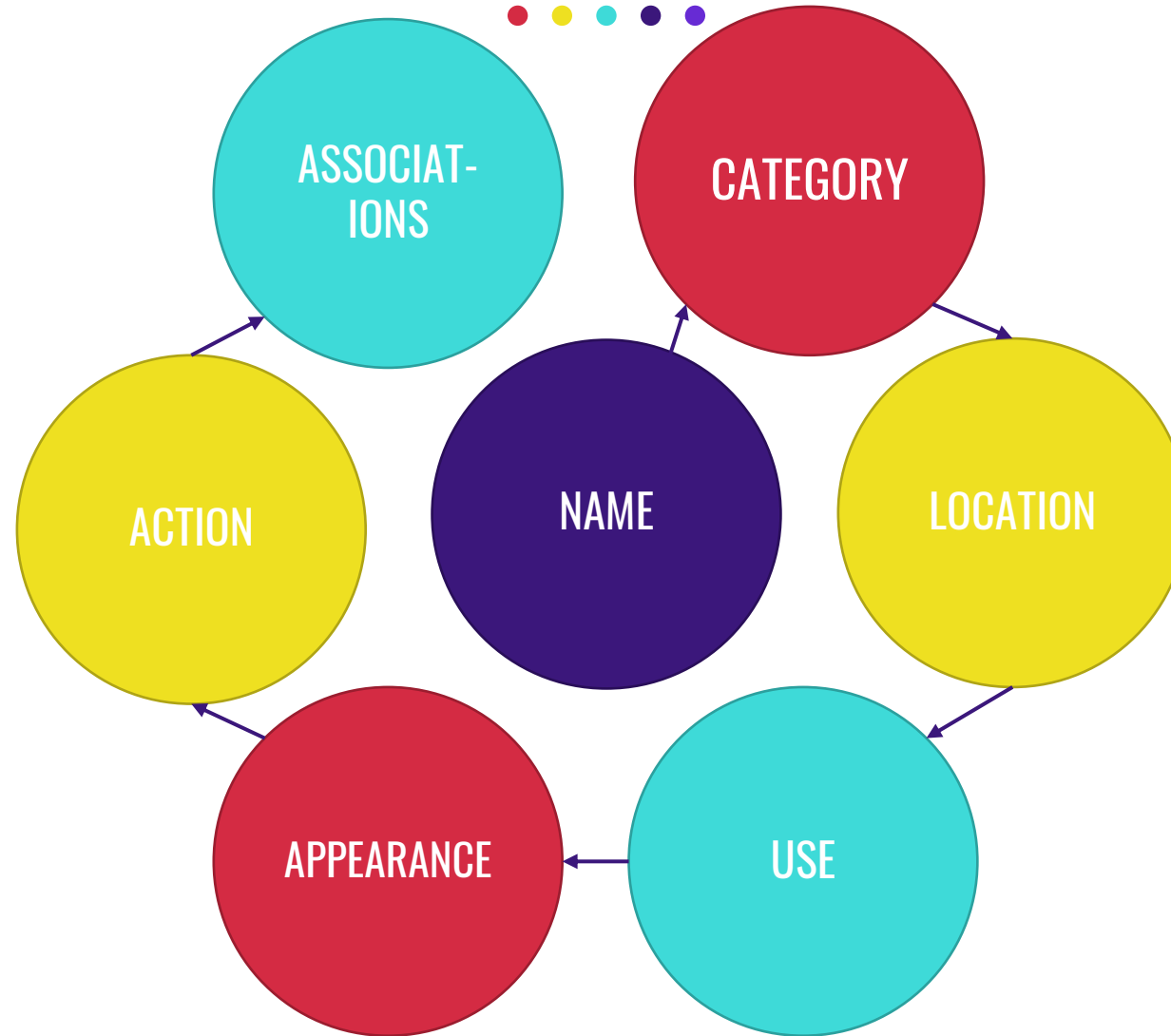
- Explicitly teach (or pre-teach) concepts
- Provide multiple repetitions of vocabulary
- Create banks of words or word walls
- Build up definitions of new words
- Use new words in a variety of ways



CLASSROOM STRATEGIES



CLASSROOM STRATEGIES



CLASSROOM STRATEGIES



- Literacy instruction will help build language
- Recast incorrect spoken grammar (if written, correct the mistake)
- Teach the different types of words (e.g. nouns, verbs, adjectives, adverbs, conjunctions)
- Extend spoken and written language (e.g. adjectives, conjunctions)
- Encourage structuring thoughts before undertaking writing tasks (e.g. drawing)

CLASSROOM STRATEGIES



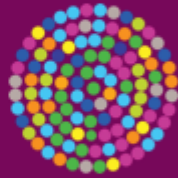
- Consider the language you use in the classroom
- Pair verbal information with written information
- Consider how to reduce the cognitive load of tasks
- Make adjustments to the learning tasks AND assessment tasks
- Build a partnership with the student
- Support their mental health



STUDENT CONSULTATION

Consulting students with disability:

A practice guide for educators
and other professionals






Example resource: Questionnaire

Menu for adjustments

- How teachers talk to me
- How teachers give instructions
- Lesson and subject content
- Changing the environment

1. What can teachers do that helps you learn?
Tick the boxes that shows your choices.
2. Add other things that do/don't help in the blank boxes
3. Circle the **most** helpful thing teachers can do.



 Not that helpful	 Kind of helpful	 Really helpful
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ASSESSMENT TASKS



- Need to consider learning AND assessment tasks.
- Consider:
 - Impact of the disability on the assessment.
 - Nature of the assessment task
 - Nature of the subject
 - The student's usual work during learning tasks
- The aim is to place students with DLD on equal footing and NOT to give them an advantage.
- Minimise the impact of their language and allow the marker to see beyond their disability to the student's knowledge and skills.

DISCUSSION STARTERS



- Who are the students in my school that may have or do have DLD?
- What might indicate a student is having trouble understanding and/or talking?
- Which educational supports do I currently use and which ones could I use to scaffold student learning?
- Which formative or summative assessments provide evidence regarding a student's listening or written comprehension?
- What steps can I take to help with communication breakdowns?
- What key points can I take away from today and apply in my classroom?

KEY MESSAGES



- DLD is one of the most common neurodevelopmental conditions in childhood.
- If you have concerns about a student's communication, academic or behaviour skills, consult with a speech pathologist.
- All areas of academic achievement are impacted for students with DLD.
- Teacher, speech pathologist and parent/caregiver collaboration can support high quality instruction for school-aged children.
- Include students with DLD in the collaborative process.
- Recognise each student with DLD has a unique profile of strengths and areas of need.
- All students with DLD can learn, but will require individualised approaches.



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