Statewide Practice Sharing Day

Victorian Deaf Education Institute

VICTORIA State Government | Department of Education

AATD VICTORIA

Friday 10 October 2025

Some Housekeeping…

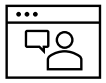

VDEI staff

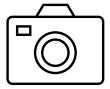

Venue & Facilities

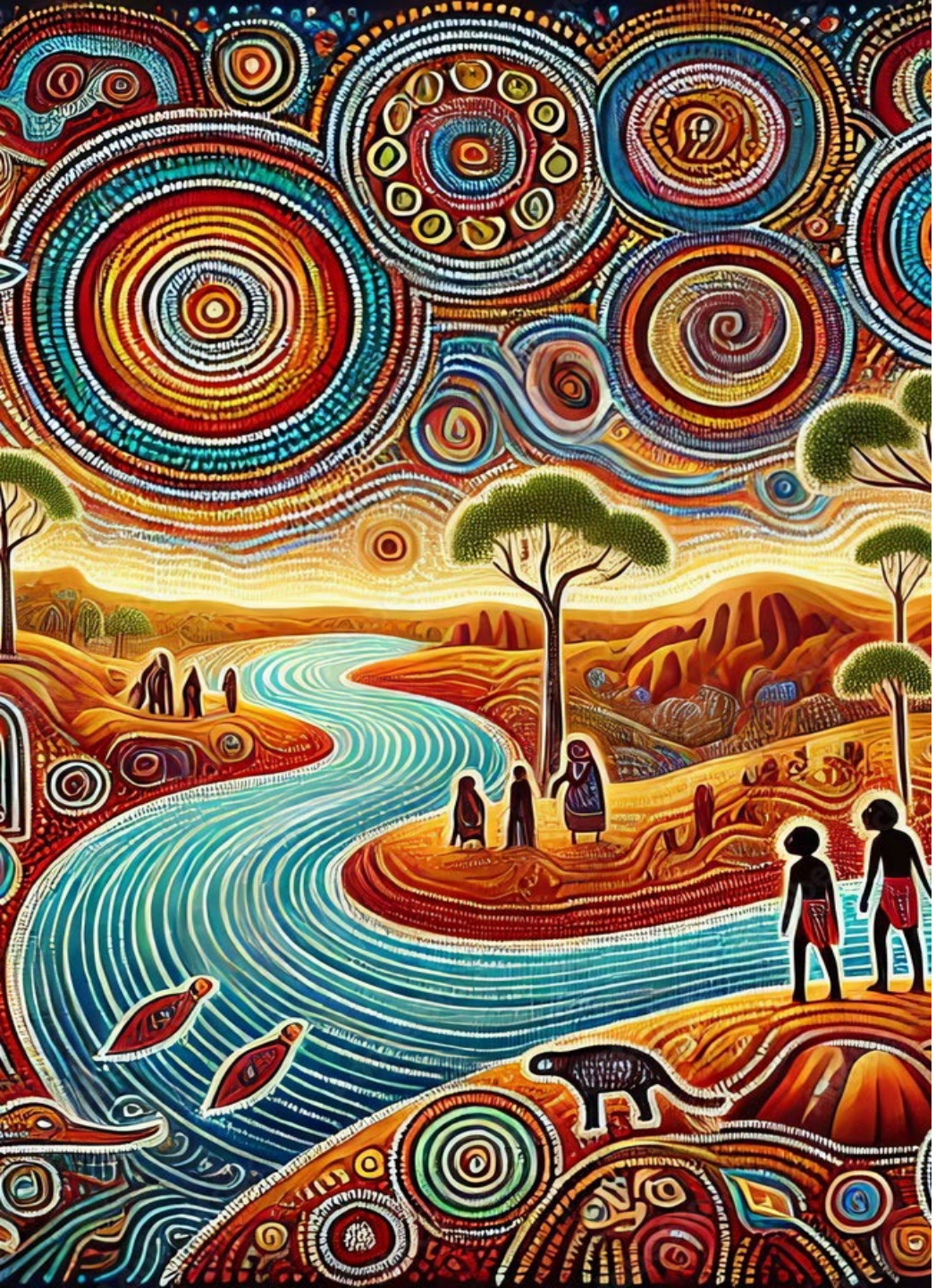

Bathrooms


In case of emergency


Catering and Food


Accessibility & Technology


Photos



Victorian Deaf Education Institute

We respectfully acknowledge the Traditional Owners of the land, the Wurundjeri peoples of the Kulin Nation, and we pay our respects to their Elders, past and present.
We recognise the richness of the culture and language of First Peoples and respect their indigenous sign languages that are as old as the culture itself.
From our First Nations peoples we learn about the value of diverse forms of communication in communities that embrace inclusion.

Welcome & Acknowledgement

VDEI General Manager
Elizabeth Levesque

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Assessment of complex language in deaf children

Sharon Klieve

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Victorian Deaf Education Institute

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Assessment of spoken complex syntax use in deaf children

Dr Sharon Klieve

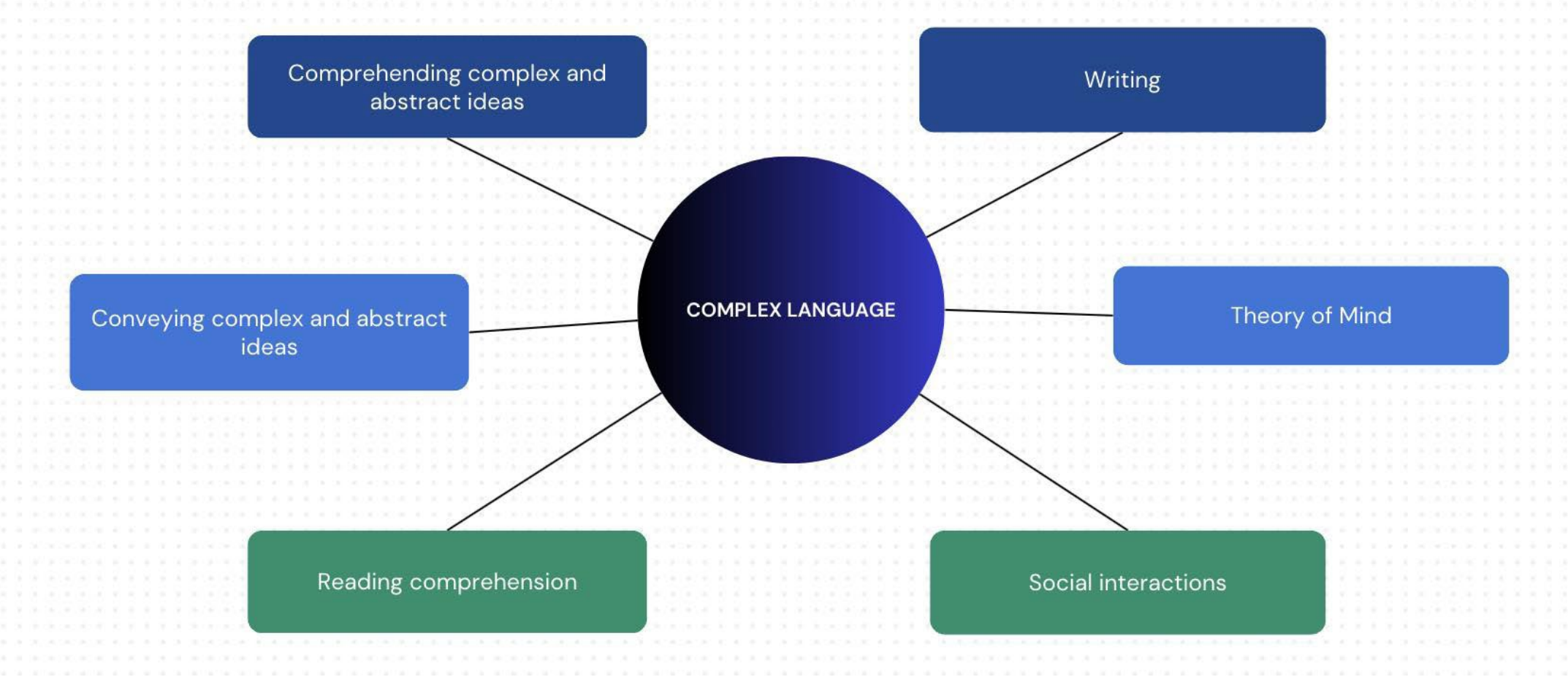
Co-authors:

P. Eadie, L. Graham and S. Leitão

Spoken language development and deaf children

- Deaf children present with a wide variety of language and literacy profiles unique to this population.
- Even with advancements in early identification, technology, and early intervention, many deaf children continue to show language difficulties when compared to their typically hearing peers.
- These difficulties are across multiple aspects of language including phonology, vocabulary, and morphosyntax.
  - One area that has been explored minimally is complex syntax.

Importance of Complex Language



Kyle & Harris, 2020; Mayberry et al., 2011; Schick et al., 2007; Yoshinaga-Itano et al., 1996)

What do we know about complex syntax use in deaf children?

ASHA American Speech-Language-Hearing Association

JSLHR

Review Article

Complex Language Use in Children With Hearing Loss: A Scoping Review

Sharon Klieve,[a] Patricia Eadie,[a] Lorraine Graham,[a] and Suze Leitão[b]

[a] Melbourne Graduate School of Education, University of Melbourne, Victoria, Australia [b] Curtin School of Allied Health, Curtin University, Perth, Western Australia, Australia

Spoken complex syntax in deaf children

- Relative paucity of fine-grained research, much only reporting on broad measures of language and attainment gaps
- Broadly improved outcomes when compared to outcomes from earlier research (pre-1990s)
- Variability but many deaf children still experience difficulties with increasing complexity, variety and accuracy of spoken complex syntax

What do we know about assessment of spoken complex syntax in deaf children?

- Assessment of complex syntax not simple and further examination is needed to develop better assessment protocols so comprehensive profiles of complex syntax can be developed

- Assessment needs to couple broad measures with detailed linguistic descriptions to allow for both
  - Prediction of group differences
  - Identified strengths and challenges in spoken complex syntax

Development of novel assessment protocol

When undertaking descriptive language studies, it is preferable to gather data using a combination of different collection methods, as formal assessments alone may not fully capture a child's natural communication skills.

A novel assessment protocol was developed, incorporating

1. standardized subtests,
2. diverse language sampling contexts, and
3. targeted syntactic elicitation tasks.

Methods: Standardized measures

Peabody Picture Vocabulary Test, 5th Ed. (PPVT-5)

Comprehension evaluation of Language Fundamentals, 5th Ed. (CELF-5) **sentence level subtests**

Language sampling across contexts

Context and elicitation methods impact:

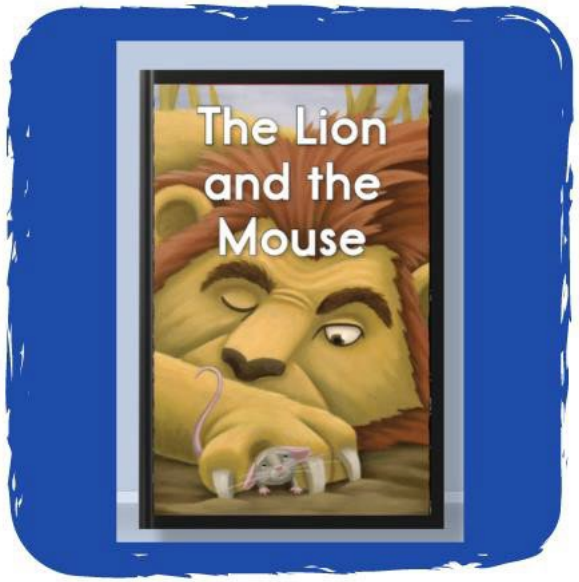
- length
- syntactic complexity
- structure of the resultant samples

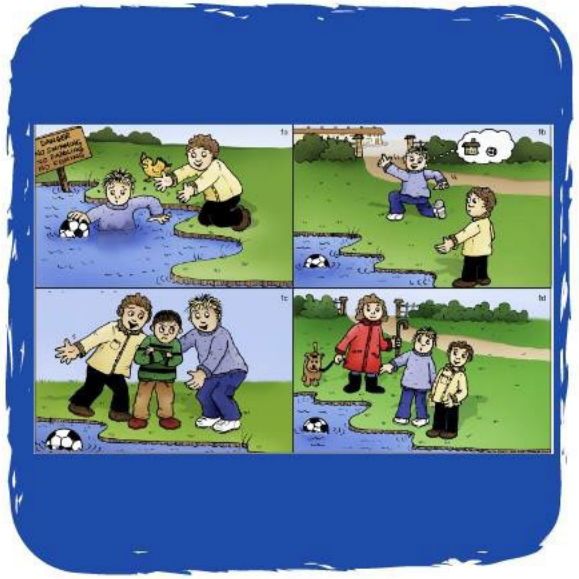
Due to these influences, sampling children's spontaneous language across more than one context is recommended (Price et al., 2010) to adequately challenge children's spoken language abilities and ensure their strengths and challenges are revealed across both semantics and syntax

Methods: Language sampling

Language was elicited across a variety of contexts and genres to obtain a broad picture of children's complex language skills including

1. narrative generation
2. narrative retell
3. expository generation
4. peer conflict resolution task





(Nippold et al., 2005; Nippold et al., 2014; Westerveld, 2011; Westerveld & Moran, 2013).

Elicitation Tasks

If a particular syntactic structure of interest is absent in a sample, it may be unclear whether this represents a lack of knowledge of the structure or a lack of opportunities in the specific discourse context (Crain & Thornton, 1991; Steel et al., 2013).

One way to address this difficulty is to use a bespoke measure designed to elicit the focus structure

An elicitation task is more structured than a language sample and prompts children to produce a particular construction that they might not produce or might produce only infrequently in a language sampling task.

Methods: Elicitation task & vocabulary

Symbol	Rating	Points
	1. I don't remember having seen this word before	1 point
	2. I have seen this word before, but I don't think I know what it means	2 points
	3. I have seen this word before and I think it means _____ (synonym or translation)	3 points
	4. I know this word. It means _____ (synonym or translation)	4 points
	5. I can use this word in a sentence: _____ (also can do section 4)	5 points

Scene: in the classroom

Researcher:	It is lunchtime
[recorded]	Seahorse can't open his lunchbox.
	He doesn't have any arms
	He wants octopus to open his lunchbox.
Researcher:	Seahorse asked……
[live]	You tell the scientist
	Seahorse ……..(with rising intonation)
Child:	_____
	[Target: *Seahorse asked octopus to open the lunchbox*]

Research questions

1. Compared with age-matched peers, does complex syntax use in CHL differ in the ***frequency*** of complex syntactic constructions?

2. Compared with age-matched peers, does complex syntax use in CHL differ in the ***variety*** of complex syntactic constructions?

3. Compared with age-matched peers, does complex syntax use in CHL differ in the ***accuracy*** of complex syntactic constructions?

4. What difficulties do CHL show in their use of complex syntax?

Participants

18 eight- ten-year-old children with hearing loss (CHL) aged

22 eight -ten-year-old children with typical hearing (CTH)

- Permanent bilateral hearing loss ranging from moderate to profound
- Spoken language as main mode of communication
- Amplification type varied
- CHL age-matched to CTH peer within 3-6 months
- Recruited nationally with majority from the Australian state of Victoria rural and metropolitan areas across a range of socioeconomic categories

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FINDINGS

Do deaf children show differences in standardized language measures?

Assessment	CHL *M (SD)*	CTH *M (SD)*	*p*	*d*
PPVT-5	92.06 (15.33)	106.4 (6.46)	< .001*	1.22
CELF-5 FS ScS	8.5 (4.15)	11.11 (1.65)	.009*	.828
CELF-5 RS ScS	8.72 (4.39)	11.72 (1.84)	.006*	.891

Sentence and word level

- Deaf children as a group in the average range
- BUT significant difference to CTH
- Wide variance

Do deaf children display difficulties and/or strengths in *earlier developing* complex constructions such as complement clauses?

CHL percent accurate	CTH percent accurate
SIs = 73.2% FPCs = 67.8%	SIs = 92.5% FPCs = 85.6%

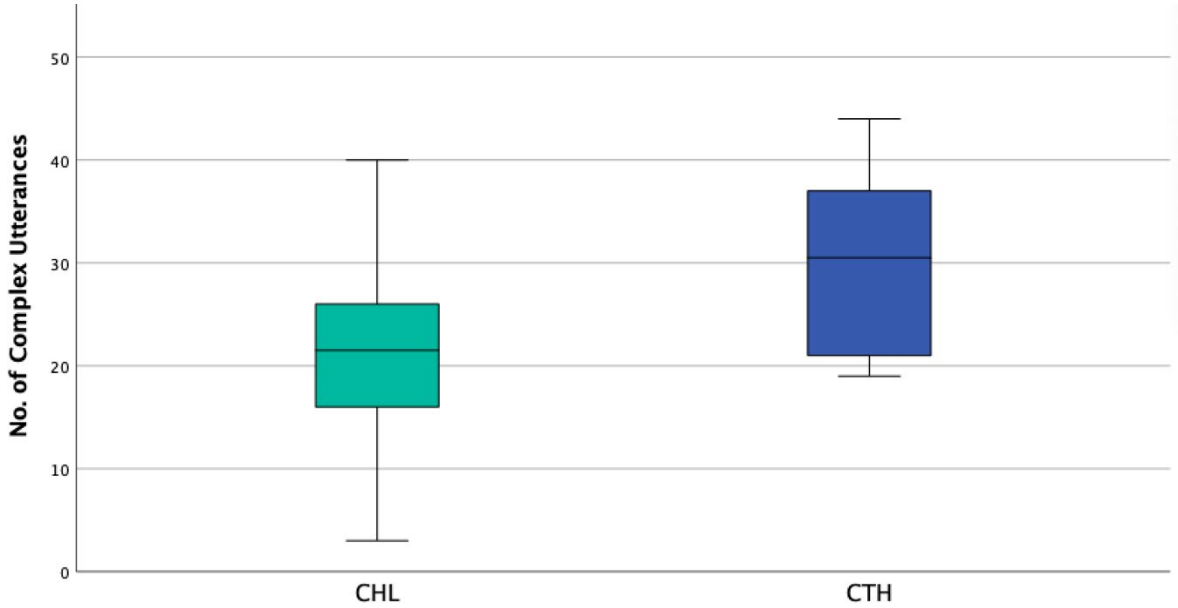
- CHL exhibited reduced accuracy in the earlier developing complement clauses
- CHL substituted simpler utterances which often contained syntactic and semantic errors

Understanding of matrix verbs

- Demonstrated understanding of a range - pointing to complex syntax had greater impact on accuracy
- CHL used a range of cognitive verbs, but errors were widely distributed

Compared with age-matched peers, does complex syntax use differ in *frequency?*

- Similar utterance length (MLUw)
- CHL produce significantly fewer complex utterances than CTH
- Substantial variability demonstrated by the deaf children



Compared with age-matched peers, does complex syntax use differ in *variety*?

Full range of complex syntax types produced by CHL including:

- coordinate clauses
- subordinate clauses
- embedded clauses

BUT Less productive

- Clinically significant differences when compared to CTH

Similar range of functions or types **within** the different clause types

- Equivalence in proportionality
- Less productive
- CHL show continued growth and development BUT not “catching up”

Compared with age-matched peers, does complex syntax use in CHL differ in *accuracy*?

- The deaf children exhibited reduced accuracy across all three complex syntax clause types.
- Clinically significant differences
- The deaf children showed substantial individual variability
- In contrast, the children with typical hearing exhibited few, if any, errors in their productions of complex syntax.

What difficulties do deaf children show in their use of complex syntax?

Language sample analysis

Errors

- Morphologic, syntactic, and semantic errors in deaf children's complex syntax use
- Substantial variability
- CTH had no or few errors but when they did occur more likely to be semantic or syntactic

Sentence level standardised measures

- Relatively even spread of errors across the different morphological, semantic, and syntactic systems
- Even when language and processing demands increased, the error patterns did not significantly alter
- Breaks down across multiple levels regardless of level of complexity.

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SIGNIFICANCE OF THE RESEARCH

Clinical implications

Relying on standardised language assessments appears to **overestimate** the skills of CHL and mask ongoing vulnerabilities

- CHL as a group may score in the average range but there are still **significant** differences and wide **variability**
- Item and error analysis is crucial for understanding of individual strengths and challenges
- When fine-grained analyses are undertaken, there are differences, and those differences are impactful

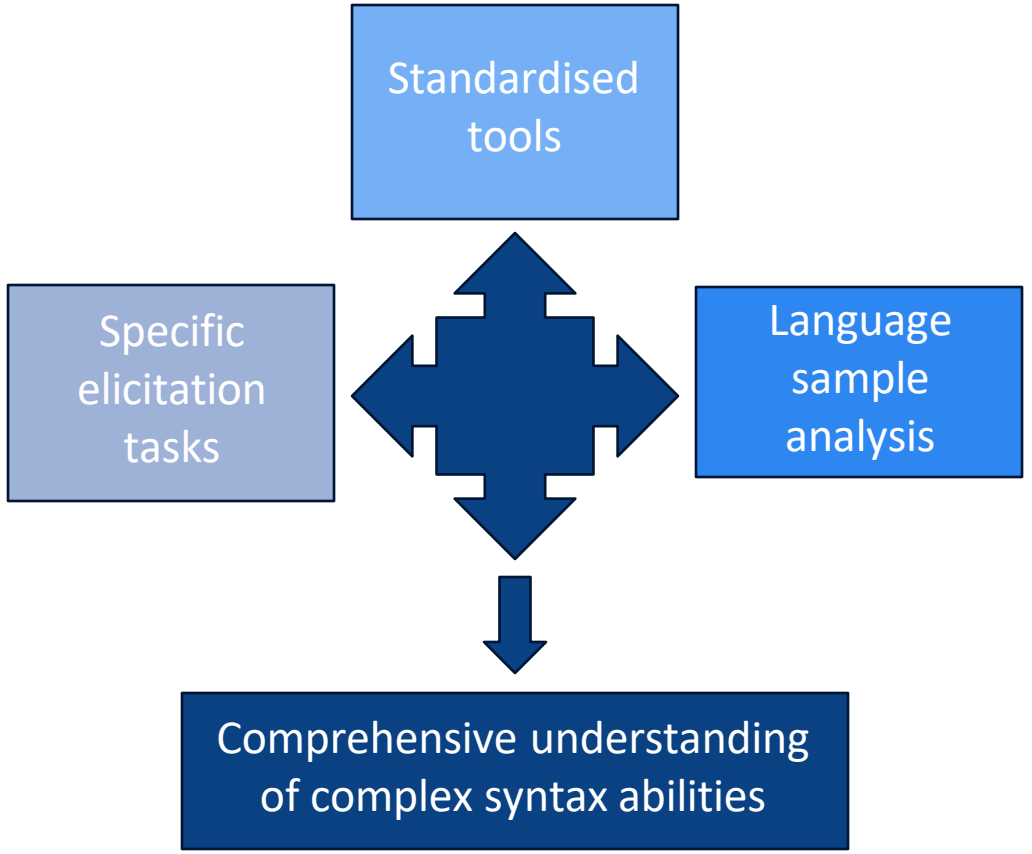
Clinical implications

- CHL demonstrated similar utterance length to CTH **BUT** longer sentence length did not imply more advanced syntactic development
- CHL are accessing and attempting the full range of complex syntactic forms **BUT** less ***productive***, ***flexible***, and ***accurate*** in their productions across earlier emerging and later developing complex syntax – sustained difficulties
- Range and proportion of CHL use appear to exhibit similar patterns in younger CTH **BUT** "not catching up" over time.

Assessment of complex language

Collecting and **analysing language samples**, in addition to **item analysis**, will allow for better identification of CHL's complex syntax strengths and weaknesses.

To gain more detailed information about competency in specific complex constructions, it is important to use specifically designed **elicitation tasks** that can actively sample **key syntactic constructions**.



Including assessment of vocabulary

Is **lexical retrieval** a relative strength or is it contributing to complex syntax challenges.

It is key to assess **depth** as well as **breadth** and utilise **dynamic** as well as **static** assessment.

Different types of vocabulary assessment tools provide different types of information and may include

- Standardised assessments (breadth)
- Assessments based on psycholinguistic models of speech processing (depth)
- Dynamic assessment (ZPD)

Educational implications

CHL appear to be less **linguistically flexible** with a **reduced repertoire** of both simple and complex syntactic constructions to draw on.

- They demonstrate clinically significant differences in both **lexical** and **syntactic** diversity
- CHL are less able to provide accurate linguistic alternatives which are appropriate to the communicative context

To foster linguistic flexibility, it is important to facilitate both vertical and horizontal growth in complex language skills as part of classroom instruction

1. ***vertical growth*** facilitating the increased variety of complex syntax types
2. ***horizontal growth*** facilitating increased variety and complexity within each complex syntax type (Barako Arndt & Schuele, 2013).

- For example, teaching a range of cognitive verbs or expanding the range of ways that a communicative function can be achieved.

Importance of considering interactions and interrelationships

Important to consider the interactions between language domains and the interrelationships between language and cognitive capacities.

- Intervention cannot solely focus on one area of language
- All areas need to be considered, including how one area of language interacts with another.

Suggests CHL experience difficulties with complex syntax due to imposed high-processing loads, and this results in breakdowns occurring at multiple levels of sentence production.

- Developing comprehensive language profiles for CHL is key to being able to balance the complexity related to their current skill levels across different systems.
- For example, controlling the lexicon used to known vocabulary when introducing a new complex syntactic structure.

Future directions

References

Barako Arndt, K., & Schuele, C. M. (2013). Multiclausal utterances aren't just for big kids: A framework for analysis of complex syntax production in spoken language of preschool and early school-age children. *Topics in Language Disorders*, *33*(2), 125–139. https://doi.org/10.1097/TLD.0b013e31828f9ee8

Bock, K., & Levelt, W. (1994). Language production: Grammatical encoding. In M. A. Gernsbacher (Ed.), *The handbook of psycholinguistics* (pp. 945–984). Academic Press Inc.

Curtin, M., Dirks, E., Cruice, M., Herman, R., Newman, L., Rodgers, L., & Morgan, G. (2021). Assessing parent behaviours in parent–child interactions with deaf and hard of hearing infants aged 0–3 years: A systematic review. *Journal of Clinical Medicine*, *10*(15), Article 15. https://doi.org/10.3390/jcm10153345

Kaplan, D., & Berman, R. (2015). Developing linguistic flexibility across the school years. *First Language*, *35*(1), 27–53. https://doi.org/10.1177/0142723714566335

Klieve, S., Eadie, P., Graham, L., & Leitão, S. (2023). Complex language use in children with hearing loss: A scoping review. *Journal of Speech, Language & Hearing Research*, *66*(2), 688–719. https://doi.org/10.1044/2022_JSLHR-22-00270

Kyle, F. E., & Harris, M. (2010). Predictors of reading development in deaf children: A 3-year longitudinal study. *Journal of Experimental Child Psychology*, *107*(3), 229–243. https://doi.org/10.1016/j.jecp.2010.04.011

Nippold, M., Frantz-Kaspar, M., Cramond, P., Kirk, C., Hayward-Mayhew, C., & MacKinnon, M. (2014). Conversational and narrative speaking in adolescents: Examining the use of complex syntax. *Journal of Speech, Language, and Hearing Research*, *57*(3), 876–886. https://doi.org/10.1044/1092-4388(2013/13-0097)

Nippold, M., Hesketh, L., Duthie, J., & Mansfield, T. (2005). Conversational versus expository discourse: A study of syntactic development in children, adolescents, and adults. *Journal of Speech, Language, and Hearing Research, 48*(5), 1048-1064. https://doi.org/10.1044/1092-4388(2005/073)

Stackhouse, J., & Wells, B. (1997). *Children's speech and literacy difficulties 1: A psycholinguistic framework*. Whurr Publishers.

Steel, G., Rose, M., Eadie, P., & Thornton, R. (2013). Assessment of complement clauses: A comparison between elicitation tasks and language sample data. *International Journal of Speech-Language Pathology*, *15*(3), 286–295. https://doi.org/10.3109/17549507.2013.777852

Westerveld, M. (2011). Sampling and analysis of children's spontaneous language. From research to practice. *ACQuiring Knowledge in Speech, Language & Hearing*, *13*(2), 63–67.

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Thank you

Empowering Inclusion - Deaf Education within our school community

Lynda Exell, Julianne Impey & Jenny Galloway

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Victorian Deaf Education Institute

Empowering Inclusion-

Deaf Education within our School Community

Acknowledgement of Country

Methodist Ladies College

Independent Girls School est 1882

Melbourne Eastern suburbs

3 Campuses Kew, Banksia & Marshmead

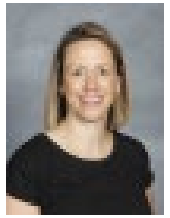
Prep – Year 12

Enrolment 2200 students

MLC ToD's

Lynda Exell Deaf Education Co-Ordinator

Juli Impey Senior School Teacher of the Deaf



Jenny Galloway Junior School Teacher of the Deaf

MLC Deaf Education

Established in 1986

20 DHH students

Prep – Year 12

3 ToD's 5 Support Staff Notetakers/Educational Interpreters

In-class support & 1:1 Teaching

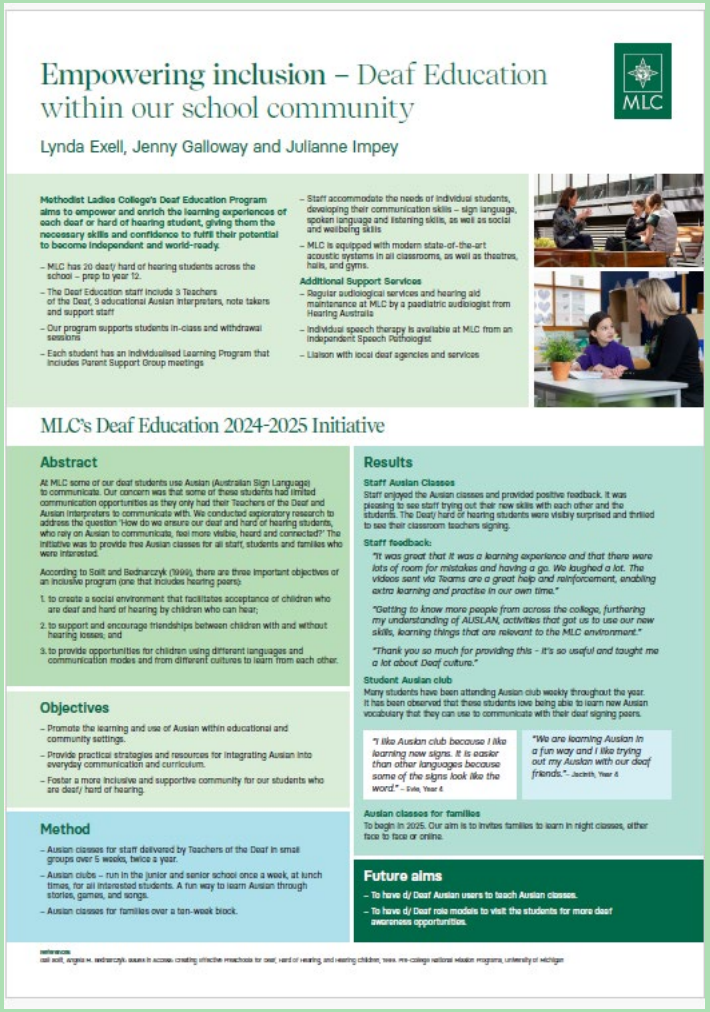
Acoustic Systems in Learning Spaces

Liaise with external deaf agencies & services

Maintaining connections with MLC Alumnae

MLC's Deaf Education 2024-2025 Initiative

The value of Inclusion



Empowering inclusion – Deaf Education within our school community

Lynda Exell, Jenny Galloway and Julianne Impey

Methodist Ladies College's Deaf Education Program aims to empower and enrich the learning experiences of each deaf or hard of hearing student, giving them the necessary skills and confidence to fulfil their potential to become independent and world-ready.

- MLC has 20 deaf/ hard of hearing students across the school – prep to year 12.
- The Deaf Education staff include 3 Teachers of the Deaf, 3 educational Auslan interpreters, note takers and support staff
- Our program supports students in-class and withdrawal sessions
- Each student has an Individualised Learning Program that includes Parent Support Group meetings
- Staff accommodate the needs of individual students, developing their communication skills – sign language, spoken language and listening skills, as well as social and wellbeing skills
- MLC is equipped with modern state-of-the-art acoustic systems in all classrooms, as well as theatres, halls, and gyms.

Additional Support Services

- Regular audiological services and hearing aid maintenance at MLC by a paediatric audiologist from Hearing Australia
- Individual speech therapy is available at MLC from an independent Speech Pathologist
- Liaison with local deaf agencies and services

MLC's Deaf Education 2024-2025 Initiative

Abstract

At MLC some of our deaf students use Auslan (Australian Sign Language) to communicate. Our concern was that some of these students had limited communication opportunities as they only had their Teachers of the Deaf and Auslan interpreters to communicate with. We conducted exploratory research to address the question 'How do we ensure our deaf and hard of hearing students, who rely on Auslan to communicate, feel more visible, heard and connected?' The initiative was to provide free Auslan classes for all staff, students and families who were interested.

According to Solit and Bednarczyk (1999), there are three important objectives of an inclusive program (one that includes hearing peers).

1. to create a social environment that facilitates acceptance of children who are deaf and hard of hearing by children who can hear;
2. to support and encourage friendships between children with and without hearing losses; and
3. to provide opportunities for children using different languages and communication modes and from different cultures to learn from each other.

Objectives

- Promote the learning and use of Auslan within educational and community settings.
- Provide practical strategies and resources for integrating Auslan into everyday communication and curriculum.
- Foster a more inclusive and supportive community for our students who are deaf/ hard of hearing.

Method

- Auslan classes for staff delivered by Teachers of the Deaf in small groups over 5 weeks, twice a year.
- Auslan clubs – run in the junior and senior school once a week, at lunch times, for all interested students. A fun way to learn Auslan through stories, games, and songs.
- Auslan classes for families over a ten-week block.

Results

Staff Auslan Classes

Staff enjoyed the Auslan classes and provided positive feedback. It was pleasing to see staff trying out their new skills with each other and the students. The Deaf/ hard of hearing students were visibly surprised and thrilled to see their classroom teachers signing.

Staff feedback:

"It was great that it was a learning experience and that there were lots of room for mistakes and having a go. We laughed a lot. The videos sent via Teams are a great help and reinforcement, enabling extra learning and practise in our own time."

"Getting to know more people from across the college, furthering my understanding of AUSLAN, activities that got us to use our new skills, learning things that are relevant to the MLC environment."

"Thank you so much for providing this - it's so useful and taught me a lot about Deaf culture."

Student Auslan club

Many students have been attending Auslan club weekly throughout the year. It has been observed that these students love being able to learn new Auslan vocabulary that they can use to communicate with their deaf signing peers.

"I like Auslan club because I like learning new signs. It is easier than other languages because some of the signs look like the word." – Evie, Year 6

"We are learning Auslan in a fun way and I like trying out my Auslan with our deaf friends." – Jacinth, Year 6

Auslan classes for families

To begin in 2025. Our aim is to invites families to learn in night classes, either face to face or online.

Future aims

- To have d/ Deaf Auslan users to teach Auslan classes.
- To have d/ Deaf role models to visit the students for more deaf awareness opportunities.

references
nell exell, angela m. bednarczyk. issues in access: creating effective preschools for deaf, hard of hearing, and hearing children, iowa. pre-college national mission programs, university of michigan

Abstract

How do we ensure our Deaf and hard of Hearing students, who rely on Auslan to communicate, feel more visible, heard and connected?’

Objective

Promote learning and the use of Auslan within educational and community settings

Provide practical strategies and resources for integrating Auslan into everyday communication and curriculum

Foster a more inclusive and supportive community for MLC's Deaf/hard of hearing

Method

Staff Auslan

Auslan Club

Auslan Classes

Projects

Results

"It was great that it was a learning experience and that there were lots of room for mistakes and having a go. We laughed a lot. The videos sent via Teams are a great help and reinforcement, enabling extra learning and practise in our own time."

"Getting to know more people from across the college, furthering my understanding of AUSLAN, activities that got us to use our new skills, learning things that are relevant to the MLC environment."

"Thank you so much for providing this - it's so useful and taught me a lot about Deaf culture."

Junior school Auslan Club

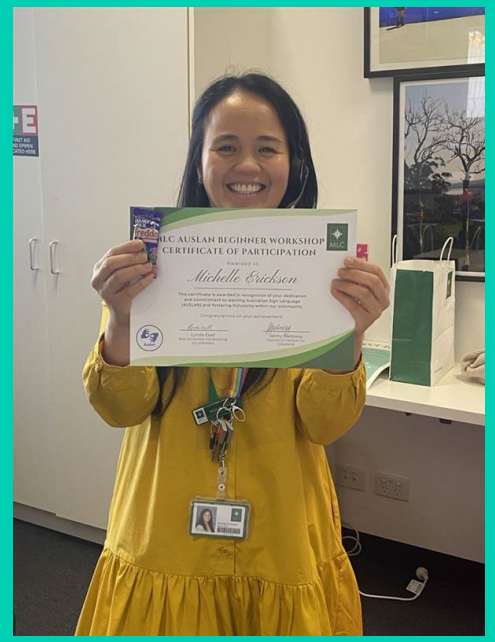
Auslan Club

"I like Auslan club because I like learning new signs. It is easier than other languages because some of the signs look like the word." – Evie, Year 4

"We are learning Auslan in a fun way and I like trying out my Auslan with our deaf friends."– Jacinth, Year 4

Staff Auslan

"We laughed a lot. There was room for mistakes and having a go. And it's been so useful for understanding Deaf culture."



Future Aims

To have Deaf Auslan users to teach Auslan classes

To have Deaf Role models to visit for further deaf awareness opportunities

To create Auslan resources to continue connections with the MLC community

ICED 2025 Rome

more than words

Thank you

The association between early life access to communication and mental health outcomes among deaf people: findings from a national survey of the Australian deaf community

Ramas McRae

VICTORIA

VICTORIA State Government | Department of Education

Victorian Deaf Education Institute

The association between early life access to communication and mental health outcomes among deaf people: Findings from a national survey of the Australian deaf community.

Ramunas McRae

VDEL 2025

Supervisors:
Dr. Amie O'Shea
Prof. Kathryn Backholer
A/Prof. Robert Adam

DEAKIN UNIVERSITY

Outline

Background
Methods
Results
Conclusion

Background

Deaf and hard of hearing (DHH) Australians report higher rates of adverse mental health outcomes.

Early communication experiences are crucial in shaping mental health outcomes.

Limited research exists on how DHH individuals perceive the impact of early communication on their adult mental health.

Methods

Quantitative: Retrospective cohort survey (340 participants)

Logistic regression models

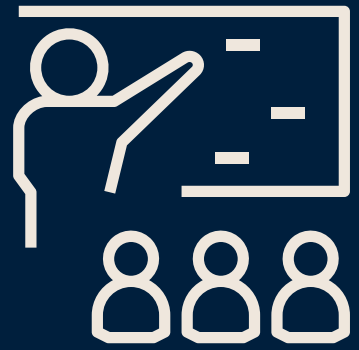
Results

Key variables: Early life communication access (age at which participant learnt Auslan, Auslan skill level, age participants became deaf, primary and secondary school types, feeling included in family conversation, access to deaf spaces before 18 years of age).

Results

Quantitative study

Feeling excluded vs included in family conversation



Mainstream school with/without deaf unit vs deaf school

Lack of access vs attendance at deaf spaces before 18 years old

Current Auslan skill - basic vs fluent

Results

Quantitative study

Feeling excluded vs included
in family conversation

Poor general mental health

X3

Results

Quantitative study

Lack of access vs attendance at deaf spaces

Poor general mental health

X1.7

Results

Quantitative study

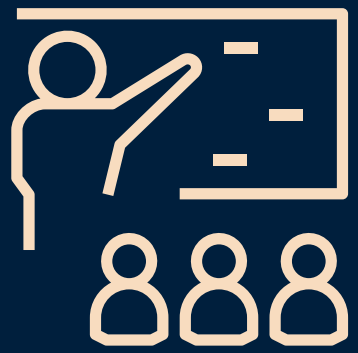
Current Auslan skill - basic vs fluent

Poor general mental health

X 0.44

Results

Quantitative study



Mainstream school with/without deaf unit vs deaf school

Depression

Mainstream school

Primary	Secondary
X3.5	X2.6

Suicidal ideation

Mainstream school		Mainstream school with deaf unit	
Primary	Secondary	Primary	Secondary
X4.10	X2.4	X3.8	X2.8

For your consideration...

Mainstream education and speech training are often prioritised for deaf children, but are these decisions truly centred on the child's well-being, or shaped by hearing adults' expectations (families/professionals)? And have we fully considered the long-term impact on deaf children's mental health?

Thank you

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Visiting Teachers of the Deaf and Reading Support: Views, Knowledge and Practices

Sharron Woolfe

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Visiting Teachers of the Deaf and Reading Support: Views, Knowledge and Practices

Dr. Sharron Woolfe,
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With Thanks and Recognition

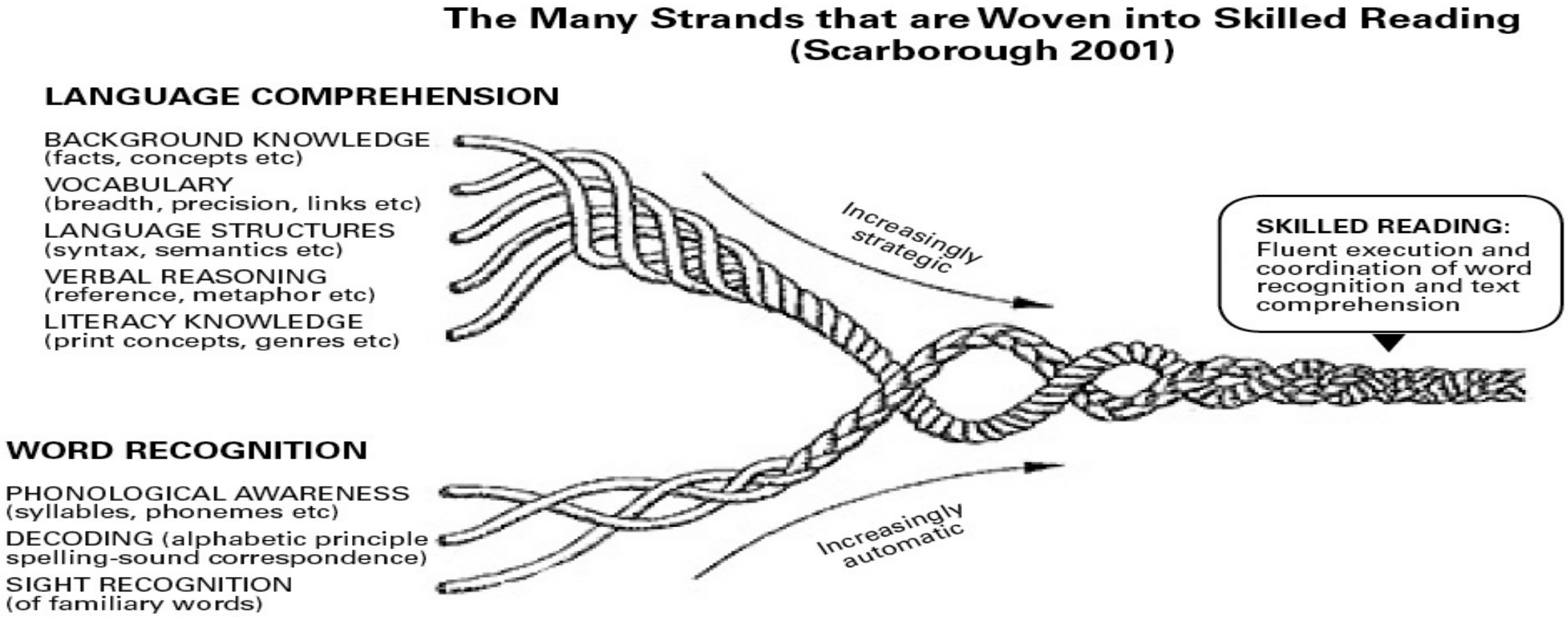
Thank you to the Victorian Visiting Teachers of the Deaf who gave of their time and expertise generously in completing a survey and/or participating in interviews.

I learned so much from your wonderful contributions and sharing of wisdom.

Why the research

- Majority of DHH students now in mainstream classrooms, with many supported by Visiting Teachers of the Deaf (VTD) Foster & Cue, 2009; Luckner & Ayantoye, 2013, US studies)
- Many students on VTD caseloads achieve grade appropriate reading levels but many do not.
- 365 US VTD rated the reading levels of one randomly selected student on their caseload. 28% of the students were one year delayed in reading, and 36% two or more years behind (Luckner & Ayantoye, 2013).
- Davison-Mowle (2016) found 50 percent of the 18 Australian students they studied on VTD caseloads were below grade level in reading.

Why reading delays for DHH students continue: impact of hearing loss on underlying reading skills.



Research Questions

1)What are the views of the Visiting Teachers of the Deaf in Victoria, regarding the provision of reading support to their students?

2)What do Victorian VTD know about developing their students' code-based reading skills?

3) What are the practices of the Victorian VTD when providing reading support to their students?

Research Methods and Tools

- Mixed methods to investigate knowledge, views and practices of the VTD in relation to reading support

Research Tools:

- Survey: anonymous online survey (33 items) 26 Participants
- Interviews: one hour semi-structured (face to face or zoom)

(9 participants: all with specialist TOD training).

Survey Participants: N=26

- 23 VTD from Department of Education and Training, 1 from Catholic Education Melbourne and 2 worked with students in the independent school system
- All had a specialized qualification in education for DHH students
- 69% of the VTD had at least 11 years experience teaching DHH students, with 46% of the ITD having 21 or more years experience in this field

Interview Participants N=9

Specialist Training
All had specialist training in the field of Deaf Education.
Years of Experience
6/9 had 10 plus years of experience. 2 of these 21 plus.
Education Setting
Department of Education and Training, Victoria : 9
Metropolitan : 5
Rural : 4

VTD views about their role in relation to providing reading support

Survey Question:

Do you see the provision of reading support to students with hearing loss on your caseload as part of your Itinerant Teacher of the Deaf role? Yes/No

Survey Results: All 26 VTD replied Yes

22 VTD explained their choices and their explanations were coded according to factors stated by the ITD

All nine interviewed VTD also viewed the provision of reading support as part of their role and provided many examples of how they do this.

Views: Approaches for Providing Reading Support Endorsed by the VTD, N=26

Approach to Reading Support	Numbers of VTD endorsing approach
Direct Support in VTD lessons	25
Advice and Collaboration with Teachers	26
Collaboration with Other Professionals Supporting the Student	24
Advice to Parents	22
No Support	0

Reasons supplied for reading support to be part of VTD Role

1) Numbers of Students with Reading Difficulties

-50% average across the caseloads of 17 DET VTD caseloads

2) Impact of hearing loss on phonological skills and language skills.

3) VTD found mainstream school staff sometimes misunderstood the best ways to help DHH students' reading skills.

"often don't understand the limitations of the hearing loss or can't identify the issue. Teachers keep trying the same thing and when that doesn't work, they have few other ideas".

"Vocabulary is generally not tested in the school population. Teachers are often unaware that the students really don't understand the text"

Reasons for Need for VTD Support with Reading Skills continued

4) Challenges to schools and classroom teachers in being able to provide sufficient support.

-busy classrooms -busy curriculum

-noise levels -overstretched teachers

-lack of additional aides and support staff - lack of school-based interventions

Practices: Reading Skills Supported by VTD n=18

Category of Reading Skill	Reading Skill	Number of ITD supporting the skills.
Code-Based Skill	Phonological Awareness	18
	Phonemic Awareness	17
	Phonics Skills	18
	Orthographic Knowledge	15
	Sight Vocabulary	15
	Reading Fluency	16
Language Based Skill	Knowledge of Morphemes	17
	Vocabulary Skills	18
	Comprehension Skills	18
	Syntax	17
	Text Reading	17

The role of oral language skills in supporting reading skills

- **Interviewed VTD and surveyed VTD stressed the importance of language skills for underpinning reading skills.**
- **Nine interviewed VTD further commented that you need to support both language-based and code-based skills to support reading.**

- This reinforces the need for reading support to be included in the VTD role. Oral language skills will always be in the VTD role, but if a DHH student requires support with code-based reading skills then targeted teaching support for these also may be required from the VTD, if it is not being supplied by mainstream school staff.

Research included a sub-focus on code-based skills

Why: research suggests that

-Support with phonemic awareness and phonics may be very helpful for DHH students (Cupples, Crowe, Day & Seeto, 2013; Gilliver et al. 2016; Guardino, Syverud, Joyner, Nicols & King, 2011; Lederberg, Miller, Easterbrooks & Connor, 2014; Lederberg, Easterbrooks, Tucci, Burke & Goldberg, 2015;, Rahim, 2009; Trezek & Malmgren, 2005; Trezek & Wang, 2006).

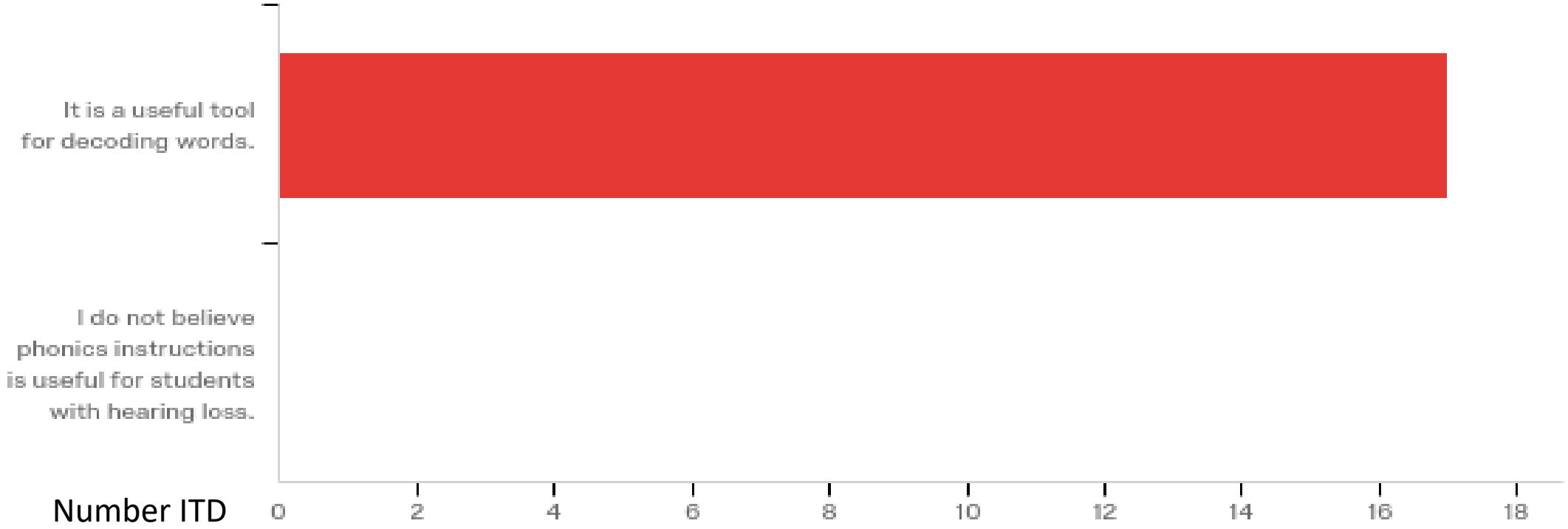
- Yet, traditionally Teachers of the Deaf (TOD) in the past did not view phonemic awareness or phonics as helpful for DHH students (Luckner & Handley, 2008).

-Some TOD may not understand the phonetic structure of words or be conversant with how to teach phonemic awareness and phonics skills (Messier & Wood Jackson, 2014).

-Some TOD may omit to teach phonemic awareness or phonics (Donne & Zigmond, 2008).

Views of the VTD regarding Phonics Instruction for DHH Students n=17

- Phonics Instruction is important for children who are deaf and hard of hearing and learning to read because (select one)



VTD provision of support for a fictitious case-study of a student with code-based reading needs. n=17

Code-Based Skill	Number of ITD listing skills
Systematic assessment of phonics/word-attack skills	6
Phonological Awareness or Phonemic Awareness	9
Teaching letter-sound correspondences	12
Teaching word-attack skills (how to sound out words)	6
Teaching phonics skills in a sequential way	7

Practices: Number of Mentions of Formal Assessments and Reading Skill Category n=18

Reading Skill Category	Assessment	Number Mentions
Reading Comprehension	PROBE Reading Assessment	9
	Oral and Written Language Scales Reading Comprehension Test (OWLS)	4
	Key into Inference	2
	Torch Reading Assessment	2
	York Assessment of Reading for Comprehension (YARC)	2
	Neale Analysis of Reading Ability	6
Phonological Awareness	Sutherland Phonological Awareness Test	7
Phonics	Educheck	3

Resources for Reading Comprehension Mentioned by VTD

Programs Total= 8 VTD **i.e. Keys into Series** **(Parkin, Parkin & Poole, 2008)**	**Workbooks Total = 7 VTD** **i.e. programs such as STARS and CARS.**	**Web-based Total=1 VTD** **Flocabulary (1)**
Teacher Made Total= 6 VTD **Reading and Discussing Texts (3)** **Games (1)** **Picture Resources (1)** **Simple Comprehension Story Lines (1)**	**Combined Phonics/Comprehension = 4 VTD** **Utilizing decodable texts (Fitzroy) (3)** **Phonics/Comprehension workbooks (1)**	**Other Total=2 VTD** **Newspaper Articles including political cartoons (2)**

Practices: Other Reading Skills

Reading Fluency Skills: strategies for support mentioned by 3/9 interviewed VTD and 1 surveyed VTD.

Morphological skills: Received little mention

Need for further training and resourcing for supporting these skills.

Implications of the Research Findings

- The role of the Visiting Teacher of the Deaf in relation to reading support is at least advisory but may at times involve the supply of direct teaching support.

-impact of hearing loss on learning to read

-50% of DHH students on caseloads with reading delays

-misunderstandings of mainstream school staff about how to intervene

-challenges to capacity of schools to provide support.

-unanimous views of the VTD surveyed

Implications of the Research Findings cont.

- Further resourcing and professional learning required for a range of reading skills.
- Similarly, further research into the most helpful strategies for supporting the reading skills of DHH students in mainstream school settings would help inform and guide the practices of VTD.

Implications for Policy Documents.

Need to include reference to reading skills in Criteria of Service Documents to inform level of student support offered.

Expanded Core Curriculum Documents: helpful to include reference to reading skills.

Inspiration from an interviewed VTD

- **So, the reading teaching that I do is the part of my job that makes me feel really productive and really proud of what we do, and it makes me feel like I'm adding a lot of value to a student's life … it's definitely important what we do, and hopefully other teachers of the deaf, are teaching reading, as detailed and as passionately, as some of us are.”** Emily.

Thanks for Listening and Questions.

- Thank you for listening.
- I can be contacted at Sharron.Woolfe@education.vic.gov.au and will be happy to assist with any questions you may have.

:Code-Based Teaching Resources Referred to by surveyed ITD n=16

Phonics (13 ITD)

Apps/Computer Software (3 ITD)

Nessy App (1 mentions)
LLLL Milo App (1 mention)
Oz Phonics App (1 mention)
Word Shark Computer Game (2 mentions)

Reading Programs (5 ITD)

Sound Check (LLLL) (4 mentions)
Phonics and Sight Word Sequence: Diana Rigg (1 mention)
Jolly Phonics (but cannot afford) (1 mention)
MULTILIT (but cannot afford or no access)) (2 mentions)

Phonic Based Spelling Programs (2 ITD)

Sound Waves (2 mentions)

Readers/Books (3 ITD)

Totem Series (High Interest Low Level Difficulty) (1 mention)
SPELD Online decodable books (1 mentions)
Sequential, synthetic phonics texts (2 mentions)

Sight Vocabulary (2 ITD)

Golden Words (1 mention)
Oxford 100/200 word lists
(1 mention)

Morphological Skills

Phonic and Sight Word Sequence: Diane Rigg (1 mention)

Orthographic Knowledge (3 ITD)

Sound Waves Spelling Program (2)
Peter Clutterbuck Spelling (1)

Reading Fluency (1 ITD)

Choral Reading/Rereading
(1 mention)

References

- Carrow-Woolfolk, E. (2011). https://www.wpspublish.com/owls-ii-oral-and-written-language-scales-second-edition
- Center on Literacy and Deafness (CLAD). Overview and Key Outcomes. Downloaded on 201/09/2024 https://sites.gsu.edu/clad/
- Cupples, L., Crowe, K., Day, J. & Seeto, M. (2013b). Predictors of early reading skill in 5-year-old children with hearing loss who use spoken language. *Reading Research Quarterly,49*(1)
- Davison-Mowle, J. (2016). *Explaining the role of the itinerant teacher to mainstream teachers.* Proceedings of the 2016 Itinerant Teacher of the Deaf Conference. RIDBC: Sydney.
- Donne, V. J. & Zigmond, N. (2008). An observational study of reading instruction for students who are deaf or hard of hearing in public schools. *Communication Disorders Quarterly, 29*(4), 219-235.
- Educheck. https://cer.schools.nsw.gov.au/content/dam/doe/sws/schools/c/cer/localcontent/from_assessment_toprogramminghandbook.pdf
- Ehri, L.C. (2020). The science of learning to read words: A case for systematic phonics instruction. *Reading Research Quarterly*, *55*(51), 545-559.
- Foster, S., & Cue, K. (2009). Roles and responsibilities of itinerant specialist teachers of deaf and hard of hearing students. *American Annals of the Deaf,* 153(5) 435-449. doi: 10, 1353/aad.0.0068.
- Flocabulary, www.flocabulary.com
- Gilliver, M, Cupples, L., Ching, T.Y.C., Leigh, G. & Gunnourie (2016). Developing sound skills for reading: Teaching phonological awareness to pre-schoolers with hearing loss. *Journal of Deaf Studies and Deaf Education, 21*(3),268-279.
- Gough, P. B. & Tunmer, W.E. (1986). Decoding ,reading and reading disability. *RASE, 7*(1), 6-10.
- Guardino, C., Syverud, S. M., Joyner, A., Nicols, H. & King, S. (2011). Further evidence of the effectiveness of phonological instruction with oral-deaf readers. *American Annals of the Deaf, 155*(5), 562-568.
- Hunter, J. & Heywood, A. (June, 2024). One in four Victorian students can't read proficiently, but the state government is taking action. Downloaded from https://www.abc.net.au/education/victorian-government-is-taking-action-on-reading-proficiency/103981246
- Lederberg, A. R., Easterbrooks, S. R., Tucci, S., Burke, V. & Goldberg, H. (2015). Effective intervention strategies for teaching early literacy skills to deaf and hard-of-hearing children. Published Proceedings from the CI 2015 Emerging Issues Symposium: Literacy and Cochlear Implantation: Outcomes and Intervention Strategies. *Cochlear Implants International.* Downloaded from http://clad.education.gsu.edu/files/2014/07/Lederberg-Easterbrooks-et-al.-Foundations-CI-International-1-wmou0b.pdf

References Continued

- Lederberg, A. R., Miller, E. M., Easterbrooks, S. R. & Connor, C. M. (2014). Foundations for Literacy: An early literacy intervention for deaf and hard-of-hearing children. *Journal of Deaf Studies and Deaf Education, 19*(4), 438-455.
- Love, E. & Reilly, S,. (2009). *A Sound Way.* 2nd Ed. Pearson: Australia.
- Luckner, J. & Ayantoye, C. (2013). Itinerant Teachers of students who are deaf or hard of hearing. Practices and preparation. *Journal of Deaf Studies and Deaf Education, 18*(3), 409-423.
- Luckner, J. & Handley, C. (2008). A summary of the reading comprehension research undertaken with students who are deaf or hard of hearing. *American Annals of the Deaf, 155(4),* 397-406.
- Messier, J. & Wood Jackson, C. W. (2014). A comparison of phonemic and phonological awareness in educators working with children who are d/Deaf or hard of hearing. *American Annals of the Deaf, 158*(5), 522-538.
- Multilit (2007). *Multilit Reading Tutor Program*, MULTILIT: Sydney
- Neale, M. D. (1999). *Neale Analysis of Reading Ability.* ACER Press: Melbourne.
- Neilson, R. *Sutherland Phonological Awareness Test, Revised. http://www.roslynneilson.com.au/tests*
- Parkin C. & Parkin, C. (2011). *PROBE 2,* Triune Initiatives.
- Parkin, C., Parking C. & Pool, B. (2010). *Key Into Inference.* Triune Initiatives.
- Parkin, C., Parkin, C. & Pool, B. (2008). *Key into Evaluation.* Triune Initiatives.
- Pollard, M. (2004). *Sound Check: Sequencing Sounds for Spelling Instruction.* Learning Logic Publishing: Melbourne.
- Rahim, Z. A. (2009). *Phonics intervention and the impact on the phonics skills, phonological awareness, speech perception, and speech production of children with hearing loss using spoken language* (Doctoral dissertation). The University of Melbourne: Graduate School of Education.
- Rigg, D. (2019). *Phonic and Sight Word Sequence-Revised Edition. Outlining the relationship between letters and sounds.* PLD Organization: Perth, W.A.

References Continued.

- Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis) abilities: Evidence, Theory and Practice. In S.B. Neuman & D. K. Dickinson (Eds.) *Handbook of Early Literacy Research,* (pp. 97-111). New York, NY: Guilford Press.
- South Australian Spelling Assessment. epresent%20their%20most%20common%20sounds%20 http://www.starjump.com.au/media/Assessment%20Tools/South%20Australian%20Spelling%20Test.pdf
- Specific Learning Difficulties, SA. *Free Online Phonics Books. https://www.speld-sa.org.au/services/phonic-books.html*
- Totem Series. Phonics Books For beginner and catch-up readers. info@phonicbooks.co.uk Australian Distributer: phonicsaustralia.com.au
- Trezek, B. J. & Malmgren, K. W. (2005). The efficacy of utilising a phonics treatment package with middle school deaf and hard-of-hearing students. *Journal of Deaf Studies and Deaf Education,10*(3), 256-271.
- Trezek, B. J. & Wang, Y. (2006). Implications of utilizing a phonics-based reading curriculum with children who are deaf or hard of hearing. *Journal of Deaf Studies and Deaf Education, 11*(2), 202-213.
- Trussell, J. W. & Easterbrooks, S. R. (2015). Effects of morphographic instruction on the morphographic skills of deaf and hard-of-hearing students. *Journal of Deaf Studies and Deaf Education, 20*(3), 229-241.
- University of Oregon, DIBELD Nonsense Word Fluency (NWGF). https://dibels.uoregon.edu/assessment/dibels/measures/nwf.php#:~:text=The%20DIBELS%20Nonsense%20Word%20Fluency,represent%20their%20most%20common%20sounds%20
- Waddington Reading Assessment. Available at https://www.wadd.com.au/reading-spell-tests-3rdedu1-site
- Webb. M. L. & Lederberg, A. R. (2014). Measuring phonological awareness in deaf and hard-of-hearing children. *Journal of Speech, Language and Hearing Research, 57*, p.131-142.
- York Assessment of Reading for Comprehension (YARC). https://www.gl-assessment.co.uk/products/york-assessment-of-reading-for-comprehension-yarc/

Deaf Role-Models for Deaf Children in Hearing Families: A Scoping Review

Angela Joy

VICTORIA

VICTORIA State Government | Department of Education

Victorian Deaf Education Institute

Deaf Role Models for Deaf Children in Hearing Families: A Scoping Review

(Journal of Deaf Studies and Deaf Education)

ANZCED 2024

Angela Joy

Teacher of the Deaf & PhD Candidate

Master of Educational Leadership, Master of Education (Deafness), Bachelor of Education (Early Childhood and Primary)

Rationale

- To explore options that address the potential of limited or delayed language exposure for Deaf children
- To provide a synthesis of current research… cultural-linguistic & audiological
- To provide policy and practice recommendations for Early Intervention for Deaf children
- Australian context

Research Question

What is known about the influence of DRMs in early intervention settings for Deaf children born into hearing families?

Inclusion criteria

- post 2000
- peer-reviewed empirical research
- focusing on early intervention
- Deaf role models, not parent role models

Seven reviewed articles

- Responses of close to 1000 Deaf and hearing participants from Africa, North America, including the USA, South America, the UK, Greece, Bulgaria, Malta and other parts of Europe, Australia, and Asia

- Thematic analysis – 5 themes: ‘Deaf Gain’, Effective Communication, developmental influences, Family attitudes & Administration of DRM programs

‘Deaf Gain’ & associated Cultural Capital

- Lived experience / cultural wealth / Deaf-centric knowledge / shared life experiences
- Diversity
- Deaf children of Deaf parents have higher developmental outcomes

Effective Communication

- Accessible language
- Bilingual bimodalism
- Consequences of delayed language acquisition

Developmental Influences

- Language development
- Identity development
- Psychosocial development

Family (or caregiver) attitudes to Deafness

- Audiological deficit / socio-cultural identity
- Difference / disability
- The role of the Deaf role models

Administration of DRM programs

- Early detection and early intervention
- Training and resource provision for DRMs (including funding)
- Formal or informal DRMs
- DRM perspective or personal experiences
- Hearing people as Deaf advocates

What does this mean for Australia?

- 300 + children
- Unwitting audiological bias in Australia, and worldwide
- DRMs involved from the point of identification

In Summary…

- Recent returned interest to Deaf role-model programs
- 5 themes: ‘Deaf Gain’, Effective Communication, developmental influences, Family attitudes & Administration of DRM programs
- Gap in the literature: family perspective & reflective Deaf perspective… need for further research

References

Fobi, D., Swanwick, R., Asomaning, D., & Doku, R. (2022). Promoting Deaf-adults' participation in early care and education of Deaf children. Journal of Deaf studies and Deaf Education, 28(2), 136-145. https://doi.org/10.1093/deafed/enac040

Gale, E., Berke, M., Benedict, B., Olson, S., Putz, K., & Yoshinaga-Itano, C. (2021). Deaf adults in early intervention programs. Deafness & Education International, 23(1), 3-24. https://doi.org/10.1080/14643154.2019.1664795

Giaouri, S., Hatzopoulou M., Karipi S., Anastasia Alevriadou, A., & Kourbetis. V. (2022). The role of Deaf practitioners as role models and sign language teachers in three European countries. Trends in Psychology. https://doi.org/10.1007/s43076-022-00242-y

Golos, D. B., Moses, A. M., Roemen, B. R., & Cregan G. E. (2018). Cultural and linguistic role models: A survey of early childhood educators of the Deaf. Sign Language Studies, 19(1), 40-74. https://doi.org/10.1353/sls.2018.0025

References (continued)

Hamilton, B., & Clark, M. D. M. (2020). The Deaf mentor program: Benefits to families. Psychology, 11, 713-736. https://doi.org/10.4236/psych.2020.115049

Rogers, K., & Young, A. (2011). Being a Deaf role model: Deaf people's experiences of working with families and Deaf young people. Deafness & Education International, 13, 2-16. https://doi.org/10.1179/1557069x10y.0000000004

Shuler-Krause, E., & White, K. R. (2019). Involvement of adults who are Deaf or hard of hearing in EHDI programs. The Journal of Early Hearing Detection and Intervention, 4(1), 54-61. https://doi.org/10.26077/x154-8175

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PhD (Thesis by publication)
"The Influence of Deaf Role Models for Deaf Children Born into Hearing Families"

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Preliminary data regarding word classes used by young Auslan learners in Australia

Erin West

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VICTORIA State Government | Department of Education
Victorian Deaf Education Institute

PRELIMINARY DATA REGARDING WORD CLASSES USED BY YOUNG AUSLAN LEARNERS IN AUSTRALIA

Dr Erin West[1]

Associate Professor Shani Dettman[1,2]

1. The University Of Melbourne, Department of Audiology and Speech Pathology
2. Cochlear Implant Clinic, Royal Victorian Eye And Ear Hospital

CURRENT GAP IN THE RESEARCH

- There are no models of expected trajectories for children learning Auslan.

- Without this information we do not know how children are progressing in their acquisition.

WE NEED MORE DATA

HANDSHAPE ANALYSIS RECORDING TOOL (HART)

- Developed to address the need to document Auslan productions quickly and easily
- Involves scoring a sign according to four phonological parameters: Location; Movement; Handshape and Orientation
- Comment box to note additional information including non-manual features

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WORD CLASSES

West E, Dettman S, & Holt C. (2025). Australian Sign Language lexicons in a bilingual-bicultural program. *Journal of Speech Language & Hearing Research*, *68*(6), 2851-2870. doi: 10.1044/2025_JSLHR-24-00651

- We wanted to look at the make up of spontaneous vocabularies:
- Nouns, verbs, other word classes?
- Would there be a verb bias?
- Note: The proportion of verbs was used as a 'proxy' for sophistication of the language. That is younger children using spoken language tend to start with nouns, and add more verbs as their lexicon develops.

WORD CLASSES- RESULTS

- Based upon analysis of 3003 lexical signs
- Predominantly nouns - **54.1**% of corpus
  - Higher than 43.5% reported at 30 months on MB-CDI *(Fenson et al., 1994)*
- Low proportion of verbs given ages of children (3-6.8 years) only **15.8**% of corpus.
  - Less than 23.2% at 30 months on MB- CDI in English
  - Less than reported for other sign languages (ASL; Sign Language of the Netherlands; Italian Sign Language)
- High proportion of adjectives - **21**% of corpus. Colours frequently used - 5.5% of whole corpus
  - More than 9.8% at 30 months on MB-CDI in English *(Fenson et al., 1994)*
  - High levels of adjectives not seen in ASL *(Anderson and Reilly, 2002)*

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IMPLICATIONS

High levels of adjectives and low percentage of verbs may be related to:

- age of the children
- difference in setting- this data was gathered in a school rather than home
- difference in modelling by education staff rather than caregivers

ASHA American Speech-Language-Hearing Association

JSLHR

Research Article

Australian Sign Language Lexicons in a Bilingual–Bicultural Program

Erin West,[a] Shani Dettman,[a] and Colleen Holt[b]

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ABSTRACT

Purpose: The aim of the study was to describe the expressive sign vocabularies of a group of children learning Australian Sign Language (Auslan).
Method: The spontaneous signs of 44 children aged 3.0–6.8 years enrolled in one early-years bilingual–bicultural educational program were documented using a new approach, the Handshape Analysis Recording Tool, across a 2-year period. The resultant corpus was analyzed to determine the frequency of word classes including nouns, verbs, and adjectives.
Results: There were 3,003 Auslan tokens and 806 different sign types. Nouns, adjectives, and verbs were highly represented in this exploratory study, comprising 54.1%, 21.0%, and 15.8% of the entire corpus, respectively. Preliminary analyses indicated differences in the composition of Auslan vocabularies when compared with existing spoken English and American Sign Language data.
Conclusions: This exploratory study identified that the types of Auslan word classes used by this heterogeneous group of young learners included a high proportion of nouns and adjectives. While comparisons with past data are stated with caution as the composition of the child sample group was not controlled, there is preliminary support for earlier exposure and focused teaching of Auslan to facilitate the development of more varied expressive sign vocabularies.

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Comparison of an Auslan expressive sample with the MacArthur Bates Communicative Developmental Inventory and American and British Sign Language adaptations

Shani Dettman

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Victorian Deaf Education Institute

COMPARISON OF AN AUSTRALIAN SIGN LANGUAGE (AUSLAN) EXPRESSIVE SAMPLE WITH THE MACARTHUR BATES COMMUNICATIVE DEVELOPMENT INVENTORY AND AMERICAN AND BRITISH SIGN LANGUAGE ADAPTATIONS

Associate Professor Shani Dettman[1,2]

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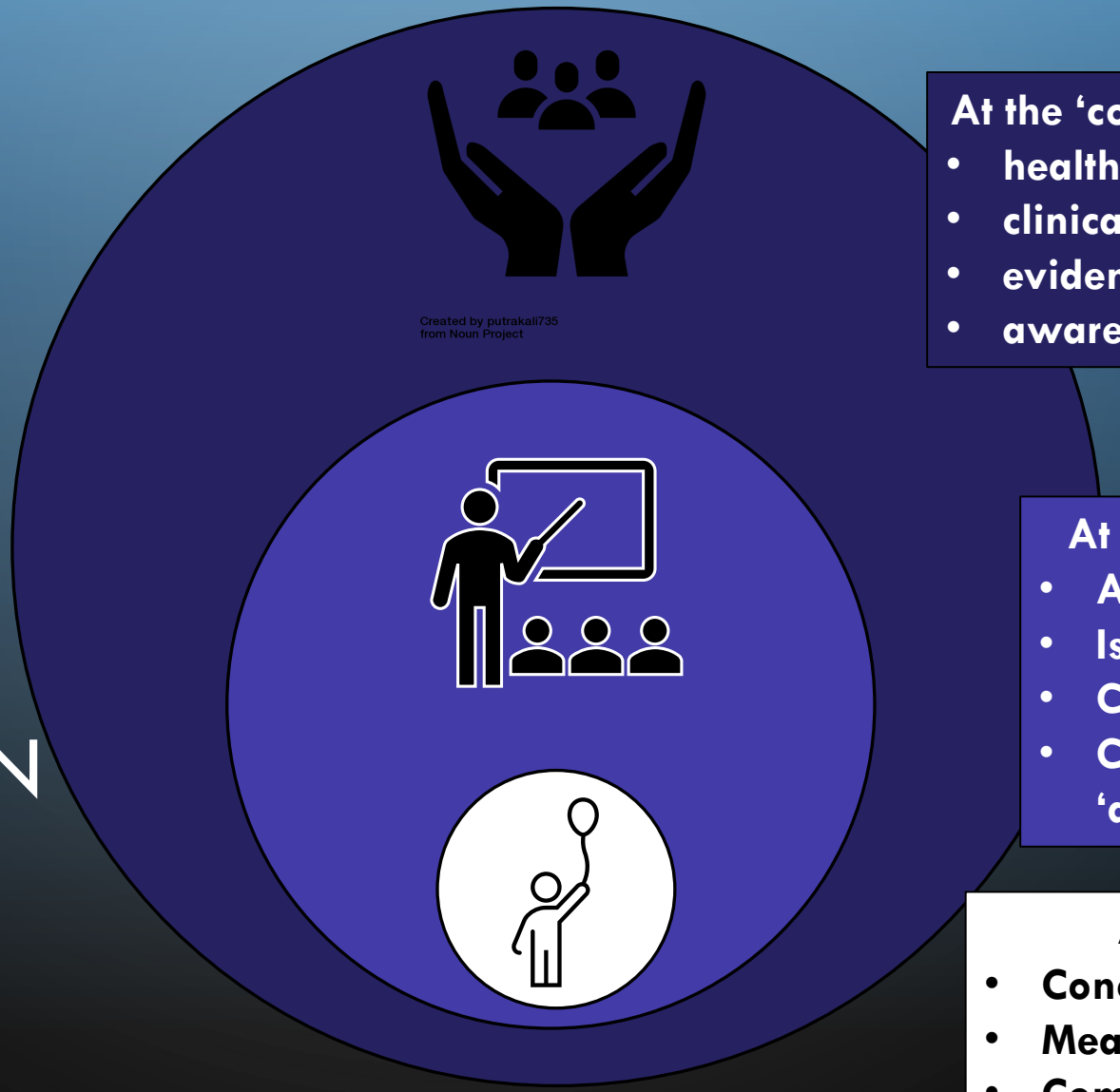
OVERVIEW

1. Why assess the child? And why so early?
2. What tools are out there for Australian Sign Language (Auslan)?
3. Methods
4. Results
5. Conclusions

1. WHY ASSESS THE CHILD's SIGN LANGUAGE?



At the 'community/global' level

- health care funding
- clinical practice guidelines
- evidence-based practice
- awareness of Auslan

At the 'service delivery' level

- Are we effective?
- Is the intervention working?
- Change the intervention
- Change the intensity or 'dose' of intervention

At the 'child' level

- Concrete milestone data
- Measure progress
- Compare to norms

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2. WHAT ASSESSMENT TOOLS ARE OUT THERE FOR AUSLAN?

Presently there are;

- no standardised checklists in Auslan for children younger than 4 years
- no paediatric normative data repositories for Auslan, and
- no assessments of Auslan development for children younger than 4 years of age *(Schick et al., 2004; Herman & Roy, 2006; Mason et al., 2010)*

- So Early Intervention centres use a wide range of invented Auslan checklists (not standardised)

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2. WHAT ASSESSMENT TOOLS ARE OUT THERE FOR AUSLAN? continued

Examples from other countries	Age range
American Sign Language (ASL) Proficiency Assessment	6 to 12 years
British Sign Language (BSL) Receptive Skills Test	3 to 13 years
Developmental Assessment Checklist for Sign Language of the Netherlands	2 to 4 years
Australia	
The Auslan Productive Skills Test' which was adapted from the Assessing BSL Development - Receptive Skills Test *(Herman, Holmes, & Woll, 1999)*	story retell task 4 to 11 years

3. METHOD

MacArthur-Bates Communication Development Inventory *(MB-CDI; Fenson et al., 1994)*

- uses standardised parent checklists to assess children's spoken vocabulary and communication skills,
- suitable for children aged 8 to 30 months (with extended normative values up to 37 months)

3. METHOD

MacArthur-Bates Communication Development Inventory *(MB-CDI; Fenson et al., 1994)*

Has already been adapted into;

- many spoken languages and dialects
- and the OZI - Australian English *(Kalashnikova, Schwarz & Burnham, 2016)*
- and sign languages; American (ASL), British (BSL), German [Swiss], Israeli, Italian, Norwegian, Sign language of the Netherlands, Spanish and Turkish

Research Question

Could we just test the children using the ASL or BSL adaptations o the MB-CDI for Auslan?

Research Question

Describe similarities and differences between an existing corpus of expressive Auslan vocabulary and four versions of the MB-CDI

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3. METHOD

Erin's Auslan Expressive Sample

- 44 children
  - 2 had opportunity for Auslan from birth
  - 42 had opportunity for Auslan from enrolment
- *mean*
  - age at first observation for this study 4.73 years (*range* 3.08 - 6.75; *SD* 1.06)
  - duration of Auslan use of 1.17 years (*range* 0.0 [newly enrolled] - 4.58; *SD* 1.16)

Comparison MB-CDIs

- MB-CDI Words and Gestures *(Fenson et al., 2007)*
- MB-CDI-ASL *Anderson & Reilly, 2002*
- MB-CDI-ASL 2.0 *Caselli, Pyers & Lieberman, 2021*
- MB-CDI-BSL adaptations *Woolfe, Herman, Roy, & Woll, 2010*

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4. RESULTS

Erin's Auslan Expressive Sample

- 3166 signs of which **806** were different Auslan signs
- Of the **806** Auslan signs, 749 (**93%**) were not seen/tested in the MB-CDI or any of the three MB-CDI sign adaptations
- **57 Auslan words (only 7% of Erin's sample) were in the** MB-CDI, MB-CDI-ASL, MB-CDI-ASL 2.0 and, MB-CDI-BSL

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IMPLICATIONS

A child could complete the existing MB-CDI (and do very well or do poorly) and

we still wouldn't know about 93% of what they can sign

4. RESULTS - What was not in the MB-CDIs

- A large percentage of the signs seen in Erin's Auslan spontaneous expressive samples were not seen/tested in the MB-CDI and the three MB-CDI sign adaptations
- Many colours and numbers were seen in the Auslan sample (none in the MB-CDI and the three MB-CDI sign adaptations)
- Australian animals, such as kangaroo (9 occurrences), koala (6), platypus (4), possum (4) were seen in the Auslan sample, but were not seen in the MB-CDI or three sign adaptations
- Other common words seen in the Auslan sample, such as water (22 occurrences), sheep (10), shark (10), and spider (7) were not seen in the MB-CDI or three sign adaptations

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4. RESULTS – Some of the most frequent Auslan (top ten) were in the MB-CDIs

Auslan Corpus (occurrences)	Also seen in MB-CDI	Also seen in MB-CDI-ASL	Also seen in MB-CDI-ASL 2.0	Also seen in MB-CDI-BSL
finish (28)	✓	✓	✓	✓
mummy (28)	✓	✓	✓	✓
green (24)	✗	✗	✓	✓
home (23)	✓	✓	✓	✓
red (23)	✓	✓	✓	✗
blue (22)	✓	✓	✓	✓
daddy (22)	✓	✓	✓ father	✓
water (22)	✓ drink	✓ drink	✓ drink	✓ drink
cake (21)	✓	✓	✓	✓
dog (20)	✓	✓	✓	✓

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4. RESULTS – Proportions of word classes were significantly different

Word Class	Auslan Corpus 806 words	MB-CDI 396 words	MB-CDI-ASL 559 words	MB-CDI-ASL 2.0 535 words	MB-CDI-BSL 548 words
nouns %	57	63	52	51	54
verbs %	18	15	22	24	21
adjectives %	13	9	11	13	10
quantifiers %	4	2	3	2	2
adverbs %	2	1	2	2	2
other %	6	10	10	8	11

Chi square indicated the differences in these proportions of word classes was significant ($p < 0.001$)

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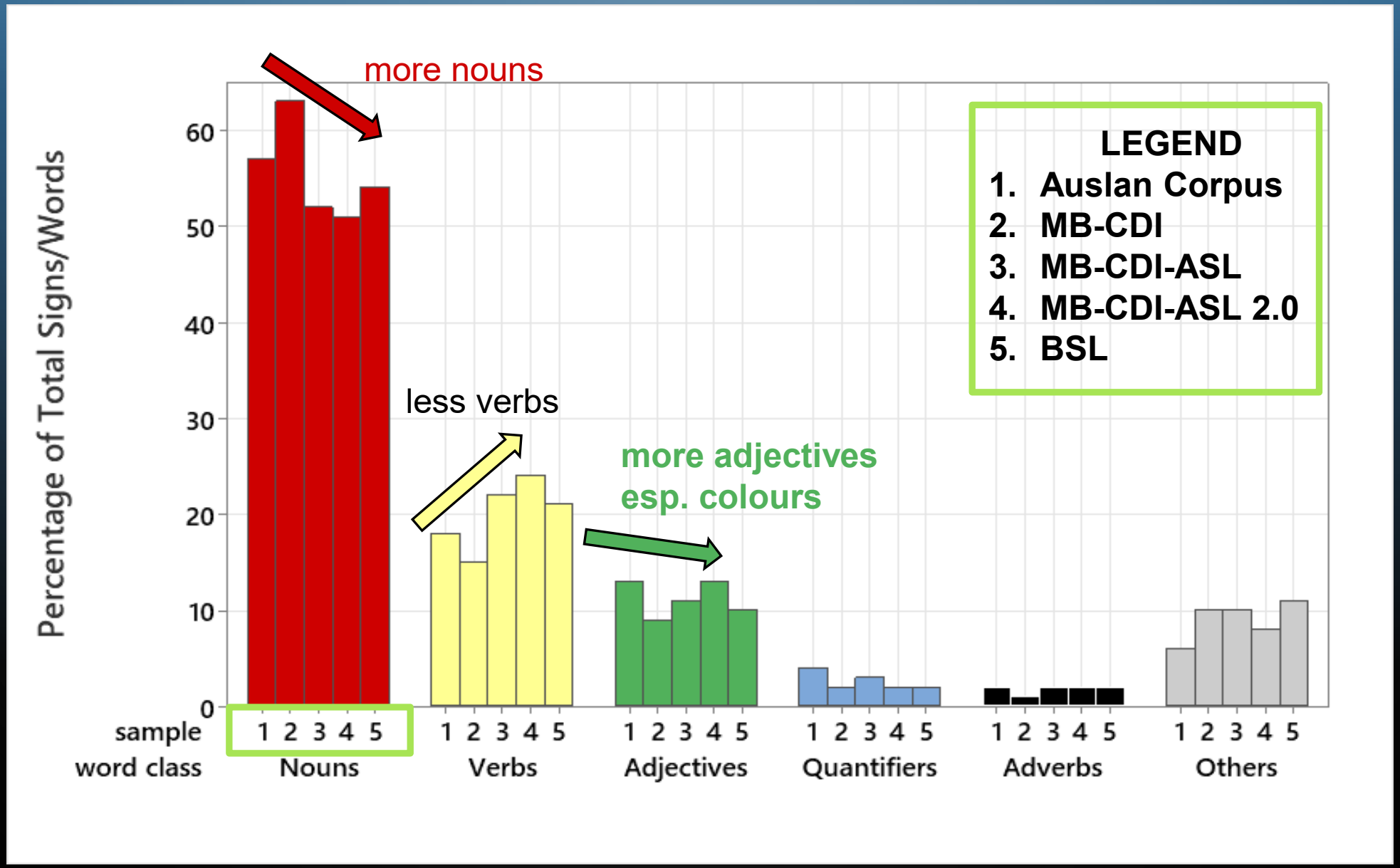
4. RESULTS – WORD CLASSES



5. CONCLUSIONS

- Very few Auslan words used by the children in their spontaneous expressive samples were also seen/tested in the MB-CDI and these three MB-CDI sign adaptations

- significant differences in the proportions of word classes (nouns, verbs, adjectives) and absence of common Auslan words support the development of a new Auslan tool

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THANK YOU

dettmans@unimelb.edu.au

Victorian College for the Deaf

Explicit Direct Instruction - the pedagogy game changer
&
Bilingual STEAM Education: A Two-Way Partnership

Marnie Kerridge & Robert Harrow

AAT VICTORIA

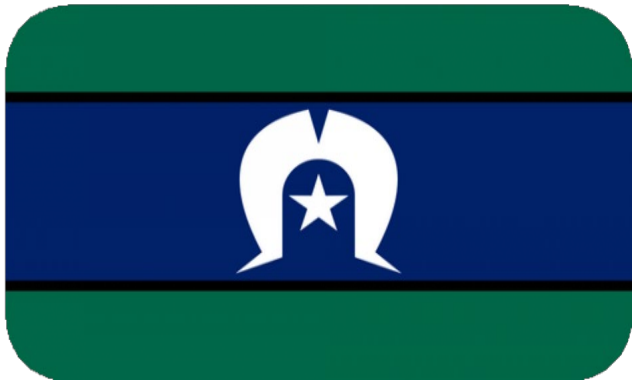
VICTORIA State Government | Department of Education

Victorian Deaf Education Institute

Victorian College for the Deaf

VICTORIAN COLLEGE FOR THE DEAF

Acknowledgements



VCD is a School of Advantage

Ages:

5 to 19

Enrolments open for:

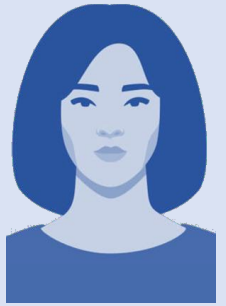
Foundation – 12

Languages of instruction:

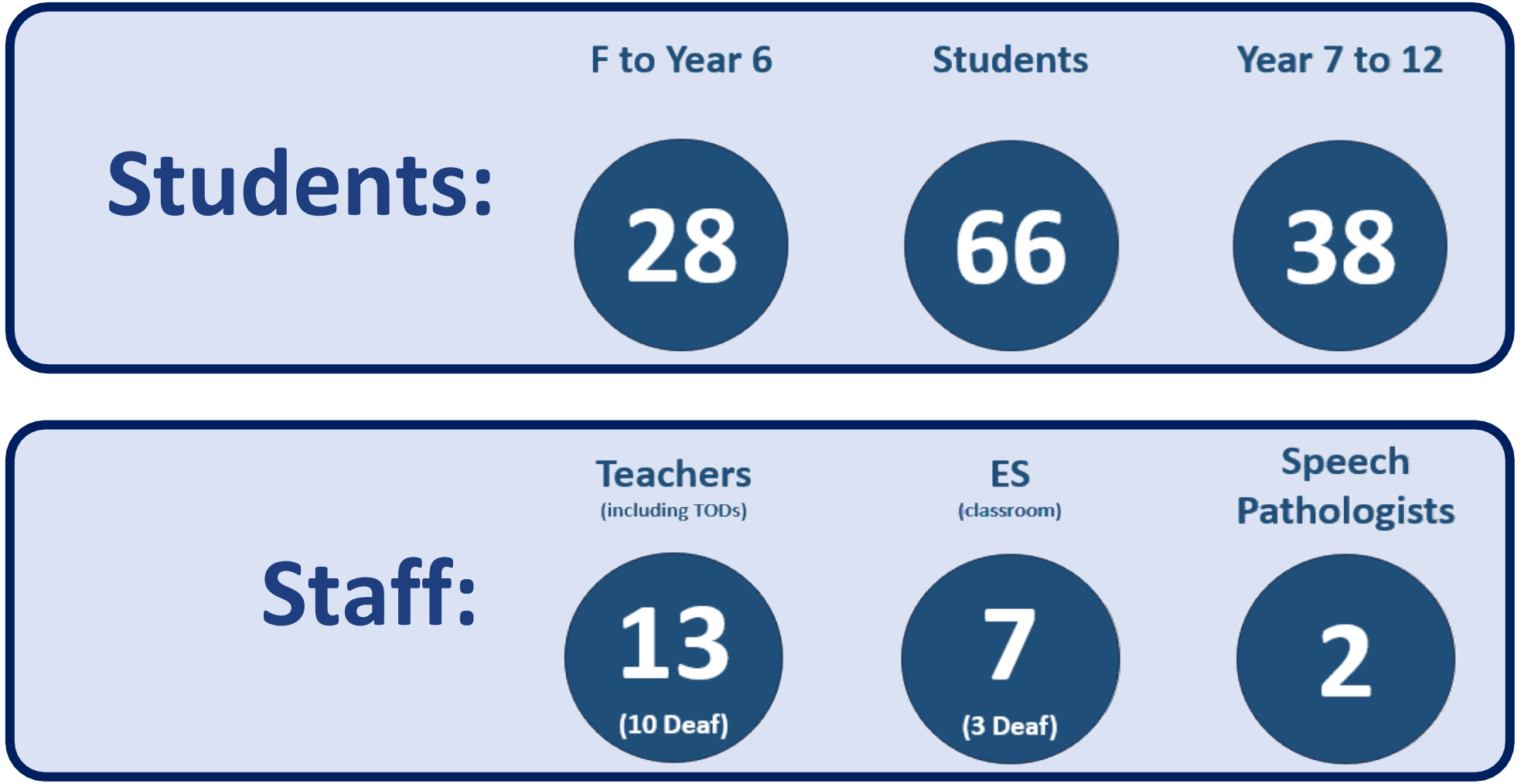
Auslan & English

Bulk of enrolments occur:

Year 7



Context


Students:
F to Year 6
28
Students
66
Year 7 to 12
38
Staff:
Teachers
(including TODs)
13
(10 Deaf)
ES
(classroom)
7
(3 Deaf)
Speech Pathologists
2

When we teach students how to survive the education system, but don't actually **teach** them, we are failing them.

Happiness is not an academic goal.

Inquiry/student-led learning

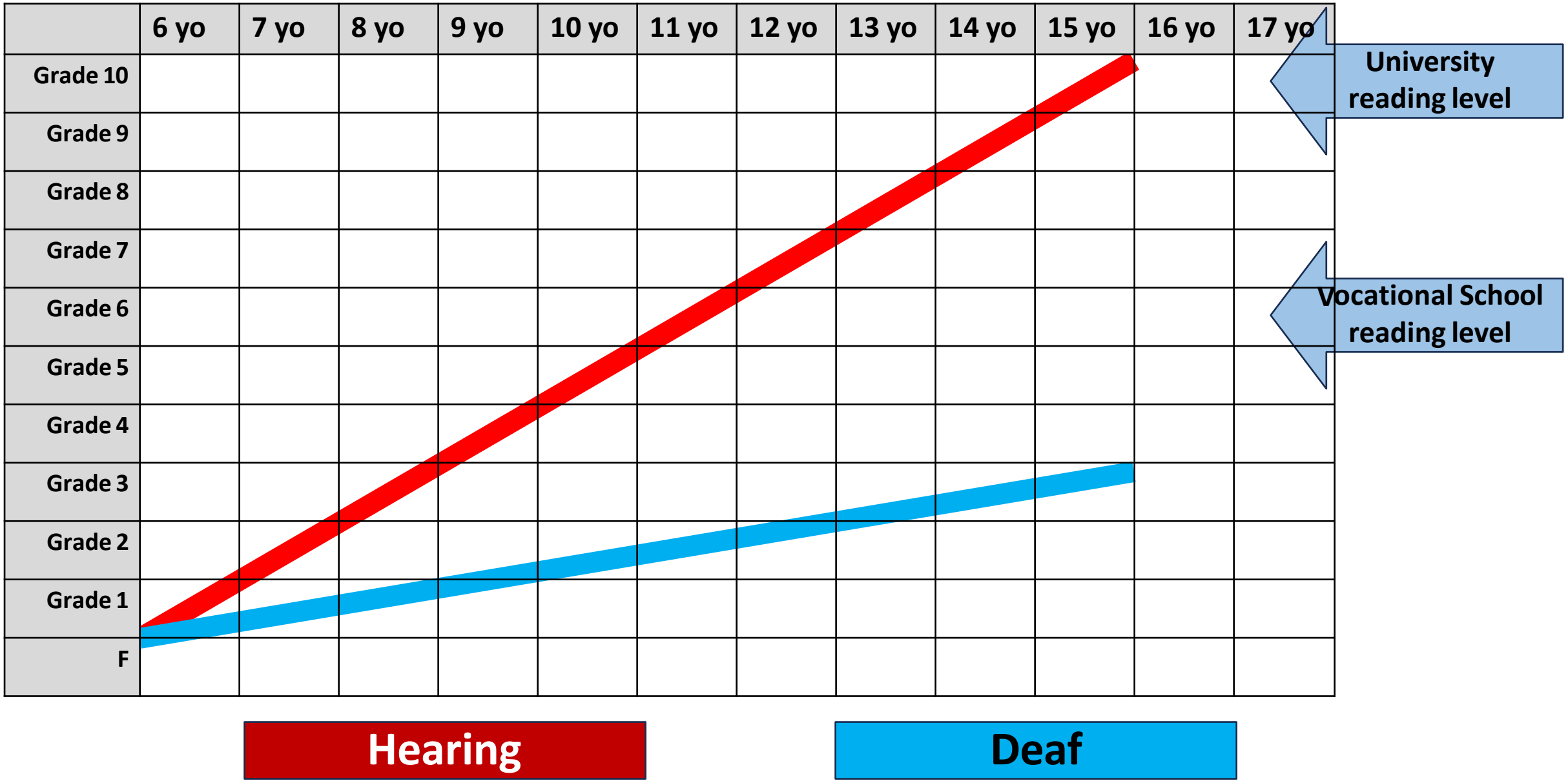
Including the e5 model (Engage, Explore, Explain, Elaborate, and Evaluate)

Hearing students:

- Language ability
- Vocabulary
- World concepts

Deaf students:

- Language ability - varied
- Vocabulary – delayed
- World concepts – not known



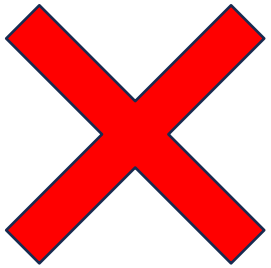
Allen, 1986, Trybus & Karchmer, cited in Kyle and Harris, 2011)
(Karchmer & Mitchell, 2003; Marschark & Spencer, 2003)

Science of Learning

- The Science of Learning is an evidence-based research that draws on cognitive psychology and neurosciences to show how students best acquire, retain, and apply knowledge.

- Use the QR code to access a free 30-minute presentation by Lorraine Hammond (also available via VCD's website at the end of this presentation).

Time to go



Inquiry approach

Student-led learning

Assessments:

- Fountas & Pinnell
- Running Records
- PM Benchmarks
- ABLES Assessment
- Reading Recovery

What's in?

Explicit Direct Instruction

evidence-based pedagogy

Direct Instruction

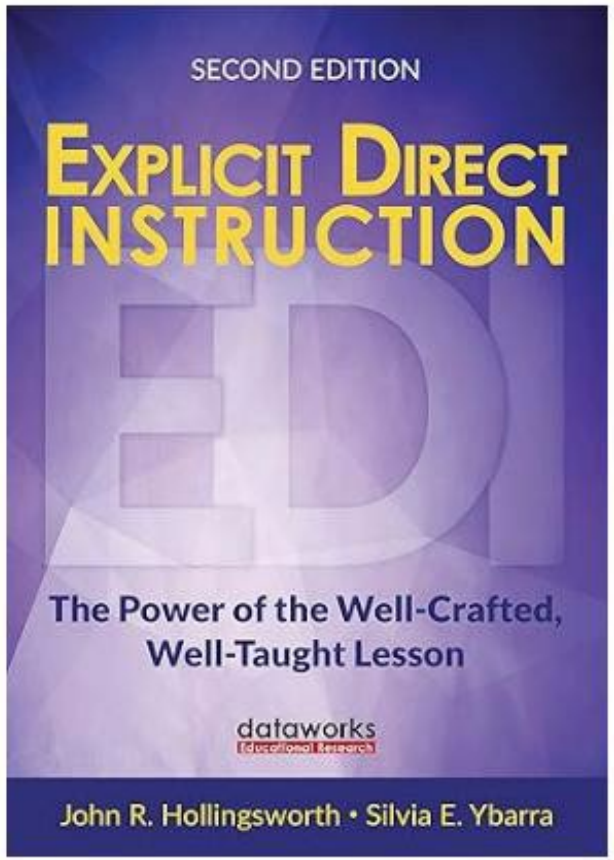
evidence-based sequential programs

Assessments:

- OWLS-II
- WIAT-III
- DIBELS / Acadience
- Australian Criterion Scale

- Embedded Direct Instruction assessments

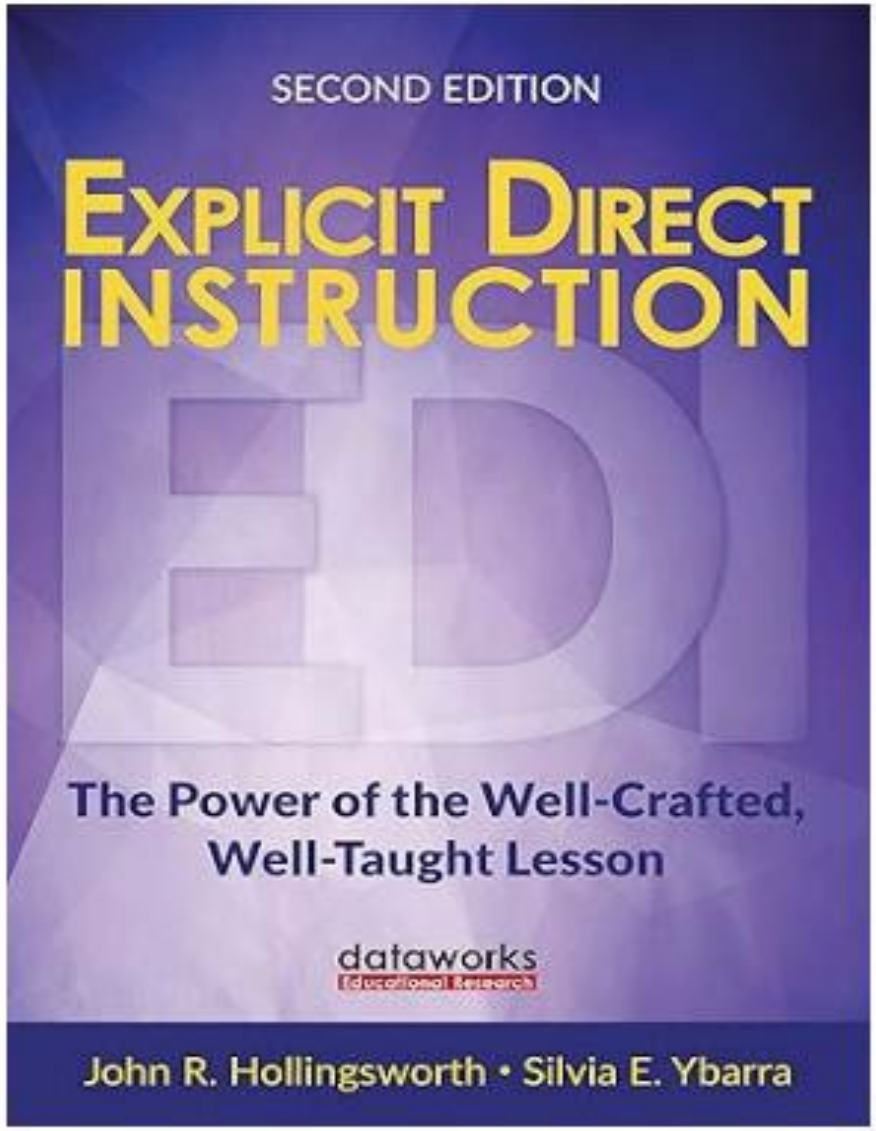
Explicit Direct Instruction

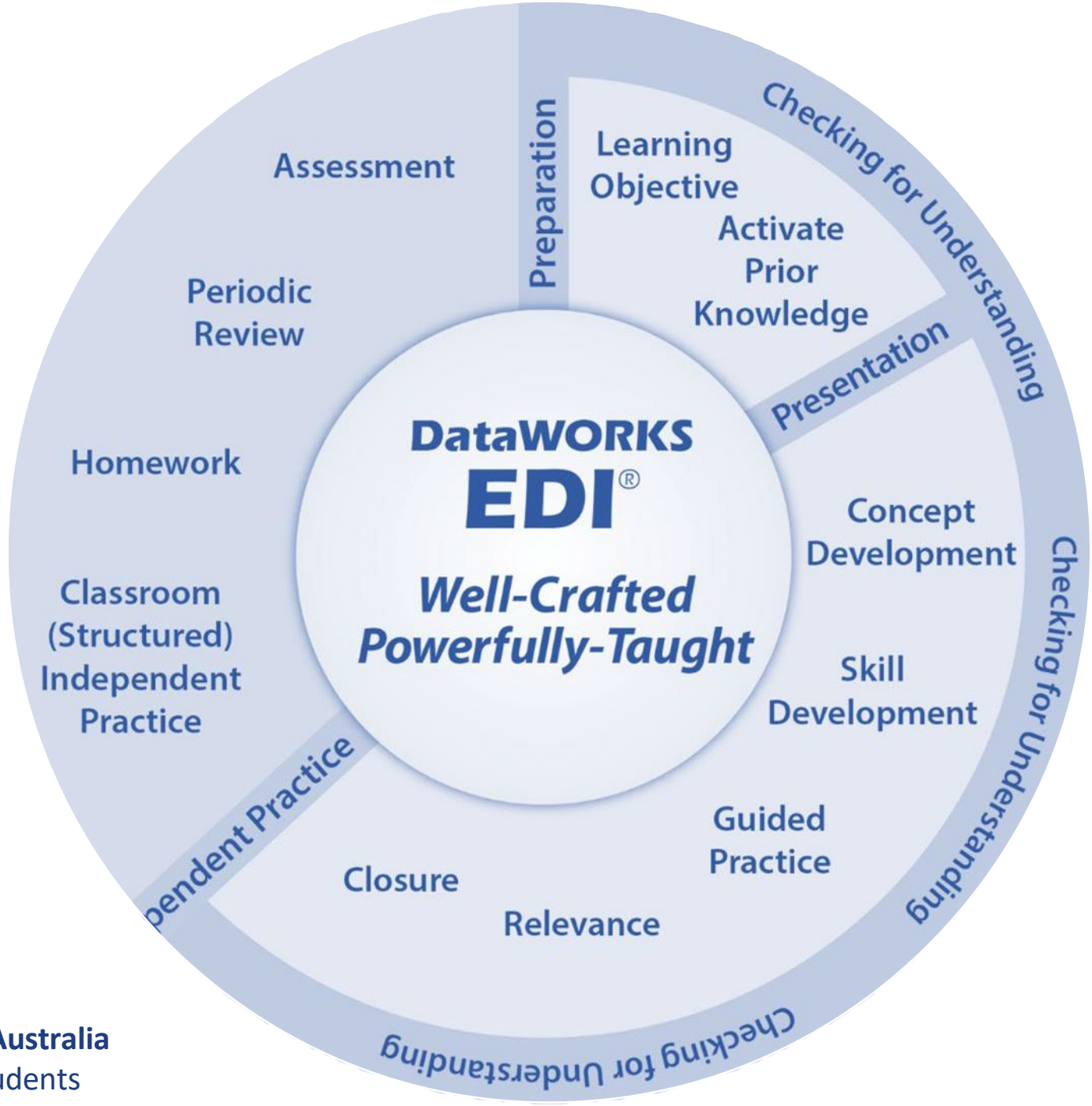


EDI is an evidence-based pedagogy.

- Teacher-led instruction
- Active student engagement
- Frequent 'Check For Understanding'

EDI ensures no Deaf student is left behind through explicit teaching, guided practice, and scaffolded learning.





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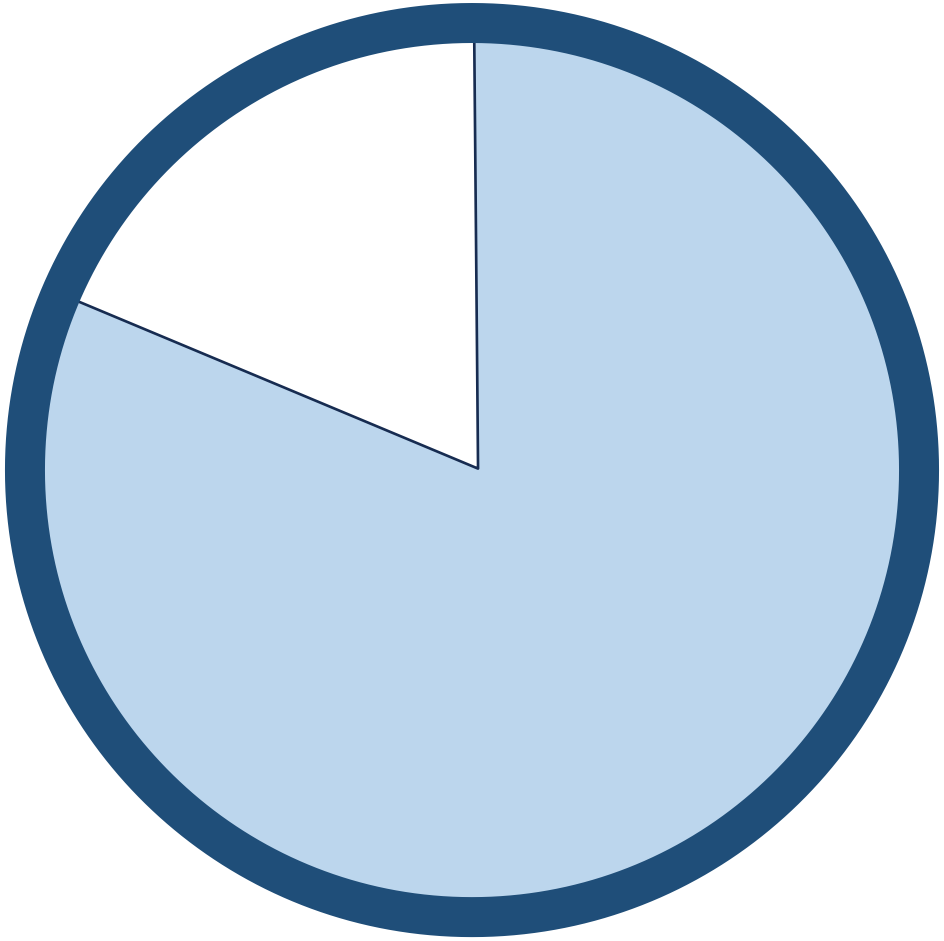
School of Advantage for Deaf and Hard of Hearing Students

EDI Lesson Structure

20%

new concept



80%

review and extension of already taught concepts

EDI *Checking for Understanding*

T Teach first

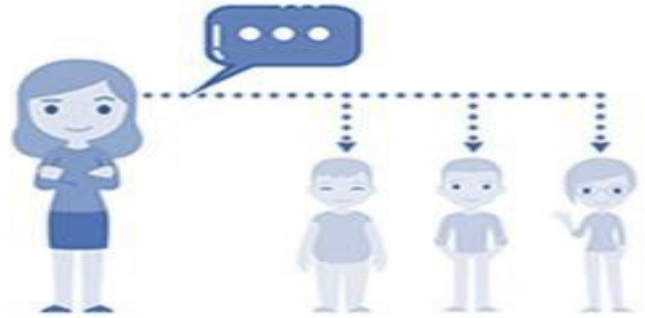
A Ask a question

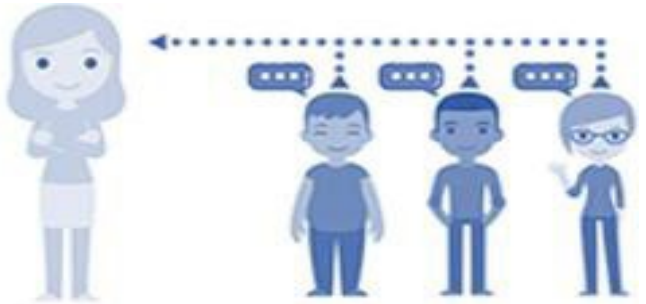
P Pair Share

P Pick a Non-Volunteer

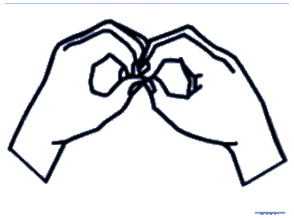
L Listen

E Effective feedback





EDI *Engagement Norms*

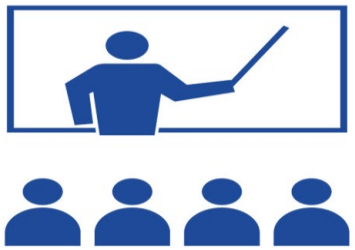



“Pronounce With Me”
(or “Fingerspell With Me”)

“Sign With Me”

“Pair Share”

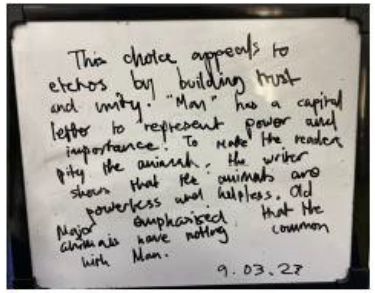
“Whiteboard Ready”
(Chin-it)

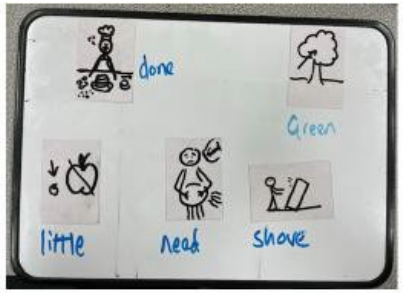


Choral Responses

Attention Signal

Assessments





Formative Assessments

Checking what students know and understand in real-time every 1-5 minutes.

Summative Assessments

Checking what the students have understood of the whole concept teaching collectively after a specific teaching period e.g. every 10 lessons.

Explicit Direct Instruction

≠

Direct Instruction

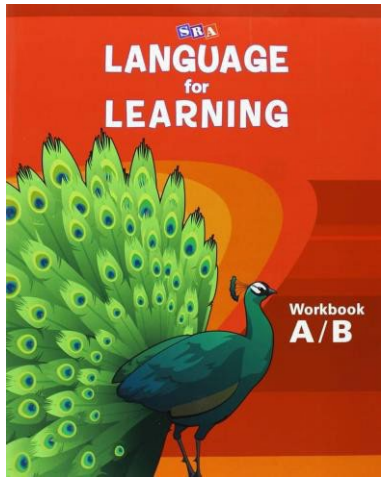
(The how)

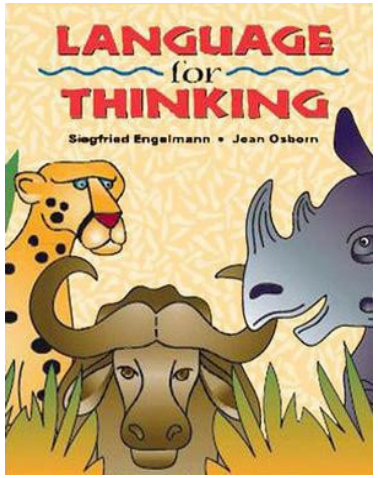
(The what)

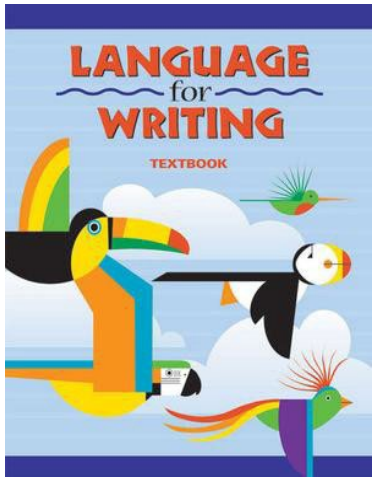
resources

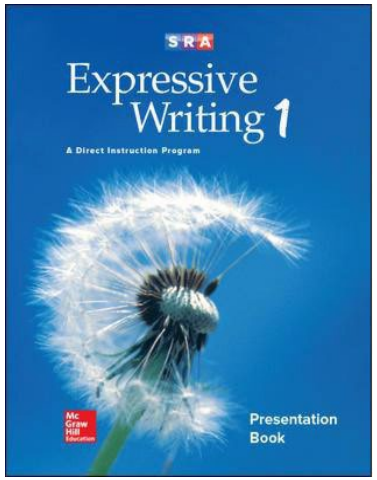
Direct Instruction

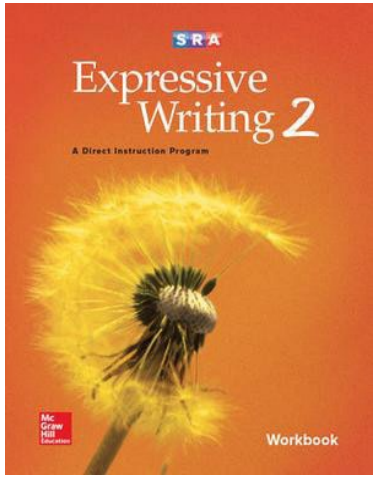
English evidence-based and sequential programs

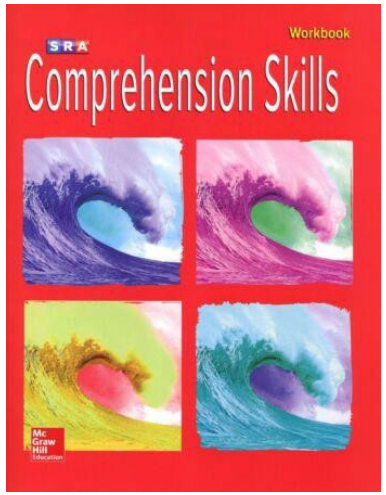


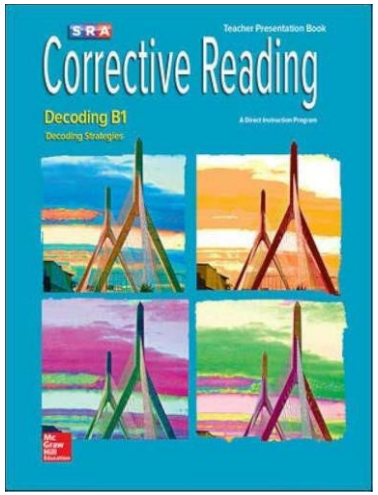


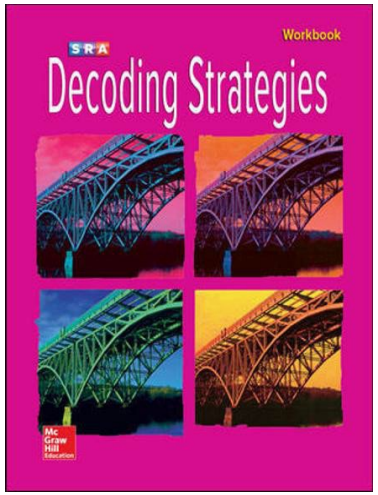






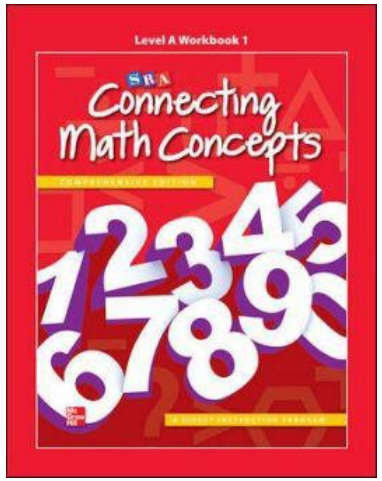


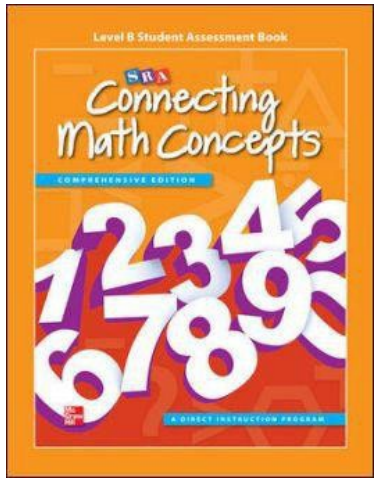


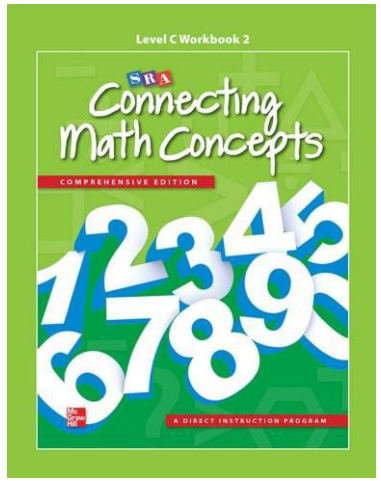


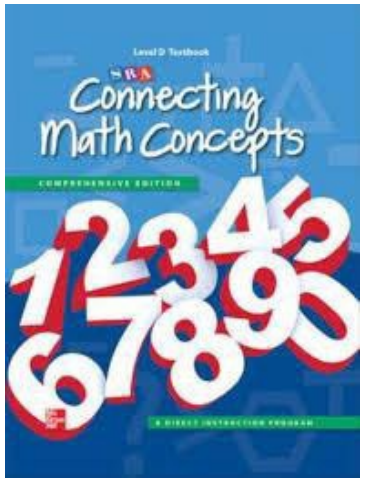
Direct Instruction

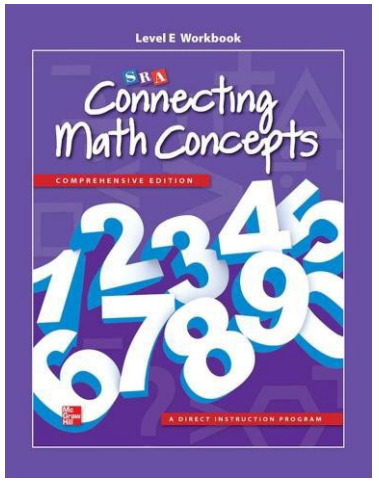
Mathematics evidence-based and sequential programs

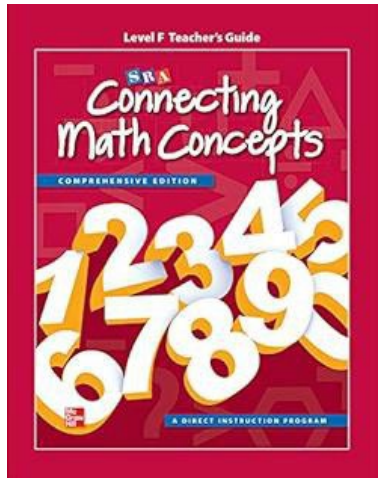












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School of Advantage for Deaf and Hard of Hearing Students

Direct Instruction Lessons

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9	Lesson 10
Concept 1	Concept 1	Concept 1	Concept 1	Concept 1	Concept 1	Concept 1	Concept 1	Concept 1	Concept 1
Concept 2	Concept 2	Concept 2	Concept 2	Concept 2	Concept 2	Concept 2	Concept 2	Concept 2	Concept 2
Concept 3	Concept 3	Concept 3	Concept 3	Concept 3	Concept 3	Concept 3	Concept 3	Concept 3	Concept 3
Concept 4	Concept 4	Concept 4	Concept 4	Concept 4	Concept 4	Concept 4	Concept 4	Concept 4	Concept 4
Concept 5	Concept 5	Concept 5	Concept 5	Concept 5	Concept 5	Concept 5	Concept 5	Concept 5	Concept 5
Concept 6	Concept 6	Concept 6	Concept 6	Concept 6	Concept 6	Concept 6	Concept 6	Concept 6	Concept 6
Concept 7	Concept 7	Concept 7	Concept 7	Concept 7	Concept 7	Concept 7	Concept 7	Concept 7	Concept 7
Concept 8	Concept 8	Concept 8	Concept 8	Concept 8	Concept 8	Concept 8	Concept 8	Concept 8	Concept 8
Concept 9	Concept 9	Concept 9	Concept 9	Concept 9	Concept 9	Concept 9	Concept 9	Concept 9	Concept 9
Concept 10	Concept 10	Concept 10	Concept 10	Concept 10	Concept 10	Concept 10	Concept 10	Concept 10	Concept 10
Formative CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Summative** Mastery Test

Direct Instruction Lessons

Lesson 81	Lesson 82	Lesson 83	Lesson 84	Lesson 85	Lesson 86	Lesson 87	Lesson 88	Lesson 89	Lesson 90
Multiplication Powers of 10 Fractions and divisions Mixed numbers Temperatures Simplifying fractions	Multiplication Powers of 10 Fractions as diagram Word problems Average Simplify Parts of	Multiplication Add mixed numbers Solve division problems with powers of 10 Add 1 more to a fraction BODMAS Find the average	Multiplication Subtract mixed numbers Divide powers of 10 Add 1 more to a fraction BODMAS Divide fractions Bar graph	Multiplication Add mixed numbers Solve division problems Brackets with a letter Fraction word problems Average and bar graphs Borrowing mixed numbers	Multiplication Powers of 10 Divide fractions Brackets with a letter Equations Average Parts of Rewrite mixed numbers	Subtraction Compare products and factors Parts of Rewrite mixed numbers Average in a set with zero Fraction and division BODMAS Equations	Subtraction Compare products and factors Subtract mixed numbers Expressions Fraction word problems Average distance Parts of	Multiplication Compare products and factors Subtract mixed numbers Expressions BODMAS Solve fraction problems Find averages Parts of	Multiplication Balanced terms Mixed numbers Convert units of measurement Parts of BODMAS Expressions
Formative CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Formative** CFU every 1-5 mins	**Summative** Mastery Test

Instructional Routines

I Do

We Do

You Do

SIMILES — I Do

- We are going to make up comparisons that are called similes.
- A simile tells how things are the same.
- Examples:
  He moves like liquid.
  She watches like a hawk.

CONTRADICTIONS — We Do

Kit wrote a sentence. It was very long. It had six adjectives. * It was about her father. It had only a predicate. It was a pretty good sentence.

*This is the contradiction because only a predicate is not a sentence. Every sentence has a subject **and** a predicate.*

SIMILES — You Do

- A woman watches carefully.
- *Carefully.*
- What other objects watch carefully?
- *Hawk, cat, detective, wolf.*
- ***Write a sentence that compares the woman with one of the objects above.***

DEFINITIONS — We Do

The word explain is a verb.

What is the noun for *explain*?

Explanation.

What is the adjective for *explain*?

Explanatory.

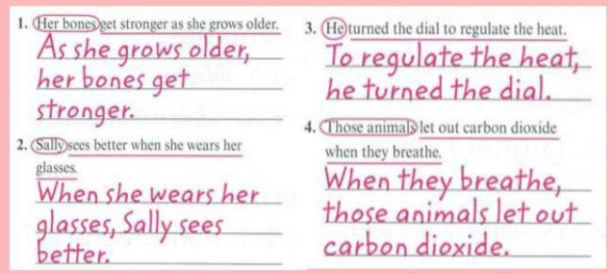
Morphographic Meaning — You Do

judge wrongly

⬇

misjudge

FRONTED ADVERBIALS — You Do



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School of Advantage for Deaf and Hard of Hearing Students

Instructional Routines

I Do

We Do

You Do

Multiplication — I Do

Rule:

When multiplying two numbers:

- if **both** numbers are **odd**, the answer is **odd**.
- If **one** number is **even**, the answer is **even**.

Percents: Fractions/Decimals — We Do

	Decimal	Fraction	Percent
a.	.76	$\frac{76}{100}$	76%
b.	.02	$\frac{2}{100}$	2%
c.	.08	$\frac{8}{100}$	8%
d.	3.90	$\frac{390}{100}$	390%
e.	8.00	$\frac{800}{100}$	800%
f.	2.07	$\frac{207}{100}$	207%

Facts — You Do

Example:	Complete the problems:		
9 – 2 = 7	5 + 10	6 – 2	3 + 3
2 + 6 = 8	6 – 5	5 + 3	9 – 3
	3 + 4	12 – 6	6 + 5

Workbook- Lesson 99 Part 2 — We Do

Part 2

a. 5 × 7 = 35 (odd) even b. 8 × 5 = 40 odd (even)

Number Families — We Do

a. 5 ×8→ 40 d. 5 ×7→ 35

b. 2 ×9→ 18 e. 2 ×8→ 16

c. 5 ×7→ 35

Independent work — You Do

Part 5 Work each problem.

a. The brown cat was $4\frac{1}{2}$ years old. The white cat was $2\frac{2}{3}$ times older than the brown cat. How old was the white cat?

b. Jane wrote at the average rate of 3 pages per hour. How many pages would she write in $4\frac{3}{4}$ hours?

c. The large box held $3\frac{1}{5}$ times as much material as the small box held. The small box held $2\frac{2}{9}$ cubic feet of material. How many cubic feet of material did the large box hold?

Instructional Routines

I Do

We Do

You Do

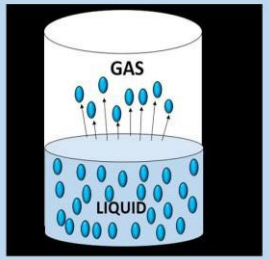
invade
verb

To enter a country with the aim of taking control.

Germany invaded Poland in September 1939.

evaporation
noun

Evaporation is the process of changing water from **liquid** to **gas**.



What is communism?

Communism is a type of government that owns everything, and everyone shares things equally.

Government system in Athens

Write Ekklesia and Boule on your whiteboard to answer the questions.

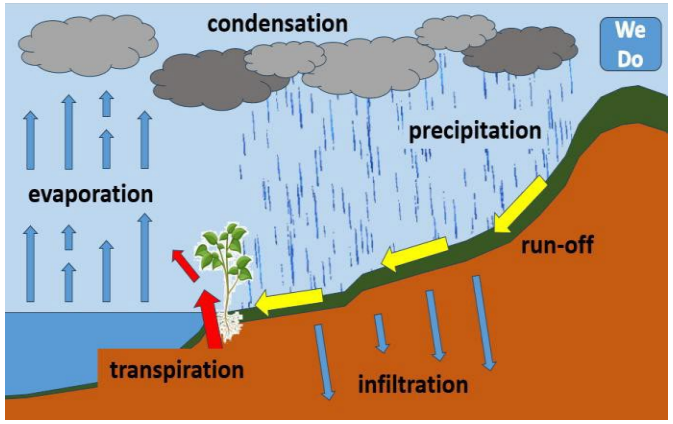
Ekklesia

Boule

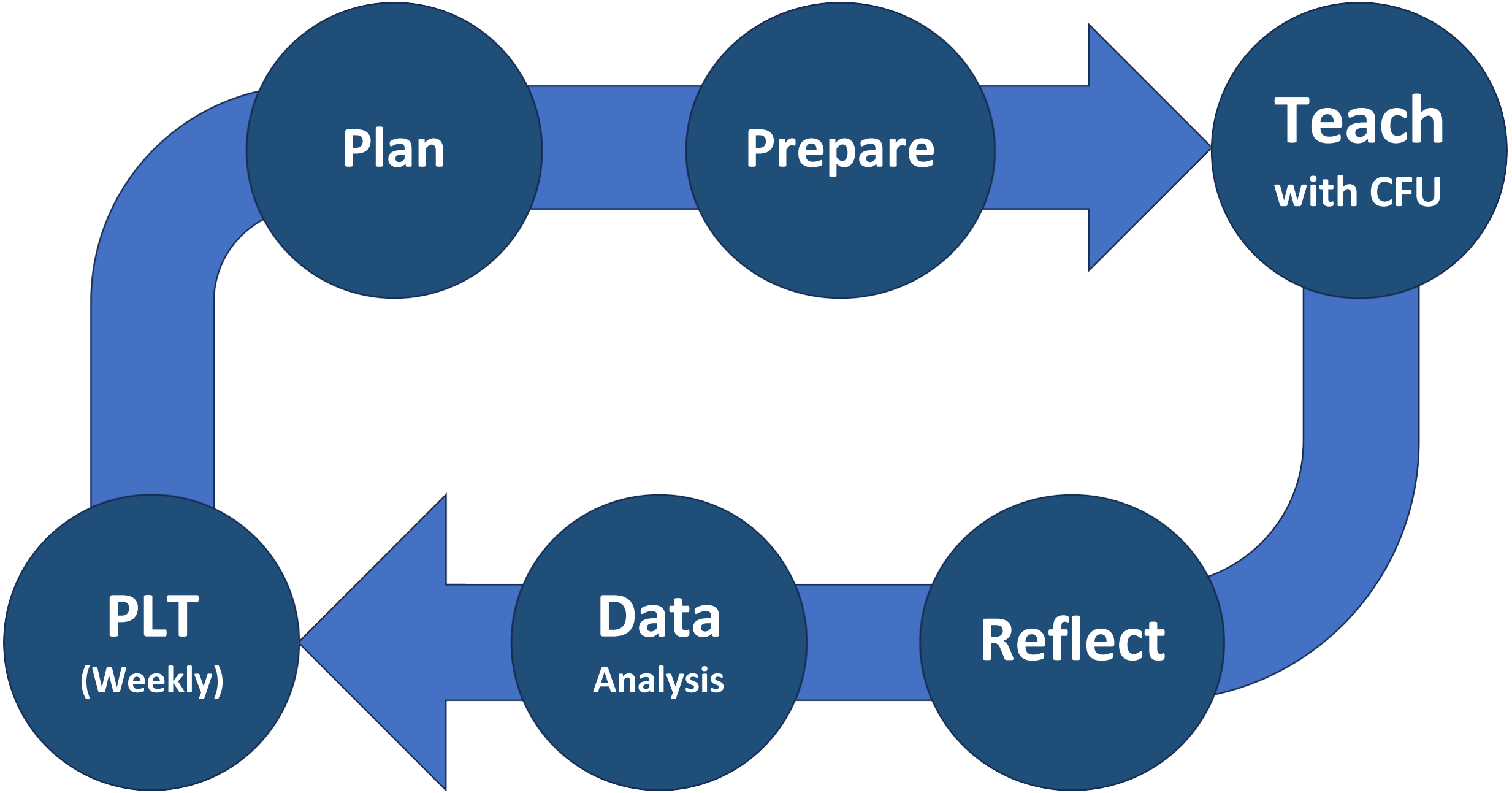
Worksheet #1

Your teacher will distribute **Worksheet #1**.
You will need to use these words:

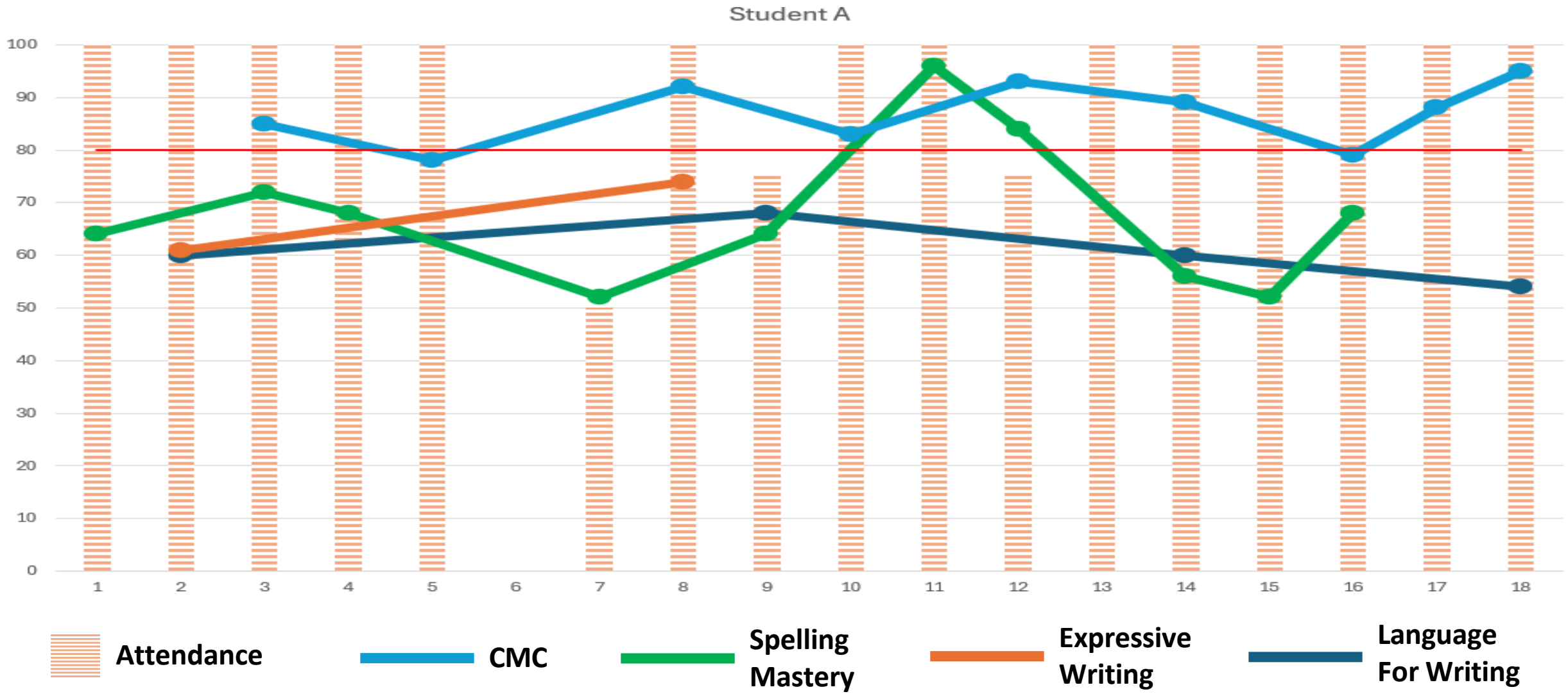
Run-off	*Infiltration*	*Evaporation*
Condensation	*Transpiration*	*Precipitation*



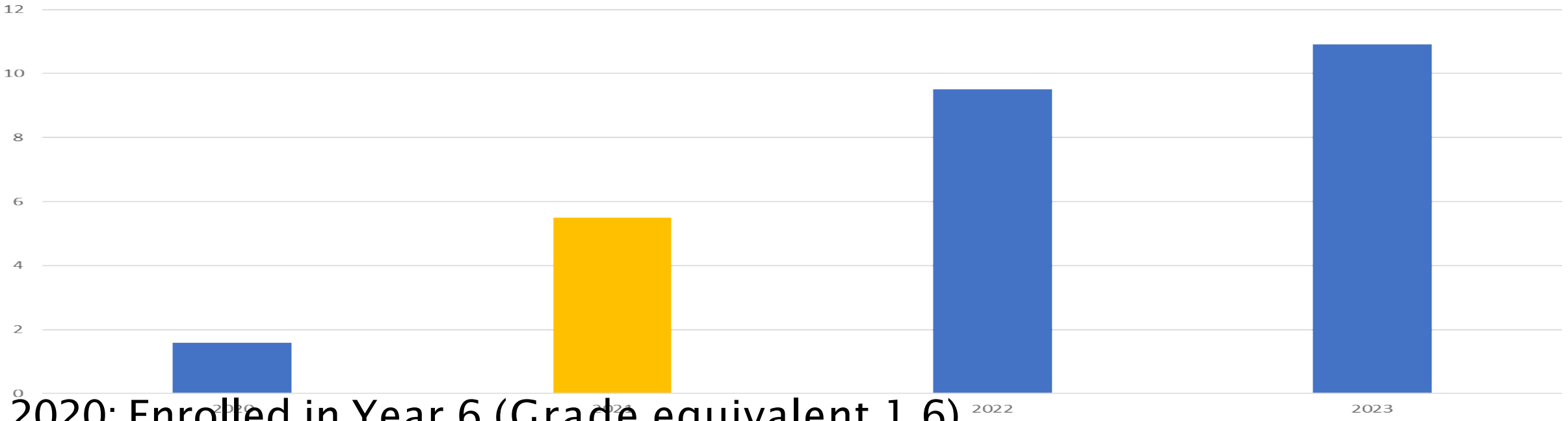
Victorian College for the Deaf F-12 **Melbourne, Australia**
School of Advantage for Deaf and Hard of Hearing Students


Plan
Prepare
Teach
with CFU
Reflect
Data
Analysis
PLT
(Weekly)

Examples of data tracking



OWLS-II (Reading Comprehension)

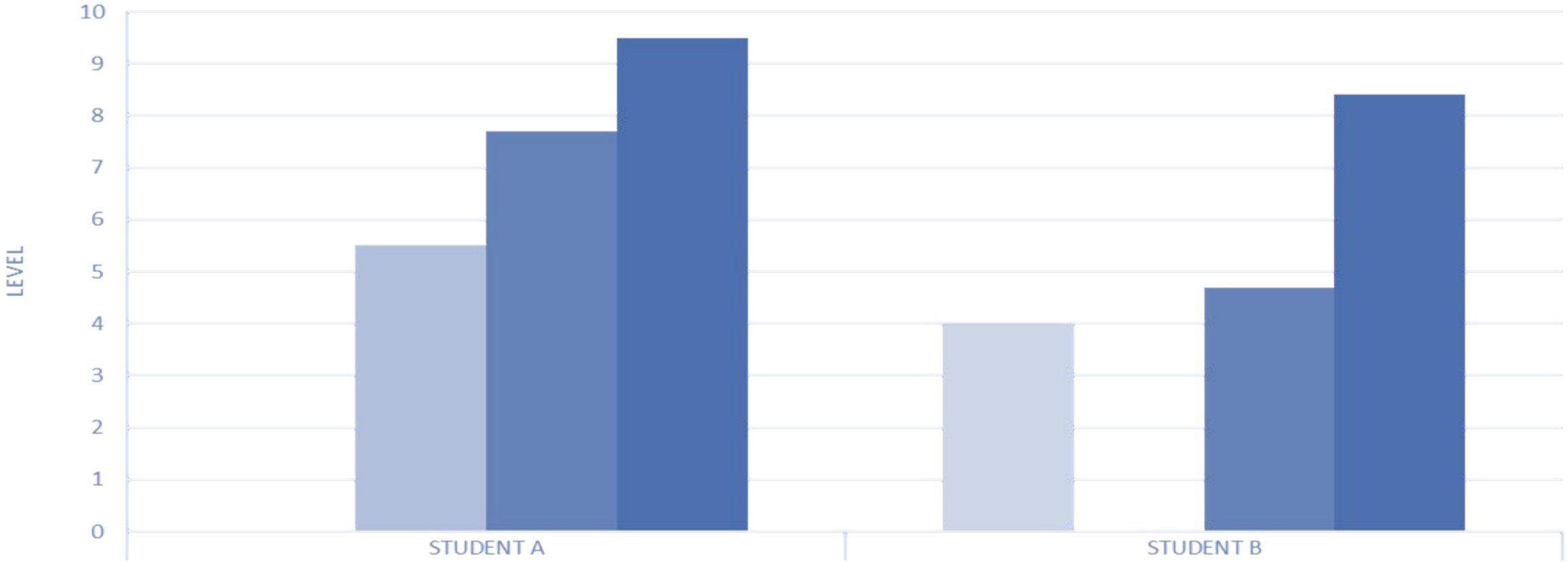


2020: Enrolled in Year 6 (Grade equivalent 1.6)

2023: Enrolled in Year 9 (Grade equivalent Year 10.9)

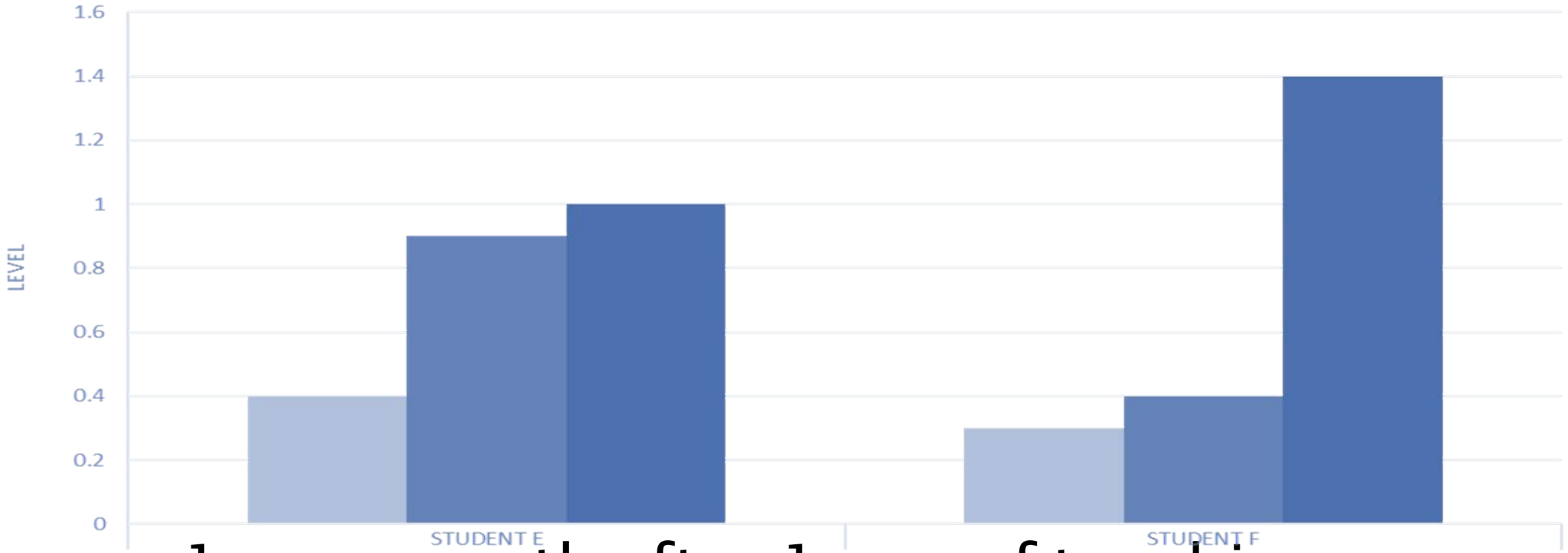
9.3 years' growth in 4 years of teaching

OWLS-II (Reading Comprehension)



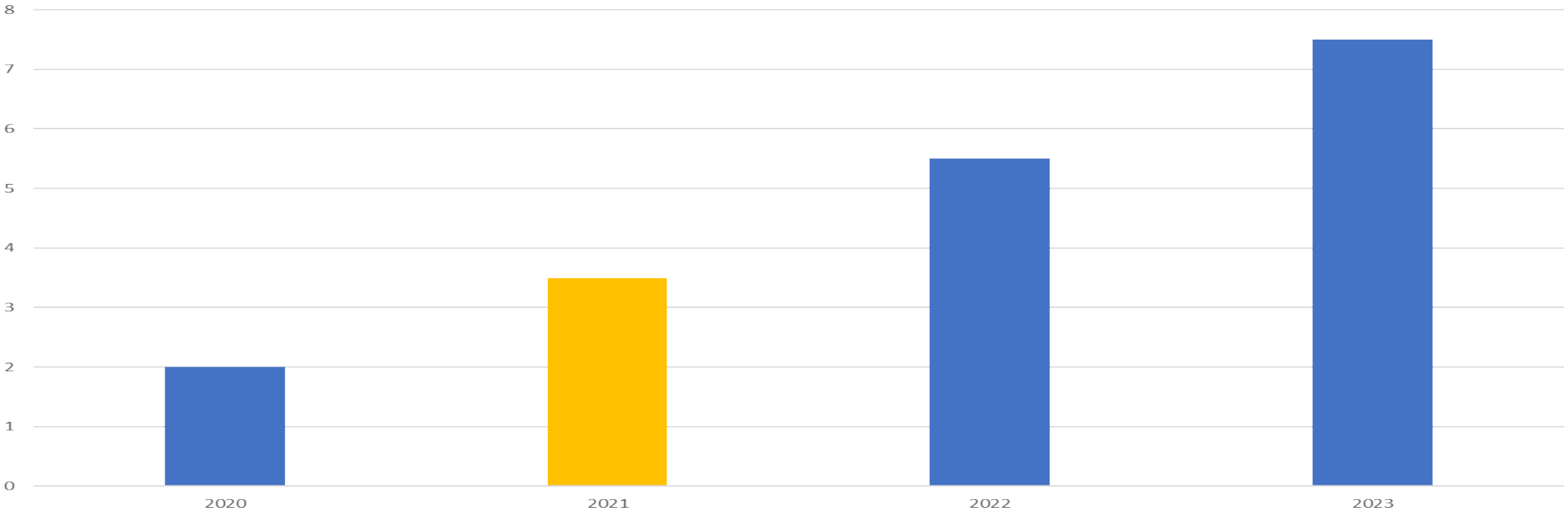
4 years growth in 3 years of teaching

OWLS-II (Reading Comprehension)



1year growth after 1year of teaching

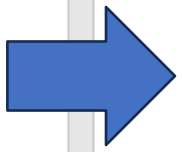
Writing (Progression Points)



From 4 years behind to 6 months behind

Auslan only (24 months)

The little girl and the little boy are building the snowman. The snowman have stick for his arms, he have a carrot for his nose. he's wearing the scarf. He have eyes, mouth and eyebrows. The little girl and the boy are making the snowballs for to throw the snowman to see if he's alive. They are throwing the snowball to the snowman but then the snowman is throwing back at them. The little and the little boy are surprised that the snowman is alive. The snowman feel good because he's throw at the two kids. The little girl and the boy, her name is Shae and the boy's name is Christian. They're wear the jacket hand glove winter hat, pant, and boot shoes.



On a beautiful Wednesday, a man was working as a butcher in his shop. As usual, he was cutting meats. He suddenly heard a bell ring from the door. A new consumer came in. She had a black shiny short hair. She looked like a tall model. When the buchter saw her for the first time, he fell in love. He felt so nervous that he kept stuttering.

"Hello, what can I do for you?" the bucther nervously asked as he was standing behind the front desk.

"Can I have one steak please?" the lady smiled. She was slightly blushing.

"Coming right up," the buchter said. He grabbed on steak and put it in a plastic bag. He gave it to her. She paid him. Before the lady left, the buchter suddenly asked her to go date with him. The lady was shocked. She happily accepted it. She noticed his name tag.

"Well, it's very nice to meet you, Micheal. My name is Anna by the way." Anna revealed her name. they both agreed to meet up on Saturday. Micheal was happy that she accepted his request.

On the night Saturday, Micheal took Anna to a very fancy resturant. He bought a private room for themselves. They were sitting and drinking their coffee in formal way. They were talking and laughing. Anna asked him why do he works as a buchter.

"Because I like meats," Micheal repiled with a smile. She laughed at his silly answer.

At the midnight, Micheal took Anna to his house. Anna suddenly felt unsafe and doesn't know why. She was trying her best to not overthink.

"Anna, please wait here. I will make some teas for us," Micheal warmly smiled. Anna nodded and waited. She sat down on the coach. Suddenly, something caught her attention from the corner of her eyes. She saw a strange door. She wasn't that type of person who would put their nose in everything, but she couldn't help. From the coach, she slowly got up. As she walked to the stange door, she could feel her heartbeat started to rising up. There was a bad smell coming from the door. She tried to calm herself before opening the door. She gulped. As she opened the door, her eyes became wide. Her skin became pale.

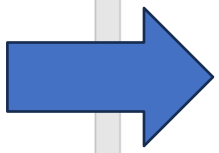
She started to walk backward away from the opened door. She wanted to scream but there was no voice coming out from her mouth. Inside of the strange door, there were full of dead bodies.

"I see that you've found my meats." Micheal smiled from behid Anna. "I'll tell you my secret. Those meats I sell are made from humans and I mixed it with meats. I asked you out because I thought that you have perfect legs. Those legs can be meats."

Anna tried to speak but she couldn't. She was choking from stuggling to speak.

Spoken English (18 months)

The girl was about to go to her soccer competition. Her name is Billie. The soccer competion was near her house, so she said "well the competition is near my house so I will just practice my Soccer skills". As she was practicing her kicks, she kicked so hard that the ball went over the fence into the neighbours backyard. "Oops, what will I do now, the neighbours are mean I cant go to their house to get my ball" said Billie. So with the help of her sports bag she managed to go over the fence. As she was about to get the ball, the neighbour's dog Daisy was sleeping and Billie woke her up. When Billie threw the ball over the fence, Daisy barked at her. "Ahhh" screamed Billie. She quickly Jumped over the fence and went to the soccer competition. Did Daisy wanted to play with Billy? Or Daisy was angry that Billie disturbed Daisy? I don't know its your choice.



Henry the hero

In Perth, Australia, there lived a deaf man in his 40's named Henry. Henry was a tall man with a long beard. He was bald and had cochlear implants. Henry lived in a fancy neighborhood; however, all the people hated him because of his deafness.

They all said to him, "Hey deaf man, did your mama ever teach you how to speak." The people in the neighborhood were very mean. Although Henry could speak, he preferred to use Auslan to communicate. He even tried to teach everyone in the neighborhood Auslan, but they didn't want to learn because they kept saying, "We're not bothered."

The whole neighborhood thought he was dumb, but Henry had a really good skill. He was a Kung Fu master and was trained by Jackie Chan.

One day, the richest people in the city's daughter was wandering around alone on the street. All of a sudden, a van with three men in it grabbed her and drove away. The three men's names were Mark, Jordan and John. Henry was close by and saw everything. He started to follow the van in his car. The little girl, whose name was Vicky, tried to fight back, but the kidnappers kept hitting her. John, who was the leader said, "Put isoflurane in her mouth to shut her up."

The other two kidnappers said, "Yes boss." She kept screaming but after a while she passed out. Then they put her in a sack.

Mark said, "Finally some peace."

Jordan said, "We're so good at this work."

Meanwhile, Henry was following the kidnappers. He said to himself, "I've got to save that little girl before those men harm her."

The men arrived at a construction site. Henry also arrived at the destination. He got out of the car and started going inside quietly.

The kidnappers got Vicky out of the sack and tied her to a chair. They threw some water at her to wake her up. When Vicky woke up, she screamed, "AHHHHH, PLEASE LET ME GO. MUM, DAD SAVE ME!"

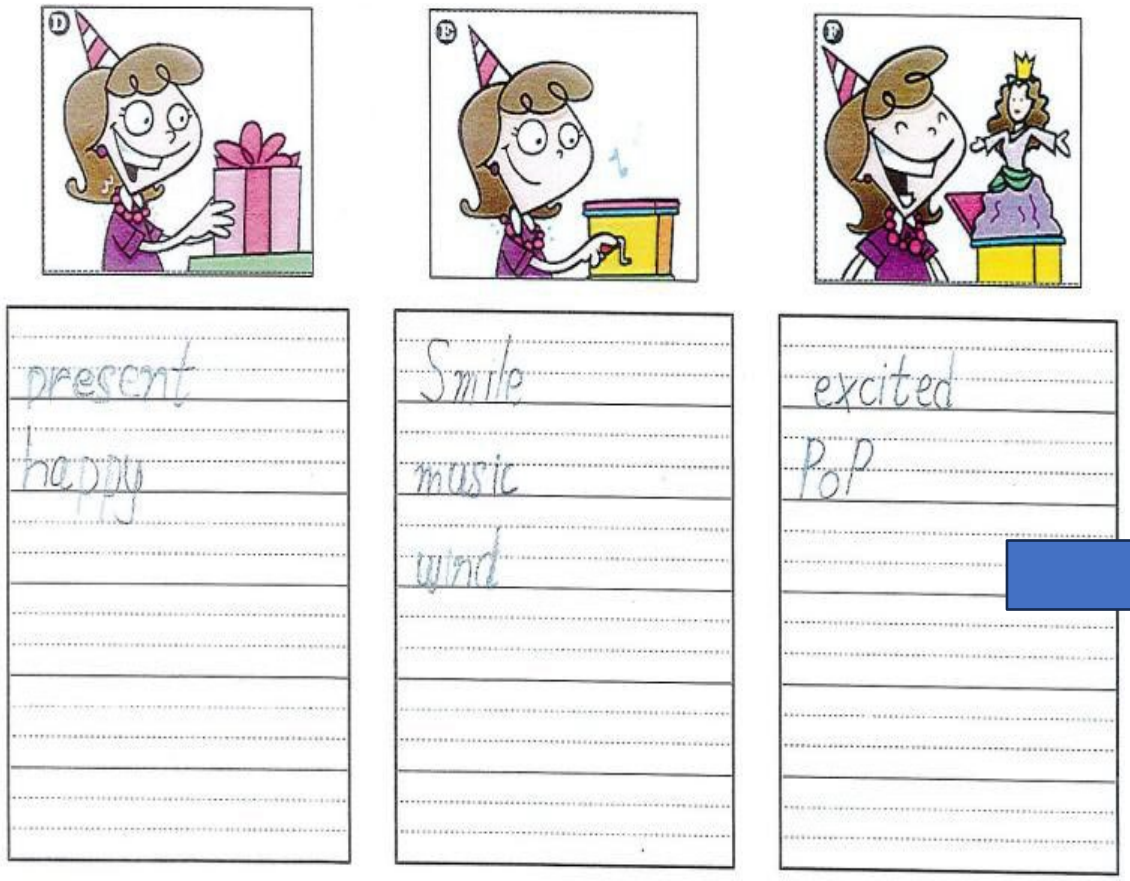
Jordan put his hand on Vicky's mouth and shouted, "Quiet, you little twerp. If you don't control that tongue of yours, you will regret it! Understand?" Vicky was petrified. She went quiet.

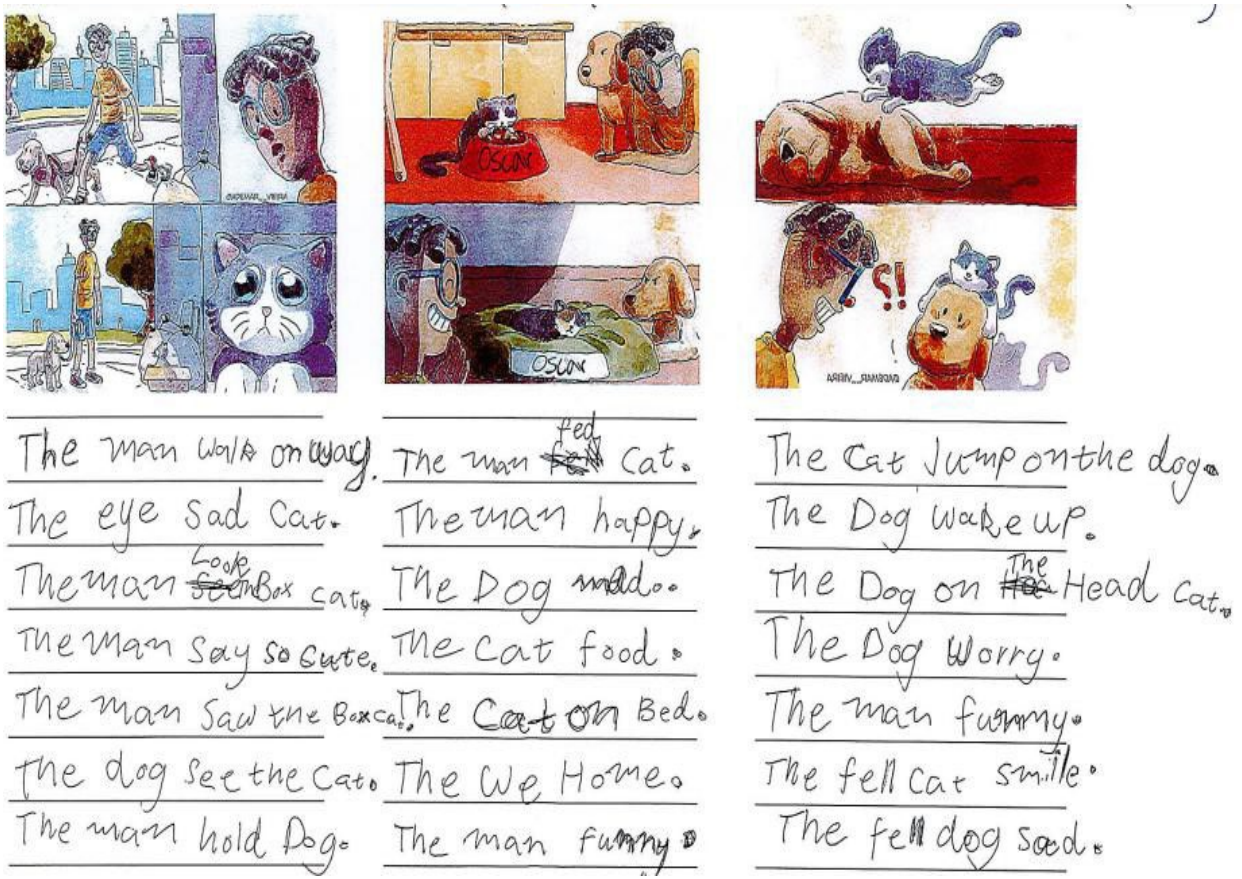
"Good job for saying that. Now this brat will think twice before speaking like that." John continued talking, "We will call her father and demand for a hefty ransom of 15 million dollars."

In the stairwell, Henry was trying to find where they were. He said, "I will destroy those men."

Vicky was trembling with fear. Mark asked Vicky, "Hey kid, you know your dad's number?" Vicky shook her head. Mark said, "This kid's of no use."

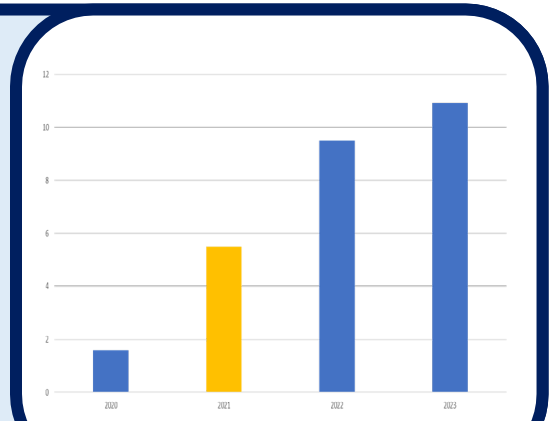
Auslan only (12 months)





Student outcomes

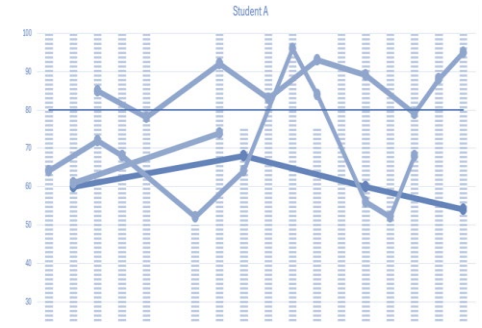
Learning growth

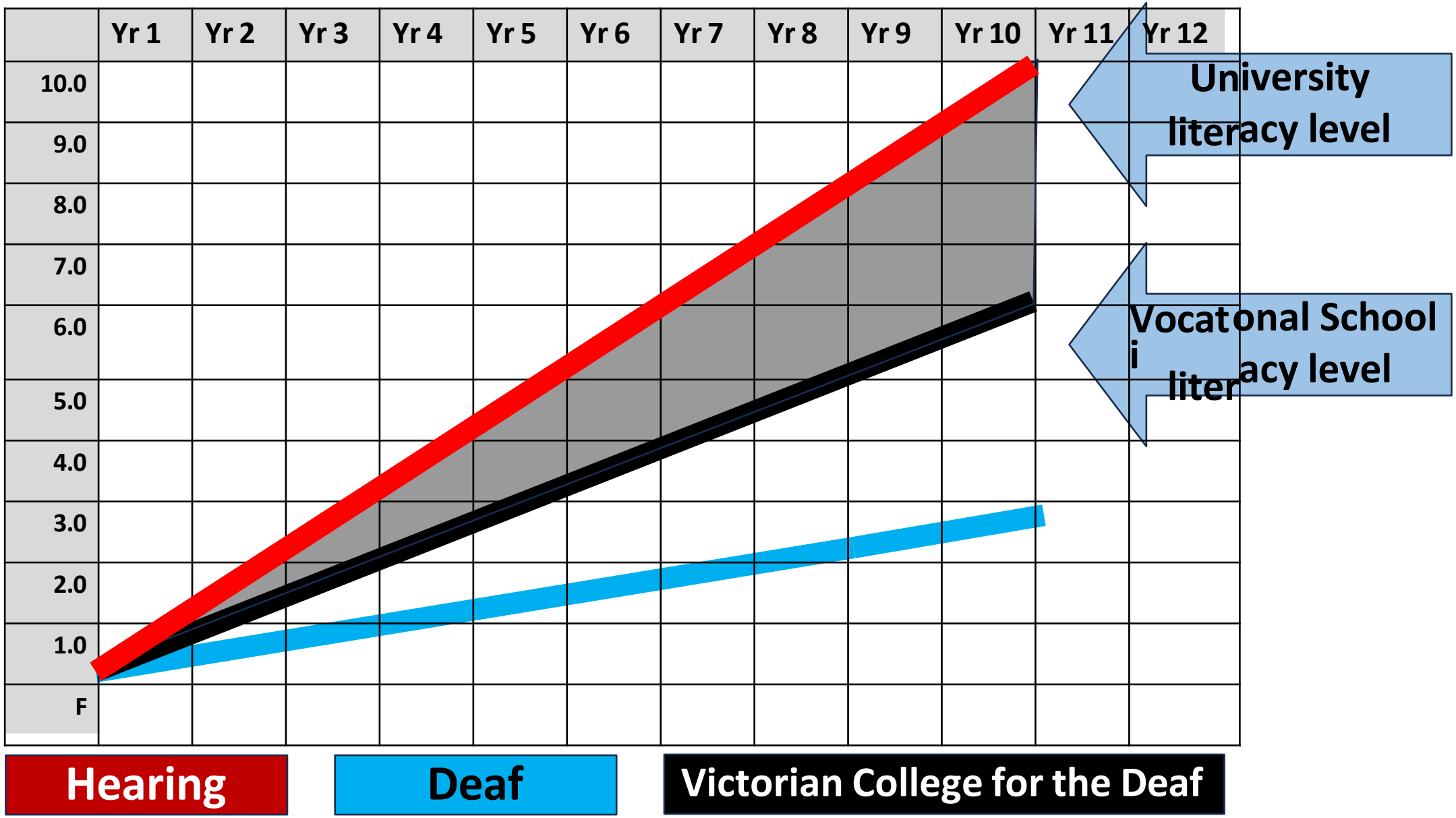


Behaviour & engagement

Higher expectations

Data accuracy





Allen, 1986, Trybus & Karchmer, cited in Kyle and Harris, 2011)
(Karchmer & Mitchell, 2003; Marschark & Spencer, 2003)

Partnership with

SCIENCE GALLERY

THE UNIVERSITY OF MELBOURNE

Victorian College for the Deaf F-12
School of Advantage for Deaf and Hard of Hearing Students

History of the partnership

2020 and 2021

VCD was the first school in Victoria to partner with Science Gallery

1x Science class per term at Science Gallery

2022

1x Science class per term at Science Gallery

VCD Graduation at Science Gallery

2023

2x Science class per term at Science Gallery

VCD Graduation at Science Gallery

Youth Advisory Panel with VCD students

Teacher Advisory Panel with VCD students

Access All Areas Symposium (Adelaide)

2024

2x Science class per term at Science Gallery

VCD Graduation at Science Gallery

Deaf staff employed at Science Gallery

Former VCD student employed at Science Gallery

Kwong Lee Dow Scholarships for Melbourne University

2025

2x Science class per term at Science Gallery

VCD Graduation at Science Gallery

Teacher of the Deaf (TOD) employed at Science Gallery

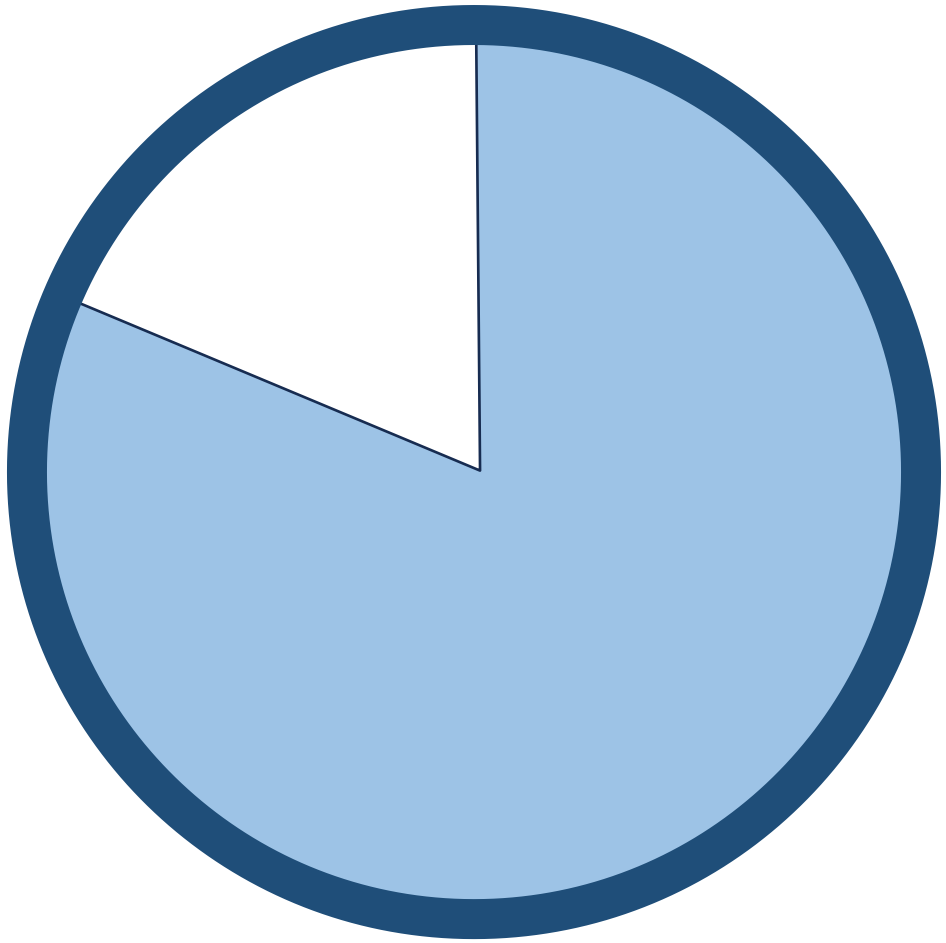
International Congress on the Education for the Deaf (Rome)

Commonwealth Government Funding

EDI Lesson Structure

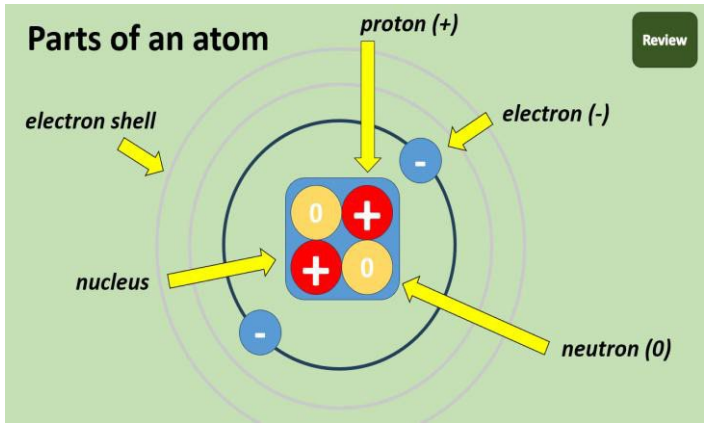
20%

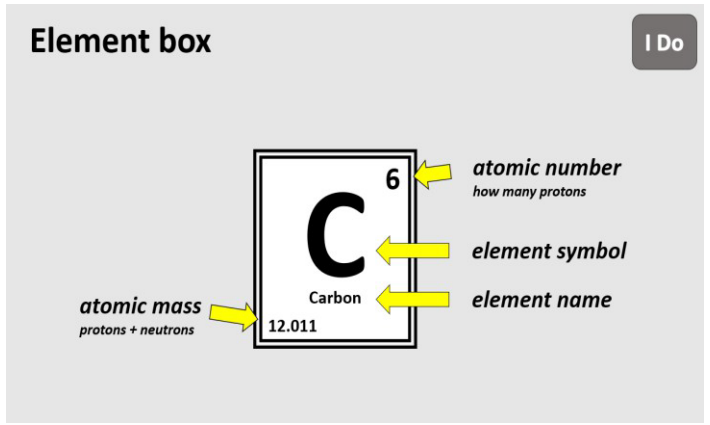
new concept



80%

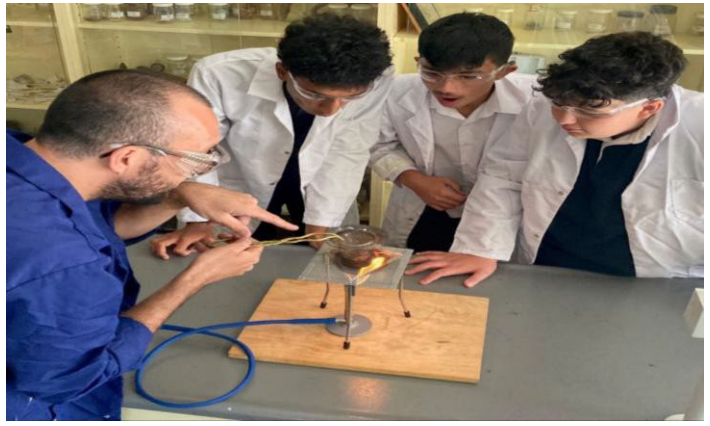
review and extension of already taught concepts


Parts of an atom
Review
proton (+)
electron shell
electron (-)
nucleus
neutron (0)

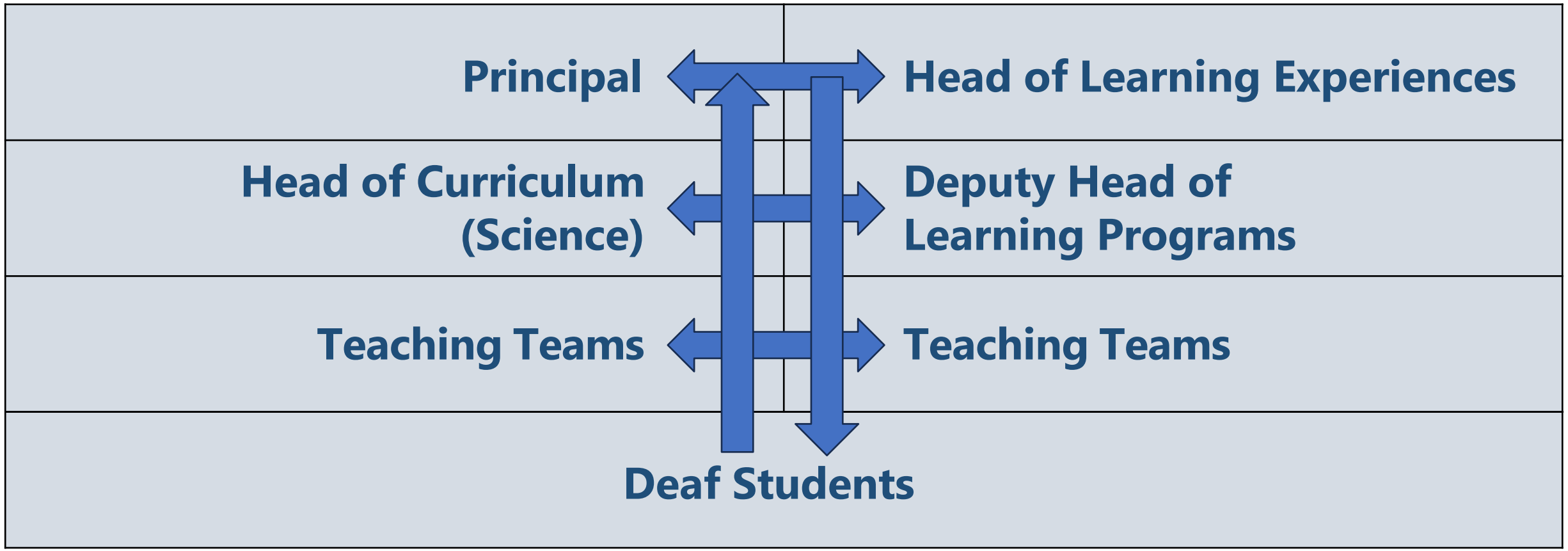

Element box
I Do
6
C
Carbon
12.011
atomic number
how many protons
element symbol
element name
atomic mass
protons + neutrons


Week 1
REVIEW
Week 2
LEARN
Week 4
APPLY
Week 3
PRACTICE


SCIENCE GALLERY

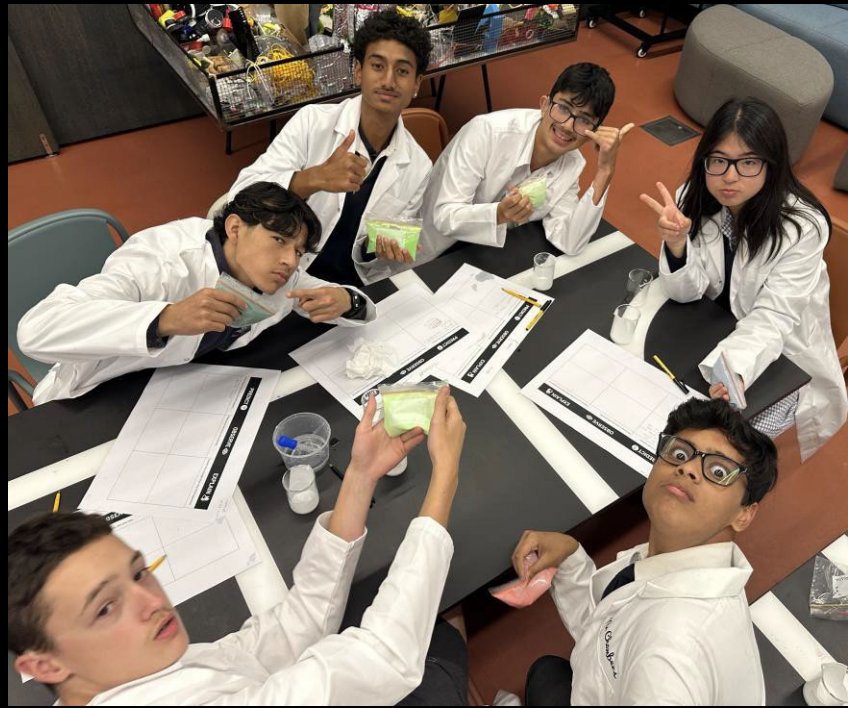


Hierarchical collaboration



Over the past four years, VCD students have visited Science Gallery 31 times, with 845 individual engagements.


FUNNEL



Since 2022, VCD has held Graduation & Awards Ceremony at Black Box, Science Gallery.

What's on now?

Faculties and schools for the deaf engagement

ICED2025

International Congress on the Education for the Deaf

Further reading

- Pedagogy
- Curriculum resources
- Evidence-based research and articles
- Victorian College for the Deaf website

Questions

VICTORIAN COLLEGE FOR THE DEAF

We mainly covered:

- Context of the Deaf school (Victorian College for the Deaf)
- Explicit Direct Instruction pedagogy
- Direct Instruction programs for Literacy and Maths

Reading Instruction for the Deaf, Turning Roadblocks into Roundabouts

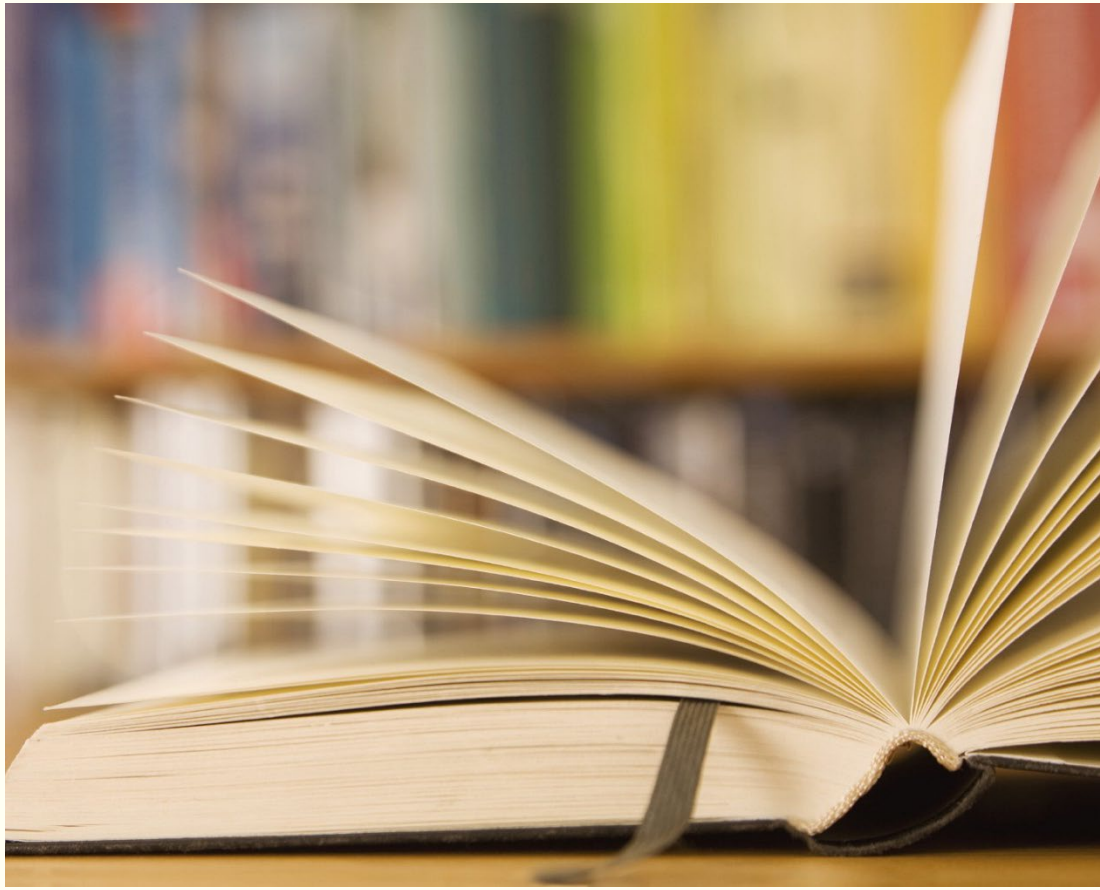
Julie Stott

AAD VICTORIA
VICTORIA State Government | Department of Education
Victorian Deaf Education Institute

READING INSTRUCTION FOR THE DEAF

Turning Roadblocks into Roundabouts

Julie Stott



Sunshine College Literacy program - SunLit

Sunshine College
Creating futures

Reading Crisis

Low reading skills across the school

SunLit Program

Whole-school reading program introduced in 2007

Systematic Phonics

Decoding strand created for lowest skill readers

Expert Mentoring

Guidance from literacy expert Dr Carol Christensen

Excellent Results

Improved reading outcomes for students

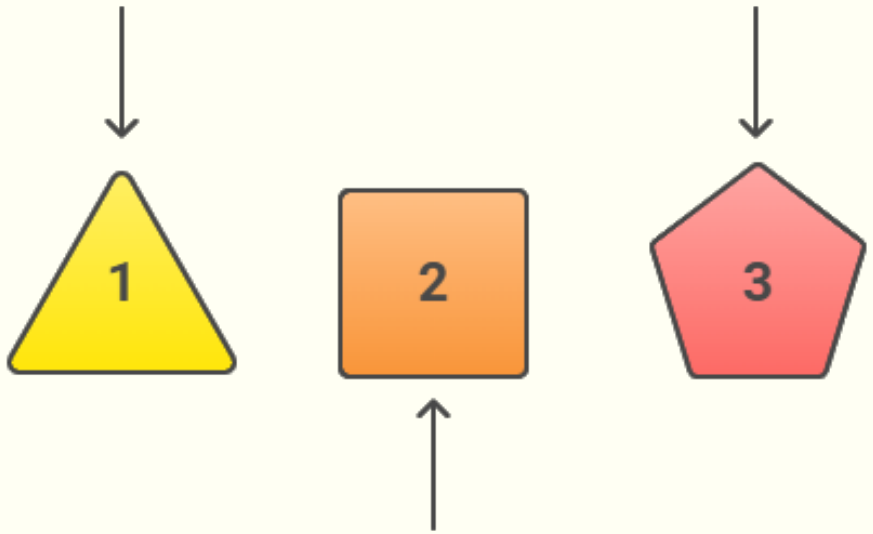
SunLit Reading Program

Varied Reading Levels

Students with diverse reading abilities

Targeted Lessons

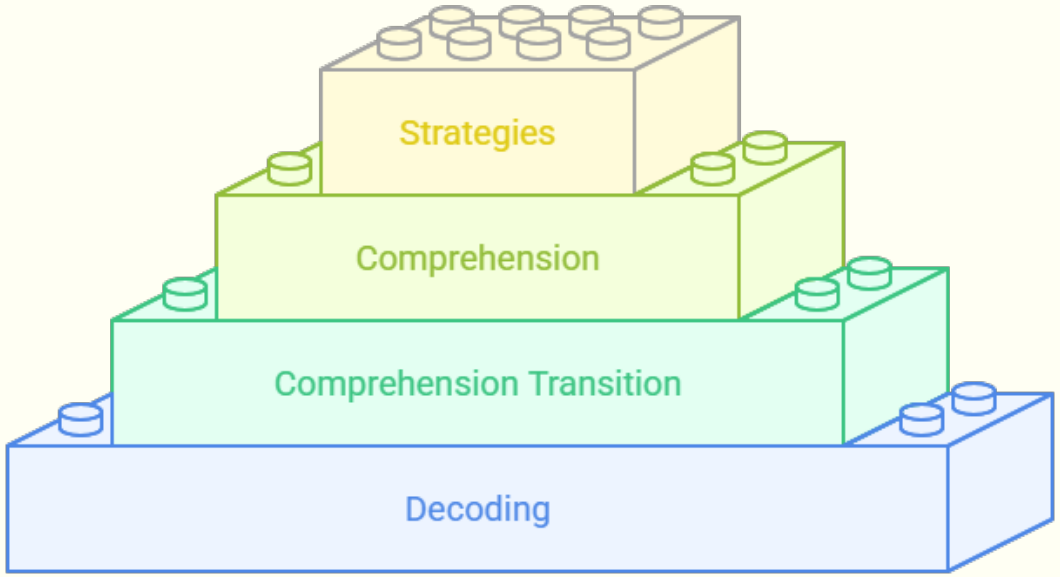
Lessons designed for specific skill levels



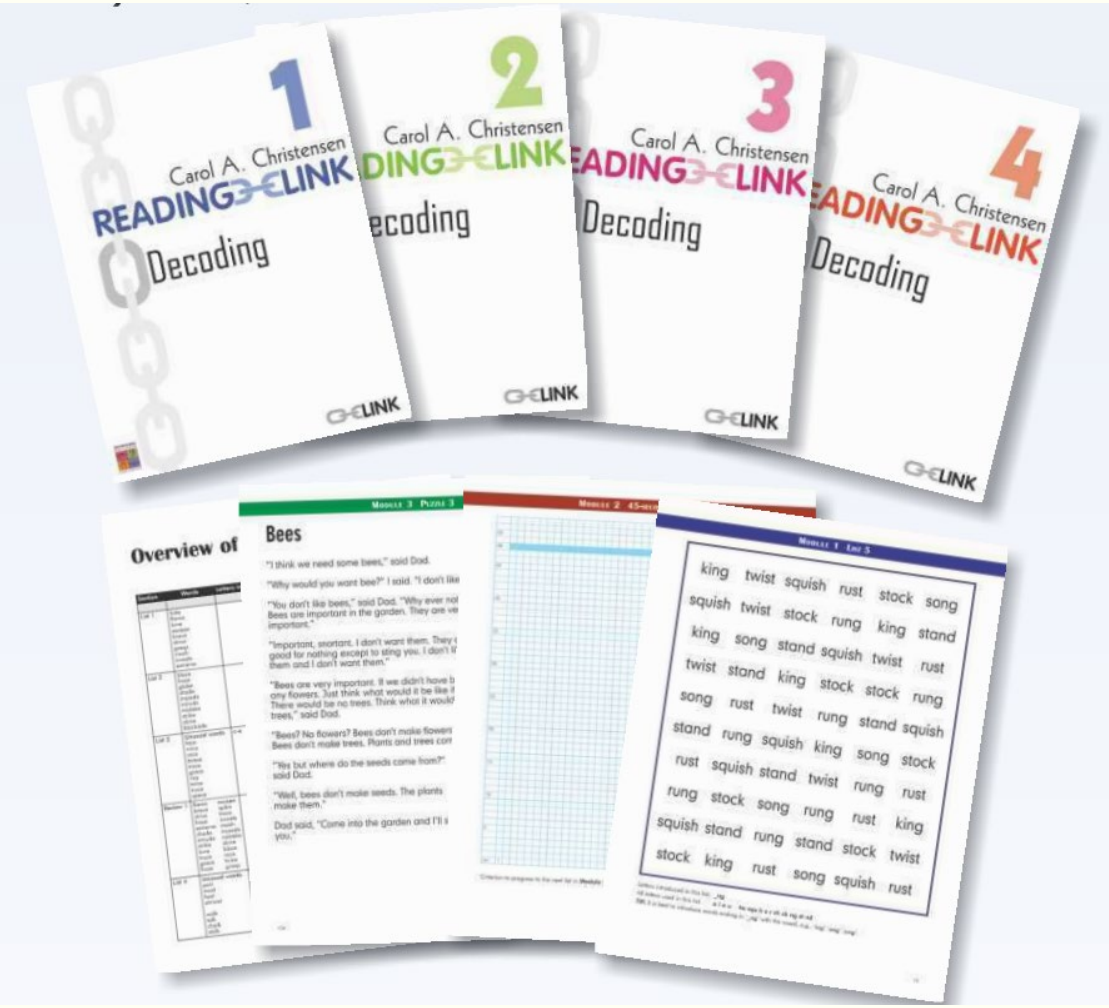
Skill-Based Grouping

Students grouped by reading skill level

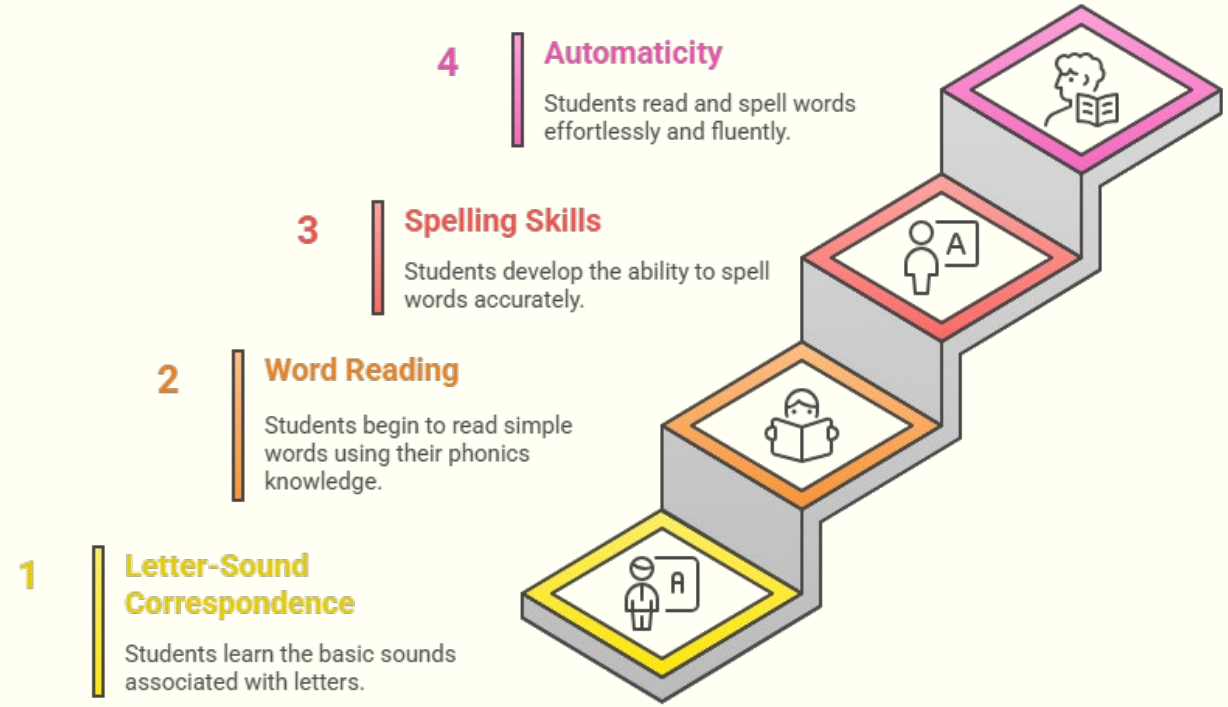
SunLit Reading Program Strands



Sunlit Decoding Strand



Achieving Reading Automaticity



How to teach decoding to signing students?

Literacy experts have said:

"If you can't decode, you can't comprehend."*

Reading comprehension is heavily linked to firstly being able to decode (word recognition) by using phonics.

How can we bypass phonics for signing Deaf students?

* Dr. Anita Archer

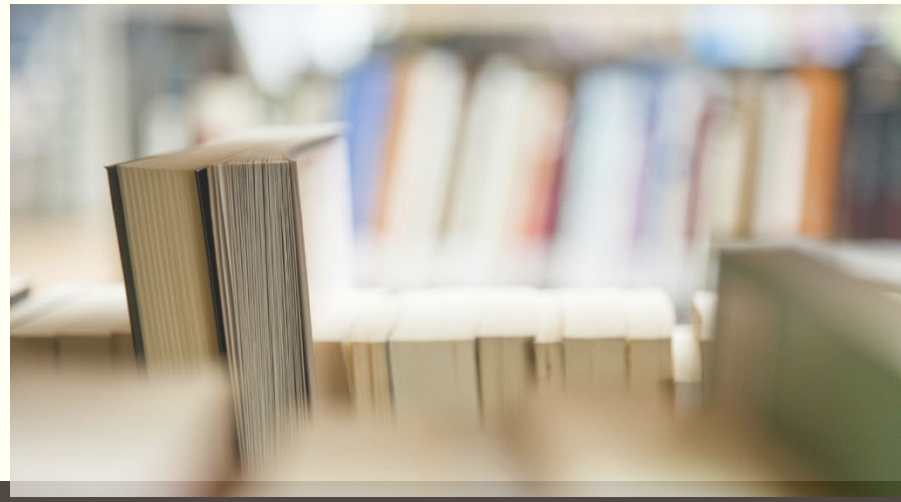
TURNING ROADBLOCKS INTO ROUNDABOUTS

I followed the school's successful phonics-based program (decoding strand):

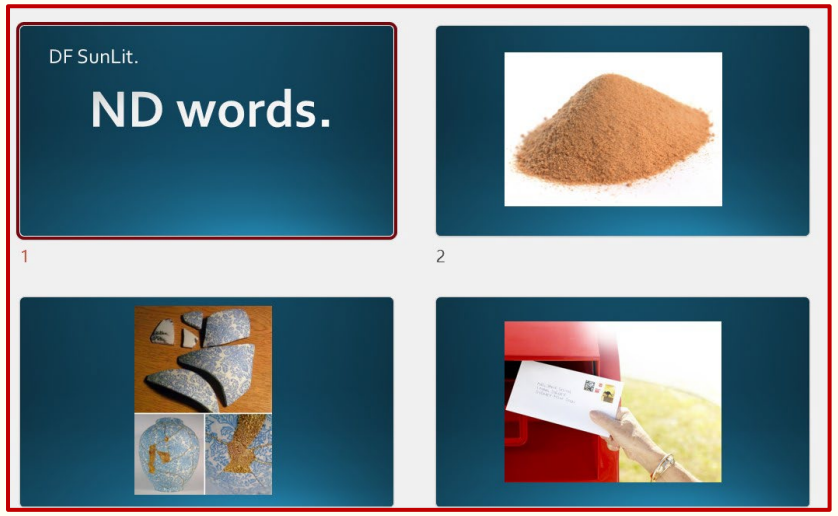
Changed from sound to sight

How?

- ✓ repetitive, visual lessons that build a strong vocabulary base
- ✓ strengthen finger-spelling skills
- ✓ understand the components of language
- ✓ incorporate comprehension strategies



Building vocabulary through word families or categories.



1. Sign the image.

2. Spell the word

3. Connect image, sign, and spelling

mend	send	fond	sand	blend
fund	sand	mend	fund	fond
blend	mend	sand	fond	send
sand	blend	mend	fund	mend
fond	mend	sand	blend	fond
blend	send	mend	sand	fund

4. Automaticity

mend	send	fond	sand	blend
fund	sand	mend	fund	fond
blend	mend	sand	fond	send
sand	blend	mend	fund	mend
fond	mend	sand	blend	fond
blend	send	mend	sand	fund

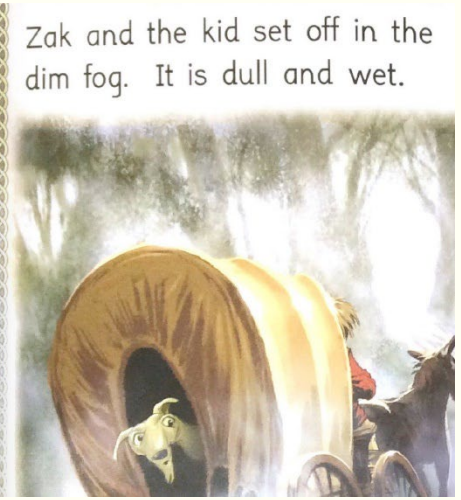
5. Words in context

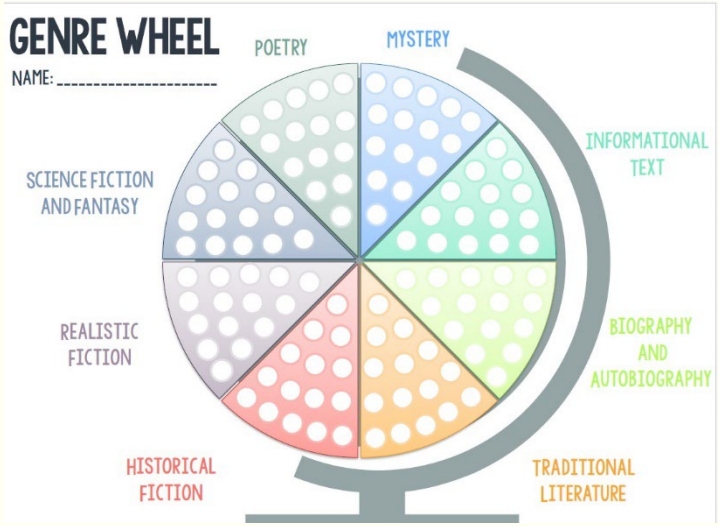
6. Reciprocal reading.

Reading Strategies

Guided reading.

- Bilingual approach
- Opportunities to practise





Reading for pleasure.

- Exposure to rich fictional texts in sign language only
- Modelling reading from an expert reader
- Building mental models

Turning Roadblocks into Roundabouts

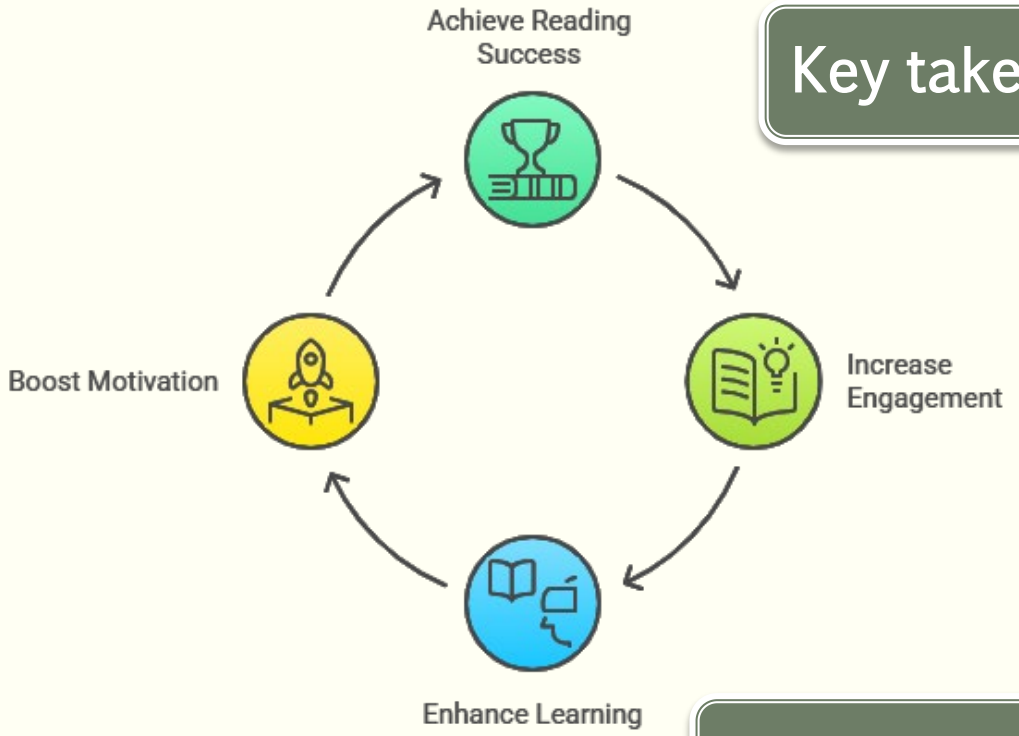
Pop Out

2020 On...	2021 On...	2021 On...	2022 On...	2022 On...	2023 On...	2023 On...
English Reading	English Reading	English Reading	English Reading	English Reading	English Reading	English Reading
E (1)	E (2.2)	D (6.2)	E (5.8)	D (6.6)	E (6.9)	D (8.5)
1	2.2	6.2	5.8	6.6	6.9	8.5
1	2.2	6.2	5.8	6.6	6.9	8.5
0	0	0	0	0	0	0
1	2.2	6.2	5.8	6.6	6.9	8.5
1	2.2	6.2	5.8	6.6	6.9	8.5

Pop Out Pivot Grid

2022 On...	2022 On...	2022 On...	2023 On...	2023 On...	2024 On...	2025 Acer PAT Adaptiv...	
English Reading	English Reading	English Reading	English Reading	English Reading	English Reading	Scale score	Band
E (0.5)	E (0.5)	E (3.1)	E (2.6)	E (2.4)	E (4)	142.50	140-149
0.5	0.5	3.1	2.6	2.4	4	142.50	140
0.5	0.5	3.1	2.6	2.4	4	142.50	140
0	0	0	0	0	0	0.00	0
0.5	0.5	3.1	2.6	2.4	4	142.50	140
0.5	0.5	3.1	2.6	2.4	4	142.50	140

2022 On...	2022 On...	2022 On...	2023 On...	2023 On...	2024 On...	2025 Acer PAT Adaptiv...	
English Reading	English Reading	English Reading	English Reading	English Reading	English Reading	Scale score	Band
E (2.3)	E (1.9)	C (5.6)	E (3.6)	E (2.9)	E (3.9)	105.60	100-109
2.3	1.9	5.6	3.6	2.9	3.9	105.60	100
2.3	1.9	5.6	3.6	2.9	3.9	105.60	100
0	0	0	0	0	0	0.00	0
2.3	1.9	5.6	3.6	2.9	3.9	105.60	100
2.3	1.9	5.6	3.6	2.9	3.9	105.60	100



Key takeaway

Results

- Student engagement
- High rate of improvement
- Comprehending simple texts

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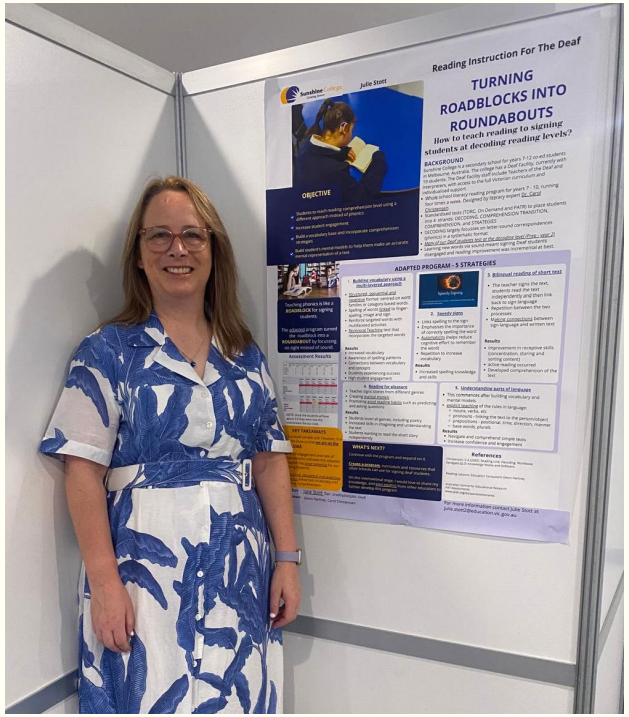

Congress in Rome 2025

- Presented poster
- Positive feedback

What next?

- Continue research and development
- Produce a resource package

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