Scan

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Published by the NSW Department of Education, Scan is an open access online journal, delivered quarterly. Scan is a leading educational resource that brings innovative change to the lives and learning of 21st century educators and students. Scan informs teachers' practice by encouraging engagement with a wide range of articles, including peer reviewed research, to enhance school and student outcomes across NSW, Australia and beyond. The journal aims to leave teachers inspired, equipped and empowered, and students prepared to maximise their individual talents and capabilities.

Curating texts for the classroom: picture books in history or the history of picture books

Joanne Rossbridge
Language and literacy consultant

Joanne Rossbridge guides teachers to curate picture books that support the learning and teaching of history and foster critical thinking.

Cast your mind back to your own schooling and consider how you engaged with the history content of the day. Christine Leland and Stevie Bruzas (2014) remind us that many of us grew up learning versions of the world through history textbooks without much critical analysis or consideration of perspectives. This can still be the case today, with libraries and websites dominated by 'information' genres which, due to their very nature, are sometimes not questioned or challenged. However, times have changed, with the Australian children's picture book, a historical artefact in its own right, providing an increased range of voices through historical texts. The purpose of this article is to guide teachers to select and curate picture books for teaching history while also supporting students to become critical thinkers, to develop a 'historical conscience' (Allender, 2019) and ultimately to play a role in society seeking equity and social justice.

The History K-10 syllabus explains that:

> **History contains many stories and … there is never only one uncontested version. There are many differing perspectives within a nation's history, and historians may interpret events differently depending on their point of view and the sources they have used.** (History K-10 syllabus, NESA, 2012, p 9)

The use of historical fiction or informational picture books to develop historical concepts such as perspective and empathy can support historical inquiry and improve critical literacies and engagement (Forsyth, 2022). Forsyth argues that this is dependent on teacher understanding of a critical literacy approach and teacher knowledge of processes for the curation of texts to use with students.

Critical literacy and picture books in history

For teachers, the *Four Resources Model* (Freebody and Luke, 1990; Luke and Freebody, 1999), and in particular the text analyst role in conjunction with the code breaker, text participant and text user roles, can be a useful way of reflecting on practices occurring in English and history classrooms. As described by Sara Demoiny and Jessica Ferraras-Stone (2018), Christine Leland and Stevie Bruzas (2014) and Natasha Small and Jon Callow (2021), picture books can be both engaging and useful for developing critically literate thinkers. Picture books based on historical content can be read in the text participant role but opportunities for critical thinking may be missed, particularly if texts are looked at in isolation from each other and without considering their broader context, their own history. As teachers, we need to show our students that texts are representations by an individual or community at a particular point in time.

'Historical fiction picture books represent a unique art form in children's literature because they encompass artistic and imaginative reconstructions of the past through words, images, and design features intended to help readers make sense of historical events and concepts' (Youngs and Serafini, 2011, p 115). However, it cannot be assumed that students will engage with meanings in picture books from a social justice or equity perspective without a critical literacy approach to the selection and a closer engagement with texts.

When discussing critical literacy in Covid times, a significant point in history itself, Edwin Creely and Damien Lyons (2022) state:

> **We need to be aware that language has been consciously constructed to shape understandings – including shaping our attitudes, values, and behaviours. A micro lens in critical literacy invites students to ask questions about how language within a social context is positioning people, and to critique gaps, silences and biases (p 15).**

This 'ideological basis of literacy' (Creely and Lyons, 2022, p 15) is a critical understanding for teachers to bring to text choice. As an example, two books can be compared in terms of reactions to pandemics at different points in history. Both published in 2020, *Pandemic* (French and Whatley) tells of the 1918 Spanish flu, while *The Great Realisation* (Roberts and Nomoco) is a poem/bedtime tale/Facebook post that became a picture book as a response to the Covid 19 pandemic. Both books have similar themes of hope and kindness creating opportunities for empathy in the reader. They are personal, family responses but are contextualised within significant historical periods. One author lived during the events while the other writes from the perspective of stories shared by her great grandmother. In the author note at the end of *Pandemic*, Jackie French (2020) says, 'This is a true story, except for the details'.

By considering whose story is told and its reliability, we can think of *Pandemic* as a secondary historical source while *The Great Realisation* is a primary source written amidst the actual historical event. Comparing many aspects of these two books we can consider whether they accurately reflect the attitudes, values and behaviours of the time. This could be supported by students' own experiences as well

as viewing the texts against other primary sources of the times such as letters, newspapers, radio and television news reports, political press conferences, social media, medical advice and so on. This leads to further discussion of how people were not only informed or misinformed but also included or excluded at different points in time through pandemic responses personally, locally, nationally, and globally.

The Great Realisation by Tomos Roberts and Nomoco (2020) and *The Australia Book* by Eve Pownall and Margaret Senior (1952)

Take a look at this lesson sequence - Indulging in Poetry: The Great Realisation by Tomos Roberts and Nomoco.

Considerations when selecting

When selecting books, we need to be aware of their multimodal complexity (Small and Callow, 2021) and the degree of background knowledge students bring to the texts (Youngs and Serafini, 2011).

Suzette Youngs and Frank Serafini (2011, p 216) suggest asking these questions of selected books:

- What background knowledge is needed to make sense of it? How does students' lack of historical knowledge affect the use of historical fiction in the elementary curriculum?
- What aspect of the book (characters, plot, setting, events) has been fictionalised?
- What do readers get from the images? The design? The text? How do the modes work together to convey the story?

These questions assume in-depth teacher knowledge of the history surrounding the picture book and may raise the need for additional research during the process of selection and curation. This raises other questions to be asked and investigated in relation to the broader context of the text. For example:

- When was the book published? Has it been republished?
- Does the publisher typically publish historical picture books and if so for how long, by which authors and on what topics?
- Has the book been nominated or won awards and if so, when?
- Is the book supported by other primary and/ or secondary sources?
- What accessible information is available on the author/illustrator? What motivated the author/illustrator to compose the book?
- Whose voice is included or excluded?

These questions are important as their answers not only enhance the reading of the book, but they also raise questions about the social, cultural, political and historical contexts or factors of each book and its value as a historical artefact. Thus, the process of critical thinking for the teacher begins at the point of selecting and curating texts for students.

Where to start with selecting and curating picture books

As alluded to in the questions above, one way to investigate how children's picture books have developed and been valued in more recent times can be to explore the books that have been shortlisted and the winners of key awards.

The Eve Pownall Award for Information Books has been a part of the Children's Book Council of Australia (CBCA) Book of the Year Awards since 1993. 'Entries in this category should be books which have the prime intention of documenting factual material with consideration given to imaginative presentation, interpretation and variation of style' (CBCA). The CBCA Reading Time site includes reviews and interviews with authors and illustrators, as well as booklists and articles which are helpful for curating books.

According to the Australian Dictionary of Biography, Eve Pownall (1902-1982), was a historian and author of children's books. Her first major work was *The Australia Book* (1952), with coloured illustrations by Margaret Senior and was named by the Children's Book Council as best book of the year. This was one of the earliest forms of picture book with historical content and a move away from blocks of written text. A revised edition was published in 1980. In many of her publications, Pownall included the role of women and children in remote areas of Australia. These were the voices that had been typically silenced in historical texts for both adults and children. One would think that she would have been an advocate for critical literacy.

Pownall's book had a significant impact on Nadia Wheatley and her writing of *Australians All* published in 2013:

> When I was growing up in the 1950s, there were not many Australian books for children. Having been brought up on books that were mostly set in England or Europe, the palette of Margaret Senior's illustrations showed me the colours of my own land for the first time. As well, Eve Pownall's text gave me my first introduction to the history of Australia. (**Kids Book Review**, Wheatley, 2013)

Australians All was organised around 80 biographies of young people throughout Australian history at a time when there had

Australians All by Nadia Wheatley and Ken Searle (2013) and *Grandma's Treasured Shoes* by Coral Vass and Christina Huynh (2020)

been an absence of children, young people, women and First Nations people in historical narratives. Both *The Australia Book* (1952) and *Australians All* (2013) were revolutionary in providing more diverse voices in historical children's literature.

Which books and whose voices?

In 2022, when referring to the Eve Pownall award won by Safdar Ahmed for *Still Alive: Notes from Australia's Immigration Detention System*, the Sydney Morning Herald (O'Brien, 2022) noted, 'New voices and different experiences are a theme in this year's CBCA awards'. The book also won a range of other awards including Gold Ledger Comic Arts Award of Australia 2022; NSW Premier's Literary Award - Book of the Year 2022; NSW Literary Award - Multicultural Award 2022. Although most appropriate for secondary students due to the confronting content and graphic account of the history and treatment of asylum seekers particularly at the Villawood Detention Centre in Sydney, this is a great example of a book capturing Australia's past and more recent history in an era in which voices have been silenced, principally by successive governments of the past 20 years.

In combination with key book awards, databases on children's literature are also very helpful for developing critical thinking and curating picture books for use in classrooms. The National Centre for Australian Children's Literature (NCACL) has a Cultural Diversity Database. There are many ways to search the database. As an example, to further investigate the presence of the voice of the asylum seeker in children's picture books for younger students, the Cultural Diversity Database can be useful for quickly locating related texts. By selecting 'asylum seekers' as a key concept in the advanced search options, recent picture books listed include:

- *The Voyage* by Robert Vescio and Andrea Edmonds (2019)
- *A Home for Luna* by Stef Gemmill and Mel Armstrong (2019)
- *Grandma's Treasured Shoes* by Coral Vass and Christina Huynh (2020)

The reading of these books can be informed through responses to the following questions:

- What is the effect of human or animal characters in telling stories of those seeking asylum?
- How are characters' lives portrayed in their new country? Is this reflected in primary sources?
- Are war-torn countries named in the books? Why or why not? How does this impact the historical value of the story?
- Is the setting of time and place explicit, implied or generalised? What is the effect?
- Does contextual information about the book and author/illustrator change the reading of the book in any way?
- What does this collection of books say about the voice of asylum seekers in literature and Australian society more generally?

This lesson sequence looks at before, during and after reading to appreciate the challenges of being a refugee from Vietnam in the 1970-80s: Interacting through Reading – Grandma's Treasured Shoes.

Picture Books on the Refugee Experience (Rossbridge, 2021) or other collections can be selected and viewed through the same questions. Some companies offer lists based on topic or theme, for example, Refugees and displaced people page (Booktopia). It is also worth noting the publication dates of such texts and connections to international wars and Australian immigration policies.

In 2022, *Heroes, Rebels and Innovators: Inspiring Aboriginal and Torres Strait Islander People from History* by Karen Wyldill and Jaelyn Biumaiwai (2021) was an Honours book for the Eve Pownall

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award. This book also brings to life voices often not shared in history through biographies.

> **This lavish and beautiful book tells the stories of seven Aboriginal heroes and heroines from the eighteenth century through to the twentieth. Each character's story is presented once through a text that is dramatic, poetic, and vivid, then it is told again through a more sober historical text. You might say that the story is told once proper way, then repeated white way. Reading Time (Brophy, 2021)**

Demoiny and Ferraras-Stone (2018) discuss the comparison of texts in history through what they term the master narrative, often a history textbook, with the counter narrative, a text giving a voice to those silenced in the master narrative. The principle of text comparison is also applied to picture books with an emphasis on the role of both words and images particularly for creating a connection between the subject or character and the reader, thus an interpretation of events and empathy for characters or historical figures and their voices over time.

For instance, in *Heroes, Rebels and Innovators: Inspiring Aboriginal and Torres Strait Islander People from History*, Bungaree is featured as a 'nautical adventurer', who was a popular character in the early years of the Sydney colony and sailed with Matthew Flinders amongst others. This picture book can be viewed alongside other picture books about Matthew Flinders such as *A Cat Called Trim* by Corinne Fenton and Craig Smith (2019) and *Matthew Flinders Adventures on Leaky Ships* by Carole Wilkinson and Prue Pittock (2020). The three picture books can be compared in terms of representations in words and images and the degree to which the subject is not only mentioned or depicted but the implied meanings about his significance as a historical figure. These discussions can then be viewed through the primary source of *Terra Australis: A Voyage to Terra Australis* by Matthew Flinders (2012), which is the edited selections of his journals. These can all then be compared with a master text or textbook version of events.

History through biographies and commemorative events

Biographies are often read and sometimes written in history classrooms, but too often the stories of Aboriginal and Torres Strait Islander people, women and some political leaders or activists are silenced. To build upon the picture books mentioned earlier, 'biographies' was searched for in the Aboriginal and or Torres Strait Islander Resource (NCACL). There were 18 results including picture books such as:

- *Albert Namatjira* by Vincent Namatjira (2021)
- *Freedom Day: Vincent Lingiari and the Story of the Wave Hill Walk-Off* by Thomas Mayor, Rosie Smiler and Samantha Campbell (2021)
- *Amazing Australian Women: Twelve Women Who Shaped History* by Pamela Freeman and Sophie Beer (2018)

Again, these texts can be used as counter narratives to compare to other versions of history in textbooks whilst also drawing upon primary sources.

Anzac Day, or a focus on particular conflicts, occurs in both history and English classrooms for various age groups. By carefully selecting and reading picture books, we can introduce students to topics such as Anzac Day through sensitive stories appropriate for their age and background. Considering historical concepts such as empathetic understanding and significance (2012, NESA) can be helpful lenses for thinking about how to approach the ideas and representations in the texts. For younger students, picture books might focus on remembrance and the significance of the Anzac Day march as well as the sacrifices and memories of both individuals and their families. Older students might consider specific wartime conflicts and their impact on identity and history, bravery and honour in war of particular individuals, the consequences of war, differing perspectives around similar events as well as the use of symbolism as a way to represent challenging concepts. It is always worth looking at not only whose stories are told or not told but also when they are told. The following books have been grouped as *trios* to place attention on perspectives and voices heard in stories of wartime.

Women in war
- *The Flying Angel* by Vicki Bennett and Tull Suwannakit (2021)
- *Rachel's War: The Story of an Australian WWI Nurse* by Mark Wilson (2021)
- *Anzac Girl: The War Diaries of Alice Ross-King* by Kate Simpson and Jess Racklyeft (2020)

First Nations perspective
- *Charlie's Swim* by Edith Wright and Charmaine Ledden-Lewis (2022)
- *Alfred's War* by Rachel Bin Salleh and Samantha Fry (2018)
- *Dreaming Soldiers* by Catherine Bauer and Shane McGrath (2018)

Differing perspectives
- *Reflection: Remembering Those Who Serve in War* by Rebecka Sharpe Shelberg and Robin Cowcher (2016)
- *Lest We Forget* by Kerry Brown, Isobel Knowles and Benjamin Portas (2019)
- *Photographs in the Mud* by Dianne Wolfer and Brian Harrison-Lever (2007)

An extensive list of Picture Books for Learning about Anzac Day (Rossbridge, 2022) can also be used by teachers for curating books. The list can be used by both teachers and students to critique the voices heard over time through books published on the ANZAC Day theme. Books can be categorised based on the voices included; for example, veterans, young soldiers, leaders, women, children, and animals. They can also be placed on timelines to link to wartime events or commemorations and then evidence gathered on points in publishing history where more diverse stories began to be heard. For example, the stories of First Nations soldiers serving in WWI and WWII have only started to appear in children's picture books in the past few years, primarily through Magabala Books, Australia's leading Indigenous publishing house. The Magabala Books website is another great resource for exploring children's picture books written and illustrated by Aboriginal and Torres Strait Islander peoples. In addition, it would also be useful to question the lack of picture books

and literature in general about the frontier wars in Australia. This article from The Guardian, [Australian War Memorial promises 'much broader, deeper' depiction of frontier wars](#) (Knaus, 2022) is a useful source to bring to the discussion.

Other voices

Finally, we are living and breathing history every moment of our lives. Currently in Australia, conversations are occurring about embedding an Indigenous voice in parliament within the Constitution. This point is a consequence of the history that has gone before and although current, needs to be seen through a historical lens. For young children, picture books are an ideal vehicle for understanding what it means and why it matters to establish a Makarrata Commission, to undertake processes of treaty-making and truth-telling ([The Uluru Statement](#)). For young people, this needs to be understood through the learning of the diverse voices in history and particularly those voices silenced across time, even in the democracy that is Australia. An understanding of 'voice' through the voting and broader political system is critical for students. The following set of picture books is ideal for this current point in history. They are not only vehicles for teaching history but can develop critical thinking about how the picture book captures a time and is significant, not only historically, but also socially and politically.

Finding our Heart: a story about the Uluru Statement for young Australians by Thomas Mayor and Blak Douglas (2020) is aimed at children and is essential for understanding the Uluru Statement from the Heart. It becomes even more meaningful when looked at alongside other books such as *Sorry Day* by Coral Vass and Dub Leffler (2018). This is the story of Prime Minister, Kevin Rudd in 2008 acknowledging the sorrows of the past and saying 'Sorry' to the generation of children who were taken from their homes. It is told through the eyes of two children.

Say Yes: A Story of Friendship, Fairness and a Vote for Hope by Jennifer Castles and Paul

Heroes, Rebels and Innovators: inspiring Aboriginal and Torres Strait Islander People from history by Karen Wyldill and Jaelyn Biumaiwa (2022) and *Finding Our Heart: a story about the Uluru Statement for young Australians* by Thomas Mayor and Blak Douglas (2020)

Seden (2017) is conveyed from the perspective of two girls who were best friends but experienced different rights as they grew older. This forms the backdrop of the 1967 Referendum to change the Constitution to recognise Aboriginal and Torres Strait Islander peoples, impacting both recognition and law making.

Votes for Women! The Story of Nellie, Rose and Mary by Mark Wilson (2022) is set during the 1890s suffragist movement. This text does not include an Indigenous perspective but can be viewed in the broader context of the right to vote for marginalised groups and the struggles required for receiving the right to vote, much like the lead up to the upcoming referendum.

Reading and viewing these texts together, allows a focus on not only the perspectives of the characters within the books but connects with the perspectives of those whose rights and freedoms have been and are still at stake. It is also interesting to place the historical events on a timeline and then the date of publication of each of the above books to discuss the time span between the events and publications. Discussions may occur on what this might say about authors and illustrators, publishers, and society more broadly at points in time.

Picture books for history and as history

The picture book is surely an artefact of history in this country. If we want our students to be critical thinkers, then teachers must be critically literate as they curate texts and when using texts within classrooms. If we want students to be aware of how different texts are positioning them, we need to show them how to put perspectives next to each other and make their own decisions about what they want to believe and how they want their lives and society to be. For this to happen, we must act as thoughtful and diligent curators of texts that encourage our students to engage in the subject of history and an equitable world.

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Using research and evidence well in practice: the format matters

The Monash Q Project team presents their findings on how educational research can best be delivered to practitioners and leaders within the education system.

Dr Hang Khong
Research Assistant, Monash Q Project

Blake Cutler
PhD student and Research Assistant, Monash University

Dr Jo Gleeson
Research Fellow, Monash Q Project

Dr Mark Rickinson
Associate Professor in the Faculty of Education, Monash University

Dr Lucas Walsh
Professor of Education Policy and Practice, Youth Studies, in the Faculty of Education, Monash University

Dr Genevieve Hall
Teaching Associate, Monash University

Although schools in Australia and internationally are increasingly expected to use research to inform their teaching efforts, the perceived gap between research and practice can be a barrier to using research well. While the factors contributing to these challenges can include the way that research is presented to educators and the interactions between researchers,

practitioners, and policy makers, the question of which evidence formats appeal to educators is still under-investigated. Drawing on a large-scale survey of 819 Australian school-based educators, this article reports on the evidence formats that educators find useful, and how they then share different evidence within and beyond their school. Findings indicate that educators prefer evidence in short formats that showcase original research findings, and from sources that are both relational and interactive. The survey data also highlights a relationship between educators' preferences for research, their use of research in practice, and how they share evidence with colleagues. Together, these findings point to important implications for educators and education system leaders as to how to support the improved use of research in educational practice.

> **'I think when you're getting up in front of staff, having a six-minute or an eight-minute video is so much more empowering and striking than trying to talk about a research paper that might take 20 minutes in a PowerPoint.' (School leader)**

There has been growing international interest in promoting the use of research and evidence to inform educational practice (Malin et al., 2020; Nelson and Campbell, 2017). In Australia, school systems have implemented changes to develop evidence-informed approaches (Productivity Commission, 2016) and a 'research-rich teaching profession' (White, 2021; White et al., 2021). Emphasis on the use of research and evidence can be seen in school improvement frameworks, professional standards, professional learning approaches, and mission statements across educational and research organisations at both the state (for example, Department of Education and Training Victoria, 2020; Victorian Academy of Teaching and Leadership, 2022) and national level (Australian Institute for Teaching and School Leadership, 2018; Australian Education Research Organisation, 2020; and similar).

However, despite these efforts, research is not used often by educators in practice (Mills et al., 2021; Walsh et al., 2022). This can be attributed, in part, to barriers regarding

the availability of useful research and evidence, users' capacities to use and apply research, the opportunity for collaboration between researchers and educators, and structural supports for research use (Torres, 2022). We are also yet to understand how the different ways in which educators engage with research influence their teaching and student outcomes (Cain, 2016). An under-investigated piece of this puzzle is understanding which evidence formats appeal to educators and may encourage the increased and improved use of research.

This paper aims to report on the evidence formats educators find most useful and how these are related to their practices of using and sharing research and evidence. Drawing on the survey responses of 819 Australian educators, the findings form part of the broader work of the Monash Q Project, a five-year initiative focused on understanding and improving the quality use of research in Australian schools. The findings indicate that educators prefer to source research and evidence from relational and interactive sources, and in formats that are short and showcase original research findings. The findings also point to a relationship between educators' preferences for research, their use of research in practice and how they share research and evidence with colleagues.

The article has 5 main sections following this introduction. The next section examines relevant literature regarding educators' research and evidence use and helps to frame the significance of investigating educators' perspectives about different evidence formats. We then explain our methods, after which our findings are presented in terms of educators' preferred evidence formats, and the relationships between these preferences and educators' evidence use and shared practices. The paper concludes with key considerations for practice to increase and improve educators' quality use of research.

Barriers to educators' research use and their preferred evidence formats

Despite increasing calls for schools to use research evidence worldwide, supporting educators' use of evidence-based practice remains a challenge (Malin et al., 2020). Several factors have been attributed to this (see Boaz and Nutley, 2019; Nelson and Campbell, 2019). From the perspectives of educators, notable factors include the ways in which research is formatted and presented, the perceived trustworthiness and credibility of research findings, and research accessibility (Dagenais et al., 2012; van Schaik et al., 2018). For example, van Schaik and others (2018) highlight that the format, language and presentation of academic research do not often align with educators' expectations, capacities or needs. Other studies have also highlighted that research written in more complicated, 'traditional' ways may be ambiguous, or may not reflect or capture classroom contexts, making it difficult to apply in practice (Cain, 2016; Vanderlinde and van Braak, 2010).

It is necessary, then, to understand which formats of research and evidence educators find useful and accessible. Some studies have provided helpful insights. For example, Cain (2016) and Lastrapes and Mooney (2021) highlight that educators value short and easily understood formats of research such as practitioner-oriented articles, research summaries and syntheses. Furthermore, they emphasise the need for academic articles to provide guidance regarding implementation of the research and clear evidence of impact on student outcomes, especially in the forms of vignettes and charts (Lastrapes and Mooney, 2021). To increase the accessibility of research, Rycroft-Smith (2022) suggests using practitioner-friendly language and formatting, as well as translating academic research into products that are suitable for educators' needs. Similarly, publishing research findings in clear and simple ways can contribute to an increase in their use, in combination with other factors (Noyes and Adkins, 2016).

While these types of 'user-friendly' format considerations are important, educators may still face challenges to interpret and use research and evidence well (Tseng, 2012). Studies suggest that supporting educators to use research in social ways are beneficial. These include interactive presentations of research followed by coaching and monitoring (Gorard et al., 2020) or having colleagues share their experiences of the research (Landrum et al., 2007).

These are important insights, but a greater understanding is required to enable improved system-wide supports for the increased and improved use of research and evidence in educational practice. In this paper, then, we aim to address the following questions:

1. What research and evidence formats do educators find useful?
2. How do educators' preferences influence their practices of using and sharing research and evidence?
3. What are the implications for educators and education system leaders to support the improved use of research and evidence?

Sample and methods

Ethics approval for this research activity was granted by the Monash University Human Research Ethics Committee, as well as the relevant jurisdiction ethics committees in each of the participating states. Following this approval, an online survey of 20 core and 33 follow-on quantitative questions was administered to participants recruited through the panels of an external data collection agency. During May – July 2021, the survey was completed by 819 educators (including teachers, school leaders and school-based education staff, such as librarians) from schools across all Australian states and territories. Tables 1–5 provide the demographics for this survey sample.

State	Participants	Proportion
Victoria	228	27.8%
New South Wales	225	27.5%
Queensland	174	21.2%
Western Australia	87	10.6%
South Australia	62	7.6%
Tasmania	27	3.3%
Australian Capital Territory	10	1.2%
Northern Territory	6	0.7%

Table 1: Survey participation by state (*n*=819)

Years of experience	Participants	Proportion
0 to <5 Years	232	28.3%
5 to <10 Years	243	29.7%
10 to <15 Years	144	17.6%
15+ Years	200	24.4%

Table 2: Educators' experience (*n*=819)

Role	Participants	Proportion
Senior leader	39	4.8%
Middle leader	60	7.3%
Teacher	589	71.9%
Other role	131	16.0%

Table 3: Educators' role (*n*=819)

Qualification level[1]	Participants	Proportion
Undergraduate	544	66.4%
Non-research-based postgraduate	235	28.7%
Research-based postgraduate	11	1.3%
Undeclared	29	3.5%

Table 4: Educators' qualification level (*n*=819)
[1]29 participants did not provide information about their qualification.

School type	Participants	Proportion
Primary (Kindergarten/Prep – Year 6)	459	56.0%
Secondary (Year 7 – Year 12)	253	30.9%
Combined (Prep/Kindergarten – Year 12)	107	13.1%

Table 5: Survey participation by school type (*n*=819)

Non-identifiable survey responses were collated by the external data collection agency and provided to the research team in a MS Excel format that were then analysed using IBM SPSS Statistics (Version 27.0). Simple inferential statistics were calculated, with Fisher's exact tests (Field, 2017) used to test for relationships; for example, between educators' preferred formats and their practices of using and sharing research and evidence.

Results
Educators' preferred formats of evidence

Survey responses suggest that **educators prefer interactive and relational formats of research and evidence**. Educators indicated that they most valued formats where there were opportunities to discuss, unpack and understand research and evidence (see Figure 1, dark blue bars). These opportunities included evidence and research being presented at or accompanied by 'professional development courses' (62.9%, 1st selected format overall), 'in-person talks' (58.6%, 2nd), 'informal chats' (47.3%, 3rd), 'videos of talks' (42.4%, 4th), and 'conferences or seminars' (40.7%, 5th).

Survey responses also suggest that **research and evidence presented in short, original formats are valued** (see Figure 1, red/maroon bars). Educators indicated that they valued 'short reports (<4 pages)' (38.0%, 6th selected format overall), 'journal articles' (37.9%, 7th), and 'practice/how-to guides that were informed by research' (36.8%, 8th). Educators expressed less preference for summarised research or evidence types, such as 'book summaries' (25.6%, 13th) and '1-page summaries' (22.6%, 16th), as well as research or evidence in longer formats, such as 'books' (24.3%, 15th) and 'reports >10 pages' (6.6%, 20th).

Relationships between preferred formats and educators' use and sharing of research and evidence

Survey responses suggest that **there is a relationship between these preferred formats and educators' use of research in practice**. For example, those educators who valued or preferred interactive and relational formats such as 'videos of talks' and/or 'conferences or seminars'

were significantly more likely to regularly use university-disseminated research than others (39.0% vs 31.5%, *p* = .030; and 39.6% vs 31.2%, *p* = .016 respectively). Additionally, those educators who preferred 'short reports' and/or original 'journal articles' were significantly more likely to regularly use university-disseminated research (43.5% vs 29.3%, *p* <.001; and 47.2% vs 27.0%, *p* < .001 respectively), as well as university-based guidance (31.7% vs 22.6%, *p* = .005; and 34.8% vs 20.8%, *p* < .001 respectively). The value of interactional formats (that is, videos of academics discussing their research) was also observed by educators in one of our studies:

> And it's like the human element to it, I think, it is really important. Staff can see that, 'Hey, these people exist. They're real. They're not just an academic writing a paper.' I think that was a big push too. And then they can go back and do a lot of research on their own. (School leader)

Survey responses also suggest that *there is* a relationship between educators' preferred formats and the different ways that they share research and evidence. For example, educators who valued 'videos of talks' were significantly more likely to report having shared evidence through formal verbal discussions (such as meetings or workshops, *p* = .002). In a similar vein, those educators who found 'informal chats' useful, were significantly more

likely to have shared evidence through informal verbal conversations (*p* < .001). Meanwhile, those who preferred 'social media' were significantly more likely to report having used informal social media posts to share evidence (*p* < .001).

Conclusions and implications for practice

Despite growing calls for the use of research and evidence in schools, research is not used often in educational practice. Studies suggest that an important reason for this is that research is presented in ways and formats that are not considered practical or usable by educators. Drawing on a large-scale Australian study by the Monash Q Project, the data and analyses presented in this paper provide insights into the types of formats that educators most value. Findings indicate that educators prefer research and evidence in formats that are relational and interactive, or in short formats that showcase original research findings. These formats reflect the ways that educators are willing to engage with research and evidence that suit their skill levels, values, motivations and circumstances, such as how much time they have or are willing to invest (Gleeson et al., 2022). There is also a relationship between educators' preferences for these formats and the regularity of their research use. Finally, the findings suggest that educators are more likely to share research with others in ways that align with their preferences for specific research formats.
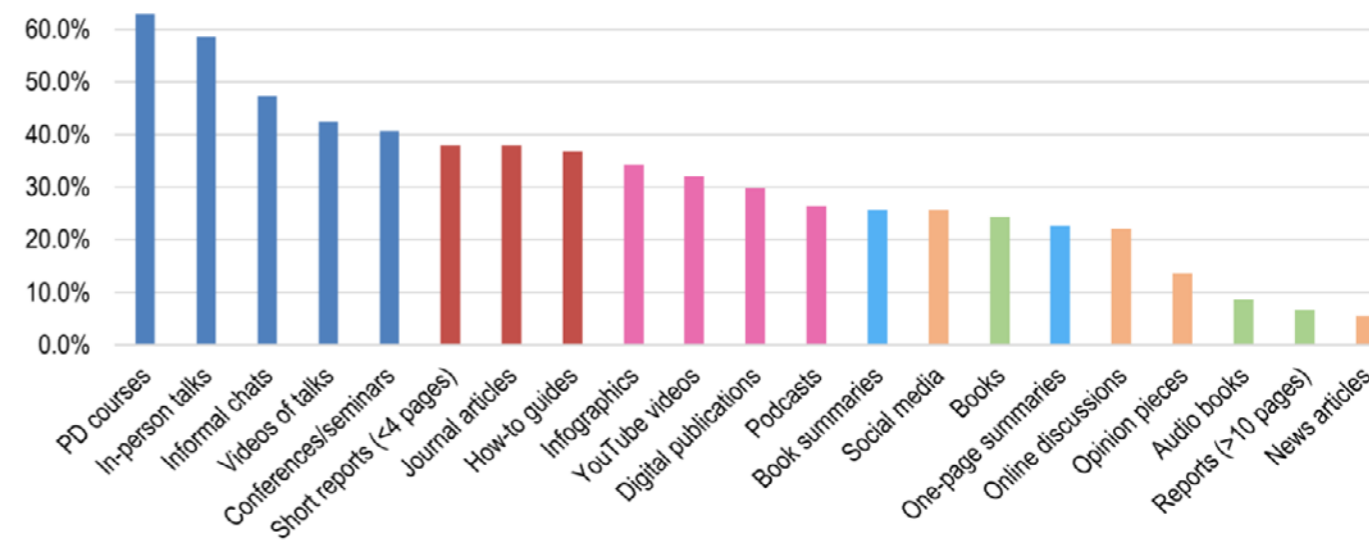

Figure 1: Educators' preferred forms of research
Key: Dark blue – Interactive and relational formats; Red/maroon – Short, original formats; Pink – Audio-visual formats; Light blue – Summarised formats; Gold – Online discussion or media formats; Light green – Extended formats (hardcopy or digital).

These findings point to important implications for teachers, school leaders, and systems leaders to promote quality research use within schools.

Specifically, we highlight the importance of:

1. **Providing** educators with access to original research articles through online research databases and/or academic journals. Original formats can provide educators with comprehensive and nuanced understandings of the research context, evidence of impact and implementation applicability. The broader evidence base suggests that engaging with original formats can also help to build educators' skills in interpreting research for use.

2. **Repackaging** research in concise and digestible formats, such as short reports of less than 4 pages. Research in these formats can also be accompanied by videos or presentations about the research. Short reports of a desirable length, supported by these interactive elements, can help educators to quickly grasp key messages and create opportunities for them to engage more deeply with the original research.

3. **Supporting** educators' engagement with research. Research, particularly if presented in original forms, takes time and skills to interpret and use. Supporting educators' use through providing skill development opportunities or coaching and mentoring can encourage greater and improved use of research in practice.

4. **Sharing** research in multiple formats, including original academic articles, short reports, and with accompanying interactive elements. Making research available in a variety of formats helps to ensure that all educators are provided with opportunities to engage with research that suits their preferences, skills and investments of time.

5. **Discussing** research in collaborative settings, such as professional development courses, professional learning communities, in-person talks, staff meetings, and conferences/seminars. These interactional and relational settings can encourage both formal and informal conversations about research among educators and support their uptake or sharing of research and evidence.

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Students from Bonnyrigg High School collaborate with Vivian Pham. (Photograph: Jacquie Manning)

'Being a writer means being able to begin.'
Creative writing and *The Coconut Children*

Richard Short
Storyteller-in-Chief, Story Factory
(Photograph: Pax Valentine)

Richard Short describes the Writers Teaching Teachers Writing program, which saw students from Bonnyrigg High School working with their English teachers and author Vivian Pham to develop a published anthology of prose and poetry.

Prologue

I'm at the Parramatta Story Factory, staring out the window that looks across George St, watching the old Roxy Theatre. Today I'm waiting for a former student to knock on our front window. I know when she knocks it will be dainty, almost apologetic. I'll turn, she'll wave, then I'll head to the door, unlock it and invite her into the centre. Like she always does, Viv will have a funny anecdote, something she's noticed on the way to the centre, a bit of wonderful strangeness that could easily be the start of a short story. Truly, the stories fall from her.

Story Factory is a not-for-profit that runs creative writing and storytelling programs for young

people aged 7 to 17. Supported by our community of expert educators and volunteer tutors, young people are empowered to create stories of all kinds, which we share and celebrate. Vivian Pham is here today because we are starting a program called Writers Teaching Teachers Writing. We plan to design a series of workshops inspired by her novel, *The Coconut Children*. Over the course of the term, we will work with students and teachers from Bonnyrigg High School to develop pieces of prose and poetry that ultimately become an anthology called *Thoughts Unfold*. The anthology will combine the writing of teachers from the English faculty and students from Stages 4 and 5.

Over the next thousand or so words, I try to capture some of the key moments from the planning and delivery of the project. This will include outlines of a few activities completed by the students and teachers, and some explanation of the thinking behind the tasks. Worksheets for these activities (PDF 3 MB) are available on the Story Factory website. I've got a fondness for using unexpected structures, so the eagle-eyed among you will notice that this article is built around a classic six-step structure favoured by scriptwriters. Here we go …

The set up: early February 2022

It's early Term 1, muggy, the year hasn't managed to shake off COVID-19. Viv and I are preparing for workshops we'll deliver together at Bonnyrigg High School in south west Sydney. That all sounds very normal, but I can assure you it's actually super special! Viv wrote the first draft of *The Coconut Children* in Story Factory's Year of the Novella program in 2017, which I ran with my colleague Bilal Hafda. This program at Bonnyrigg is the first time I've programmed with a former student, and the first time we've built a program around their work. It will also be the first time we've run a program that explicitly involves teachers writing.

Today we're starting to map out the program; we start roughing up the resources and select the passages from Viv's book that we'll use as inspiration. It's the fun part of programming, the part that feels incredibly

creative and open-ended. As we're working and talking, I think this is the way I want the workshops to feel for the students. Like they're full of possibility, like the process of creation is fun.

Eventually, we start turning the ideas and outlines of the writing program into concrete reading and writing activities that will provide the students and teachers with enough information, inspiration and technical advice to complete their own pieces of fiction. The program is broken into 6 weeks of articulating activities. Each week is focused on key passages Viv has selected from *The Coconut Children*. The activities are designed to run together so each week builds on the previous in a way that gently guides students toward the writing of an extended piece of fiction.

New situation: February-March 2022

The aim of this project is for students to come up with pieces of short fiction somewhere in the region of 1,500 words. Today is our first day in class with the students; we need to do a few things - pitch Viv's book, pitch the idea of writing, and get the students excited about the project. Luckily, Viv has brought along some baby pictures to show the students. They're charmed, which is a major victory in a school anywhere, particularly on a Tuesday morning in a February that seems to be composed entirely of rainy days.

From the baby pictures, we segue quickly to story beginnings, and to the way Viv has managed to give her novel three openings – all of them compelling and fascinating in completely different ways. It's a great way to give the students a chance to see how beginnings work and to provide a sense of the story strands that make up *The Coconut Children*.

> … concrete reading and writing activities … provide the students and teachers with enough information, inspiration and technical advice to complete their own pieces of fiction.

Model texts

The readings for our first section of the workshop are all from the opening 4 pages of the novel: the prologue, the first appearance of the marvellous character Vince, and the first appearance of the shy and beguiling Sonny – who watches Vince return to Cabramatta from her front window.

Student activity: character and location

This activity can be used by writers to investigate any well-described location.

1. Read selected text describing a location.
2. For each location, 'describe' the characters who might be encountered in the location. This 'description' could take the form of dialogue, description or even an internal monologue.

Encourage students to be adventurous in their answers. Often a character in an unexpected place has an interesting story to tell.

For this activity, students write 3 short 'descriptions' of 3 characters in the selected locations.

This is a generative activity in which (hopefully!) students begin to discover characters who are compelling enough to become the main players in the short story they will write.

Students and English teachers from Bonnyrigg High School participate in Story Factory's Writers Teaching Teachers Writing program. (Photograph: Jacquie Manning)

Progress: early March 2022

During the second week of workshops, students focus on setting, while teachers are introduced to a poetry writing activity.

Student activity: setting, location and place

During this activity, students develop short descriptions of locations they might be able to use in the story they are writing. This generative activity makes use of what we call the **maybe space** – a space in which students are encouraged to experiment and gather ideas in a non-judgemental way. In the **maybe space**, students create short setting descriptions, responding to the following prompts.

Ideation prompts:
- A place that represents/captures a history you know.
- A place where something unexpected or exciting could happen.
- A place a character might want to escape (or escape to!)

After students write short descriptions of the 3 locations, they select the one they feel is most useful for their story and expand the initial ideas. The aim for this longer description is to investigate the complexity of the location. This links specifically to Viv's particular talent for creating a mise en scène that contributes to the development of character and narrative.

After our student workshop, the Bonnyrigg English faculty is waiting, ready to discuss the resources we've been using with students. Excitingly, the teachers are also ready to write! We've decided to use an activity based on the final part of *The Coconut Children* (substantial spoiler alert!). In the novel's epilogue, the reader is presented with a poem Vince wrote when he was at school. Viv and I have decided to use this poem as a model for the first piece of writing from the teachers.

Teacher activity: 'I will' poem

This is a fun, low-risk personal writing activity that could easily be used in units of work that are not specifically focused on *The Coconut Children*.

1. Read through pp 205-207 of *The Coconut Children* to understand the context for this poem.
2. Read through 'I will' by Vincent Tran.
3. Complete an individual version of the 'I will' poem using the prompts as a guide.

Model text

'I will' by Vincent Tran
I will be dawn
I will be day
I will be dusk
I will be dark
I will live longer than any sunflower
I will make the stars gaze
I will be louder than thunder
I will be the action that learns to speak
I will not be still in life
I will struggle with serenity
I will be more than my impression
I will be the painting, not the painter
I will be my self-portrait
I will not believe the light's distortions
I will be what I should see
I will be made in my own image
I will be made …

Scaffold for 'I Will' poems
I will be …
I will be …
I will be …
I will be …
I will live longer than …
I will make the stars …
I will be louder than …
I will be the action that …
I will not be …
I will struggle with …
I will be more than …
I will be the …
I will be my …
I will not believe …
I will be what I should …
I will be made …

Complication: mid-March 2022

After the creative excitement of ideation and development activities, there can be a slight slump as students start to wrestle with the difficulties of creating a sustained narrative. At this point, Viv's out-of-workshop life comes in handy. Viv is in the middle of creating scripts for both the stage and film versions of *The Coconut Children*, so she has been thinking deeply about narrative structure and form. We agree to use a modified film script structure to help students think about the arrangement of the various elements in their story. Michael Hauge's film script structure has 6 key parts, which we use as a guide: set up, new situation, progress, complication, final push and aftermath.

Student activity

In this activity, students are encouraged to map out their whole story, to embrace a rich, substantial narrative. But instead of aiming to write the entire story, students only write selected parts. The approach to this is quite flexible: students use the six-stage film structure worksheet (PDF 3 MB, p 4) as a guide, mapping their story, and then select up to 4 stages they want to include in their short story.

Wise words from Vivian:

> I remembered that I wrote the second last chapter, 'The wedding portrait', as a short story first, and that came about from one clear image: someone looking at their own wedding photograph and not recognising the people in it. In terms of Michael Hauge's six-stage plot structure, it might be interesting to have the students think of a few (maybe one to four) key scenes or moments they can see clearly and build a narrative around that. These scenes/moments/images can be as specific or elemental as they like.

> **Students start to imagine and develop the tiny details they might use to introduce a character in their story. The aim is to use details that provide unusual and surprising ways to reveal aspects of the character.**

Final push: late March 2022

Once the stages are selected, students begin the challenging work of developing the rich and varied details that turn a good piece of writing into something great.

Student activity: how to build a character from detail

During this activity, students create a scene in which readers meet one of their important characters.

Students read and discuss 2 examples from *The Coconut Children*. Both examples are early in the novel, when readers are introduced to the character Vince.

Attentive reading

Before reading through the extracts, ask students to notice and consider the details in each passage. Both passages contain an accumulation of description built around small details. As part of this attentive reading process, prompt students to consider what the details ask us to know, recognise and assume about a character.

Model texts

- p 1: Example detail - 'gleaming gold necklace, jade buddha nestled contentedly between his newly defined pectorals'
- p 12: Example detail - 'Fire reflected in eyes'

Idea development

Students start to imagine and develop the tiny details they might use to introduce a character in their story. The aim is to use details that provide unusual and surprising ways to reveal aspects of the character.

Aftermath: late April and beyond

Our workshops were spread across a whole term. In that time, we moved from wearing masks in workshops to no masks. We also went from a room full of students with blank sheets of paper to a room full of excited writers holding their copies of *Thoughts Unfold*, the anthology collecting and celebrating the writing completed by both students and teachers in the project.

So, what happened to the main players?

1. The students at Bonnyrigg High School, with the help of their teacher Haylie McDonald, Head of English Geremy Crithary, and Bilal Hafda from Story Factory, start an after-school writing club. Those students continue to work with Story Factory and continue to write.
2. Supervising teacher Haylie McDonald is one of 13 early career teachers recognised at the Principal Network Awards 2022 for her passionate professionalism, outstanding hard work and willingness to go above and beyond for her students.
3. The production company working on the film adaptation of *The Coconut Children* gets a substantial piece of production funding … Vivian starts to work even harder on her script!
4. Four students from Bonnyrigg High School complete year-long after-school writing programs with Story Factory and publish collections of poetry … yes they're being released in February 2023!

The final word goes to Vivian, from the introduction to *Thoughts Unfold*:

> The first time we met, Richard and I asked you to write down what a short story should do. You wrote that it should be short but never ending; it can be about anything as long as it comes from a passion; it should make us feel less alone; in it, we should see reflections of ourselves. As the Tuesday afternoons unfolded, I watched you heed your own advice as you crafted your stories. Every week, I grew more and more astonished. I had so much confidence in your ability, I didn't have any room to doubt my own. Yes, I had a bunch of ideas for novels taking their last breath inside me, but that wasn't the point. You taught me something infinitely more important: being a writer means being able to begin again.

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Author Vivian Pham co-presents workshops inspired by her novel, The Coconut Children. (Photograph: Jacquie Manning)

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Play to project: investigative learning in Stage 1

Sophie Parsons
Stage 1 Teacher, Balmain Public School

Ariana Davis
Stage 1 Teacher, Balmain Public School

Teachers Sophie Parsons and Ariana Davis discuss the evolution at Balmain Public School of their Investigative Learning program, an inquiry and play-based program that incorporates a flexible environment, authentic materials and open-ended tasks.

Investigative learning at Balmain Public School

Balmain Public School embraces contemporary education as part of its future-focused vision for teaching and learning, which aims to ensure our students develop 21st century learning capabilities that will enable them to thrive in a rapidly changing world. Throughout Stage 1 (Years K-2), we have implemented **Investigative Learning**, an inquiry- and play-based program that incorporates a flexible environment, authentic materials and open-ended tasks. After 6 years of consolidating the Investigative Learning program in Kindergarten (PDF 2.5 MB), we are currently reviewing the program's expansion across all of Stage 1.

Figure 1: Investigative Learning in Stage 1 at Balmain Public School [2:30 minutes, YouTube]

The investigative learning philosophy is consistent from K-2, but the delivery of our program has evolved to ensure it remains challenging at every year level. As our students transition from Kindergarten through Stage 1, we have watched them become steadily more proficient in the application of critical, creative and computational thinking skills. In response, we have begun to envisage 21st century learning capabilities as a continuum, with every child progressing in inquiry skills in the same way they progress on the literacy and numeracy continuums.

Applying investigative learning philosophy to Stage 1, we aim to assist our students to:

- Apply **creative thinking** to larger projects, focus on a project for weeks rather than days, separate tasks into parts and extend projects into a second medium.

- Display more complex **critical thinking** through accessing information from more than one source of material, organising their information and using technology to present.

- Begin to develop **computational thinking** through describing the steps in an inquiry, recording patterns using numerical symbols and exploring simple coding with robotics.

- Use **ethical reasoning** as they begin to assign their own responsibilities in the investigative environment, take on different roles in larger collaborative groups and describe values concepts in the roles of photographer and reporter.

- Develop **metacognition** as they begin to record processes, set goals and describe thinking strategies in their learning journals.

Play to project

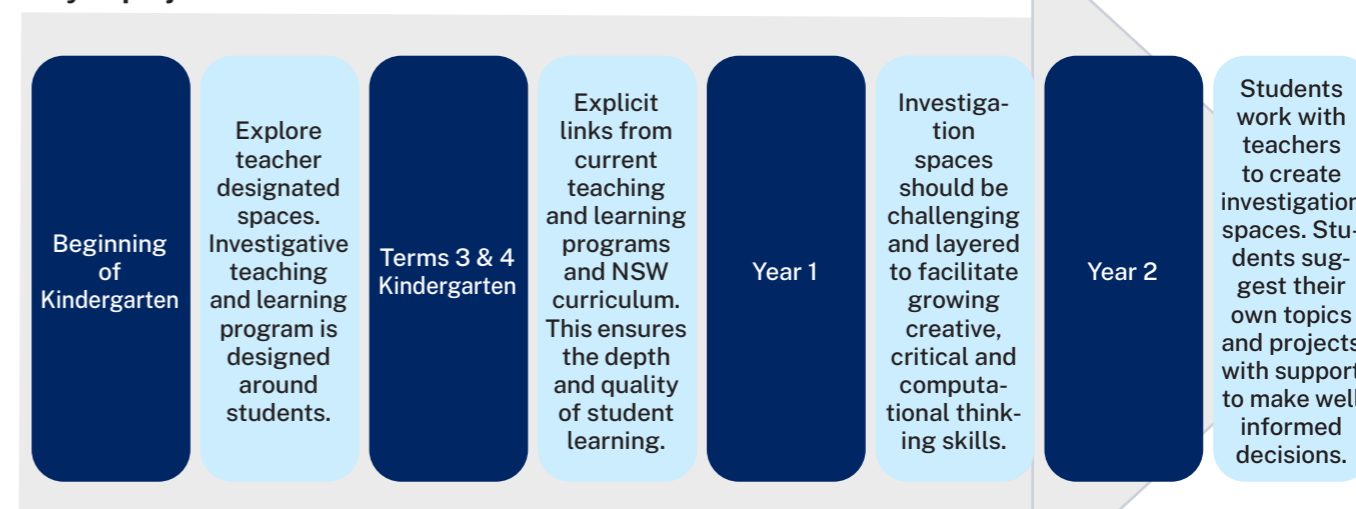| Beginning of Kindergarten | Explore teacher designated spaces. Investigative teaching and learning program is designed around students. | Terms 3 & 4 Kindergarten | Explicit links from current teaching and learning programs and NSW curriculum. This ensures the depth and quality of student learning. | Year 1 | Investigation spaces should be challenging and layered to facilitate growing creative, critical and computational thinking skills. | Year 2 | Students work with teachers to create investigation spaces. Students suggest their own topics and projects with support to make well informed decisions. |

Figure 2: Continuum of investigative learning teaching goals for K–2

Increasingly complex learning stations

We found adding more **layers** to our investigative areas engaged Stage 1 students more deeply with a topic and encouraged them to gain new inquiry skills. A Kindergarten area of inquiry, for example, might have a single focus and 2 or 3 materials, but our Year 2 areas contain a range of source materials to research from, a wider variety of materials and complex topic word banks.

Student voice

Within our Stage 1 program, we have also embraced student voice as we set up investigative areas. Working side-by-side with teachers, students draw a design for the area, choose resources and arrange provocations. Our Mythical Creatures area (Fig. 5) was assembled with student input on the position of the table, the paper for the books, the vocabulary, colour and shape of the word wall cards. With increased agency we have found students feel more connection to investigative spaces. The classroom becomes their 'studio'.

Visual/Sensory provocations in the Mythical Creatures Investigative Learning Area

The sensory glowing egg sparked two terms of writing from our Year 2 students. The egg has an incredible texture and can glow, pulse, or strobe fifteen different colours! We added a bubbling water feature, wood and stones to prompt students to imagine qualities of worlds they could write about.

Investigative question formed by students

While we had originally purchased the egg as a light source, students began to imbue it with sci-fi properties and formed the question, 'What will hatch from the egg?'

Literary provocations/source materials

The passion of a group of students for mythical creatures prompted us to select a variety of books on myths and legends.

Visual boundaries that define the area

The area has an overhanging tent, ivy wall and a round table. We often colour-theme our areas to visually define them rather than rely on screens to separate them.

Creative materials

Textured paper, tea-stained paper, leather to bind books, ribbon and ink pens are available to create books. The latest student request has been for a feather quill and ink pot.

Text-rich environment

Students chose topic vocabulary such as 'tentacles' and the scroll shape for the vocabulary cards. When the books became a series, we added Roman numerals for numbering stories.

Examples of outstanding work

High quality student books remain on display as explicit quality criteria.

Moving mediums – where to next?

Our investigative learning areas are ever evolving. We have built more storage into the area and added laptops as students began creating 'merchandise' (key chains, bag tags) and publishing the stories.

More complex areas facilitate more complex projects

Students begin to focus on a project for longer as they become more proficient investigative learners. In Kindergarten, students may move between investigative areas daily. At the end of Year 2, where groups of students might work in one area for up to 2 terms, our aim is to extend students within that area.

At our Mythical Creatures table (Fig. 5 and 7), students began by creating characters and writing a legend about their character. They assigned roles within the group to write about air, fire and water creatures and then went on to create 3 separate series of books where the creatures interact.

To align with numeracy outcomes, teachers prompted the group to create 'merchandise' with price tags for their book series. The group was expanded to include accomplished artists in the class to help design posters to sell the 'merch'. The final stage was for the students to type and publish stories on the school Instagram and hold a stall where they sold their 'merch' to raise money for charity. Literacy, numeracy, visual arts and technology outcomes were all covered

within the one project. Advanced collaboration skills, understanding how to break a project into parts, integrating technology and creating for a real-world audience were some of the skills we watched students develop.

But are you covering all the outcomes?

We never stop getting *that* question. One of our aims in Stage 1 has been to make explicit the links between our investigative learning activities and the NSW curriculum. The areas in our rooms also reflect our current programming in science, history, numeracy and writing. Further, we have created descriptions adapted from NSW Key Learning Area (KLA) Stage 1 stage statements (NESA, 2021) of how students work in each area. Design Briefs (Fig. 8) used in investigations display outcomes and can be used as formative and summative assessment tasks. We have found that visible outcomes assist teachers and students to articulate the content covered during investigations and help us form 'next steps' for projects.

While we clearly link the topics of the learning stations to the current class program, we are conscious that there is no need to rotate students through areas. Not every student needs to have worked at a History table to have gained knowledge in that KLA because during reflection time all students are listening and responding to the findings of the students that have worked in that area.

Figure 3: Stage 1 Students engaged in investigative learning at the Nature table

Figure 4: Students undertaking investigative learning at the Potions table

Figure 5: The Year 2 Mythical Creatures learning area
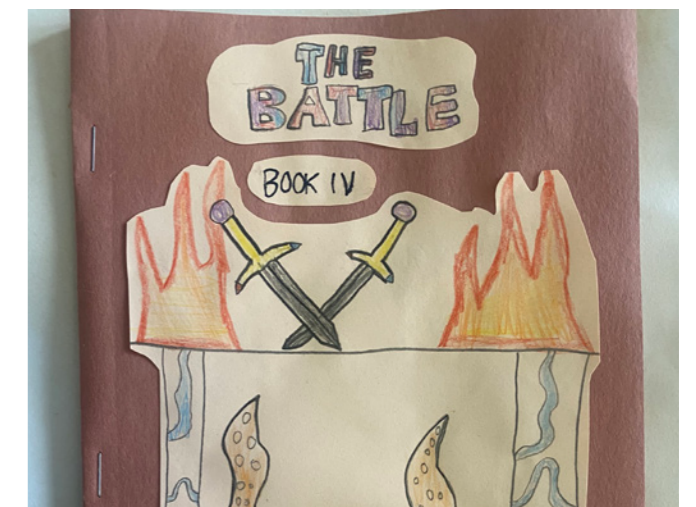

Figure 6: Student-created 'Battle Book'

Learning journals

Reflective journals of learning are a new addition to our Stage 1 Investigative Learning program. After 2 years of online learning, we found our cohort had strong oral language skills, but their writing skills required consolidation. Reflecting on learning in written form seemed like a natural next step for our Year 2 students. We introduced the learning journal, a scrapbook where students could glue design briefs and photos of their explorations. Students annotate their photos with information about who they worked with, what they discovered and where they plan to move to next.

Another important function of our learning journals has been to facilitate **computational thinking** as students record steps in their coding inquiries and robotics investigations. **Metacognition** is encouraged when students describe the strategies they used. Learning journals have become a beautiful diary of our year's Investigative Learning journey and are one of our student's favourite books.

Relating investigative learning to targets in our Strategic Improvement Plan (SIP)

NAPLAN data identified measurement and space as a strand to focus on in Stage 1, so we created a STEM area with a measurement and
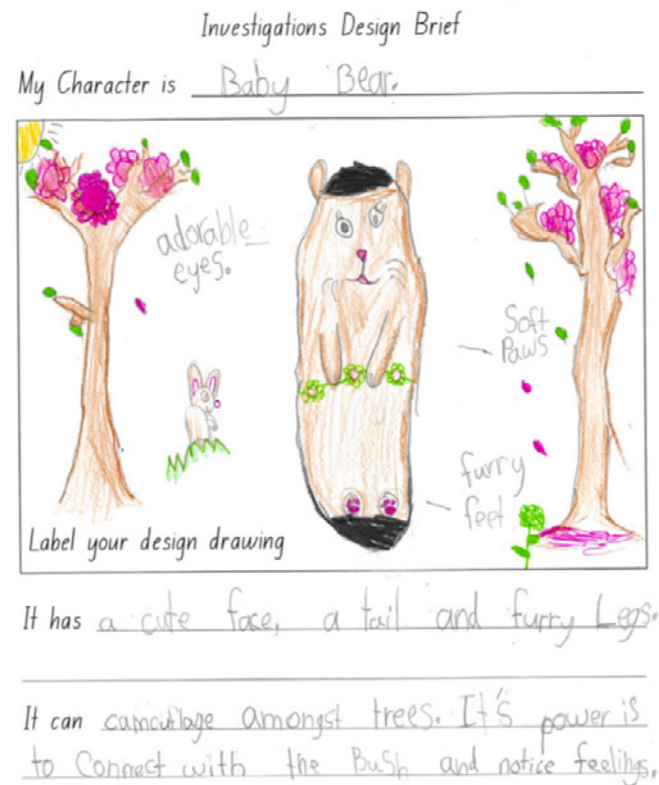

Figure 8: Example of a Design Brief by a Stage 1 student

space focus in every classroom. We applied for funding from our Director of Educational Leadership Iron Cove, Simon Paterson, and supplemented our program with new 3D shape construction materials and Kubo Robots. Year 2 students designed and built towns from 3D shapes and programmed the (very cute!) robots to move around the towns. This provided every Stage 1 student with daily

chances to consolidate their understanding of measurement and space teaching through personalised inquiry tasks with hands-on materials.

Incorporating our SIP plan targets into the program has empowered us. It further establishes that our Investigative Learning program is not something we do 'as well as' our literacy and numeracy goals; it is the intentional method for consolidating the learning that helps us move towards those goals.

Returning to school after 2 years of online learning has been a transition for students. Connections with classmates built through collaborative learning and the excitement of interest and inquiry-based projects have seen them re-engage joyously and rapidly with school life. In our student goal reflections, more than three-quarters of the class commented that 'a thing they loved about school' was investigative learning. The addition of learning journals with annotated photos and written reflections have enabled us to track the growth of every student's contemporary learning skills. It has been incredible to watch every child constantly progressing with their inquiry skills, growing at their own pace towards becoming independent 21st century learners. We love watching them move from play to project.

Figure 7: Year 2 students working at the Mythical Creatures table

Figure 9: The History table

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Tackling hateful conspiracy theories and fake news – what can teachers and students do?

Stijn Denayer
CEO, All Together Now

Ramy Sedrak
Project Coordinator, All Together Now

Stijn Denayer and Ramy Sedrak explain how the Agent C program equips secondary students to think critically in identifying and challenging misinformation.

Children and young people are particularly vulnerable to engaging with fake news and conspiracy theories online, including divisive and hateful forms. In response, not-for-profit organisation All Together Now developed Agent C, a specialised training program for young people aimed at enhancing their skills to critically engage with misleading information and online hate. The Agent C program is currently being offered across NSW through schools and youth services.

About All Together Now

All Together Now's mission is to 'educate Australians about racism'. We do this by imagining and delivering innovative, evidence-based projects that promote racial equity. As an organisation dedicated to enhancing racial equity through education, we've done a lot of work with and for schools and young people. For instance, we partnered with the ABC series *The School that Tried to End Racism* to create a guide to support teachers, parents and carers having conversations with children about racism.

For many years, we have been active in fostering community resilience to far-right extremism, online hate, fake news and conspiracy theories. We've designed a number of government-supported preventive projects aimed at enhancing the skills of frontline workers, including teachers and school staff, to respond to this growing challenge. In 2021, we developed a pilot for the Agent C program that received funding from the NSW Government through Multicultural NSW.

The Agent C project aims to:
- develop and deliver a specialised, evidence-based, co-designed training program with and for young people (aged 14-21) in NSW
- enhance the confidence and capacity of young people to unpack and critically engage with divisive, hateful, and possibly violent conspiracy theories and fake news, and to have stimulating conversations with their peers which encourage critical thinking.

> … the Agent C program aims to increase the agency, self-worth and critical thinking skills of young people who are increasingly being confronted with online misinformation and divisive content.

This project is necessary as the COVID-19 pandemic and extended lockdowns caused a significant rise in online conspiracy theories and fake news, and created ideal circumstances for racism and right-wing extremism to flourish. Developed with support from our project partners (Headspace Camperdown and Urbis) plus a number of informal partners (including academics and co-design experts), the Agent C program aims to increase the agency, self-worth and critical thinking skills of young people who are increasingly being confronted with online misinformation and divisive content.

A co-designed and evidence-based approach

The Agent C training program consists of three 1.5-hour online workshops that are delivered for free via Zoom by two expert facilitators.

Each of the workshops has been co-designed and developed in a way that draws on the many different approaches outlined in the relevant literature. Research in this space continues to develop, and it's important to note that there is no single solution to the problem of conspiracy theories and fake news. Every student's personal situation and engagement with this type of content is different; often there are a range of psycho-social factors at play that differ from student to student. It is therefore advisable that teachers draw from the wide range of approaches available, according to their context and individual situation.

The Agent C program is designed around the so-called 'inoculation theory' approach. This theory uses a biological metaphor to describe an intervention that builds resistance to misinformation and conspiracy theories – in the same way that the body can be protected against disease by pre-exposure to a weakened version of a pathogen. This approach can be applied to beliefs, attitudes and information. The most accessible way to implement such an intervention is through 'prebunking'. This preventive approach allows for low-level exposure to misinformation and conspiracy theories in the hope that the

experience will provide a form of 'immunisation', allowing young people to spot and question misinformation better in the future. Inoculation theory is integrated into the Agent C program through numerous examples and activity-based learning.

In addition to the inoculation theory approach, Agent C uses a variety of other research-based approaches to tackle misinformation and conspiracy theories, including motivational interviewing techniques, fact-based correction, media literacy, decoding hateful elements, racial literacy, and reimagining intergroup relations. These approaches and the content of each workshop are examined further below.

Workshop 1 – 'Making sense of the fake news world: what, why and how?' (media literacy; fact-based/science-focused correction)

This introductory workshop is designed to familiarise young people with the fake news landscape. The session looks at the question 'what is fake news?' and examines the various forms it can take. It also considers the creators of fake news and conspiracy theories – what are their motivations? The workshop explores the various ways in which information can be manipulated, as well as how it can target certain groups. Through activity-based learning, young people are given the opportunity to experiment with various forms of non-hateful fake news aimed at empowering them against future exposure. The workshop concludes by providing young people with a practical toolkit that they can use to assess the validity of information, spot fake news, and enhance their media literacy.

Through activities that are aimed at decoding and breaking down the hateful and divisive elements of certain conspiracy theories and fake news, this workshop encourages students to build empathy and awareness of other people's experiences and to reimagine intergroup relations.

Workshop 2 – 'Fake news and conspiracy theories: the connection to racism, power and privilege' (decoding hateful elements; reimagining intergroup relations; racial literacy)

Workshop 2 goes further and begins to unpack the more hateful elements of certain conspiracy theories and fake news, while exploring the interconnected concepts of identity, power and privilege. The session takes a deeper dive into hateful misinformation and conspiracy theories that target specific groups in society, and aims to enhance the racial literacy of participants. Participants are encouraged to reflect on their own identity, world views, and possible biases and prejudices. Through activities that are aimed at decoding and breaking down the hateful and divisive elements of certain conspiracy theories and fake news, this workshop encourages students to build empathy and awareness of other people's experiences and to reimagine intergroup relations.

Workshop 3 – 'Fake news and conspiracy theories: what can we do about them?' (motivational interviewing techniques; peer-to-peer learning)

The final workshop is about exploring different responses to the issues of fake news and conspiracy theories, and allows participants to put into practice all the knowledge gained in the first two workshops. Via activities, participants are taken through a range of motivational interviewing techniques that they can use to have stimulating and constructive conversations with their peers. Motivational interviewing techniques originally come from counselling approaches designed to elicit behavioural change. This workshop builds the confidence of students to have conversations with their networks (including family members and friends) in a safe manner and encourages peer-to-peer learning.

Outcomes of the Agent C training program

The pilot phase of Agent C ran from February to December 2021. We subsequently evaluated the pilot with our independent evaluation partner, Urbis.

In terms of the achieved outcomes, Urbis' evaluation report confirmed that Agent C had proven to be a 'highly impactful' project, which had 'successfully achieved all 4 of its intended outcomes, through delivering highly topical and applied content to young people in an engaging way.'

The most significant outcomes for the Agent C pilot include the following:

Outcome 1: Participants are equipped to reflect on their own identity, privilege and power
- 79% of participants reported that they have thought about their privilege and power in society, either during or since taking part in the training.

Outcome 2: Participants are equipped to engage more critically with media
- 91% of participants reported that they have learned something new about the media.
- 82% of participants reported that they now have a better understanding of the media.

Outcome 3: Participants are empowered to recognise and critically engage with fake news and conspiracy theories
- Participants reported that they now feel more confident in their ability to tell when something is fake news (91%) or a conspiracy theory (88%).

Outcome 4: Participants have conversations within their social networks about fake news and conspiracy theories
- 88% of participants reported that they have learned new skills for talking about fake news and conspiracy theories.
- 85% of participants reported that they have already talked to friends and family about fake news and conspiracy theories.

The workshop concludes by providing young people with a practical toolkit that they can use to assess the validity of information, spot fake news, and enhance their media literacy.

The project team was particularly pleased with the results of the 2 last outcomes, as the program was aimed at equipping young people with the skills and confidence to talk about their learning with their friends and family. With almost 90% of participants self-reporting that they had learned new skills for talking about fake news and conspiracy theories (and a similar proportion reporting that they'd already had such discussions with friends and family), we are very confident that the Agent C program can create real social impact and enhance community resilience against hateful misinformation.

The full evaluation report on our pilot program will be published in early 2023 and will be available on the All Together Now website.

What's next for Agent C?

After its successful evaluation, the pilot phase of the Agent C project was extended until June 2022. During this time, the Agent C project team delivered a total of 38 workshops to young people in NSW, including vulnerable young people, through youth services and schools for specific purposes.

In June 2022, after another successful evaluation, All Together Now received further multi-year funding from Multicultural NSW to continue and scale up the Agent C program. This funding will enable us to rollout the training program to young people, schools and youth services throughout NSW until June 2024.

Secondary teachers and teacher librarians can view the Agent C webpage for more information about arranging free workshops for their school.

New resources for teachers and school staff

All Together Now is currently building on its Agent C work by creating a brand new resource for teachers aimed at building their skills to recognise and respond to young people who are engaging with problematic misinformation, fake news and conspiracy theories.

Our consultation with schools and educators has taught us that there is a strong need for such a resource, as young people are increasingly being confronted with online content that is misleading, divisive and hateful in nature, and many teachers and frontline workers may not have the skills and resources to effectively respond to this growing

issue. Our new resource will bridge this gap, preparing educators with practical skills and tools, suitable for use in Australian classroom settings.

This new resource will be available in early 2023 and will consist of a facilitated workshop for educators, as well as post-workshop support and classroom materials. The resource will be based on best practice in terms of instructional design and educational methodologies, and will align with existing school syllabuses and resources in exploring online safety and media literacy.

For updates regarding this new resource, please contact us via training@alltogethernow.org.au or subscribe to our newsletter.

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The three spheres of library skills: best practice in library lessons

Mali Jorm
Teacher Librarian, Melba Copland Secondary School, ACT

Mali Jorm discusses the research-based *Three Spheres of Library Skills* framework created to help teacher librarians support students to be proactive, enthusiastic participants in the construction and dissemination of quality information.

Teacher librarians provide students with expert instruction on important cross-curriculum information literacy, research, and critical thinking skills that are often loosely referred to as 'library skills.' Using current research-supported practices, these skills can be classified into three interconnecting spheres, creating a meaningful framework to plan, teach and promote library skills.

The three spheres comprising the *Three Spheres* framework are *Readers*, *Researchers* and *Thinkers*. To become successful and independent users of information, students need skills in all three spheres. The first sphere, *Readers*,

underpins the other spheres by providing a foundation for ongoing literacy skills acquisition. The second sphere, *Researchers*, focuses on research skills that support both personal and academic information literacy, and the final sphere, *Thinkers*, is a higher-order sphere that focuses on critical thinking skills and information synthesis.

The Readers sphere

Supporting students to become engaged, self-motivated readers is an essential role of teacher librarians. Reading acquisition is a powerful tool that promotes literacy gains in reading, grammar, vocabulary, and writing skills, as well as improving students' general knowledge (Krashen, 2004; Cullinan, 2000). Being a confident reader supports students in the other spheres of library skills as well as in their academic and personal interests. Teacher librarians play an essential role in supporting literacy acquisition by promoting reading engagement, self-efficacy, peer modelling, and adult modelling.

The school library plays an important role in supporting reading engagement. Student reading skills are enhanced by access to high-quality, diverse and professionally curated library collections (Krashen et al., 2012). School libraries with current, attractive and student-driven resources also demonstrate increased usage and borrowing rates (Johnson, 2014).

Research by Lonsdale (2003) indicates that the quality of a library and the resources available to students also have a direct effect on student reading achievement. Successful school libraries have an environment that fosters reading immersion that is supported by providing students with access to engaging and diverse literature in a variety of modalities (Barber and Klauda, 2020). Guthrie and colleagues (2004) note, 'when students are interested in what they read, they process the material more deeply, gain richer conceptual understandings, and engage more fully with the text' (p 416). Furthermore, teacher librarians provide students with support to have time and space to engage with reading. Prioritising dedicated, regular time for self-directed reading is shown to improve both reading engagement and literacy skill acquisition (Ivey and Fisher, 2006; Garan and DeVoodg, 2009).

The *Three Spheres* model advocates using 50% of all library instruction time for self-directed reading. This includes time for browsing and exploring the library collection, reading book 'blurbs' and searching the library catalogue. Research by Krashen (2004) indicates that the three elements of a successful reading program are access to a large collection

READERS

READ FOR PLEASURE
Reading for pleasure offers students improved literacy, wellbeing and academic outcomes.

ADAPTABLE
Readers are able to engage with a variety of texts.

HAVE WONDER AND CURIOSITY
Readers are lifelong learners who gain intrinsic joy from discovering the world around them.

Figure 1: The Readers Sphere

The *Readers Sphere* encourages a mindset of lifelong growth and ongoing engagement with reading as students' skills, interests and educational requirements evolve.

of quality resources, time and space to read, and creating a sustained, ongoing program of recreational reading. Students benefit from regular library lessons that allow their teacher librarian to learn deeply about students and their interests and to find meaningful ways to engage them with self-directed reading through their extensive knowledge of the collection (Band, 2018; Merga, 2019).

Part of the teacher librarian's role in the *Readers Sphere* is to provide students with explicit instruction on methods and strategies they can use to find reading material that interests them (Merga, 2017) and exposes them to new and different modes and styles of literature. Opportunities should be provided to showcase peer reading, as peer reading behaviours and involvement with reading are influential in motivating students to engage with recreational literacy (Cooc and Kim, 2017). Peer reading is also a powerful motivator to engage with new and novel reading material, as students are more likely to learn about books that they would like to read from their peers than from other sources (Miller and Kelley, 2014). Successful recreational literacy scaffolding involves celebrating students' personal interests and validating their own reading engagement motivators.

The *Three Spheres* model focuses on the importance of viewing reading, not simply as an isolated method of skills acquisition, but as a social habit that grows from an atmosphere that actively fosters positive associations with reading as well as positive student self-image as a reader. Mat Roni and Merga (2019) state that successful reading engagement requires two factors: a positive attitude towards reading and frequent reading practice. The *Readers Sphere* encourages a mindset of lifelong growth and ongoing engagement

with reading as students' skills, interests and educational requirements evolve.

Under the *Three Spheres* model, teacher librarians provide leadership in their schools in supporting the creation of a whole-school environment that values and promotes personal choice reading. When staff demonstrate that reading is a school priority, it creates a conducive literacy culture for students to follow (Daniels and Steres, 2011).

The Researchers Sphere

Becoming a skilled researcher requires extensive scaffolding and practice; thus, making research skills a cornerstone of a successful library program. Research skills involve search strategies, recognition of the importance of academic scholarship and academic integrity, and an understanding of the evolving nature of human knowledge.

As part of the *Researchers Sphere*, teacher librarians model research strategies to their classes. Students can engage in scaffolded searching exercises, group research activities and academic writing analysis. Students should be given opportunities to practise researching information for both academic and personal needs.

Research by Mahaffy (2006) demonstrates that students struggle to make the transition from conducting cursory Google searches to more complex search strategies. Students expect answers quickly and easily and are unwilling to invest the time needed to do a deep, multifaceted search (Yevelson-Shorsher and Bronstein, 2018) that involves complex search strategies using multiple search points, refining search queries and using existing subject knowledge to influence the search focus.

… teacher librarians provide leadership in their schools in supporting the creation of a whole-school environment that values and promotes personal choice reading.

Teacher librarians can support classroom teachers by incorporating research skills into assignment design, along with a scaffolded program of search skills and cultural support for deep reading and researching. The assumption that young people who have grown up using the Internet are knowledgeable about the best ways to research and evaluate information was debunked by Hargittai (2010), who showed that exposure to the Internet without direct instruction was insufficient to develop robust information literacy and digital literacy skills.

Curated content collections or pathfinders are a valuable way to highlight what a successful research collection with quality resources looks like. Helping students to become familiar with academic writing and referencing conventions can assist them in identifying the markers of quality sources and how to recognise them in their own searches. Pathfinders support

students in their assignment writing by giving them access to relevant sources that have already been scrutinized by a professional. Learning how to locate quality pathfinders on their own is a straightforward search engine strategy (often simply adding 'LibGuide' to their topic search), which empowers students to engage with finding and using reputable sources. Students should have exemplary pathfinders showcased to them that meet the four elements of a successful pathfinder identified by Dahl (2001): consistency, scope, readability and usability.

Students need opportunities to analyse both good and bad examples of academic writing to develop an internal picture of what successful academic research looks like. Teacher librarians can support students by providing them with real-world examples of research-driven writing and explicit deconstruction of what has been done well or requires improvement. Bauder and Rod (2016) suggest that students learn to analyse and create their own review articles. Review articles are secondary sources that summarise the current knowledge on a particular topic and analyse the methodology of the sources cited in them. Such articles are valuable for providing students, not only with an overview of a particular subject, but with a sample of quality academic writing that

RESEARCHERS

VALUE ACADEMIC SCHOLARSHIP
Researchers recognise quality, peer-reviewed research.

KNOW HOW TO RESEARCH
Researchers have comprehensive research experience.

EVOLVE THEIR WORLD VIEW
Researchers are able to update and improve their hypotheses and understanding of a subject.

Figure 2: The Researchers Sphere

synthesises information from multiple sources to create something new.

Scaffolding students to become effective researchers takes time and requires ongoing practise and modelling for students to master and extend their suite of research techniques. The *Researchers Sphere* can be a challenging sphere to teach successfully, as intrinsic student interest in academic research and referencing can be low. Students often erroneously believe that they are already skilled at searching online (Ivanitskaya et al., 2006) and do not require further instruction.

Making use of best-practice learning and engagement strategies is essential to keep students engaged with research and referencing skills. Gamification, for example, is a familiar education strategy that combines game design with established learning strategies, leading to effective learning outcomes (Qian and Clark, 2016). Research and referencing skills can be easily gamified through simple strategies like points, competitions and incorporating narrative elements into a lesson to make it more engaging.

Spacing of instruction is a highly effective and well-researched practice that improves students' long-term academic achievement (Yuan, 2022). Building spaced practice into library instruction for low-interest tasks that require high levels of accuracy, such as academic referencing, not only showcases how to study effectively for other subjects, but also improves students' retention of lesson content. Kapler and colleagues (2015) found that students who reviewed material with at least a week's break between lessons demonstrated more significant improvement in knowledge retention than students who reviewed work the next day.

The Thinkers Sphere

Supporting students to become successful critical thinkers is a higher-order skill set that builds on the skills gained from the *Readers Sphere* and the *Researchers Sphere*. Teacher librarians foster the *Thinkers Sphere* by providing structured opportunities to critically evaluate a variety of sources for personal and academic use. They support students to learn how to successfully communicate complex information to diverse audiences and teach metacognition strategies and foster awareness of cognitive biases. Teacher librarians also explicitly support students to explore a global understanding of the information landscape and how to become successful digital, as well as offline, citizens.

Students need to be able to synthesise and communicate complex information effectively to connect to a variety of audiences. Practising peer editing, sample editing and self-editing skills allows students to learn the features of successful academic writing, while also improving their subject knowledge on a research topic. Ebadi and Rahimi (2017) recommend using Google Docs as a peer editing tool, since the application is easy to use and conducive to sharing and collaboration when researching and writing. Research by Afrani and Noor (2018) demonstrates that engaging in peer editing improves students' writing skills, and self-editing results in greater independence and motivation as a learner. Giving (rather than receiving) quality peer feedback to other students results in improved assignment performance (Baker, 2016), highlighting the effectiveness of analysing peer work samples and applying this knowledge to students' own writing.

Part of being a successful thinker is learning how to critically engage with diverse information sources. Understanding how misinformation, fake news, and propaganda are used to manipulate people is essential for students to become robust critical thinkers. Students benefit from exploring the historical motivation for propaganda campaigns as well as identifying modern misinformation and fake news in popular culture.

Roozenbeek and van der Linden (2019) identified the difficulty of debunking fake news after people had already been exposed to it and sought to develop a gamified way to 'inoculate' people against misinformation. Their critical thinking game, *Bad News* is a high-interest, narrative-driven game that takes students behind the scenes in creating an effective fake news empire. Understanding how bad agents work empowers students to identify their techniques and motivations in real life. Basol et al. (2020) found that playing *Bad News* significantly improved students' ability to identify misinformation techniques.

Students need robust critical analysis skills to be able to evaluate the information sources they encounter. Lateral reading is the gold standard in critically evaluating sources, allowing students to evaluate any source in a consistent, easy-to-remember way. In their influential research, Wineburg and McGrew (2019) studied

THINKERS

🖥 **CRITICALLY EVALUATE SOURCES**
Thinkers use lateral reading skills.

📖 **SYNTHESIZE INFORMATION**
Thinkers communicate knowledge effectively to influence others.

🌐 **ENGAGE IN GLOBAL CITIZENSHIP**
Thinkers explore what it means to be a good person and contribute to humanity as a digital citizen.

Figure 3: The Thinkers Sphere

experienced online researchers and analysed the success of their search strategies. They found that professional fact-checkers were the most effective group at identifying if an information source was reputable or not. These fact-checkers utilised 'lateral reading,' a technique of reading across a source by seeing what other sources were saying about it. Stanford University used this research to create lessons on the lateral reading technique, which are freely available as part of their *Civic Online Reasoning* course. Research indicates that active interventions to explicitly teach lateral reading skills using direct instruction and subject-specific searches results in improved lateral reading use in subsequent student assignments (Bodsky et al., 2021; Breakstone et al., 2021).

Content curation is a skill that allows students to learn how to synthesize and communicate information in a variety of modalities to cater to different audiences. Curatorial practices 'help students understand the value of representing others' ideas accurately while at the same time encouraging them to build on that work to create something new' (Bauder and Rod, 2016, p. 257).

The museum sector provides tangible and familiar frameworks for curating and presenting complex information using different media to engage diverse patrons. Students can use museum visits to identify the robust research basis for museum collections and identify the ways that academic-level information is presented in an accessible way. Clifton-Ross et al. (2019) highlight the importance of learning to present content to appeal to the three types of information users: ideas-based, objects-based, and people-based. Ideas-based content can be presented

through traditional academic writing, such as reports and articles. Object-based content can be presented creatively through videos, images, artworks and music, while people-based content can be presented through a human interest focus, such as interviews, blog posts and audio recordings.

Engaging students to create their own personal or collaborative curated content collections is valuable in helping them to consolidate the skills behind curation as well as creating a personal investment in engaging with professionally curated information collections. Learning how to be successful curators can improve students' media analysis skills, narrative structure skills, and connection to collaborative online culture (Mihailidis, 2015).

Metacognitive awareness allows students to examine their own thinking patterns and how humans can become trapped by faulty ways of thinking. Cognitive biases are hardwired faulty patterns of thinking that can have a significant impact on how we perceive information and are easily manipulated by those promoting misinformation. Improving student's knowledge of cognitive biases allows them to pre-emptively take action to combat their effects (Marie et al., 2020).

Commonly encountered cognitive biases include the familiarity heuristic (humans are more likely to trust people familiar or similar to themselves over experts in a field) and confirmation bias (humans are more likely to believe information that confirms what they already believe is true). Explicitly teaching students about cognitive biases gives them a framework to examine their own thinking and the thinking of others. Britt et al. (2019) note that by gaining an understanding of

how the human brain works and being able to identify the cognitive biases at work behind conspiracy theories and marketing techniques students are empowered to recognise how human thinking patterns can be exploited.

The Thinkers Sphere provides a framework for extending students' critical thinking and metacognition skills, but also provides values education as they explore the nature of scientific research, global knowledge and the improvement of humanity. Students should recognise that information is socially constructed, with motive, access, and agency shaping the information landscape. The facilitation of critical information literacy should include a discussion of which voices and ideas have power and which are marginalized (Tewell, 2015) and students should be encouraged to engage with information power structures and act in ways that are congruent with being critical thinkers and global citizens. To this end, critical literacy education should be community focused and inspire students to become actively engaged global citizens (Ramasubramanian and Darzabi, 2020).

Conclusion

The *Three Spheres of Library Skills* is a research-driven framework that supports teacher librarians to teach best-practice information, media, and digital literacy skills to their students. It supports students to make reading for pleasure a priority, gain the skills to successfully find and use reputable information for both personal and academic purposes, and become confident at critically evaluating diverse forms of information. The framework engages students with meaningful, real-world connected skills that allow them to become successful lifelong readers, researchers and thinkers.

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Understanding and supporting gifted students with disability

Jillian Wyatt
Teacher Quality Advisor (Curriculum Implementation and Reform), Teaching Quality and Impact Directorate, NSW Department of Education

Jillian Wyatt discusses the NSW Department of Education's policy changes regarding students identified as 'gifted with disability' and considers the need for teachers to implement effective learning and teaching practices to develop the talent of high potential and gifted students with disability.
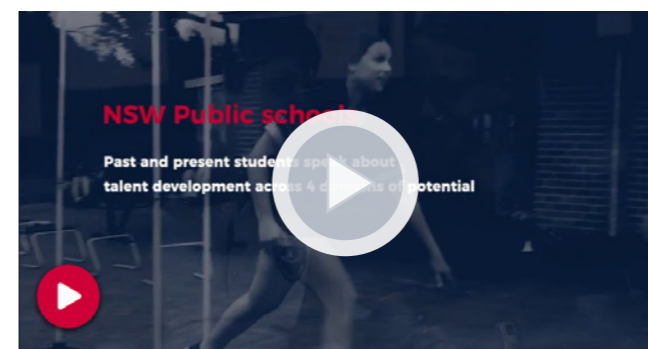
A [not so] new policy

2021 saw the implementation of a new ground-breaking policy for the NSW Department of Education. The High Potential and Gifted Education (HPGE) Policy (NSW Department of Education, 2022a) applies to all NSW public schools, students and departmental staff, replacing the Gifted and Talented (GAT) Policy (NSW Department of Education and Training, 2004). It is no happy accident that the new policy is no longer titled 'Gifted AND Talented'. In the intervening years since the previous policy was released, much research has been undertaken in the field of gifted education (Centre for Education Statistics and Evaluation [CESE], 2019) and we now know that having potential does not guarantee performance and that educators play a

key role in supporting students to systematically develop their gifts into talents (Gagné, 2009).

At its core, the High Potential and Gifted Education Policy reflects the aims of the NSW Department of Education's Strategic Plan (NSW Department of Education, 2022b) to ensure *all* students experience high expectations and are engaged and challenged to achieve their best. No longer focused solely on students who are identified as gifted, the HPGE policy promotes engagement and challenge for *every* student in *every* school, across the four domains of potential: intellectual, creative, social-emotional and physical, whilst explicitly addressing the learning needs of high potential and gifted students. The HPGE policy is deliberately inclusive, calling out a number of groups who experience additional challenges in achieving potential. It is on one of these groups, students with disability, that this article focuses.

Clarifying terminology

The term 'twice exceptional (2E)' is readily used in gifted education literature across the globe (CESE, 2019). Unfortunately, it is a term often misconstrued as referring to a student being doubly gifted, when, for those in the know, the term means that students have both exceptional ability and disability. The new HPGE Policy seeks to clarify this terminology; preferring instead to use the term 'gifted with disability' (NSW Department of Education, 2022, 1.3.2). The implication of this change is that gifted with disability students fall under disability legislation (Australian Government, 2005) and, as a result,

'NSW Public Schools: Past and present students speak about talent development across 4 domains of potential' by NSW Department of Education [5:11 minutes, Brightcove]

teachers have a legal obligation to ensure that students access syllabus outcomes and content on the same basis as their peers. Importantly, it means that for students who are gifted with disability, educators need to ensure that these students have opportunities for talent development that are similar to what would be provided to other high potential and gifted students.

Myths and misconceptions

When speaking to colleagues about gifted students, few pause when asked to consider the possibility of gifted students possessing physical or sensory disabilities. However, the same cannot be said when mentioning students who are gifted with cognitive, behavioural, or emotional disorders that impact learning. Like physical or sensory disabilities, ADHD, autism, dyslexia, processing disorders and mental illnesses can mask giftedness, just as giftedness can mask disability (Baum and Owen, 2004).

A lack of teacher awareness, combined with students exhibiting masking behaviours, have likely contributed to the misconceptions and the resultant myth that students with disability, particularly those with learning disabilities, cannot be gifted (National Association for Gifted Children, n.d). The gifted and disabled populations are highly diverse, even before the two collide, but for students who have a foot in both camps, navigating school can be even more challenging.

The research

In her paper, *Invisible Gifts, Invisible Handicaps*, Linda Silverman (1989) stated that 'far more gifted children suffer from learning disabilities than anyone realises' (p 37). This work, however, is now over three decades old and during that time there have been significant changes in the disability landscape. Apart from the obvious shift in language, the number of students with disability who require support has increased. Compared to the 1% increase in student enrolment in NSW schools, there has been a 4% increase in students requiring disability support (NSW Department of Education, 2022), with greater public awareness, legislation such as the *NSW Disability Inclusion Act* (NSW Government, 2014) and the introduction of

the National Disability Insurance Scheme (NDIS) all contributing to the increase. A recent joint research project (Wormald et al., 2021) conducted between the University of Wollongong and the NSW Department of Education, found that in participating schools, 11% of high potential and gifted students had a disability.

From a gifted education perspective, the reach of the High Potential and Gifted Education Policy has expanded considerably. It not only focuses on assessing and identifying the specific learning needs of gifted students, but also includes students with high potential; 'high potential' being the term used to describe 'students whose potential exceeds that of students of the same age in one or more domains' (NSW Department of Education, 2022c, para. 1).

Across the four identified domains of potential: the intellectual, creative, social-emotional and physical, high potential and gifted students are represented in all classrooms. Importantly, when assessing and identifying these students, the focus should not be about labels or statistics, but instead about supporting all students to realise their potential by providing optimal learning conditions. It is about ensuring that students with different degrees of potential, regardless of personal circumstance, have their learning needs met (NSW Department of Education, 2022a). For gifted students with and without disability, this policy mandate is a breath of fresh air.

Despite the extensive evidence base, it is still a well-kept secret that students can be both gifted and face challenges due to disability. When teachers don't know of, or understand, the existence of such students, these students can easily fall through the cracks. Research shows that gifted students with disability are often underrepresented in gifted programs (Wormald, 2009) and the High Potential and Gifted Education Policy seeks to address this inequity.

The first Australia-wide study examining teacher knowledge and understandings of twice exceptionality suggests that nation-wide there is limited understanding of students with high

cognitive ability and disabilities (Wormald and Bannister-Tyrrell, 2021). For gifted students with disability, the ongoing failure to meet learning, social, and emotional needs can lead to 'long term underachievement and poor life opportunities' (Australian Gifted Support Centre, n.d., para. 3). As a result, it is critical that this myth is busted. To achieve this goal, teacher training (both pre-service and in-service) is required, along with increased levels of community awareness (Wormald, 2015).

In the following video, school leaders and teachers discuss how they use differentiation in programs and practices to enhance teaching and learning.

'Differentiation' by NSW Department of Education [8:31 minutes, Brightcove]

Impacts on teaching and policy

Now that NSW public schools are in the implementation phase of the High Potential Gifted Education Policy, it is important for schools and staff to evaluate and update their current policies, programs and practices to reflect the many changes from the previous GAT Policy. Apart from rebranding GAT to HPGE, building teacher capacity in gifted education and applying 'evidence-based talent development to optimise growth and achievement' (NSW Department of Education, 2022a, 1.4), the review process also needs to focus on effective assessment and identification. Practically, this means schools need to be aware that some commonly used assessment and identification measures for gifted students may disadvantage certain groups (Gifted Education Research, Resource and Information Centre [GERRIC], 2004; NSW Department of Education, 2022d) and even more

significantly, that the policy is *not* about assessing and identifying high potential and gifted students, but rather it is about identifying **their specific learning needs**.

Foley-Nicpon and Kim's (2018) research into identifying and providing services for twice exceptional students outlines three ways students can be 'unidentified': identified as gifted but their disability is unidentified; identified as having disability but their gift is unidentified; and neither the gift nor disability are identified. For schools this research finding reinforces the need for a variety of objective, valid and reliable measures (NSW Department of Education, 2022a, 1.2.1) to build an informed picture.

Given educators have a legal obligation to ensure that students with disability participate in their education on the same basis as other students (Australian Government, 2005), all schools must ensure that gifted students with disability are afforded opportunities and choices comparable to those of other gifted students and, it all starts with assessment and identification of student learning needs (NSW Department of Education, 2022d).

Both in the education community and wider community, people tend to equate being gifted with 'learning abled' (Silverman, 2021) and, therefore, with school achievers. Unfortunately, this perception has led to a misunderstanding of what giftedness is and at the same time has unintentionally excluded 'learning disabled' students, further perpetuating the myth that students who have disability cannot be gifted.

At a systems level, redefining giftedness and what it means to have high potential, is important. At its core, Silverman (2021) believes that being gifted is about asynchronous development; that is, the mismatch between a student's mental age and their chronological age. All gifted students have things that they are incredibly good at, whilst they also have areas needing further development. For students who are gifted with disability, these areas are greater and more challenging, and thus at greater odds with their gifts.

> **Teachers not only have the responsibility to ensure adjustments are made to increase complexity and challenge whilst providing adjustments for disability, but the focus needs to be on a student's strengths …**

The NSW Department of Education has begun the process of redefining gifted education in public schools, but with 2,216 schools and 96,099 teachers and staff (NSW Department of Education, 2022e), it is a mammoth undertaking. To support the changes, the NSW Department of Education provides professional learning opportunities for its teachers through online courses, the High Potential and Gifted Education Professional Learning and Resource Hub (staff only) and a dedicated HPGE state-wide staffroom (staff only) that encourages collective efficacy.

For gifted learners with disability, their explicit inclusion in the policy and professional learning resources aims to address the disadvantage this group experiences. Ultimately, however, effective inclusion comes down to action at a school and classroom level.

When the myth exists that students with disability cannot be gifted, it creates a situation where teachers overlook assessment and identification opportunities. Why look for a needle in a haystack if there is no needle in the first place? When this situation occurs, it is students who miss out on either the challenge and/or support they need to see their potential realised (Gagné, 2009). Additionally, some teachers of students with disability do not expect them to excel (Chivers, 2012) and this too can directly influence teaching practice. Research has shown that high expectations are linked to higher achievement and environments that foster a culture of high expectations, therefore, may address some of the inequities that exist for students from disadvantaged backgrounds (Centre for Education Statistics and Evaluation, 2020). In a study of teachers identified as experts in the teaching of students with severe disabilities, Ruppar et al. (2017) specifically

identified that having high expectations was one of the four core qualities the study's participants had in common. When teachers have low expectations, student attendance, motivation and academic performance can be impacted (Centre for Education Statistics and Evaluation, 2020). If, due to myths and misconceptions, teachers are unaware of gifted students with disability *and* have low expectations of students with disability, teaching practice can never hope to meet the needs of these students.

Recommendations and strategies

A multi-pronged approach is needed to overcome the myth that students who have disability cannot be gifted. Globally, wider engagement with the extensive research base is needed, while locally, the same is true. People don't know what they don't know. Educators, parents, psychologists and others involved, need to have an awareness of gifted students with disability. To this end, the NSW Department of Education has taken a momentous step by explicitly including this group in the High Potential and Gifted Education Policy. The significance of this should not be underestimated as disability legislation further protects students, even beyond the mandatory policy. Unfortunately, this alone won't affect mass change, but it is a welcome start.

Building teacher capacity to meet the learning needs of gifted students is a priority and NSW teachers have a responsibility to 'undertake professional learning that enhances their expertise in planning and programming effective learning experiences for high potential and gifted students across all domains of potential' (NSW Department of Education, 2022a, 4.2.4). Targeted professional learning, coupled with resources, such as the NSW Department of Education's (2022f) Differentiation Adjustment Tool, support teachers to do just that. The Differentiation Adjustment Tool includes 9 adjustments, 65 strategies and 93 examples of what differentiation adjustments might look like when planning or delivering a lesson. Teachers can use the tool for ideas; they don't need to remake the wheel, just apply the selected strategy to the content they are teaching.

The other important element to consider is building teacher capacity in inclusive education. The NSW Department of Education defines inclusive education to mean 'all students can access and fully participate in learning, supported by reasonable adjustments and teaching strategies tailored to meet their individual needs' (NSW Department of Education, 2022g, para. 1). Professional learning targeted at supporting students with a range of disabilities, such as the OnLineTraining (OLT) courses, have been shown to impact teacher competence (OnLineTraining, 2022). The NSW Education Department's (n.d.) development of the Inclusive Practice Hub, which houses evidence-based practice resources to support students with disability, is also another practical platform to support teachers to make adjustment for students with disability.

Critically, having competence in the skill sets needed to support gifted students with disability is not enough. The research is clear that educators of gifted students with disability must adopt a strengths-based approach (Baum et al., 2014). Teachers not only have the responsibility to ensure adjustments are made to increase complexity and challenge whilst providing adjustments for disability, but *the* focus needs to be on a student's **strengths** (and not deficits) as well. Educators working with high potential and gifted students with disability need to understand that this approach is fundamental if students are to realise their full potential (Wormald, 2015). The case for change is clear and the NSW Department of Education is leading the way in debunking the myth that students who have disability cannot be gifted. While acknowledging this is important, however, more needs to be done to facilitate and strengthen support for these students and their teachers.

The Australian Professional Standards for Teachers (Australian Institute of Teaching and School Leadership, 2017) requires that all teachers 'differentiate teaching to meet the specific learning needs of students across the full range of abilities' (Area of Focus 1.5). To do this effectively, teachers need to undertake targeted professional learning, utilise best practice strategies and access evidence-based resources for gifted students with

disability. All this takes time. At a systems level, it is the author's opinion that increasing teacher release time would go a long way to supporting educators to strengthen their practice to better meet the needs of gifted students with disability.

Schools also have an important role to play in the planning of professional learning calendars. Ultimately it is about priorities, and for gifted students with disability who are at an increased chance of experiencing lifelong disadvantage, it is about ensuring equity — one of the core values of public education (NSW Department of Education, 2020). If that is not a priority, then what is?

For truly inspirational stories about why differentiation to meet the needs of gifted students with disability matters, read about Charlie and engage with the following Illustrations of Practice for Tilly, Brooke and Tate.

Illustrations of practice

Domains of potential (Tilly) – film
This illustration of practice highlights the collaboration between various stakeholders that was necessary to nurture Tilly's creative high potential in music and cater for her needs as a student with multiple disabilities.

'Tilly's Story' by NSW Department of Education [12:30 minutes, Brightcove]

High potential with disability – Tate's story
This illustration of practice is a case study about Tate, a student who has a severe language disorder affecting his expressive, receptive and social language skills. He also has a serious speech-sound disorder. Despite his communication difficulties, Tate has been identified as having high potential in the intellectual and creative domains; specifically, in spatial awareness.

Domains of potential (Brooke) – film
This illustration of practice shows how Brooke's school has been supportive in facilitating her talent development in the physical domain as a swimmer while simultaneously providing appropriate adjustments and support for her disability.

'Brooke's Story' by NSW Department of Education [4:12 minutes, Brightcove]

Tate in action building block towers

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Supporting a student who stutters: what schools can do

Associate Professor Robyn Lowe
Associate Professor, Australian Stuttering Research Centre, UTS

Professor Ross Menzies
Clinical psychologist, Australian Stuttering Research Centre, UTS

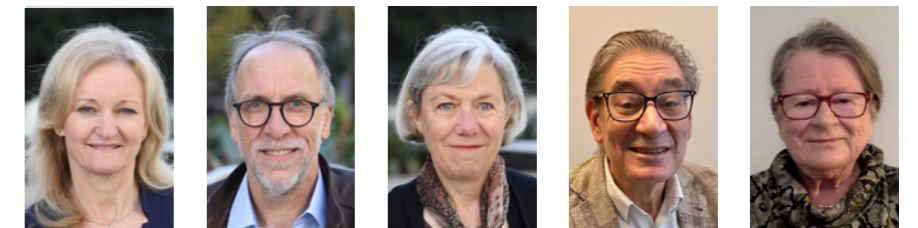**Associate Professor Sue O'Brian**
Senior Researcher, Australian Stuttering Research Centre, UTS

Professor Mark Onslow
Foundation Director, Australian Stuttering Research Centre, UTS

Professor Ann Packman
Foundation member, Australian Stuttering Research Centre, UTS

Researchers from the University of Technology Sydney (UTS) explain how students who stutter can be supported in the classroom environment.

As a teacher, can you always know when a student in the classroom has a stutter? How can you support a student who stutters to achieve their full potential at school? Many students who stutter try to conceal their stuttering, so it may go undetected in the classroom. The following article gives an overview of the disorder of stuttering and how it can impact a student in the school environment, and outlines some simple strategies to provide a supportive and inclusive learning environment.

What is stuttering?

Stuttering, or 'stammering' as it is known in the United Kingdom, is a disorder of speech production. It may involve one or more of the following features: repeating sounds and words; speech 'blocks', when words appear to get stuck; and the prolongation of sounds or words. Stuttering may also involve grimacing and muscle tightness around the face and neck during speech. The severity of stuttering varies markedly across individuals. However, for most, stuttering increases in stressful situations, such as talking in front of people, talking to people of authority, giving presentations, and talking on the phone. Overall, those who stutter know exactly what they want to say, but the issue is simply saying it.

Current evidence indicates that part of the cause of stuttering is underdeveloped connectivity in areas of the brain associated with planning and organising spoken language (Onslow, 2022; Packman et al., 2022). Stuttering is a physical condition. It is not caused by parenting practices or anxiety.

The onset of stuttering typically occurs during the preschool years. This is around the time when, or soon after, a child begins to say short sentences as language develops and becomes more complex. Some children will begin stuttering suddenly – sometimes overnight – while for others the onset can be gradual.

Many children will recover naturally from stuttering within a few years after onset, without intervention. However, it is currently not possible to be sure for which children that will occur (Onslow, 2022). Ten percent of all people will experience stuttering at some stage during life, and 1–2% will continue to stutter throughout their lives (Onslow, 2022).

Stuttering is associated with a high risk of developing anxiety-related mental health issues, the most prevalent being social anxiety disorder (Onslow, 2022). It is known that even primary school children who stutter have higher rates of social anxiety than their peers (Iverach et al., 2016). The development of social anxiety is typically the result of negative social experiences. Many children are teased and bullied because of their stuttering, which can result in the development of serious psychological issues and low self-esteem (McCabe et al., 2010); for school-age children who stutter, this is a really serious problem. Chronic stuttering and the negative consequences associated with it can lead to educational and occupational disadvantages throughout life.

Treatment for stuttering

Stuttering is treated by speech pathologists. Treatment occurs with assistance from a clinical psychologist if the child is experiencing associated anxiety. Treatment during the preschool years, or as early in life as possible, reduces the risk of experiencing the negative consequences associated with stuttering. For young children who stutter, speech pathologists typically train parents to give treatment in the home environment. During the preschool years, and for many children during the early school years, treatment can successfully resolve stuttering or significantly reduce the severity of stuttering.

As the school years progress, however, stuttering becomes less responsive to treatment and the type of treatment that is needed changes. For children approaching adolescence, treatment may focus on controlling stuttering, which can include dealing with social anxiety, teasing, and bullying. Generally, though, the earlier stuttering is treated by a speech pathologist the better.

The school environment

The school years are a challenging time of life for a student who stutters. Negative experiences in the classroom and playground, such as teasing, mocking and bullying, can lead to the development of anxiety-related conditions, including social anxiety disorder. It is well known that students who stutter are less likely to complete secondary education or to obtain a tertiary degree. As adults, they are more likely to work in jobs that are below their capabilities, or they may seek occupations that minimise speech communication (Onslow, 2022).

There are many situations in the school environment that can cause anxiety about speaking due to stuttering, such as talking or reading aloud in front of others. As a result, a student may try to hide stuttering, so it may go undetected by teachers. Some ways a student may hide stuttering are by sitting at the back of the class, avoiding eye contact, avoiding asking and answering questions, or giving only short answers to questions. Some students will substitute words in an attempt to avoid using words they know are likely to be stuttered. They may even take time off school rather than give a presentation to the class. A student who stutters may come across as being shy and may not have many friends. Therefore, it is critical that students who stutter are managed sensitively in the school environment.

How can you support a student who stutters?

Teachers play an important role in helping students who stutter at school. The school environment needs to be a place where a student who stutters can reach their full potential. For that to occur, the student needs to feel safe in the classroom. This can be achieved during regular confidential conversations with the student about classroom needs and the general experience of school life.

It is important for a teacher to know if a speech pathologist is assisting a student who stutters. A speech pathologist will be able to provide useful guidance about how to support that student at school. If a student has had no contact with a speech pathologist, discussing this with the student and parents is essential. A referral is not needed for an appointment with a speech pathologist. For some students, the speech pathologist will initiate contact with a clinical

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psychologist if it is thought to be necessary. A speech pathologist can be located using the links at the end of this article.

Typically, a teacher will not be involved directly with the treatment of stuttering but will provide a more general type of support. A student who stutters will benefit from not being rushed when talking. Allow the student time to finish talking, even if it is taking a while or the student is obviously struggling. Don't finish sentences for a student who stutters; all those who stutter find that to be unhelpful. Being told to slow down when talking does not generally help to reduce or control stuttering, so this is not a helpful suggestion for most people who stutter.

The most helpful thing to do with students who stutter is to talk to them. Ask the student how you can help at school. For example, the student may prefer not to answer questions or read aloud in front of the class, or they may feel more comfortable doing these activities in front of a smaller group of students. The student may like to try talking or reading aloud in front of others, but they may find it less stressful if called upon second or somewhere in the middle of the group. However, this will not be the case for every student who stutters, and that is why it is so important to talk to your student about how you can help.

Some students will be happy for you to discuss their stuttering with the rest of the students in the classroom, talking about what it is and why it happens. However, other students will not be so comfortable with this approach. For some Children, it can be emotionally traumatic to have attention drawn to their stuttering in front of other students.

It is critically important to establish if a student who stutters is being teased, bullied, or mocked by peers. If this is the case, teachers need to act to stop this immediately. This may include the involvement of the school counsellor.

In summary:
- Talk to the student about how you can best provide support.
- Instigate referral to a speech pathologist if required.
- Give the student time to talk.
- Don't finish sentences or suggest to the student to slow down when talking.
- Allow the student to read or speak aloud privately or in smaller groups if requested.
- Take steps to stop any teasing and/or bullying.

Where to get help

Stuttering is a physical speech disorder, which can cause anxiety-related mental health issues and educational and occupational disadvantages. These issues begin during the school years. Speech pathologists treat stuttering, sometimes with assistance from clinical psychologists. It is essential for teachers to ensure that a student who stutters has contact with a speech pathologist. Teachers can provide general support in the classroom, based on conversations with the child. Such support is fundamental to avoiding disadvantage because of stuttering during childhood.

Further information and resources

For further information about stuttering and for useful resources, please refer to the following links. The short film 'Wait, wait, I'm not finished yet …' is a resource recommended for teachers to understand the experiences in the school setting of younger and older children who stutter.
- Australian Stuttering Research Centre
- Australian Speak Easy Association (ASEA)
- *Wait, Wait, I'm not finished yet …* Short film for teachers [20:40 minutes]
- Speech Pathology Australia: find a speech pathologist
- Stuttering Unit: South-Western Sydney Local Health District

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Writer biographies

Joanne Rossbridge

Joanne Rossbridge is an independent language and literacy consultant working in both primary and secondary schools and with teachers across Australia. Her expertise, and much of her experience, is in working with students from diverse linguistic and cultural backgrounds. Joanne is particularly interested in educational equity as well as student and teacher talk, and how talk about language can assist the development of language and literacy.

Dr Hang Khong

Hang Khong is a Research Assistant for the Q Project and Teaching Associate at Faculty of Education, Monash University. She earned her Master of Educational Studies and PhD in education at the University of Queensland. Her research interests include teacher professional development and professional learning, teacher education, classroom talk, lesson study, school reform, school leadership, and technology integration. She is passionate about supporting teacher learning both formally and informally, particularly in school-based contexts through the Lesson Study for Learning Community.

Blake Cutler

Blake Cutler is a PhD student and Research Assistant in the Faculty of Education at Monash University. His doctoral studies are focused on how the quality use of research can address issues of social injustice for queer people in Australian schools. Prior to joining the Monash Q Project, Blake was an experienced music teacher across primary, secondary, and instrumental settings. Blake tweets at @blakeacutler.

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Dr Jo Gleeson

Joanne Gleeson is a Research Fellow with the Q Project in the Faculty of Education at Monash University. Joanne draws from cross-sectoral professional experience in executive human resource management, business consulting, careers counselling, education and education research. Her research is focused on improving adolescents' career identity, employability and education-work transitions.

Dr Mark Rickinson

Mark Rickinson is an Associate Professor in the Faculty of Education at Monash University. His work is focused on understanding and improving the use of research in education. He is currently leading the Monash Q Project, a five-year initiative with the Paul Ramsay Foundation to improve the use of research evidence in Australian schools.

Dr Lucas Walsh

Lucas Walsh is Professor of Education Policy and Practice, Youth Studies, in the Faculty of Education at Monash University. He is currently a chief investigator on The Q Project and director of the Monash Centre for Youth Policy and Education Practice (CYPEP).

Dr Genevieve Hall

Genevieve Hall is an experienced teacher, teacher educator and professional learning expert. Her previous roles include working as an Education Consultant for the Asia Education Foundation at the University of Melbourne on designing, implementing and evaluating professional learning programs for teachers and school leaders. She has also worked as a Lecturer and Curriculum Lead at RMIT University and a Teaching Associate at Monash University where she has educated pre-service teachers about current learning theories and pedagogies to prepare them to meet the Australian Professional Standards for Teachers through evidence-informed practice.

Richard Short

As Storyteller-in-Chief at Story Factory, Richard designs and facilitates creative writing programs for young people and teacher development programs for adults. Prior to joining Story Factory in 2012, he taught at secondary schools in the western suburbs of Sydney. His first collection of poetry (written under the pseudonym Rico Craig), *Bone Ink*, won the 2017 Anne Elder Poetry Award and was shortlisted for the 2018 Kenneth Slessor Prize. His subsequent collections include *Our Tongues Are Songs* and *Nekhau*. Richard has also lectured in tertiary courses, performed at poetry events, and was a judge for the 2021/2 NSW Premier's Literary Awards. (Photograph: Pax Valentine)

Sophie Parsons

Sophie Parsons is a teacher, writer and illustrator. She has taught across all stages in Australia, leading whole school visual arts programs. Sophie has been facilitating investigative learning programs since 2017. Passionate about supporting high potential and gifted students, Sophie has created numerous NSW outcomes-linked resources to support differentiation through inquiry-based learning. She has also co-written 2 previous articles, Investigative Learning, our Journey at Balmain Public School (PDF 2.5 MB) and Facilitating Growth in Literacy Outcomes through Investigative Learning (PDF 2.4 MB).

Writer biographies

Ariana Davis

Ariana Davis has refined her expertise in experiential learning tasks through more than a decade of experience in Primary and Early Childhood classrooms. Ariana has facilitated the introduction of Investigative Learning at Balmain Public School across Early Stage 1 and Stage 1. To support other teachers setting up inquiry-based learning classrooms, she has also presented at the UNSW *Ignite the Spark* conference and *COLAS* (Community of Leichhardt Area Schools), and has co-written 2 previous articles, including [Investigative Learning, our Journey at Balmain Public School (PDF 2.5 MB)](link).

Stijn Denayer

Stijn Denayer is the CEO of All Together Now. He has over 15 years of international experience in the human rights field, working on issues such as discrimination, racism, right-wing extremism and hate speech. Before stepping into the CEO role in late 2021, Stijn managed All Together Now's projects and programs relating to right-wing extremism and conspiracy theories. Previously, Stijn worked for the Indigenous Law Centre (UNSW) and for Unia, the National Human Rights Institution of Belgium, as well as several human rights organisations in South Asia and the Middle East.

Ramy Sedrak

Ramy Sedrak is a facilitator, researcher and community engagement worker. He has over 10 years' experience supporting community and youth engagement, anti-racism and social cohesion. Over the last 6 years, he has worked with All Together Now on projects relating to far-right extremism. Previously, Ramy worked with several community organisations in NSW and has a background in the legal sector.

Mali Jorm

Mali Jorm is a leading innovator in information management in schools. Passionate about design, marketing and psychology, Mali is an affirmative educator who has worked with primary, secondary and adult education students. They bring a research-driven mindset to library services, curating innovative programs with excellent student engagement and circulation outcomes. Mali brings together diverse skills in media, teacher librarianship, game design and visual communication to create exciting information spaces and products. Find Mali at the [Three Spheres of Library Skills](link).

Jillian Wyatt

Jillian Wyatt is a public school teacher and leader with over 20 years' experience working in a range of school settings. Throughout her career, she has taught gifted students, coordinated gifted programs and led professional learning to strengthen teaching practice. Jillian has post graduate qualifications in gifted education and is passionate about engaging and challenging all students. As a HPGE specialist, Jillian is currently working with the Teaching Quality and Impact Directorate to improve student learning outcomes and to support implementation of the High Potential and Gifted Education Policy across NSW.

Associate Professor Robyn Lowe

Robyn Lowe is a Senior Researcher at the Australian Stuttering Research Centre, University of Technology Sydney. Her work is focused on increasing access to speech and anxiety treatments for children, adolescents, and adults who stutter. Robyn's research interests include exploring anxiety associated with stuttering and its impact on the maintenance of speech treatment benefits. Robyn has a number of peer-reviewed scientific publications and has presented at international conferences.

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Professor Ross Menzies

Ross Menzies is a clinical psychologist at the Australian Stuttering Research Centre, University of Technology Sydney. His research has focused on anxiety and its management. Ross has over 180 publications in peer-reviewed scientific journals. He has published 12 books and over 30 book chapters. Ross is the former National President of the Australian Association for Cognitive Behaviour Therapy (AACBT) and is Australia's representative on the Board of the World Confederation of Cognitive and Behavioural Therapies (WCCBT).

Associate Professor Sue O'Brian

Sue O'Brian is a Senior Researcher at the Australian Stuttering Research Centre, University of Technology Sydney. She initially trained as a speech pathologist and has many years of clinical and research experience with adults and children who stutter. Sue has over 100 publications in peer-reviewed scientific journals, and she has contributed to several books on aspects of stuttering.

Professor Mark Onslow

Mark Onslow is the Foundation Director of the Australian Stuttering Research Centre, University of Technology Sydney. His research interests are the epidemiology of early stuttering, the mental health of those who stutter, the measurement of stuttering, and the nature and treatment of stuttering. He has over 200 publications in peer-reviewed scientific journals. He has published six books and 37 book chapters. Mark was joint recipient of the American Speech-Language Hearing Association Kawana Award for Lifetime Achievement in Publication.

Professor Ann Packman

Ann Packman has worked at the Australian Stuttering Research Centre, University of Technology Sydney, since its inception in 1996. She has also worked as a speech pathologist with people who stutter and their families, and as a university educator. Ann has over 190 publications in peer-reviewed scientific journals and is the first author of a book, now in its second edition, on causal modelling of stuttering.

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