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Scan

The journal for educators

**Critical thinking
and content
knowledge**

**SPaRK - *The
Inheritance***

**Nurturing reader
identity**



Contents

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Critical thinking and content knowledge: what cognitive load theory gets wrong 4

Dr Peter Ellerton explores critical thinking and critiques claims from cognitive load theory that critical thinking skills can't be explicitly taught.

SPaRK – The Inheritance: considering the affective nature of visual narrative – Stage 5 English 10

Dr Cathy Sly considers teaching and learning ideas for Stage 5 students exploring Armin Greder's evocative picture book, *The Inheritance*.

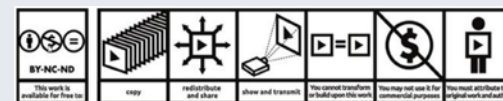
Nurturing reader identity in high school 15

Laura Smith investigates research about reader identity and offers practical suggestions for cultivating a reading culture at school.

Writer biographies 20

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Critical thinking and content knowledge: what cognitive load theory gets wrong



Dr Peter Ellerton

Curriculum Director, University of Queensland Critical Thinking Project

Dr Peter Ellerton explores critical thinking and critiques claims from cognitive load theory that critical thinking skills can't be explicitly taught.

This article is a summary of key points made in the peer-reviewed publication: Ellerton, P. (2022). [On critical thinking and content knowledge: a critique of the assumptions of cognitive load theory](#). *Thinking Skills and Creativity*, 43. For more details and further references please refer to the [preprint](#).

Introduction

It makes sense that how we understand critical thinking would influence how we go about teaching it or whether we should try at all. We might also wonder if critical thinking can be taught as a standalone subject or in any discipline context. Philosophers of education, educational psychologists, teachers, school leaders and those

in charge of policy do not have a unified view on this. This article helps to sharpen the debate by pointing out serious errors in reasoning behind claims that critical thinking can't be taught. In particular, it critiques some of the assumptions of cognitive load theory (CLT), an educational approach that has some traction, at least in the Australian context.

Let me contrast two broad views. The first is that critical thinking consists of a range of skills, knowledge and dispositions that are themselves subject to pedagogical influence. The second is that critical thinking cannot be spoken about meaningfully outside of a discipline context and can only be developed through deep engagement with subject area knowledge. The first view is supported by many educational jurisdictions, including the Australian Curriculum Assessment and Reporting Authority ([ACARA, 2010](#)). It is also the view behind programs such as Philosophy for/with Children, an approach to focusing on thinking skills that has had significant success worldwide. The second view is supported by CLT and by a range of researchers who resonate with its assumptions.

Assumptions of cognitive load theory

Let's look at some of the key assumptions of CLT, which will form the basis of my analysis. Two statements are axiomatic; the first being that our working memory – that part of our memory which accommodates and manipulates information before it can be passed to long-term memory or forgotten – is severely limited in capacity and needs to be carefully deployed for effective learning to occur. According to CLT, one of the most effective things teachers can do to enhance student learning is to make sure that our instructional techniques provide students with the easiest cognitive pathway to their learning, minimising the so-called 'extrinsic' load of instruction. Over-complicating instruction, and the consequent excessive demands on student working memory that creates, makes engagement with content unnecessarily difficult.

There exists a well-theorised and well-researched body of work that offers actionable and explicit approaches to developing knowledge, skills and dispositions of critical thinking that should command the attention of any interested educator.

The second axiomatic statement is that critical thinking is 'biologically primary', something for which we have an inherent (possibly fixed) capacity. Something else that might be biologically primary is our ability to develop language. Just as we can use this innate ability to learn languages naturally, without explicit instruction, so too our natural ability to think critically emerges with developing content knowledge.

From these two axioms a series of propositions can be generated:

- P1: Working memory should be optimised during learning through attention to instructional design.
- P2: 'Explicit guidance and feedback from teachers is more effective in teaching students new content and skills than letting them discover these for themselves' (Sweller, 2019).
- P3: Inquiry 'should only be used when we cannot obtain needed information from others' (Sweller, 2019).
- P4: 'To think deeply, we need lots of knowledge stored in long-term memory' (Sweller, 2019).
- P5: '... critical thinking is biologically primary knowledge and so unteachable' (Sweller, 2019).

From these, two others follow:

- P6: Critical thinking can only be actualised through deep content knowledge.
- P7: Critical thinking is not a transferable skill.

What cognitive load theory gets wrong

Learned heads have nodded as these propositions roll out, but there are some serious objections regarding both the axioms and the inferences drawn from them. These objections fall into four main categories, which are briefly outlined.

Attempts to limit critical thinking to deep content knowledge (and expertise) expose serious inferential errors in CLT.

explain exactly what critical thinking skills they would bring to bear to solve it. The obvious fact that the problem was unsolvable without significant physics knowledge was intended to be a knockdown argument against any claims that critical thinking could be useful without deep discipline knowledge. The old 'if you're thinking critically, you must be thinking about

something' adage. But this is flawed reasoning. There is no question that some physics knowledge was *necessary* to solve that problem, but that does not imply that physics knowledge was *sufficient* to solve it (nor, indeed, that the problem itself required much critical thinking beyond content knowledge). This confusion between necessary and sufficient conditions provides a perpetual source of support for CLT, but it only helps to make the case that a bit of explicit training in critical thinking can go a long way.

2. The experimental problem

Let's assume that we can rely on all the experimental evidence showing that lowering the extrinsic cognitive load of a task through tight instructional design helps student learning. Let's also accept that the more content knowledge we have, the better we might be at solving problems in a particular area. None of this means that critical thinking can't be made an object of study or that it is biologically primary and can't be taught. The only way any claim that critical thinking can't be taught can be justified is to show that attempts to do it have all failed. Moreover, these attempts need to: be clear about what critical thinking is and what skills are being developed; be taught well; and ensure that any assessment addresses critical thinking skills.

Willingham offers that a range of programs in schools to teach chess, musical instruments, or types of computational thinking have failed as 'all-purpose enhancers of intelligence' and that 'it is no surprise then that programs in school meant to teach general

The only way any claim that critical thinking can't be taught can be justified is to show that attempts to do it have all failed.

critical thinking skills have had limited success' (Willingham, 2020, p 6). Two main problems with this assertion are (1) none of these things meet the conditions outlined above and (2) there seems to be further confusion about the relationship between critical thinking and intelligence. If Willingham believes that improving critical thinking means improving intelligence, as this assertion suggests, then he is at odds with most of the literature on critical thinking (and, arguably, intelligence).

Willingham's claim that attempts to teach critical thinking have failed draw on Ritchhart and Perkins' (2005) thorough analysis of thinking programs which indeed found variation in levels of success. But they did find success, including Philosophy for Children (P4C) programs that showed significant academic improvement, including in terms of transferability of thinking skills (Ritchhart & Perkins, 2005, p 779). Topping and Trickey (2007) also found P4C caused gains in cognitive skills, including those measured by transferable effects, that lasted years after the intervention. Van Gelder et al. (2004) found significant cognitive gains in university students taught argument construction via argument maps, with gains over one semester equating to gains typically seen over the course of an entire undergraduate degree.

A more fundamental empirical concern with CLT is that its conceptions of cognitive load types, and the insistence that critical thinking is biologically primary, are not well supported by evidence (de Jong, 2010). As a result, 'cognitive load theory is constructed in such a way that it is hard or even impossible to falsify ... [and] ... every outcome fits within the theory post-hoc' (de Jong, 2010, p 125). There could be no criticism more damning for a theory that presents itself as scientific.

3. The inquiry problem

As there is variety in how people understand critical thinking, so there is variety in how inquiry is understood. While some may see it as unstructured, it is not so. For example, Walton, Reed and Macagno (2008) present a broad and deep analysis of argument schemata to generate critical questions to test thought and further inquiry. Van Gelder et al. (2004) show that high levels of informal reasoning

CLT's focus is on instructional design, offering neither understanding nor appreciation of the learner as an autonomous agent. This is a significant omission since definitions of critical thinking are often, quite properly, concerned as much with the character of the learner as they are with thinking skills ... These characteristics include dispositions such as open-mindedness, a willingness to enquire, intellectual humility, and the desire to test our thinking through collaborative inquiry.

can be developed through explicit attention to thinking skills. Cook, Ellerton and Kinkead (2018) developed a rigorous methodology to debunk claims that climate science can be dismissed based on reasoning analysis rather than deep content knowledge.

CLT relies heavily on experimental evidence drawn from mathematics teaching, particularly geometry. These kinds of problems have very well-defined procedures and definitive answers, requiring minimal inquiry. Indeed, these are just the kinds of problems for which direct instruction of the 'I do, we do, you do' sort can work very well. But how can we get from this agreeable context to the idea that inquiry should be avoided in the classroom (P3)? We can get there if we make two errors of reasoning. The first is to imagine that all of mathematics education consists of drilling students in algorithms and procedures, and sharpening their application. Those of us who teach mathematics know this is an important part of mathematics, but it is a far richer field than can be exhausted by this approach.

The second error, a more egregious one, is to try and generalise what makes for effective teaching from these simple (and simplistic) contexts to all areas of the curriculum and all skill development. That teachers of business, citizenship, design, drama, economics, English literature, geography, history, music, philosophy, technology, religion or, for that matter, science, should emulate such a narrow view of teaching and learning is naïve.

1. The definitional problem

Any claim that teaching critical thinking is or is not possible must be connected to a clear understanding of what critical thinking is. This is of course true of both sides of the debate. As this article's primary purpose is a critique of CLT, I will look to its proponents first for their thinking on this matter. (For an alternative view, see Ellerton, 2020.) One of the strongest voices is the psychologist Daniel Willingham, whose articulation of critical thinking will serve as a useful focus. Unfortunately for CLT, this articulation is extremely unclear.

Willingham (2008) suggests that critical thinking is a 'type' of thinking that '... even three-year-olds can engage in – and even trained scientists can fail in' (p 22). What a 'type' of thinking means is not clear, nor are the characteristics of a type that would make it 'critical' explained. Examples of this type are offered, however, including 'playing chess, designing a product, or planning strategy for a field hockey match' (Willingham, 2020, p 9). This is unhelpful as what these skills may be and how they are applied in these contexts is not addressed. For example, computers can play chess using an 'if – then' approach but we would not say they think critically. Perhaps Willingham refers to the recognition of patterns and deployment of strategy chess players often use, representing the kind of thinking often associated with expertise and expert knowledge. Experts have deep domain knowledge and can use this to solve problems in the context of these domains. But if expertise is equivalent to critical thinking, or if some level of expertise is at least necessary for critical thinking, whence comes Willingham's three-year-old?

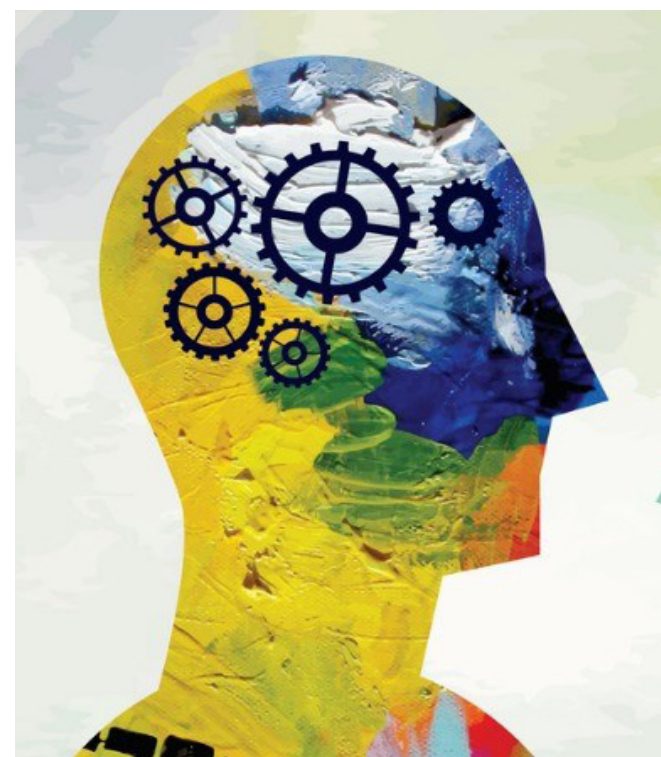
Attempts to limit critical thinking to deep content knowledge (and expertise) expose serious inferential errors in CLT. In a recent webinar (Horvath, 2021), viewers were invited to solve a complex physics problem, and to

4. The agential problem

CLT's focus is on instructional design, offering neither understanding nor appreciation of the learner as an autonomous agent. This is a significant omission since definitions of critical thinking are often, quite properly, concerned as much with the character of the learner as they are with thinking skills, including Siegel's understanding that critical thinkers are 'appropriately moved by reasons' (1989, p 23). These characteristics include dispositions such as open-mindedness, a willingness to enquire, an appreciation of our own fallibility that includes intellectual humility, and the desire to test our thinking through collaborative inquiry. Many approaches make the development of these and other dispositions a point of focus, including explicit attention to students' self-directed development of their own character. (See Panadero's (2017) review of the theoretical and empirical work on Self-Regulated Learning, for example.) Theoretical and empirical work linking student success to empowerment through self-directed deployment of cognitive resources, particularly centred on argumentation, is compelling (Bailin & Battersby, 2016, 2015; Kuhn, 2015, 2000, 1999).

A false dichotomy

That working memory should be optimised and that content knowledge is often essential to solve problems does not provide any evidence that critical



That working memory should be optimised and that content knowledge is often essential to solve problems does not provide any evidence that critical thinking cannot be explicitly taught.

thinking cannot be explicitly taught. CLT offers an educational approach that comes with the promise of simplicity: an appeal to 'back to basics' thinking and permission to drop worrying about critical thinking as a concern because it will emerge with proper instructional design and knowledge development. This suggests a dichotomy between teaching for thinking and teaching content knowledge which has no basis in evidence. It also invites simplistic responses that reach for this binary as if it were some holy grail of educational reform (see, for example, Kelly, 2021). There exists a well-theorised and well-researched body of work that offers actionable and explicit approaches to developing knowledge, skills and dispositions of critical thinking that should command the attention of any interested educator.

Turning again to Ritchhart and Perkins:

'...we venture that the true promise of the teaching of thinking will not be realized until learning to think and thinking to learn merge seamlessly' (2005, p 795).

But let me give the last words to John Dewey, since he has voiced many firsts:

'Thinking is the method of intelligent learning' (1966, p 152).

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SPaRK

Shared Practice and Research Kit

SPaRK – *The Inheritance*: considering the affective nature of visual narrative – Stage 5 English

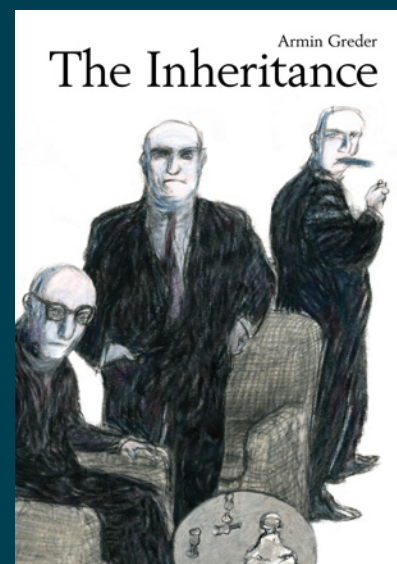


Dr Cathy Sly

Researcher and writer

In this Shared Practice and Resource Kit (SPaRK), Dr Cathy Sly explores Armin Greder's evocative picture book, *The Inheritance*, and suggests ways students can interrogate the techniques deployed by composers to elicit an affective reader response.

Resource overview



Lauded for works such as *The Island* (2007), *The Mediterranean* (2018), and *Diamonds* (2020), Greder tackles sensitive socio-political issues through visual texts pitched at older readers. His recent publication, *The Inheritance*, focuses on what one generation leaves for the next, and what the heirs choose to do with their legacy. Narrated through primarily monotone sketches and scant verbal content, this publication is useful for investigating the effectiveness of the multimodal narrative as a format for socio-political commentary. This SPaRK offers teachers ways to encourage students to examine representation as well as connotation, imagery and symbol in relation to ways composers elicit affective responses to texts. It seeks interpretive ideas and critical thinking from students, as they weigh the author's perspective against their own feelings about issues raised by the text.

Twentieth century art critic, John Berger, claims, **'A line, an area of tone, is not really important because it records what you have seen, but because of what it will lead you on to see.'** (Berger, p 33).

This comment is especially pertinent to a recently published picture book, in which Armin Greder not only leads a reader 'to see', but also to feel, to contemplate and to share responses to significant facets relating to 'inheritance'.

Greder's recent publication, *The Inheritance* (2021), is an evocative picture book that calls for close study. Sophisticated picture books, like this one, provide a valuable means of cultivating and developing secondary students' multimodal reading skills. This SPaRK triangulates visual literacy, the [English Textual Concepts](#) of **Representation** and **Connotation**, **Imagery and Symbol**, and a recognition of the role that the theory of 'affect' plays in literary critical practice.

Educational significance

Challenging picture books like *The Inheritance* offer a concise focus and operate as a springboard to stimulate feelings and deep thinking about controversial issues. By relying on his images to affect readers, thereby eliciting an emotional reaction, Greder dispenses with the need for a detailed verbal track, prompting readers to feel first, then decode and infer meaning from the elements of the narrative.

The object of Greder's visual narrative is to beseech readers to question the industrialist attitudes that have operated in many countries of the world since the late 18th century. Greder interrogates the ramifications of accumulating wealth through industrial activity and the passing on of such industry and wealth from one generation to the next.

Through close critical analysis, students can explore how well Greder manages to achieve this goal and why his perspective on society is worth pondering. Through its focus on industrialism and the closely linked economic ideology of capitalism, *The Inheritance* also raises a myriad of concerns relating to contemporary social, economic, political, environmental and ethical issues.

Syllabus links

Links to outcomes in the [NSW English syllabus](#) for Stage 5 include:

- A student responds to and composes increasingly sophisticated and sustained texts for understanding, interpretation, critical analysis, imaginative expression and pleasure EN5-1A
- A student thinks imaginatively, creatively, interpretively and critically about information and increasingly complex ideas and arguments to respond to and compose texts in a range of contexts EN5-5C
- A student investigates the relationships between and among texts EN5-6C
- A student understands and evaluates the diverse ways texts can represent personal and public worlds EN5-7D
- A student questions, challenges and evaluates cultural assumptions in texts and their effects on meaning EN5-8D.

Thematic issues within this visual narrative readily lead to class discussion involving science and HSIE subjects, such as, history, geography and commerce. In addition, there are clear connections to the cross-curriculum priority of [Sustainability](#) and to the general capabilities of [Critical and creative thinking](#) and [Ethical understanding](#) outlined in the [Australian Curriculum](#).

Like Greder's earlier picture books, *The Inheritance* is highly emotive. It is created to evoke an 'affective response', that is, to cause a reader to have strong feelings about (and possibly even emotional reactions towards) the issues raised. By studying Greder's mode of representation and the connotation, imagery and symbol present in the text, students become aware of how a composer manages to affect a reader and elicit particular responses.

Suggestions for using this resource

As indicated by the syllabus links above, there are various ways this resource can be used to support outcomes in Stage 5 English. Learning from other areas of the curriculum, along with learning from social interaction

beyond the classroom, is to be encouraged. Topics raised by this picture book prompt students to become informed on a range of contemporary issues, and guidance towards reputable reference material can be assisted through collaboration with a teacher librarian. Branches of science such as biology and earth sciences, along with social sciences like history, geography and commerce also offer valuable insights, and students should be persuaded to draw widely on their learning.

Teaching activities

Pre-reading

Prior to reading *The Inheritance* it would be useful to investigate meanings of 'inheritance' and make a list of synonymous words. Students should consult a dictionary and thesaurus and make a list of meanings and synonyms for later reference. Ask students to divide their list into material things (for example, property and money) and immaterial things (such as 'good will' in business, and futuristic ideas and plans) that are passed from one generation to the next. Students can then include annotations to indicate those which they feel have 'real' value and those which may not.

Further points for written and/or oral comments can be triggered by the following:

- Ask students to examine the cover closely and contribute ideas about what they expect the narrative to be about, giving evidence from verbal and/or visual information on the cover.
- Record these suggestions on a class mind map diagram, along with a record of feelings that are evoked by the monotonal image on the cover.

Reading, re-reading and discussion

Read the book (ideally as individuals or small groups). An initial reading should be followed by a slow second reading, using the questions below to generate discussion in relation to different pages in the book.

Teachers wishing to refresh students' knowledge on elements associated with visual literacy may use material from the following internet links:

- [Visual techniques – Ms Sales](#)
- [Tips for viewing images in picture books – Josephine Laretive](#)
- [Visual metalanguage for comprehending and composing visual meaning – Department of Education and Training Victoria.](#)

Alternatively, the class could watch the YouTube video, [Visual literacy elements and principles](#) (19:12 mins).



'Top 10 panel/page layout methods' by Michelle Mouton [12:52 minutes, YouTube]

Engaging students in close analysis

- The narrative opens with the statement, 'The old industrialist was dying' (pp 2-3). Students research and discuss the meaning of 'industrialist':
 - Do you think the term 'industrialist' is used positively, negatively, or neutrally in this book? Why?
 - Whose voice is relaying the narrative to the reader?
 - What other information can be gathered from the opening double-page spread where the old industrialist is dying? Support your ideas with evidence from the visual and/or verbal elements on these pages.
 - Keep a record of any emotions that are triggered for you by the first scene in the book.
- What clues (p 4) are given by the author/illustrator as to the religion of the deceased man? Do you think the inclusion of religion is relevant to the narrative? Why/why not?
- Visually, what is the focal point on the image depicting the Mass (p 4)? How has this focal point been created? Why do you think the author/illustrator has used this scene to represent the passing of the industrialist? What connotations can be derived from the imagery and symbols in Greder's representation of this Requiem Mass (that is, church service for the deceased)?

- What can be inferred from hearing about the attendees at the funeral of the industrialist (p 5)?
- The written text (p 5) recounts what the brothers spoke about after their father's death. Explain how a combination of the visual and verbal convey meaning about the brothers and their intentions. What connotations arise from the various aspects 'they talked about'?
- Given their posture, facial expressions, and the way they are depicted physically, what feelings are conveyed by the brothers when their sister returns (pp 6-7)?
- When the sister appears (p 8) she says, 'Maybe we should think again'. Does the visual representation of the sister and her list of statements (p 9) evoke empathy or antipathy in the reader? How? Why?
- What counter arguments to the brothers' plans are given by their sister (pp 8-9)?
- How do the brothers react (pp 10-13)? Use visual and verbal evidence to support your arguments.

The subsequent pages (pp 14-34) are 'silent' double-page spreads depicting another type of inheritance, that is each of the concerns outlined by the sister on page 9. In this case, inheritance refers to the natural world that our children and grandchildren will inherit.

Visual analysis

As a collaborative learning activity, students can work in pairs or small groups to interrogate aspects of the mode, tools and techniques used by Greder, in one of the 'silent' images, to activate an affective response in the reader.

Sophisticated picture books, like this one, provide a valuable means of cultivating and developing secondary students' multimodal reading skills.

By relying on his images to affect readers, thereby eliciting an emotional reaction, Greder dispenses with the need for a detailed verbal track, prompting readers to feel first, then decode and infer meaning from the elements of the narrative.

Findings can be presented to the class by way of a brief oral and/or digital presentation. Suggestions and questions below offer some guidelines for unpacking the images:

- Is the image a record of the present or a projection of the future? Whose perception is depicted in the image?
- What immediate feelings/emotions does the image elicit from a reader?
- Make a note of the techniques used by Greder to evoke these feelings (for example positioning of elements, modality, colour, space, expression and gestures, point of view, and so on).
- The medium used by Greder is a combination of charcoal and pastel on paper. Is there anything significant about his tools and techniques in relation to the story he tells?
- Greder's images are not contained within a frame. Why do you think he allows them to 'bleed' off the edges of the page?
- Select particular images or symbols within the double-page artwork and suggest various meanings that can be interpreted from these.
 - To what extent does the image activate an emotional response? How/why?
 - Create a title that captures the essence of the image.
 - How successful is Greder's use of the picture book format in raising concerns about contemporary socio-political issues?

Experimenting

Ideas included in this section take students beyond the focus text to investigate relationships between and among texts and to compose texts in a range of contexts. The following activities are appropriate for individuals, pairs or small groups of students.

- Select one of the silent images in *The Inheritance* and team it with two other texts (or excerpts from texts) of your own choosing to create a multimodal piece appropriate for presentation at a school assembly. [Other types of text include: fiction, graphic novel, poetry, film, nonfiction, drama, documentary, journalism, website or digital text.]
- Script a dramatic scene portraying the conversation between the three brothers and their sister.
- Create a Q&A style interview between one of the brothers and the sister where each responds from his/her own perspective to an interviewer's questions. This may be presented 'live' or as a podcast or video.
- Research one of the concerns expressed by the 'silent' images and compose a feature story (including images) for an imaginary monthly journal titled 'Global Village'.
- Use John Berger's observation, 'A line, an area of tone, is not really important because it records what you have seen, but because of what it will lead you on to see', in your introduction to an essay on how Armin Greder leads us to see and better understand the notion of 'inheritance'.
- Imagine you are on the board of a company concerned about the redistribution of wealth as a means of protecting the environment and sustaining life on earth into the future. Prepare a 'white paper' which outlines problems and proposed solutions in relation to the issue of inheritance to present to your government.

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Nurturing reader identity in high school



Laura Smith

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Laura Smith investigates research devoted to the need to foster reader identity in high school students. She offers a range of practical suggestions, for teachers and teacher librarians, to assist in their endeavours to cultivate a reading culture within their schools.

The practice of wide reading or reading for pleasure is deemed to be highly significant to a student's educational growth. In the context of this article, the notion of 'reading for pleasure' is derived from Stephen Krashen's description of 'free voluntary reading' whereby students are free to select their text of choice to read (Krashen, 2001). Reading for pleasure is further defined as reading that we do of our own free will, anticipating the satisfaction that we will get from the act of reading. It also refers to reading that, having begun at someone else's request, we continue because we are interested in it (Clark & Rumbold, 2006, p 6). A culture of reading nurtures the intrinsic motivation to engage in reading for pleasure (Clark & Rumbold, 2006, p 6).

Program for International Student Assessment (PISA) data indicates that one third of Australian students in 2009 said that they did not read for

enjoyment (OECD, 2010). Between 2000 and 2009, the percentage of children who reported reading for enjoyment daily dropped by five percent on average across OECD countries (OECD, 2010). This suggests that there needs to be a renewed focus on creating a reading culture in Australian schools.

NSW Department of Education high schools focus on improving reading as an aspect of the school planning cycle. Every school must have Student Growth and Attainment as their first strategic direction in their Strategic Improvement Plan for 2021-2025. The link between reading proficiency and academic success has been codified by the NSW Premier's Priorities, aiming to lift students' performance in reading in the top 2 bands of NAPLAN testing by 15% by 2023. In high schools, the mechanics of reading and comprehension have been prioritised, systematised, tabulated, institutionalised, rationalised and standardised. So, why are we not seeing more significant improvement? Has teaching and learning in high schools become geared towards literacy skills acquisition to the detriment of nurturing the will to read for enjoyment? (Sullivan, 2014).

High school students need to continue to develop their reader identity as they transition from Year 6 to Year 7 and to continue to develop as readers throughout the middle years of schooling. Reading is essential to support literacy growth and maturity. While reader identity is carefully and passionately crafted in primary school, high school students generally experience a decline in reading for pleasure. High schools tend to value reading for informational purposes and there is a belief that those who competently comprehend informational texts will be successful students. Reading is viewed as a purposeful and functional vehicle through which content can be delivered (Thomson, DeBortoli, Nicolas, Hillman & Buckley, 2010). Consequently, students build an identity as learners, but not necessarily as lifelong readers. This trend is indicated by Christina Clark and Kate Rumbold who found that a greater percentage of primary rather than secondary aged children in the UK view themselves as a 'reader' (Clark & Rumbold, 2006).

What is reader identity?

Reader identity refers to how capable students believe they are in comprehending texts, the value they place on reading and the framework through which they view particular types of readers. The development of a positive reader identity comes through engagement with texts and motivation to read, both of which are underpinned by student choice and peer participation.

Peer participation is perhaps one of the most underutilised strategies in building reader identity for adolescents. Reading for pleasure becomes more engaging for adolescents when it is an enabler for social participation with peers (Cremin & Swan, 2016). Teresa Cremin and Joan Swan found that conversational engagement around books was a crucial factor in enabling environments that develop reader identity. The aim is to foster opportunities where students can regularly experience reading in a positive light, using visible learning strategies to identify themselves as readers and engage with peers as a community of readers.

Student choice of text is essential in building positive reader identities (Williams, 2014). Students are proven to be more motivated to read when they have opportunities to make choices about what they read, with adolescents showing resilience in sustained reading when they have an interest in the book (Morgan & Wagner, 2013). Choice in the classroom is a well-supported motivational practice where students can choose their own texts, the tasks they perform, and the partners with whom they work (Perencevich, Taboada & Barbosa, 2006). Giving students choices will allow students to be more involved in the learning process, developing their identity as invested and empowered readers.

Fostering a culture of reading

When considering the notion that a culture of reading supports a culture of success, 'culture' refers to the customary beliefs and social norms that are embedded and recognised within a society. How then do we develop reading for pleasure as a social norm within our school communities? While a visit to the school library to engage in sustained silent reading is a reasonable place to start, this tokenistic wide reading session is often inadequate in building a culture of reading.

Instead, the whole school community must normalise reading for pleasure through additional routines, social interactions and recognition of reader identity.

Reading cultures that foster student engagement in reading for pleasure can lead to growth in student literacy achievement (Baxter & Sawyer, 2006). A supportive school reading culture in high schools denotes availability, opportunity, encouragement and support for reading (Merga, 2019). The building of a culture of reading and focus on developing student reader identity are crucial foundational steps to enabling and developing literacy. Reading for pleasure is key to literacy growth during adolescence and yet the early years of high school are ironically a time typically associated with a sharp decline in reading for pleasure (Merga & Gardiner, 2018).

At the core of building a reading culture is devising strategies to motivate students to want to read. Positioning reading as a pleasurable and socially desirable pursuit is the challenge faced by high schools. Australian high school libraries are increasingly active in building cultures of normalising reading for pleasure through a range of enabling strategies.

Learning from others

Often applauded for its success, the Finnish education system focuses on building literate environments in schools, where reading for pleasure is normalised. Fifty per cent of pupils in Finland operate in classrooms with class libraries, and there is major emphasis on reading for pleasure (Garb et al, 2016). The Finnish school library is not the only hub promoting reading. Cultivating a love of reading is seen to be the domain of a collaboration between the government, schools and families. Public libraries are cultural centres and are often frequented for the purpose of reading for pleasure. This sits in clear contrast to Australia given that research in 2017 found that 36% of Australians with children regularly visit the public library (Throsby, Zwar and Morgan, 2017). Thus, the role of school libraries is particularly important.

Ways of normalising reading for pleasure in the school context

The following section provides examples of schools that have created strategies for cultivating a reading culture. Permission to showcase the strategies used by the featured schools has been granted by the school principals.

Picnic Point High School

Choose Read Connect (CRC) is a bespoke reading for pleasure program developed at Picnic Point High School. Collaboration between the teacher librarian and literacy facilitator led to creating a stage 4 program with the goal of maintaining reading enthusiasm from primary school through to stage 5. The initial fundamental step in CRC involves the teacher reading a high-quality picture book, modelling excitement, enjoyment and engagement with texts.

The Choose Read Connect (CRC) synthesises best practice approaches, evidence based research and contextual high school considerations to establish a model of deeply engaging reading for pleasure as a vehicle for literacy growth. The fundamental elements of CRC include:

- Choose: students must have choice over the text they are reading.
- Read: school libraries must cater to the cognitive, cultural and physical reading preferences of students.
- Connect: suggests connecting text to self and using texts as a means of social connection to build positive reading identity.

Picnic Point High School also makes use of teachers as models of reading for pleasure. They believe that increasing the visibility of staff as readers is essential for creating a reading culture in high school. For adolescents, teachers play a vital role in modelling positive attitudes toward reading (Merga, 2019). The teacher librarian, placed laminated posters outside every staff room where staff could write their name and the name of the book they were currently reading. This had an effect across the school, leading to the development of discourse around the importance of reading for pleasure.

Students discovered:

- teachers as visible models of reading for pleasure
- teachers identifying themselves as readers and displaying an interest in reading for pleasure
- teachers recommending different types of texts
- reading for pleasure was made visible, thereby sending the message that reading is valued.

Rouse Hill High School

A strategy, embraced by Rouse Hill High School involves harnessing social media to build reading as a social activity. The school library has an active

and vibrant Instagram presence, with regular posts reflecting reading for pleasure across the school. #BookFaceFriday is a weekly post where students and teachers recommend books by posing with books that incorporate their faces and bodies onto the book cover.

Galston High School

The teacher librarian at Galston High, Jade Arnold, uses Book Week as an opportunity to build and nourish a love of reading in her school. She also runs daily events with a focus on inclusive activities that invite and encourage all students to engage in the joy of books. Notably, her trivia sessions that focus on 'favourite books from childhood' help to connect with students who were readers as young children but may since have dropped off.

Gymea Technology High School

All students in years 7-10 at Gymea Technology High take part in a fortnightly reading for pleasure session. At the beginning of the session, the teacher librarian, Erica Heath, presents 'Book talks' where she introduces 4-5 diverse texts that will be of interest to the students. Differentiation is at the core of this successful strategy to engage students in reading for pleasure.

The Australian Islamic College

At the Australian Islamic College students engage in a Ramadan Readathon. This practice uses their cultural identity as a means of building reader identity during Ramadan. During this period, students are encouraged to read widely and are rewarded for their reading efforts.

Birrong Girls High School

Victor Davidson, the teacher librarian at Birrong Girls High, does not provide explicit book recommendations to students. Instead, he empowers his students by encouraging them to choose their own path on a reading journey and to develop their personal identity and agency as discriminating readers.

Expected outcomes

It is evident from international research and Australian school reading initiatives that developing student and teacher commitment to reading for pleasure within the high school context has significant positive impacts on literacy attainment (Manuel, 2012). Multiple studies have shown that avid readers demonstrate both superior literacy development and wide-ranging knowledge across subjects (Sullivan & Brown, 2013).

Sustained independent reading enables students to consolidate their reading skills and strategies (Krashen, 2011). Adolescence is targeted as a vital period during which students must undertake sustained reading for pleasure, however the storehouse of positive literacy experiences that children bring from primary school are often diminished in high school. The Centre for Youth Literature (2009) asserts that students experiencing a decline in reading for pleasure from the ages of 10-13 will most likely lose the skills of sustained reading that are prioritised more vehemently in primary school. Adolescence is one of the most crucial times when the hard wiring of the brain occurs and it is argued that skills not maintained during adolescence, like sustained reading, will not be easily developed in later years (Centre for Youth Literature, 2009). Such neurological evidence is of particular concern when viewed through the 'increasingly complex texts' demands of the ACARA Literacy Progressions (Australian Curriculum, Assessment and Reporting Authority, 2018).

Students who read well are able to access more texts and knowledge through wide and varied reading, as well as making gains in reading comprehension, vocabulary growth, spelling ability, grammatical usage and writing style (Stanovich, 2003). Students learn to acquire, process and apply information through reading. Capable readers gain more by reading more, whereas less able readers find it difficult to be motivated or engaged in the type of reading for pleasure that has a proven effect on enhancing comprehension and knowledge acquisition (Allington, 2014). The impact of reading for pleasure on literacy growth is clear. Stanley Jay Samuels and Yi-Chen Wu (2001) correlate the amount of time spent on reading for pleasure in schools with increased benefits for reading and comprehension.

The next steps

It is clear that reading for pleasure has positive educational and personal benefits for students and that it can be promoted in a variety of ways. It is important for teachers, students and parents to be made aware of research on the positive results of the building of a reading culture and fostering student reading identity. This is a fundamental step in leveraging reading programs for literacy growth. Thus, high schools need to involve teachers, students and parents in plans to adopt, adapt or devise a program that they feel is the most appropriate for the culture of their school community.

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Writer biographies



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Dr Cathy Sly

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Cathy Sly is an independent researcher and writer. After teaching English in NSW Department of Education high schools for many years, she completed a PhD in Media, Communications and Creative Arts at Deakin University. Cathy has a keen interest in visual literacy and multimodal literature for readers of all ages. She has presented at academic conferences and contributed to scholarly publications both in Australia and overseas.



Laura Smith

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Laura Smith is the Teacher Librarian and Head Teacher Mentor at Picnic Point High School. In her role, she has worked across the school to promote a love of reading and literature. Laura is currently leading the development of an integrated curriculum for Stage 4 at Picnic Point High School.

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