

Positive strategies for child
mental health p. 8

Postcard from the US:
reading controversy p. 25

Shanahan on knocking down
strawman arguments p. 27

Nomanis

Reading | Teaching | Learning | Connecting

Issue 9 June 2020

WHY POOR KIDS ARE MORE
LIKELY TO BE POOR READERS
(and what we can do about it)

Positive Teaching Professional Development Workshop

now available via eLearning



Learn how to build less stressful and more productive learning environments using the **Positive Teaching** approach.

MultiLit's Positive Teaching Workshop, now offered via self-paced eLearning modules, shows primary teachers how to create an effective learning environment so that students remain on-task and ready to receive instruction, thereby maximising opportunities to learn.

The Positive Teaching Workshop is based on the extensive research of Emeritus Professor Kevin Wheldall AM and Dr Robyn Wheldall (Beaman) of Macquarie University and on the earlier research of Emeritus Professor Kevin Wheldall and Dr Frank Merrett at the Centre for Child Study, University of Birmingham.

The Positive Teaching approach shows how teachers can use contingent praise related to classroom social behaviour to increase the time students spend on-task, leading to improved academic performance.



Find out more and register at
<https://multilit.com/professional-development/positive-teaching-pd/>

Positive Teaching for Australian Primary Schools

Effective classroom behaviour management

Kevin Wheldall
Robyn Wheldall
Frank Merrett

Bonus: Complimentary book

Participants will receive a complimentary copy of the book *Positive Teaching for Australian Primary Classrooms: Effective classroom behaviour management* by Emeritus Professor Kevin Wheldall AM, Dr Robyn Wheldall and Dr Frank Merrett.



4

**Editorial:
How hard is it not to read?**

Kevin Wheldall

Stay safe

Robyn Wheldall

5

What we've been reading

8

**Time-out, enacted properly,
is a positive strategy for child
mental health**

Mark Dadds

11

**So you want to know how to
teach reading?**

John Kenny

15

The discipline of reading

Jodie Watson



25



8

18

**Why all states and territories
should follow South
Australia's lead and introduce
the Year 1 Phonics Check**

Jennifer Buckingham

Kevin Wheldall

21

**Noble intent but misguided
ideas: Reading and literacy in
the NSW Curriculum Review**

Jennifer Buckingham

25

**Postcard from the US: The
current controversy about
teaching reading**

Daniel Willingham

27

**How to knock down five
strawman arguments
against phonics**

Timothy Shanahan

29

**Do our genes determine
learning ability?**

Annie Brookman-Byrne

31

**Why poor kids are more likely
to be poor readers (and what
we can do about it)**

David Kinnane

36

Why phonology comes first

Michael Salter

38

**Nomanis Notes:
What is curriculum-based
measurement of reading?**

Alison Madelaine and Kevin Wheldall



31

Reading | Teaching | Learning | Connecting

Nomanis is published twice yearly by MultiLit Pty Ltd
Suite 2, Level 7, Building C
11 Talavera Road
Macquarie Park NSW 2113
Australia

www.multilit.com

MultiLit is a research initiative of Macquarie University

Joint Editors

Emeritus Professor Kevin Wheldall AM

e: kevin.wheldall@multilit.com

Dr Robyn Wheldall

e: robyn.wheldall@multilit.com

Editorial Team

Dr Nicola Bell

Dr Jennifer Buckingham

Dr Anna Desjardins

Dr Alison Madelaine

Dr Meree Reynolds

Editorial Advisor

Dr Molly de Lemos AM

Nomanis is available free to anyone interested in sharing ideas about the effective teaching of reading and writing. Readers are free to distribute each issue in its entirety, or individual articles, to their networks *in the exact form in which it is published*. Requests for permission to re-publish items in other publications should be addressed to the editors who will liaise with the authors who retain the copyright in their contributions.

Kevin Wheldall



How hard is it not to read?

Every morning I stand in front of the bathroom mirror waiting for my electric toothbrush to tell me when the required two minutes of brushing is complete. Rather than looking at myself (not a pretty sight first thing in the morning), my eyes wander across the bathroom shelf. I am assailed by items on the shelf or, rather, by the words on the items. ‘Shampoo’ leaps out at me, rapidly followed by silent shouts of ‘deodorant’, ‘toothpaste’ and, worst of all, ‘man size tissues’. Seriously, who wants to be called ‘large ‘n’ thick’ first thing in the morning ... ?

No, I’m not having a psychotic incident. Trapped in front of the washbasin, it just seems impossible not to read the words on the products directly in front of one. A colleague tells me that she has the same problem with the cereal packet at breakfast. She can’t stop herself reading the words on the box. I found this enormously reassuring. I’m referring here to the simple fact that when you can read well, you can’t not read. We cannot inhibit our learned skill of reading, apparently instantaneously, any string of letters forming a word in our focus. When you think about it, this really is a remarkable facility to possess.

We have scientific proof of this by virtue of the Stroop test. Participants in research studies are successively presented with words of different colours and are asked to name the colour as quickly as possible. The time taken to do this is recorded and is known as the reaction time. If the word, say, blue is presented in the colour blue, the reaction time for naming the colour is faster than when, say, the word red is presented in blue. It appears that our facility for instantly reading words, in this case the names of colours, inhibits our response to colour naming and hence increases our reaction times. All of this emphasises the importance of automaticity. It is not enough to teach kids to decode accurately. We must also teach them to decode fluently; to reach automaticity.

Kevin Wheldall,
Joint Editor

Robyn Wheldall



Stay safe

It would seem odd to send this issue of *Nomanis* out into the world without making reference to COVID-19. What a rare thing it is that the whole world is so keenly focused on precisely the same thing at the same time. There are many issues about which we should all be concerned that threaten our existence and our wellbeing. But we are probably living through a distinct period of history where we are collectively cognisant of facing a common threat and enemy at the same time.

What is it that we shall learn through this experience? There will be many lessons but one I wish to focus on here is the importance of connectedness. The first easing of restrictions in the state where I live is allowing two people (with children if they have them) to go into another home where their friends or relatives are, just to be in each other’s presence. Even though physical or social distancing must still be observed, the mere fact of being able to be in the physical presence of those who are important to us was seen as a critical first step in easing the feelings of isolation that have been mounting and concomitant decline in people’s mental health. We are built for interaction. We are built for connection. We have marvellous means of keeping in touch with each other in this technological era. But even though we’ve Zoomed, Face-timed, Hung out and WhatsApped to our hearts’ content, we still crave that most human of things. I think this is a very good reminder to us all that ‘No Man Is An Island’, the John Donne poem that inspired the title of this *Nomanis* publication and that Connecting, one of the purposes of *Nomanis*, is more crucial than ever. We wish for you and yours a safe journey out of this mire, and for those of you who have lost friends and loved ones we hope that your grief will be eased by knowing that others care.

Robyn Wheldall,
Joint Editor



p.s. Keep physical distancing socially. The agisted sheep at our country place (where we are currently isolated) have learned this already!



What we've been reading



Nicola Bell

I recently finished an epic 72-hour audiobook collection of Sherlock Holmes stories. It was really enjoyable, even though – if I'm honest – I do prefer the storytelling, characterisation and Cumberbatch-ness of the contemporary televised *Sherlock* BBC series. As usual, Stephen Fry was an excellent narrator, and his introductory forewords to each of the six (!) book parts added something very special and personal to the stories that followed.

In the last few months, I also listened to Annabelle Crabbe's *Quarterly Essay 75: Men at Work* and would highly recommend it. It's a thoroughly researched and insightful essay on the gender bias associated with parental leave – a topic with which I previously had very little understanding. Currently, I'm in the middle of reading both *The Trauma Cleaner* by Sarah Krasnostein, and *Quichotte* by Salman Rushdie. Both are incredibly well-written, although I sometimes lose patience with the rambling prose style in parts of *Quichotte*.



Anna Desjardins

With my Christmas book pile teetering on my bedside table, I've been treated to a range of different stories this summer. *The Silence of the Girls*, by Pat Barker, is a colloquial retelling of *The Iliad* from the perspective of a Trojan princess hauled off as a prisoner after her city is defeated and gifted to Achilles as bed-slave. Everyday details of the war and the brutality of what must have actually gone on mingle with more mythical aspects of the story. An interesting premise (which made me want to go away and actually read *The Iliad!*), but, unfortunately, I found that the writing style jarred with the subject matter and failed to capture me entirely.

Shell, by Kristina Olsson, was a book I bought on a whim on a late-night visit to the Newtown bookshop, Better Read than Dead, seduced by its display of new Australian fiction. This is a story of Sydney, at the time when the Opera House was being built, interwoven with the lives of two main characters – a Sydney journalist and a Swedish glassmaker. The writing style was fresh and often beautiful, although I became frustrated with the overuse of fragmented sentences and a choice to only mark direct speech with italics. Made reading a 'distant' exercise, rather than a 'plunge in and live the story' experience. Overall, the story moved slowly, too, and many of the main ideas were explored repeatedly. That said, on finishing, you did feel like you had read something of great sensibility, as carefully crafted as the shells of the Opera House themselves.

Most recently, I have finished *10 Minutes and 38 Seconds in This Strange World*, by Elif Shafak. This was my kind of writing. Wonderfully drawn characters, whole lives suggested with a few deft memories of taste and smell. Set in Turkey of the 1950s through to the 1990s, it was also a window into the changing Turkish cultural landscape of those decades. The subject matter was quite upsetting at times, but the writing skirted masterfully around topics of deep distress to focus, ultimately, on the indomitability of the human spirit. I will definitely be looking for more by this author.

I am currently highly enjoying *A Gentleman in Moscow*, by Amor Towles, the story of a Russian aristocrat sentenced to house-arrest during the Russian Revolution. So far, the entire story has taken place within the walls of the hotel he is confined to – not much scope to maintain a storyline, one would think – but this is exactly what makes it so delightful. It is quite Jane Austen-like in its style, bringing us down to the dramas being played out in quiet and confined spaces, and I am often finding myself smile as I read. The writing is deliciously elegant, and the reader can relax entirely, knowing that they are in competent hands. I'll leave you with a quote that captures the wry style of the author: "Here, indeed, was a formidable sentence – one that was on intimate terms with the comma, and that held the period in healthy disregard."

What we've been reading



Alison Madelaine

My favourite read of the last few months was unexpected as I didn't choose the book – it was a book club read. *The Last Runaway* by Tracy Chevalier is about a Quaker who moves to Ohio from England in 1850. She encounters various hardships in her new life and gets drawn into helping runaway slaves. It was interesting to read about the Underground Railroad and how dangerous it could be from the point of view of those helping the runaways. Some other reads have included *Unsolved Australia* by Justine Ford, *A Man Called Ove* by Fredrik Backman, *Fleishman is in Trouble* by Taffy Brodesser-Akner, *The Ruin* by Dervla McTiernan and *Too Much Lip* by Melissa Lucashenko.

I don't often read young adult fiction, but I've read two good novels recently (both set in Australia), *Between Us* by Clare Atkins (involving a cross cultural romance in and around a detention centre), and *The Surprising Power of a Good Dumpling* by Wai Chim (another young romance exploring mental illness, and in particular, how this is dealt with in a Chinese Australian family). I've also recently discovered Helen Garner. I'm not sure how I have avoided her books for all this time, but I have enjoyed *Everywhere I Look* and am currently listening to *Monkey Grip*, read by the author of course. I'll definitely be reading more of her writing in the future.



Sarah Arakelian

A little while ago I picked up a copy of *The Ultimate Hitchhiker's Guide to the Galaxy* which is a collection of Douglas Adams' first five books in the Hitchhiker's series. Having seen the movie a long time ago, I enjoyed the original story so much that I continued on to read the next two books, *The Restaurant at the End of the Universe* and *Life, the Universe and Everything*. Though I thoroughly enjoyed Adams' clever and offbeat humour as he takes the reader through an absurd adventure through the galaxy, I found I needed a break back to reality but intend to finish the series at some point.

Where the Wild Mums Are, by Katie Blackburn and Sholto Walker, was given to me by my own mother. It was a great take-off of the well worn *Where the Wild Things Are*, instead depicting an escape for a tired mum. I especially love the cup of tea waiting for her at the end.

I am currently reading another book given to me as a present, *The Story of Edgar Sawtelle*, by Davin Wroblewski. It follows the main character as his peaceful life with his parents is torn apart when his uncle returns and his father dies. Though it is a long book, it is easy to read and get lost in descriptions of the setting.



Jennifer Buckingham

As an enthusiastic user of my local library, when it comes time to recall all the books I have been reading, more often than not I can't. So many books fall out of my mind as quickly as they fall into the return chute. One I do remember is Margaret Atwood's *The Stone Mattress*, which is a collection of strange and intimate short stories. I've also recently found the series of Nicci French novels with Freida Klein, a crime-stopping psychotherapist, as the protagonist. The story has enough intrigue to be entertaining, and I especially enjoy the history of London's boroughs woven through them.

Looking at my bookshelf for recent additions, I can see Helen Garner's *The Children's Bach*. I am an unashamed devotee of Helen Garner. I love the way she writes and the way she thinks about human imperfection, both the physical and metaphysical. This is an older novel and not my favourite of hers, I have to say, but that's a high bar to reach. Sitting next to Helen on the shelf is Stanislas Dehaene's new book, *How We Learn*. It's great, of course, and if you are a reader of *Nomanis*, you've almost certainly already read it!



Kevin Wheldall

I have long been a fan of (the late) Peter Temple's fiction and was delighted to come across *The Red Hand*, recently published posthumously and including a new, but sadly unfinished, Jack Irish novel. So far so good but in this unfinished novel, and certainly in the book reviews and essays also included, Temple comes across as rather snide, mean-spirited even, such that literary luminaries such as Hemmingway and Le Carré are casually trashed en route.

As luck would have it, John Le Carré's latest novel, *Agent Running in the Field*, was next up on my bedside table. At the age of 88, he is back on form in his latest outing, putting younger writers to shame. He grabs you with his opening sentence ("Our meeting was not contrived") and never lets go. He has earned his place alongside his hero, Graham Greene, as a fine novelist.

The death of Australian literary lion, Clive James, prompted me to re-read his breakthrough (semi-autobiographical novel), *Unreliable Memoirs*. What a hoot! As others have cautioned, do read this book but not in a public setting if you do not wish to be embarrassed by your (guaranteed) snorts of laughter. Here's a small sample: "They had a cattle dog called Bluey. A known psychopath, Bluey would attack himself if nothing else was available. He used to chase himself in circles trying to bite his own balls off."

The many admirers of the (rightly) celebrated American author, Elizabeth Strout, will be delighted to spend more time with Olive Kitteridge in *Olive Again*. What an insightful writer Strout is, as well as being a supreme stylist. Widely misunderstood, Olive has a huge heart alongside her undeniable foibles. In reality, more a collection of short stories, this book will serve only to enhance her growing reputation.



Robyn Wheldall

Currently I am reading *Abide with Me* by Elizabeth Strout, author of the fabulous Olive Kitteridge books referred to by Kevin in his *Nomanis* offering in this issue. Strout is such a fine writer; her descriptions conjuring up settings and characters with consummate ease and unconscious detail. *Abide with Me* explores the widowed life of an American pastor in northern New England in the late 1950s, dealing with his grief, his congregation and the fractured life of one of his young children in particular. It's sad but thoroughly engaging and I shall miss it when I have finished. I have never been to New England in real life but this book has taken me there.

Hares' Fur by Trevor Shearston, published in 2019, is a gentle and compelling read set in the familiar and beautiful Blue Mountains. When reading this, I could almost smell and hear the bush that is the backdrop to this story of loss, hope and purpose. A recently widowed potter provides haven and then love for three destitute children. A wonderful tale of the healing power of purpose. And I now know a lot more about how pottery is made!

Perusing the list of books that I have read over recent months, there is an emerging theme that I was unaware of until writing this piece. Nearly all of the books I have read since the last *Nomanis* have been concerned with the death or mourning of a loved one. This has been an unconscious choice, in the main, but mirrors my own grief on the death of my mother in November. Another example of the power of reading to meet us at our point of need. A couple of conscious choices were *With the End in Mind* by Dr Kathryn Mannix, a book about the dying process. It addresses the propensity we have in our modern, medicalised world to turn away from the dying process and, hence, not having an understanding of it when we are confronted by it. This is a book everyone should read. I found it extraordinarily helpful in a personally difficult time. Sarah Ferguson's *On Mother* was another timely read, the raw emotion of loss captured in a personal story that spoke to others. *The Weekend* by Charlotte Wood, set in the familiar surroundings of the Central Coast region of New South Wales, was a wonderful and at times brutally honest story of friendship and loss. How those left behind made sense of their friendship when one of them had died was the gist of this story. I can imagine this as a television drama as the characters are vivid and the pathos real. *The Erratics* by Vicki Laveau-Harvie is a gripping memoir of a Canadian-born Australian author that deals with the increasing frailty of a toxic mother and the complex family dynamics that play out in these defining stages of life. This book won the Stella Prize in 2019 and it is easy to see why.

Changing the theme completely, my summer reading also included *Reason, Faith and the Struggle for Western Civilisation* by Samuel Gregg. A scholarly work spanning time and ideas, it is an intellectually stimulating book about, as the title suggests, faith and reason and the Western tradition. This is one I have to read again to fully plumb its depths and appreciate the thesis being presented. I thoroughly enjoyed it even though at times I found it challenging to hold the ideas in my head long enough to absorb them properly.

Time-out, enacted properly, is a positive strategy for child mental health

Mark
Dadds



In 2014 *Time* magazine published an article titled [‘Time-outs are hurting your child’](#) by Siegel and Bryson. The authors largely recanted the argument later in *The Huffington Post*; however, this and other articles have been associated with a widespread and growing rejection of time-out as an acceptable discipline strategy, especially for children believed to have attachment problems or trauma histories. Are these concerns warranted?

Recently, Lucy Tully and I [presented an analysis](#) of parental discipline strategies, and time-out (from positive reinforcement – its original definition), in terms of four contemporary pillars of child development theory: social learning theory, attachment theory, self- and emotion regulation theory, and ecological/family systems theory. We used these models to derive a set of axioms to guide how any discipline strategy should be evaluated in terms of its impact on child mental health, and then applied these axioms to time-out in order to clarify how it should be used. In summary, our analysis led to the following conclusions:

- 1 Time-out should only be used for inappropriate child behaviour over which the child has some control and that is functional in producing some desired outcome for the child. It should not be used for behaviour that represents an inability to perform an action, lack of understanding, mistakes, or fear and other overwhelming emotions.
- 2 The effectiveness of time-out implementation should be judged in terms of observable and timely reductions in the problem behaviour and thus, in the rapidly diminishing need to use time-out.
- 3 The use of time-out must be a part of a broader behavioural program that promotes a warm and rewarding relationship, and explicitly teaches alternative positive child behaviours to replace the problem behaviour to improve the child’s self-efficacy in meeting their own needs.
- 4 Time-out should be seen as a microcosm of the fundamental attachment process of separation and reunion. It must not carry any parental communication of abandonment, isolation, and rejection during the time-out and return to time-in phases. Implemented appropriately, time-out can be seen as micro-theatre for enacting and repairing attachment problems, conveying the explicit message that this discipline event is focused on a specific problem behaviour, and throughout the child remains safe, valued and loved.



A priority for improving child mental health literacy is to disseminate accurate information about the mechanisms and procedures of this and other forms of discipline

- 5 The child should have an active role in influencing the unfolding of time-out such that their self-regulatory capacities are enhanced rather than externally controlled and diminished. Thus, time-out should end in a way that is contingent upon the child's self-regulation, not an arbitrary time period. For example, return to time-in can be contingent upon the child showing a brief but stable period of regulated emotions and behaviour.
 - 6 Discipline strategies should function to improve the child's ability to effectively regulate emotions and behaviour. Thus, the child should be taught, at a positive time outside of conflict and prior to time-out being used, some basic rules for time-out, and skills for regulating their emotions and behaviour that can be used in time-out and elsewhere.
 - 7 Time-out should be used for behaviours that are pre-specified and explicitly explained to the child as being problematic and inappropriate in terms of generally accepted mores to the child, the family, the school and so on. These should be open to discussion at positive times outside of discipline events.
 - 8 Time-out implementation should be embedded in a family and ecological system of shared perceptions of what is right; it is not arbitrary, out of scale to the problem behaviour, unfair, and based on parental emotion or impulse. Children should be encouraged to be active participants in understanding the cultural, moral and pragmatic context of family discipline.
 - 9 Time-out should be applied democratically. That is, in order to embed the discipline process firmly within accepted ideas of fairness, time-out should be applied equally and fairly across children in a family depending on developmental levels.
- Conceptualised and enacted within these guidelines for promoting mental health, we propose that time-out is not only an acceptable parental discipline strategy; it is a positive perturbation of the parent-child system that can enhance and repair behavioural problems as well as broader problems of self-and emotion-regulation, and parent-child attachment problems.
- Finally, the Dadds and Tully [review](#)

Time-out, enacted properly, is a positive strategy for child mental health



and analysis showed that the appropriate use of time-out is compatible with our best understanding of the needs of, and effective for treatment of behavioural and emotional problems in, children with a history of exposure to trauma.

These findings have important implications for clinical practice and policy. The evidence presented here indicates that the adoption of policies that prohibit the use of time-out with children may be ill-considered and deny access of children in need to an effective evidence-based procedure.

Given the wealth of evidence showing time-out is a positive perturbation in child mental health, and the absence of evidence showing it is harmful after five decades of research, clinical and common usage, claims that it is harmful should be considered extraordinary, and thus require an extraordinary level of evidence to back them up. A clear parallel is the claim that vaccinations cause autism. The evidence showing this to be false is so strong that claims to the contrary require an extraordinary quality and quantity of evidence to back them up.

Where time-out is used, however, it is crucial that its underlying theory, its therapeutic mechanisms, and its procedural subtleties are well understood and explicit to all parties concerned. The evidence is clear that inappropriate variations in parental discipline have and are being implemented in the name of time-out and that these are widespread, ineffective, and potentially harmful. Thus, a priority for improving child mental health literacy is to disseminate accurate information about the mechanisms and procedures of this and other forms of discipline.

Further reading

Brestan, E. V., & Eyberg, S. M. (1998).

Effective psychosocial treatments of conduct-disordered children and adolescents: 29 years, 82 studies, and 5,272 kids. *Journal of Clinical Child Psychology*, 27, 180-189.

Dadds, M. R., & Tully, L. (2019). What is it to discipline a child; what should it be? A re-analysis of time-out from the perspective of child mental health, attachment and trauma. *American Psychologist*, 74(7), 794-808.

Drayton, A. K., Andersen, M. N., Knight, R. M., Felt, B. T., Fredericks, E. M., & Dore-Stites, D. J. (2014). Internet guidance on time out: inaccuracies, omissions, and what to tell parents instead. *Journal of Developmental and Behavioural Pediatrics*, 35, 239-246.

Kaminski, J. W., Valle, L. A., Filene, J. H., & Boyle, C. L. (2008). A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology*, 36, 567-589.

Regalado, M., Sareen, H., Inkelas, M., Wissow, L. S., & Halfon, N. (2004). Parents' discipline of young children: Results from the National Survey of Early Childhood Health. *Pediatrics*, 113, 1952-1958.

Riley, A. R., Wagner, D. V., Tudor, M. E., Zuckerman, K. E., & Freeman, K. A. (2017). A survey of parents: Perceptions and use of time-out compared to empirical evidence. *Academic Pediatrics*, 17, 168-175.

Sanders, M. R., Kirby, J. N., Tellegen, C. L., & Day, J. J. (2014). The Triple P-Positive Parenting Program: A systematic review and meta-analysis of a multi-level system of parenting

support. *Clinical Psychology Review*, 34, 337-357.

This is an edited version of an article that first appeared in Australian Psychological Society eNews (December 2019).

Mark Dadds is a Principal Research Fellow of the National Health and Medical Research Council of Australia, and Professor of Psychology at the University of Sydney Australia. He is Director of the Child Behaviour Research Clinic which develops state-of-the-art treatments for children and adolescents with behavioural and emotional problems, and has developed and directed several national intervention programs for children, youth, and their families, at risk for mental health problems. He has been National President of the Australian Association for Cognitive and Behavioural Therapy, Director of Research for the Abused Child Trust of Queensland, Professor of Parenting Research at the Institute of Psychiatry, Kings College London and a recipient of several awards including an Early Career Award from the Division of Scientific Affairs of the Australian Psychological Society, the Ian Matthew Campbell Award for Excellence in Clinical Psychology, and Distinguished Career Award of the Australian Association of Cognitive and Behavioural Therapy. He has authored four books and over 240 papers on child and family psychology, and has given invited keynote addresses to international audiences throughout the world. He also practises as a clinical child psychologist and his treatment methods were the subject of the 2014 ABC TV documentary Kids on Speed? for which he was awarded the Inaugural APS Award for Media Engagement with Science.

So you want to know how to teach reading?

The lack of direction on how to effectively teach reading leaves many pre-service teachers unsure of where to start. Here, fellow teacher John Kenny shares what he has learned in the years since he completed his own initial teacher education.



**John
Kenny**

[Four Corners recently aired a report](#) on education that featured the Reading Wars. The report itself did not surprise me much. It summarised the arguments of both sides in typical fashion. What really got my interest were the comments made by pre-service teachers interviewed for the piece. One pre-service teacher made comments on his teaching degree that made it clear the information he is receiving is vague. He said that he felt his teaching degree wasn't giving much direction on how to actually teach kids how to read:

“I know at university, we're taught a whole abundance of approaches to teaching reading and writing, but we're not necessarily taught which one works. I think the reason for that is that people don't know.”

I think his comments are very insightful because, at that very point in my career, I did not have the awareness to make judgements about my degree – my opinions were pretty staunchly aligned with the opinions of my lecturers. I'm happy to pitch a guess that most pre-service teachers are like me; the pre-service teachers in the report are likely exceptions.

The pre-service teachers gave me much hope that there are new teachers out there that are hungry to learn how to teach kids to read effectively. If you are a pre-service or new teacher, and your curiosity has brought you to this article, then you need to know that you don't know nearly enough to teach reading properly. Yes, that is scandalous, and yes, you have the right to be upset about it. I also spent \$\$\$ to learn very little. In the years since finishing, I have learnt enough to feel confident in my practice (though I still have much to learn!). There are some things worth knowing to get you started on your journey to becoming a good teacher of reading. Let me help you out by pointing you in the right direction.

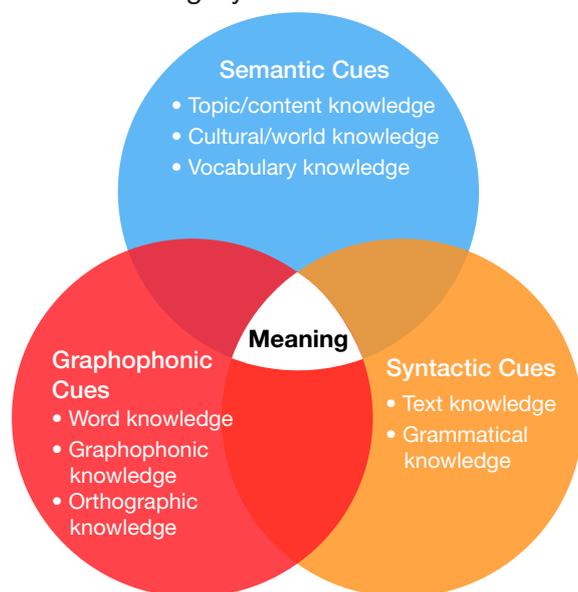
Why bother?

In case you're still not convinced that diving deep into the world of evidence-based reading instruction is necessary, then you should take the time to read [this paper](#) by three people who really do know their stuff. It's tough reading; at least, I felt it was very hard to read when I first encountered it, for I did not want to admit that I did not know enough. I implore you to read it. Find motivation in it. You will feel so much more fulfilled once you realise you've got a way to go, that you can gain the knowledge you need to improve your practice and gain the best possible outcomes for the kids you teach.

One of the authors of the paper above also recently [did research](#) into whether or not teacher education courses are giving their students the knowledge they

So you want to know how to teach reading?

Three Cueing System



need about effective reading instruction. [The results were not encouraging](#). It's worth your time.

It's best if you move away from poor ideas

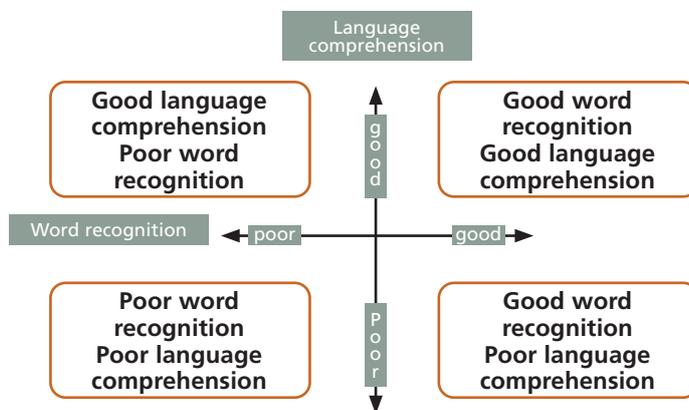
Having gone through initial teacher education, I have no doubt you have been introduced to the Three Cueing System.

You need to know that this model does not align with research on reading and that you should move away from it as soon as possible. The [Simple View of Reading](#) is widely accepted as a good starting point for thinking about how students learn to read. You should move away from the Three Cueing System and begin to study the Simple View.

The Simple View of Reading shows us that, while reading is a complex task, it can be represented as two independent processes: word recognition (decoding) and language comprehension. Skilled reading is actually a combination of these two processes. Decoding is the ability to get the words off the page accurately and fluently, and language comprehension is the ability to make sense of what is being communicated. If a student is deficient in either of these, then reading difficulties will arise.

Treating reading like a combination of two separate processes means that we also need to teach the two processes separately. When students first come to school, they have few, if any, word

The Simple View of Reading



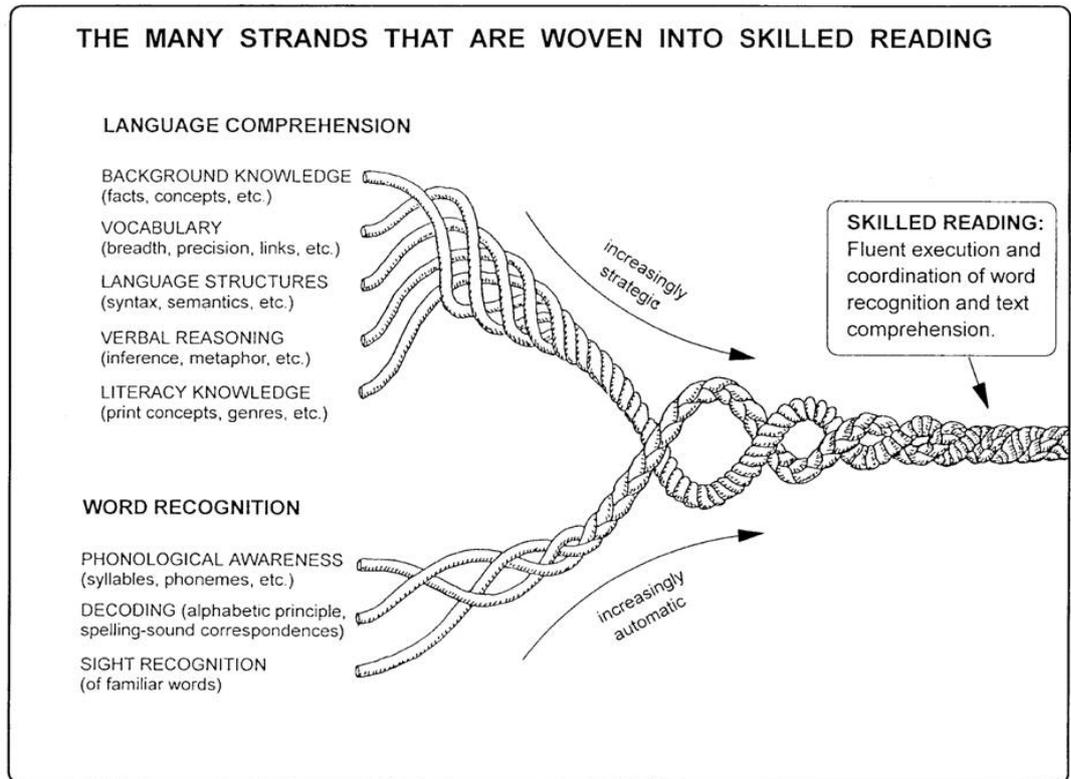
recognition skills. This is why the evidence base recommends focusing on strengthening word recognition skills right away while simultaneously and separately building students' language comprehension through vocabulary, knowledge building, oral language and book exposure.

Whole Language and (so-called) Balanced Literacy advocates reject this evidence-based view of reading because they believe that reading words cannot be separated from 'meaning'. They believe students can grasp the meaning of texts without actually being able to decode words as reading is a 'meaning-making process'. The Three Cueing System says students should figure out words using 'semantic' and 'syntactic' cues *before* relying on graphophonic cues (graphophonic isn't a word, btw. They mean using phonic knowledge). This approach has been debunked by reading research and should be put to bed. [As I've written previously](#), it's actually worse than that: reading research has shown that this approach [teaches the habits of poor readers](#). It's not just that the Three Cueing approach isn't correct, it's actually completely and utterly backwards. The research strongly indicates that the Simple View really is the correct way to think about how students come to read: two processes that converge into skilled reading.

Since the publication of Gough and

The research strongly indicates that the Simple View really is the correct way to think about how students come to read: two processes that converge into skilled reading

Scarborough's Reading Rope (2001)



Republished with permission of Guilford Publications, from 'Connecting early language and literacy to later reading (dis)abilities: evidence, theory and practice', Handbook of early literacy research, Vol 1, pp. 97-110, 2001; permission conveyed through Copyright Clearance Center, Inc.

Tunmer's [1986 paper](#), researchers have worked to expand on the Simple View of Reading. One often-cited model that expands and builds on the Simple View is Scarborough's Reading Rope. The 'rope' breaks reading down into its two processes – word recognition and language comprehension – and expands on them to give a neat breakdown of the component parts of the two processes. This model does a great job of showing how complex the Simple View really is – it is simple, but not simplistic.

Get familiar with phonics, but not 'just phonics'

How students come to get the words off the page – the 'word recognition' side of the Simple View – is the battlefront of the Reading Wars. Research has found that synthetic phonics, an approach where students are taught letter-sound correspondences in isolation and then taught to synthesise the sounds to read words, is the most effective way to teach [word recognition skills](#). Whole Language advocates totally reject the evidence base for the efficacy of synthetic phonics. Within the evidence-based community, to reject synthetic phonics is akin to being a flat-Earther. Yet you will hear many on the Whole Language

side disparage the approach as overly simplistic rote learning. That it is not. It is systematic, engaging, explicit and difficult to teach well. The evidence for it is very convincing. The debate around the efficacy of synthetic phonics is one where a lot of misinformation is thrown around, so I encourage you to dig a little deeper to get to grips with the facts of this approach.

Although phonics is rightfully at the forefront of the debate (it's not taught very well, so evidence-based advocates push hard for change in that area), it's important to note that it is not the only area that needs to be taught explicitly and systematically. The reading research actually identifies five components, or 'keys', of reading instruction that need to be taught in this way. The five keys are phonics, phonemic awareness, fluency, vocabulary and comprehension.

That pre-service teachers do not hear about the five keys in their courses is evidence enough that something isn't right. They were first identified as the five essential components of reading instruction in a report by the National Reading Panel in the United States titled, [Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature](#)

That pre-service teachers do not hear about the five keys of reading instruction in their courses is evidence enough that something isn't right

[on Reading and its Implications for Reading Instruction](#). Many publications on the five keys have been published since. The most digestible versions of these come from [Hempenstall](#) and [NSWCESE](#). It's well worth getting to grips with the five keys, for they form the basis of all effective reading programs. The amount of time devoted to each of the components will obviously vary across year groups and ability levels, but nevertheless, good reading instruction will teach all of the components explicitly and systematically.

Remember that you cannot teach what you don't know

Do you know what a bound morpheme is? How about a schwa? A relative clause? An allophone?

If you had a similar experience to me, you won't know what these are. You must know what these are and a very long list of other language concepts that aren't considered super necessary by initial teacher education courses. You simply cannot teach what you know nothing about. Of course, there is *a lot* to know. No one expects primary teachers to have professor-level knowledge of the intricacies of, for example, bound and free morphemes, but a minimum standard is necessary. We should at least know what they are, why they are relevant, and how that knowledge can be used to improve reading outcomes. That goes for a long list of language concepts.

I can't recommend [Louisa Moats's *Speech to Print*](#) highly enough. This book will give you the base knowledge you need to teach language concepts well. Trust me, you will have kids in your class that *really struggle* with reading. So much so that it is very easy to feel completely overwhelmed by their needs. Knowing your stuff will help you help them. There is no way around this.

I'd like to mention that there are people out there that go hard after teachers for a myriad of reasons. We are constantly poked and prodded at in the media. Some of the criticism is valid and some of it isn't. If we are going to take a research-based, objective approach to things, then the criticisms of teacher knowledge in this area are valid. You must remember one simple thing: it's not your fault; the bar is set very low in initial

teacher education courses. All you should do from here is work to plug those holes.

Get to grips with explicit instruction

Knowing your stuff will make little difference if you do not know how to teach it well. Many have a role in helping students learn to read, but the teacher's main role is to implement best practice in a classroom setting. We do the coal-face stuff.

Knowing a lot about the evidence on teaching children to read is a great start, but it won't make much of a difference if you do not teach it well. The instruction really matters. Unfortunately, Initial Teacher Education (ITE) is really left wanting in this area, too. Explicit instruction isn't heavily favoured and, in my experience, often talked down. Yet the evidence is very clear. From [Project Follow Through](#) to process-product research, the principles of explicit instruction have been shown to be effective time and again. This is the craft of teaching. Many people know the reading research – they study it and write about it – but only teachers implement the ideas in the classroom. It's what we do as a profession, so it is important we do it right.

[Barak Rosenshine's paper](#) on the principles of instruction is required reading. I cannot recommend [Tom Sherrington's booklet](#) on this paper highly enough, and once you've moved on to refining your explicit instruction, picking up [researchED's Direct Instruction](#) book is a great idea.

Get on Twitter

Lastly, if you are not on Twitter, then I really encourage you to get on there. Twitter can be at times ... erm ... not great, BUT it can also be fantastic. There are very knowledgeable people on Twitter willing to share their ideas daily. You will learn things at an amazing rate if you follow the right people. See you there!

From Project Follow Through to process-product research, the principles of explicit instruction have been shown to be effective time and again

*John Kenny currently teaches Year 2 in an inner Sydney public school. He writes on reading instruction and other education topics through his blog. Connect with him on Twitter @johnkenny03
Email: johnrkenny1@gmail.com*

The discipline of reading

“The more that you read, the more things you will know. The more that you learn, the more places you’ll go.” – Dr Seuss, *I Can Read With My Eyes Shut* (1978)

It should come as no surprise to anyone that, as Manager of the MultiLit Literacy Centre at Macquarie Park, I am a fan of reading. Reading is an essential skill for children and adults alike. It provides opportunities to increase vocabulary knowledge, as texts present new words in a written context. It has the potential to open the door to academia and analytic thought. Sustained reading of longer texts allows us to gain the full picture and see the world through different perspectives. It is essential for deep learning. It is also a great way to relax on a lazy Saturday afternoon.

When I began teaching in the early 1990s, it was a different time. My students had started to enjoy the availability of screens and games, but they were nowhere near as pervasive as they are today. Screens now appear to be such a big part of our existence both at school/work and in our leisure time. A major source of knowledge is now YouTube or Google. Connections are often sought and developed through social media. And why wouldn’t we choose these options? They are quick, visual and we can quench our ever-growing curiosity about just about any subject at all in a much shorter time.

As educators we have responded to this change. We have incorporated more screen-based activities into our classrooms. We use smartboards to present content with summarised information, pictures and videos. Students use laptops to ‘research’ (often choosing the first search result on Google) and type assignments using spell-check, reducing the need for handwriting and spelling skills.

I fear that student ability to attend to and read in detail large sections of text appears to be decreasing. I worry about our endless efforts to innovate and make teaching relevant to 21st century learning. Are we losing sight of the very purpose of reading – to motivate and inspire further investigation and deep learning? Are we failing to provide students with the opportunity to extend themselves and grow into discerning, informed investigators of truth? I worry that we and our younger generations are losing the discipline of reading.

I have had an increasing interest in the term TL;DR (Too Long Didn’t Read). Originally coined as an acronym used on blogs to encourage more succinct written entries, it can also reflect the attitude of many readers today when faced with a more lengthy document or text. In a recent article written for the Journal of the English Association, author and English professor Lahiri laments the ever-increasing trend from younger generations to use skimming or simply not reading prescribed texts at all.

Our undergraduate students specialise in skimming, not because they are young and lazy (which of course they may be) but because they specialise in the vertical, extractive, rapid reading that is crucial to functioning in an internet-based environment (p. 2).



**Jodie
Watson**

The discipline of reading

Lahiri suggests a possible solution in her article (p. 5):

As we teach our students the forms of reading that we hold dear, in which we have staked our personal and professional lives, perhaps we can teach them, as well, to seek out the long texts that are most worthy reading – more worthy than an endless stream of inflammatory and addictively short tweets.

We are living in a time when we are surrounded by a 24-hour news cycle. Hitting saturation point with information, we are often convinced by a news headline or sound bite. I am a big fan of Twitter and enjoy flipping through a wide range of opinions but how often do we stop and actually read the article? I am increasingly aware, when I take the time to do so, that contributors can, intentionally or unintentionally, misinterpret and misrepresent information. More and more our society requires less explanation and detail. We can all be guilty of forming an opinion without doing our homework and reading the details. Misinformation can thrive in an environment that does not require evaluation and thoughtful response.

Australia's new Children's Laureate and award-winning author, Ursula Dubosarsky, has [recently criticised the growing trend](#) toward renaming school libraries as 'information and resource centres' and making them paperless work spaces. She has expressed concern that younger readers may not develop a lifetime appreciation of reading and therefore lose the opportunity to develop creativity and enjoyment of reading through fiction. In her two-year term titled *Read For Your Life*, she hopes to raise awareness that reading often drops off after primary school and that it needs to be developed as a lifelong habit.

Reading is a dying art, that's the sad possibility ... Reading is a lifetime project, it's not something you learn, and that's it. To be a good reader you have to read all the time. It's like learning to swim but only doing one lap. You won't be able to save yourself.

According to recent [Organisation](#)

[for Economic Co-operation and Development data](#), students who read for enjoyment score an equivalent of one-and-a-half years of schooling above those who do not. An analysis by the Australian Council for Educational Research of [Progress in International Reading Literacy Study \(PIRLS\) data](#) reported that over *one third* of participating Australian students in Year 4 were not confident readers and indicated that they did not like reading. Students have the opportunity to make substantial gains through frequent and sustained reading. Many are missing out on this opportunity.

We know through the ever-growing body of evidence in support of the science of reading that reading development is not natural. While spoken language develops for the vast majority of children incidentally by listening to and conversing with others, reading needs to be taught and taught well. As stated by [Castles, Rastle and Nation \(2018\)](#), reading is "a learned skill that typically requires years of instruction and practice" (p. 8). From novice readers learning to crack the code through to skilled readers conducting expert-level analysis, effective classroom instruction is key to student literacy.

Children firstly need to understand how written text relates to sounds in order to decode text. This requires explicit instruction. Phonemic awareness, phonics, fluency, vocabulary and comprehension are the keys to reading success. But our responsibilities as educators do not end there.

Students then need to make the transition from decoding text to orthographic mapping through frequent reading practice. This process is described as phonological recoding by [Share \(1995\)](#). To facilitate this process, students need to develop and maintain good reading habits. They need to read worthy and notable texts, and then to analyse those texts with the aim of gaining author's insights and perspectives. All very well in theory, but how does this play out in classroom practice? In my opinion, we need to ensure classroom programs include the following non-negotiables:

1 Systematic, explicit instruction in how the alphabetic code works

(including syntactic and grammar conventions) [should be a key focus for early learning in the first three years of schooling.](#)

While it is estimated that up to 5% of students enter schooling with knowledge of letter-sound correspondences, [the majority of students require](#) systematic, explicit phonics instruction to learn to read effectively. Without this, students will find reading difficult and be more reluctant to read. We should not make reading a guessing game that requires hard work and negative attitudes. I have heard teachers express concern about directly teaching phonics, grammar and syntactics because they are worried they will turn students off reading. The opposite is actually true. Give them the beginning tools and foundations they need to succeed. Students who do not obtain these basic skills in the first three years due to learning difficulty or complexity of learning profile should urgently have access to small-group or individualised explicit instruction. All students should have the best chance to learn to read.

2 Students then need to regularly apply these foundational skills in context.

Early-year instruction is important but our work as educators does not stop here. Application of these foundational skills is essential to reading at a higher level because it leads to the [development of orthographic mapping](#). We need to ensure students keep reading. Orthographic mapping refers to the process of learning letter strings and is developed through applying initial letter-sound correspondence knowledge to increasingly complex text. These important skills are not likely to develop unless students are reading widely, deeply and often. Reading should focus on finding information that is relevant and contextualised so students can see direct relevance of building knowledge through reading. The ever popular activity in classrooms 'DEAR' (Drop Everything and Read) is only of value if students have sourced or are provided with meaningful and suitably levelled texts – both fiction and non-fiction.

3 We should continue to have these expectations with progressively



harder texts as students move into higher grades and beyond primary school.

Teachers need to have high expectations of what and how often students read in their classes. Set background reading as a homework activity and discuss it in class. Share reading in all its different forms in all subject areas. Expose students to different genres and authors. Read to learn. Read for fun. Hold students accountable for reading and set expectations. If students have an opinion on a particular topic, require them to produce evidence and further information, arming themselves with information against opposing perspectives. Without reading, students are missing an opportunity to develop deep knowledge of their subjects including specialised vocabulary. Background knowledge is the key to comprehension. Deep subject knowledge is the key to inquiry and high-level analysis.

4 Model a love of reading yourself.

In an examination of the cognitive basis of reading development [Willingham \(2017\)](#) describes the behaviours that are most likely to create expert readers. There is a cycle in play – the more a

person reads, the better reader they become and the more they enjoy reading. Enjoyment leads to more reading, and positive experiences in reading lead to recognition of the value of it. It is common to see reward systems for reading, particularly in primary school settings. Willingham expresses concern about these schemes because they may undermine the development of intrinsic motivation to read.

5 Set yourself reading goals, both professional and for pleasure.

Increase your knowledge of best practice instruction through journal articles and professional readings. Often as educators with limited time we skim through readings because they will be the subject of our next professional learning group or staff meeting. Reading regularly and in depth allows you to make informed choices in your own professional practice. Reading for pleasure can also provide you with the opportunity for relaxation – something we tend to forget to do as we complete marking, programming and any number of administrative tasks in our time away from students. It is difficult to communicate the importance of reading to students if you do not value and prioritise it yourself.

Reading is a discipline. It does not come naturally and it takes years of instruction and a lifetime of reading to be an expert. We often, as educators, want to instil a love of reading in our students, but it is through skilful teaching and continued high expectations that students will get there. Gone are the days when most students will choose to read for fun out of school hours on their own. It is up to us to make meaningful opportunities within our classroom programs, including providing a range of texts, to inspire students to read for pleasure and for meaning. We need to ensure that we, as a profession, value and prioritise reading ourselves to ensure we are providing the best quality instruction for our students.

Jodie Watson is an educator of over 25 years in multiple settings including mainstream primary education (public and private), learning support, gifted education and most recently as an Assistant Principal supervising OC classes. She has completed postgraduate study in Special Education at UTS and Gifted and Talented education at UNSW. Jodie is currently Literacy Centre Manager at MultiLit.

Why all states and territories should follow South Australia's lead and introduce the Year 1 Phonics Check

Jennifer Buckingham



The proposal to introduce a phonics check – employed in schools in England towards the end of Year 1 – into Australian schools has created considerable controversy. It has been said that it would prove stressful to young children and is unnecessary, because phonics is already taught adequately in most Australian schools as part of the literacy curriculum.

The South Australian (SA) government commissioned a trial of the utility of the phonics check in 2017 and, on the basis of the trial's finding, decided to implement the check in all state schools in 2018, with non-government schools joining the program in 2019.

The results of the trial allayed many of the reservations about the check and confirmed the need for its introduction. The second state-wide implementation last year showed that some improvement had already occurred but also demonstrated that many children were still struggling with phonic decoding – a foundational skill for reading.

Kevin Wheldall



What is the Year 1 Phonics Screening Check?

The phonics check consists of 40 single words children read aloud to a teacher. There are 20 real words and 20 'pseudo words' – all of which can be read using phonic decoding. The pseudo words are included because they can't be read from sight memory and are a purer test of phonics ability.

In SA the check was done in August, when children had been at school for a little over 18 months. The timing of the check was based on a recommendation from a ministerial advisory group to the federal government.

Many students have very low decoding ability after 18 months at school

The SA state government decided to set the threshold score at 28 marks out of 40 for the state-wide implementation in 2018 and 2019. The 28 mark threshold was set using two criteria:

1. **Timing.** While the threshold score in England is 32, the check is given later in the school year than the SA check, and so more content will have been taught to English children; and
2. **Curriculum.** Benchmarking of the items in the check was aligned with the National Literacy Progressions.

The threshold score is the minimum expectation, and given that the check is not unreasonably difficult and that approximately 16% of children obtained a score of between 36 and 40 in the trial, a high score is achievable and should be the goal.

The headline data from the 2017 trial showed that the majority of children in Year 1 found the test items difficult. The report shows approximately 33% of children achieved a score above 32. [By comparison](#), 81% of Year 1 students in England achieved this score for the past two years.



According to the SA trial evaluation report, teachers and leaders observed: “...students did more poorly than expected, across the board. Numerous respondents reported feeling surprised and disappointed by the results based on students’ known reading abilities and results on the Running Record.”

This is a clear indication that existing assessments in these SA schools were not providing an accurate measure of students’ decoding abilities.

The way the data are reported in the 2017 trial evaluation report does not allow a calculation of the proportion of children who achieved 28 out of 40 – the threshold score set for the 2018 implementation. The trial evaluation report showed that around 44% of children achieved a score above 26.

In the 2018 implementation, 43% of students achieved the threshold score of 28 or above, and in 2019 it was 52%.

Research on the phonics check with Year 1 children in NSW has shown that following one year and three terms of explicit synthetic phonics instruction, the proportion passing the 28 out of 40 criterion was far higher than was found in South Australia – more than 80%. This shows that a high level of achievement in the check is possible with quality phonics instruction.

In the SA trial, the distribution of student scores was very different to the distribution of scores in England. In SA, student scores were distributed on a bell curve. English student scores are skewed to the right of the distribution. This means most children in SA scored around the middle, whereas most children in England score at the higher end. In many English schools 100% of students achieve

the threshold score. This level of data is not available for the 2018 or 2019 assessments in SA.

Three ways South Australia’s phonics check is different to England’s

The phonics check in SA employs the same word items used in various years of the English checks. But there were methodological differences in how the checks were conducted in SA and in England, which may cloud the comparability of the results obtained.

1. **The font.** Teachers raised the issue that the font used in the check was different from the standard font used in SA schools. But by the end of Year 1, children will have encountered many different fonts in books and elsewhere. It’s unlikely this will have been a major factor influencing performance on the check.
2. **Timing.** In England, the check is given to students about a month before the end of Year 1 (after nearly two years of initial instruction). But in the SA trial, the check is given earlier, in term three. The SA students had about a term less to learn letter sound correspondences, and this needs to be kept in mind. As above, this factor is reflected in the lower threshold score.
3. **The ‘stopping rule’.** More significant was the decision to advise teachers to discontinue testing once a child had made three consecutive errors. This stopping rule has the potential to deflate scores on the check, because students who had been stopped might have gone on to answer a

Research on the phonics check with Year 1 children in NSW has shown that following one year and three terms of explicit synthetic phonics instruction, the proportion passing the criterion was far higher than was found in South Australia – more than 80%

few more questions correctly. The evaluation report also found that the stopping rule was not consistently applied. However, it's unlikely that many children failing three items in succession would be able to achieve the threshold score of 28 items out of 40. The [NSW research mentioned above](#) has demonstrated that the application of the stopping rule makes very little difference to the score achieved. A stopping rule is not part of the standard conditions used in England, although teachers do decide to stop children if they are struggling. As many as 41% of teachers [have been found](#) to do this.

Students liked it

The report of the SA trial was very comprehensive and gathered process information as well as student results. Teachers and leaders in the trial reported that all students responded positively, including struggling readers, and that they were engaged and interested. There were no reports of anxiety or stress for students. Teachers “universally” commented that students “loved the one-to-one time with the teacher”.

Teachers and school leaders were overwhelmingly positive about the check. The feedback from teachers and school leaders in the trial was encouraging and positive about all aspects of the administration of the check and the information it provided, including:

- the sufficiency of training and support materials
- the ease of administration
- the length and duration of the check for young students
- the engagement and effort of the students, and
- the usefulness of the data it yielded on student reading abilities, for the purposes of guiding instruction and for identifying and supporting students who “may otherwise be slipping under the radar”.

The phonics check was reported to be a “good eye-opener for teachers”, and widely seen as complementing rather than duplicating existing assessments.

What should happen next?

In spite of the differences in the SA and

England phonics checks, listed above, it's unlikely that their combined effect could account for such a difference in performance between the two. SA's results suggest that there is little room for complacency about the state of phonics teaching in SA.

Almost all teachers in the trial said that they taught phonics using either synthetic or analytic methods, reflecting the claim that Australian teachers already teach phonics. But there was no information to verify that phonics teaching is systematic or explicit, and these results clearly suggest that they don't teach it well enough.

The SA trial and implementation of the Year 1 phonics check has been an important initiative. The evaluation report was a valuable guide to changes that needed to be made for a state-wide implementation, and this has been done carefully.

Even more significantly, the trial has provided strong support for implementation of the Year 1 phonics check across Australia. Or, at the very least, for other states and territories to conduct similar trials. The NSW and Tasmanian governments have announced trials to be conducted this year.

The trial supports [the findings of the expert panel](#) for the Australian government, and has validated the [arguments of advocates](#) that the phonics check gives teachers vital information about decoding skills not gained from other systemic assessments, and is neither burdensome for teachers nor stressful for students.

However, an assessment will not of itself improve student learning. For improvement in children's reading ability to occur, systems, schools and teachers must respond to the results of the phonics check and improve their teaching practice accordingly.

This is a revised and updated version of an article that first appeared in [The Conversation](#) (April 2018).

Dr Jennifer Buckingham and Emeritus Professor Kevin Wheldall, formerly at Macquarie University and now with MultiLit, are well-known researchers, writers, and speakers in the field of literacy.

The trial has validated the arguments of advocates that the phonics check gives teachers vital information about decoding skills not gained from other systemic assessments, and is neither burdensome for teachers nor stressful for students

Noble intent but misguided ideas: Reading and literacy in the NSW Curriculum Review

The Interim Report of the NSW Curriculum Review by Professor Geoff Masters AO was released on 22 October 2019. The K-12 school curriculum review was intended to “ensure that the NSW education system is properly preparing students for the challenges and opportunities of the 21st century” (p. v). The report contains wide ranging proposals with significant implications for teachers and students, including for teaching reading and literacy.



**Jennifer
Buckingham**

Reading and literacy in the Interim Report of the NSW Curriculum Review

The acknowledgement that literacy is a fundamental and essential skill is welcome. The report notes that “a large and growing proportion of NSW students are leaving school with unacceptably low levels of attainment, including in basic skills such as reading and numeracy” (p. 102).

Rates of low literacy in NSW are inarguably unacceptable, a fact that has been reinforced by the most recent PISA results, which found that 44% of 15-year-olds in NSW schools did not achieve the National Proficient Standard in reading literacy and 48% did not achieve the National Proficient Standard in mathematical literacy.

The report’s statement that literacy should be a “common entitlement” and that there should be explicit and clear standards set for a level of attainment every student should reach by the end of their schooling (p. 88) is worthy of support by all levels of government. All schools and systems should be working to achieve this goal without exception.

However, the specific proposals in the report to achieve this goal need to be examined closely. In some cases, they misconstrue research-based approaches to teaching reading and therefore will be counterproductive. There are also inconsistencies and contradictions in the proposals.

- 1 The report proposes that children who are not making adequate progress in literacy and numeracy should have instruction in only these areas until they meet a designated standard.

Ensuring that every student is on track to meet minimally acceptable levels of literacy, numeracy, and social and emotional development should be the top priority in the first few years of school. This should take precedence over providing exposure to a broader curriculum in these early years, especially for children who begin school with developmental delays and low levels of language and other foundational skills. There should be a strong focus on ensuring that every student masters essential enabling skills in reading. Many children begin school behind

most of their age peers and not performing at the levels currently assumed by the school curriculum. Teachers sometimes believe they are required to teach the Kindergarten curriculum to all children whether or not they are ready for it. A future curriculum should be designed on the expectation that, for children who require it, the focus will remain on ensuring at least minimally adequate levels of foundational skills before they are exposed to all mandated Key Learning Areas. (p. 80).

It is a mistake to assume that the other essential component of the Simple View of Reading – language comprehension – will develop without an explicit instructional focus, and that it develops only within literacy lessons

an explicit instructional focus, and that it develops only within literacy lessons. Language comprehension includes vocabulary and general knowledge, [both of which are developed and extended](#) through the other Key Learning Areas. Denying children the benefit of exposure to learning about their social and natural world, and its history, customs and cultures, will impede their acquisition of the language and knowledge [they need to be proficient readers](#). As the Interim Report states, “Literacy is the ability to put knowledge to work” (p. 63).

Rather than narrowing instruction for children who are making low progress in reading, it is preferable to adopt a [three-tier Response to Intervention framework](#) to ensure that all children receive the level of instruction they need to achieve literacy and numeracy, early and successfully.

In a Response to Intervention model of instruction and intervention, all children receive high quality, evidence-based whole class reading instruction. This will be sufficient for around 75-80% of students to learn to read. Regular curriculum-based assessments monitor each child’s progress. Children who are struggling to keep up with their peers may need extra support in a small group setting, with more intensive instruction in the aspects of reading that are presenting difficulties. Most of these children will make accelerated progress and catch up with their peers. The small proportion of children (around 3-5%) with more serious learning difficulties or disabilities will need specialist, one-to-one intervention, sometimes for a limited time, but sometimes for their entire school life.

In this way, the Response to Intervention model caters for all children while still preserving whole class teaching as the primary mode of instruction. High quality, explicit whole class teaching along with appropriately targeted interventions can be differentiated to accommodate a wide range of abilities and is the best way to ensure that all children make good progress toward literacy goals.

- 2 The report recommends against the use of a defined scope and sequence.

The intent of this proposal is good but the proposed means are misguided. Literacy and numeracy should certainly be the priority in the early years of school as they provide the foundation for all learning, but this should not be exclusively skills-focused and there should be room in the school week for other important aspects of education, including social studies, art and music. Some children will require intensive literacy support that may require withdrawal from other lessons but this does not necessitate teaching literacy and numeracy to the exclusion of all other content. That approach would be counterproductive.

Such a proposal misconstrues the process of reading development. The highly predictive model of reading comprehension called [the Simple View of Reading](#) states that reading comprehension has two essential components – decoding/ word recognition and language comprehension. A deficit in either component will cause problems with reading comprehension. It is essential to establish accurate and fluent decoding through systematic and explicit phonics instruction in the first few years of school, as [this skill is a prerequisite](#) to accurate and fluent reading.

However, it is a mistake to assume that the other essential component of the Simple View of Reading – language comprehension – will develop without



Rather than a preconstructed scope and sequence chart that specifies what will be taught, when it will be taught and for how long it will be taught in the coming school year, teachers need support in establishing where individual students are in their learning at any given time and in deciding what to do next to promote further learning. This is likely to be different for different students. (p. 85)

In the case of early reading, a carefully developed scope and sequence is vital. Defining the content to be covered, and the order in which it is to be taught, is a key element of explicit and systematic teaching. There is a [large amount of research evidence](#) showing that explicit, systematic instruction in the essential components of early reading instruction is more effective than other approaches.

An evidence-based scope and sequence for phonics instruction will begin with teaching a set of simple single letter-sound correspondences that can be used to make decodable vowel-consonant and consonant-vowel-consonant words. Children learn to blend the letters together to read words. As new sets of letters and sounds are taught, moving to more complex letter-sound representations such as digraphs and trigraphs, children cumulatively learn the entire alphabetic code. This methodical presentation of phonic knowledge enables them to read and spell familiar and unfamiliar words and ensures that all children [learn the necessary content](#). The [National](#)

[Literacy and Numeracy Learning Progressions](#) have been developed to provide this detailed guidance to teachers.

While some students will learn more quickly than others, this is accommodated within the Response to Intervention model. The scope and sequence provides teachers with a guide to what needs to be taught and in which order, while curriculum-based assessments determine whether it has been learned, and which students may need further teaching.

It is not explained in the report how teachers can establish “where students are in their learning” without a scope and sequence showing what should ideally have been taught and learned and what remains to be taught and learned.

- 3 The report recommends an exit standard for every Key Learning Area to be met by the time they finish the compulsory school years.

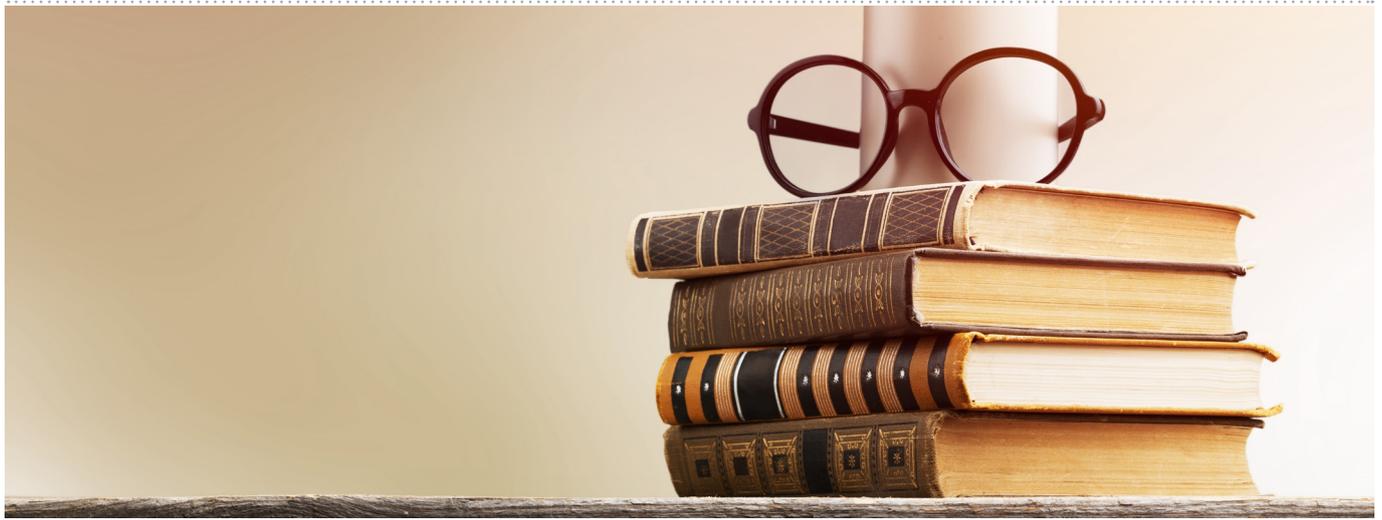
In each Key Learning Area, establish a standard that every student should meet by the completion of their schooling. This standard should be set at a level of knowledge, understanding and skill necessary to function effectively in adult life and usually should be met before commencing advanced study of that subject in the final years of school. (p. 89)

An expectation that every student has achieved a good educational standard – at the very least they should be literate and numerate – by the

The report recommends abandoning year or stage-based syllabi and achievement expectations, which will arguably make it more difficult to ensure that students are making a sufficient rate of progress in each year

time they complete school is entirely reasonable. Yet it is not evident how the proposals in the report will achieve this goal. The report also recommends abandoning year or stage-based syllabi and achievement expectations, which will arguably make it more difficult to ensure that students are making a sufficient rate of progress in each year to be on track to achieve the goal.

To address this need, the report proposes “a number of ‘Progression



Steps” which would together “provide a road map for each individual child and young person’s progress in learning”, which would “correspond broadly to expectations at ages 5, 8, 11, 14 and 16” (p. 50).

The problems with this idea should be obvious. How much children have learned is more strongly determined by the quality and quantity of the teaching they have received than their chronological age. No evidence is provided in the report to support age-based achievement standards, which is what the progression steps actually represent.

Overall, the report does not provide any evidence or explain how its proposed structure of ‘learning progressions’ and ‘progression steps’ is educationally superior to the current year or stage-based syllabus structure.

- 4 The report proposes that students who have not met the exit standard would have to continue studying until they do.

In some learning areas, students who have not met the standard by the end of Year 10 might be required to continue their study in that learning area until they do. For example, in mathematics, students who have not met the standard might be required to continue their study of mathematics until they do. (p.89).

Again, there is no explanation of what this might entail. Will students who do not meet the designated standard be “required to” repeat Year 10 at school indefinitely, or to continue studying at

TAFE or another educational institution until they meet the literacy standard? What might be the consequences for students who do not continue to study? And who is to be held accountable for students’ failure to meet the standard? What might be the penalty for them? These questions are not acknowledged in the report, let alone answered.

The report’s proposals lack a strong evidence base and leave too many questions unresolved

This response to the Interim Report of the NSW Curriculum Review is not an unqualified defence of the current curriculum and syllabi, aspects of which would benefit from revision. There is little doubt that teachers are struggling to teach all of the content required and that many children are not learning it well, if at all. Yet there is no demonstrated need for a fundamental and radical restructuring of the curriculum and no clear evidence that the particular reforms proposed in the Interim Report are necessary or appropriate. No successful precedent or example of such reforms is provided.

The various unexplained and apparently contradictory aspects of the proposals in the Interim Report are not just details to be determined later. They suggest that the rationale and evidence base for the proposals lack the coherence and rigor that should underpin reforms of the magnitude suggested. The ambiguity and lack of detail about implementation in schools is a critical deficiency. The NSW government should be extremely cautious in considering these reforms.

There is little doubt that teachers are struggling to teach all of the content required and that many children are not learning it well, if at all. Yet there is no demonstrated need for a fundamental and radical restructuring of the curriculum

Dr Jennifer Buckingham is Director of Strategy and Senior Research Fellow at MultiLit.

Postcard from the US: The current controversy about teaching reading

Recently, the *New York Times* published an [article](#) on the front page about the teaching of reading. A friend posted in on Facebook saying “I won’t know what to think about this until Dan comments on it”. I thought some background for people like my friend might be useful.

How is the teaching of reading still controversial? Surely they’ve sorted it out by now.

The relationship between a teacher’s actions and a child’s success is murky.

Psychologists love to point out that “complex behaviour is multiply determined”. Reading is complex; therefore many factors contribute to success or failure. Phonics instruction supports children learning to decode, but some kids figure out decoding with less support. The degree to which kids need more or less phonics instruction depends on their oral language skills (vocabulary, the complexity of syntax they can unravel), their knowledge of letters and print, and their ability to hear individual speech sounds, at the least. In addition, a teacher may be fully on board with phonics instruction, but either not be great at it (lack of knowledge or skill due to poor training) OR may be hobbled by the school or district having adopted a mediocre reading program.

And once you get past measuring decoding (i.e., you’re measuring comprehension), things get still murkier because other factors contribute to comprehension.

So with all those factors, how much does all this really matter? If every teacher taught decoding via phonics instruction tomorrow, how much would reading improve?

It’s hard to say precisely, but you can predict the general pattern.

First, as I noted, some kids need less phonics instruction, so they get by with the bits and pieces they are getting now, although they’d learn to decode faster and more easily with more systematic instruction. It’s the kids with weak oral language skills, and those who have a hard time hearing individual speech sounds who will benefit most. There’s absolutely some percentage of kids floating into mid- and upper-primary grades with really poor decoding skills who could be doing better.

Second, ‘decoding’ is not synonymous with ‘reading’. It’s necessary but not sufficient. Once a child is a fairly fluent decoder, her comprehension is heavily influenced by her vocabulary, as well as the breadth and richness of background information in memory.

So it’s not that phonics instruction would make every child a great reader. It’s that without it, some kids won’t learn to read at all.

Isn’t phonics instruction boring for the kids who don’t need it?

There’s limited data on the matter, but a [nationally representative sample](#) from 1995 showed that reading attitudes weren’t affected by decoding instruction.



Daniel Willingham

Although phonics instruction may seem boring it may be that 1) decoding itself is rewarding; 2) phonics is boring, but there are still read-alouds and other stuff that support positive reading attitudes; 3) other types of instruction aren't as interesting as we might have thought.

Perhaps most importantly, in most classrooms, teachers accept that there are some things children must learn or experience that aren't fun, but are too important to skip. You make it as fun as you can, you make a show of enthusiasm, and hope the kids are swept along.

What happened that prompted *The New York Times* to put a story about this on the front page?

The article made it sound like new data from eye-tracking and brain imaging “now show” that phonics is crucial (and that exposure to appealing books isn't enough). I don't think that's true. The behavioural data were plenty convincing 20 years ago, although our understanding of how the mind reads is, of course, always advancing. (Also, brain-imaging and eye tracking data aren't that new.)

This issue – how much phonics instruction is really necessary? – has been visited and revisited since the 1920s. It quieted down in the early naughts with what was supposed to be a compromise position called ‘balanced literacy’. This position said “look, both sides are right. You need phonics, and you need great children's literature and read-alouds.” This position is correct, of course, but people have been worried that phonics is getting short shrift, that teachers (and those who teach them) who don't think phonics matters much just kept doing what they'd been doing, but now called it balanced literacy.

I've never met a US reading teacher who said, “Kids don't need any phonics instruction.” The concern is that teachers are underestimating the quality of phonics instruction required, as well as how much of it kids need. Exactly because reading is multiply determined, it's easy to think of reasons the child might not seem to get it very quickly ... and to think that maybe he'll get it in a few months.

Meanwhile, the instructional supports

teachers get often encourage this sort of thinking. [A recent review](#) of one of the most-used reading programs in early grades concluded that support for phonics instruction was weak. In 2015 I noted in one of [my books](#) that the K-2 literacy guide for New York City Schools listed 16 activities, only one of which was phonics instruction. Yet I don't think I was concerned enough.

The impetus behind the new controversy has been the work of [Emily Hanford](#), a reporter who has done a thorough job of describing what's known about how children learn to read, and she called schools of education to task for not teaching future teachers the best way to teach kids to read. Who knows, maybe the time was just right, but certainly the depth of her reporting made the moment possible.

So schools of education are to blame?

There are thousands of teacher preparation programs in the US so it's hard to generalise.¹ But the weekly education newspaper, *Education Week*, did a survey of professors regarding how they prepare future teachers to teach reading, and yeah, the results indicated that a lot of teachers are not getting very good instruction in teaching reading.

The most common misalignment I hear is this: when people think about reading, they think about it the way an already-skilled reader does it. For example, they say that readers use meaning-based cues to help figure out a word. That's true, and there are two ways it happens. One is an unconscious process that is only in place if you are a fluent decoder who understands the rest of the text to that point; this process only nudges you towards the right interpretation, it doesn't magically make you read it. The second is a conscious process, puzzling out what an unfamiliar word means, and ample data show readers are willing to do a little of that work, but not much. It's frustrating and effortful. So the idea that we should teach beginning readers to use meaning-based cues has a certain logic to it – it's what really good readers do – but it's not a good strategy for beginners.

So what happens next?

Ideally, current and future teachers will get better instruction in how people read (I actually wrote [The Reading Mind](#) as auxiliary textbook for schools of education with this purpose in mind) and then too in how to teach reading. There's much more to reading than phonics instruction and we actually know much less about how to teach those elements – fluency, for example, or how to raise reading motivation. Decoding is the most thoroughly researched aspect of reading, and it's the one we know the most about teaching. We really ought to take advantage of that work.

Editor's note: For Australian readers, a report was published in 2019 about initial teacher education (ITE), in which the authors concluded: “Studies, testimonies from pre-service and graduate teachers, and surveys of teacher and principal perceptions ... have together contributed to persistent and serious concerns about the quality of preparation to teach reading in [ITE] courses”. [See the full report here.](#)

This is an edited version of an article that first appeared on [the author's website](#) (February 2020).

Daniel Willingham earned his B.A. from Duke University in 1983 and his Ph.D. in Cognitive Psychology from Harvard University in 1990. He is currently Professor of Psychology at the University of Virginia, where he has taught since 1992. Until about 2000, his research focused solely on the brain basis of learning and memory.

Today, all of his research concerns the application of cognitive psychology to K-16 education. He writes the ‘Ask the Cognitive Scientist’ column for American Educator magazine, and is the author of Why Don't Students Like School?, When Can You Trust the Experts?, Raising Kids Who Read, and The Reading Mind.

His writing on education has appeared in seventeen languages. In 2017 he was appointed by President Obama to serve as a Member of the National Board for Education Sciences.

How to knock down five strawman arguments against phonics

Countering some of the most common claims bandied about by opponents of phonics.

Recently, the *Washington Post* published an article about the latest hostilities in the “reading wars”. I noticed it because the columnist, Jay Matthews, quoted from [my blog](#).

The column did a good job of surfacing the disagreements, but what really caught my eye was the comments section. More than 50 readers had weighed in – defending phonics or trying to clothesline it.

As a longtime phonics advocate, I was especially sensitive to the illogical arguments against decoding instruction. They were mostly the same arguments I’ve heard for the last 50 years of my career.

I might think these to be illogical arguments, but they appear to be persuasive to someone or they wouldn’t keep getting repeated. That’s the thing about logically fallacious arguments – they sound a lot like logically reasonable ones. That’s particularly true for people who may not have a depth of knowledge on the topic, like a first-time mum whose kids are just reaching phonics age, or the experienced high school teacher who knows education, but is not well-versed on decoding.

This article considers five of these claims.

1 Phonics is inherently boring.

This argument against teaching phonics is both wrong and inane. The inane part is that it suggests that we shouldn’t teach whatever students might not like.

“In my experience, kids don’t like long division so let’s not bother with that any more in math class.” Musicians no longer need to play scales, and basketball players no longer need to shoot free throws, and ... well, you get the idea. The argument is: don’t teach anything that kids might find boring, no matter what the implications.

I have no problem with teachers and curriculum designers who fear phonics might be dull, so they try to juice it up a bit – making it more energetic and fun in some way. But omitting an important part of the curriculum because it might not be fun? That’s silly.

Of course, phonics instruction can be dull. But so can fluency instruction, vocabulary, guided reading, workshop conferencing ... and, there goes literacy.

Kobe Bryant wrote, “Why do you think I’m the best player in the world? Because I never ever get bored with the basics.”

Great musicians will tell you the same thing about playing scales. They became great because they learned to manage or overcome their boredom, and teachers and coaches should try both to instill a respect for foundational skills and to make an effort to keep it interesting.

This advice is especially important for teachers who, themselves, may find phonics to be boring. Don’t communicate that to your students about phonics or anything else that you teach. Enthusiasm is contagious, so buck it up.

In any event, there is nothing inherently boring in phonics, phonics isn’t



**Timothy
Shanahan**

How to knock down five strawman arguments against phonics

boring to everyone, and good teachers find ways to liven up what may be, for some, dull ground to cover.

2 English spelling is too inconsistent for phonics to make sense.

I'm surprised that this claim continues to be made. [Extensive computer analysis](#) has shown that English, *while being complex*, is *not nearly as inconsistent* as is often claimed. One must pay attention to syllable boundaries, letter positions, and morphological information, but English spelling and its relationship to pronunciation is systematic and quite consistent overall.

The argument that it is pointless to teach decoding because of the chaotic nature of English spelling loses its persuasiveness when the language turns out to be not particularly chaotic. It may have made sense for the George Bernard Shaws and Theodore Roosevelt to seek English spelling reform, but in the 2020s to ignore the consistency identified in extensive empirical analyses of the language is foolish.

3 I learned to read without phonics.

Some of the complaints against phonics were based on personal experience. It is not uncommon that a parent or teacher remembers learning to read without phonics, so any insistence on phonics seems to them narrow and pig-headed ("just like an educator to insist things be done in a particular way even if it makes no difference"). This argument is also put forth this week by Barbara Murchison, the director of the educator excellence and equity division of the California department education [in Education Week](#).

I've written about this before. There is no question that it is possible to learn to read without explicit phonics instruction. I'll concede that.

The problem with this argument is that it proceeds on the assumption that the outcomes are discrete rather continuous. It isn't that phonics leads to learning and other approaches do not. The differences are at the margins. They are statistical. The groups of kids taught with phonics score higher in reading on average or have fewer out-and-out failures.

In such cases, the anti-phonics person points out the kids who learned with little or no phonics, and the pro-phonics person points out the higher achievement

and lowered incidence of failure. They're both right, but that it is possible to learn to read without phonics ignores the value that such instruction adds for the overall population and the kids on the margins. Writing them off because some kids can learn without phonics is illogical (and a little mean, too).

4 We all learn in different ways.

In some ways this is a corollary of the previous argument. The folks proposing this recognise the complexity and individuality of human beings. There's a reason Baskin & Robbins doesn't tout one flavour. We're all different, we all like different things, different strokes for different folks, you say potato and I say ... well, you get it.

This is a very appealing argument. You learn one way, I learn another, and if schools would simply vary their instruction to address the learning needs, styles, and tastes of everybody, we'd all be happier. Hell, that's democracy! Viva, diversity! And we poor phonics idiots only have phonics to offer.

While that might seem like a bad trade, again, I turn to the research. [Studies of reading show](#) that anyone who learns to read English – no matter how they are taught – must master decoding, and [brain studies show](#) an incredible consistency in how this takes place in proficient readers.

Basically, research says that as readers, we aren't that diverse. We all process text in pretty much the same way. It makes greater sense to teach someone something they need to learn, rather than teaching them something else hoping they'll figure it out.

What that means is that, whether or not we teach phonics, is not a matter of learning style or taste, but effectiveness.

5 There is more to reading than phonics.

Great argument. I used to try this one with my father when as a boy I didn't want to eat my vegetables. "Dad, there is more to nutrition than just veggies. I'm eating my meat and drinking my milk." Dad wasn't impressed with that tactic, and you shouldn't be either.

My claim is correct: you won't be healthy if you only eat vegetables, but it was a distraction more than a real argument. After all, Dad was pro-protein and pro-calcium, too. The only reason he was so stridently insistent on the vegetables

The argument that it is pointless to teach decoding because of the chaotic nature of English spelling loses its persuasiveness when the language turns out to be not particularly chaotic

was because I was hiding them under the edge of my plate instead of eating them – and when he challenged that practice, I made it sound like the argument was about who was most committed to a balanced diet, not whether I needed to eat my green beans.

I fear that we are engaged in that same dance step today. Someone isn't including phonics instruction, and when anyone challenges that omission, the response emphasises the importance of teaching reading comprehension or writing. "Please don't notice the good things that we aren't giving kids, just notice the other good things we are."

As you can see, those five arguments against phonics, when considered carefully, hold no water.

And, what of the arguments for phonics?

I can think of only one: the only reason that I can think of for teaching phonics explicitly in the primary grades is because a large number of independent studies with a variety of approaches and methods have consistently found that providing such instruction to children gives them a clear advantage in learning to read. They, as a group, do better; we lose fewer kids off the lower end.

That's the only reason, and it ain't made of straw.

Timothy Shanahan is Distinguished Professor Emeritus at the University of Illinois at Chicago and was formerly Director of Reading for the Chicago Public Schools, and president of the International Literacy Association. He is a former first-grade teacher and is a parent and grandparent. His website www.shanahanonliteracy.com is popular with parents and teachers.

Do our genes determine learning ability?

Taking an evidence-based approach to teaching and learning, as encouraged by the field of educational neuroscience, is challenging and at times controversial. Perhaps the most contentious aspect of this endeavour is the application of genetics to education, which has generated considerable debate. Nevertheless, the fact that it is controversial doesn't mean that we should shy away from it. So what exactly can the study of genetics tell us about learning, and what can educators do with this information?



**Annie
Brookman-
Byrne**

A large body of evidence indicates that cognitive abilities are influenced by genetics, and that each psychological trait is influenced by many genes. This means that educational outcomes are heritable to some extent: to take an example, a study of 13,306 twins found that a composite GCSE English, maths and science score was 62% heritable. Interpretation of this finding requires an understanding that heritability describes differences between individuals.

High heritability can mean that schools are doing a good job of educating pupils, so that remaining differences between pupils (whatever their size) are down to genetics. It is crucial to understand that high heritability does not mean that the school or other environmental factors are unimportant.

Rather than delving further into the details, let's consider how these summary findings might relate to learning and education. First, these discoveries support the argument that learners have different strengths and weaknesses, and should not all be expected to conform to the same profile of competences. Second, genetically influenced individual differences in ability may take away some of the pressure on educators. Teachers and schools are judged on the performance of their pupils, and as such aim for the highest grades for all students across subjects, yet a genetically informed approach might lead to greater acceptance of differences between pupils.

So far, these messages don't seem too outrageous. So why is genetics such a controversial topic in education? Some fear that these findings – that school-related abilities are in part due to genetics – will lead to a deterministic stance: if we accept that not all students can achieve the same grades, is there a danger that some children will get left behind without the help they need?

However, an appreciation of differing skill-sets need not lead to such a fatalistic position. There are two responses to this concern. The first is that a genetic predisposition for finding certain subjects or activities challenging does not mean that this can't be combatted. Rather than being left behind, learners could be given further assistance in recognition of the difficulties they face. As described above, heritability of traits does not mean that the environment has no effect. Teachers should continue to provide the best

Do our genes determine learning ability?



possible educational practices, such as a reading intervention for a struggling reader. The second response is that we should reconsider what constitutes success and which skills are valued.

As we discover more about the science of learning, including the role of genes, it is expected that there will be a move towards precision education. Tailoring education to the needs of individuals is anticipated through the accumulation of information on genetic, neural, and environmental risk factors. The more that we know about what causes individual differences, the more we will be able to adapt teaching and learning activities to each pupil.

You don't need to be a scientist in order to understand that our genes are a part of who we are, in the same way that our brains are a part of who we are. Finding out as much as possible about the mechanisms and processes underlying and affecting learning (through genetics, neuroscience, psychology, and other disciplines) is the best way to find out how to support everyone in their learning. Scientists should engage with those who are affected by their work: active engagement and discussion between educators and geneticists will enable

teachers to shape the future of research. The best way to proceed is to open the conversation and consider the most desirable way of incorporating research findings into practice.

This article was originally published by npj Science of Learning Community in December 2017.

Annie Brookman-Byrne is a science writer and Deputy Editor of The Psychologist magazine from the British Psychological Society. Her background is in educational neuroscience research, using behavioural, neuroimaging and classroom methods to examine science and maths reasoning. Annie also writes regularly for the Jacobs Foundation's blog on learning and development (BOLD).

Tailoring education to the needs of individuals is anticipated through the accumulation of information on genetic, neural, and environmental risk factors

Why poor kids are more likely to be poor readers (and what we can do about it)

Over the school holidays, I've been reading some influential business books in preparation for a course I'm giving. By definition, these books were penned by highly literate, highly educated authors. Writers who have enjoyed great financial and life success.

A pervasive theme in these books is the idea that you can 'Think Yourself Rich'TM. The sentiment seems innocent, inspiring even. But, the more I think about it, the angrier I get. For, if you flip it around, it insinuates something atrocious – that, if you are not rich, you have somehow failed to think hard enough about it to escape poverty. If only life were that simple!



**David
Kinnane**

Good books can change your mind

When I was 22, I stumbled on *Slaughterhouse-Five* by Kurt Vonnegut. I read it in a single, sunny day in a pretty park in the fairy-tale town of Český Krumlov. It's a terrific, powerful, troubling, hilarious, and devastating read. It changed my view on many things, including poverty.

Consider this quote (ostensibly about Americans, but applicable to most of us):

Americans, like human beings everywhere, believe many things that are obviously untrue. Their most destructive untruth is that it is very easy for any American to make money. They will not acknowledge how in fact hard money is to come by, and therefore, those who have no money blame and blame and blame themselves. This inward blame has been a treasure trove for the rich and powerful, who have had to do less for the poor, publicly and privately, than any other ruling class since, say, Napoleonic times.

Poverty and reading outcomes

Now, why am I writing about poverty on a speech pathology blog? And just what does poverty have to do with reading?

Well, it turns out poverty has a huge, well-known, and negative impact on literacy achievement in all English-speaking countries. In Australia, you can look at any number of stats to see it. Here are just a few:

- [In 2009](#), 13.9% of Australian children in the lowest socioeconomic quintile were assessed as 'developmentally vulnerable' in language and cognitive skills, compared to 4.7% of kids in the highest quintile.
- [In 2009](#), the Programme for International Student Assessment (PISA) team assessed the literacy of 15-year-olds in Australia and several other countries. They found 25% of 15-year-old young adults in the lowest socioeconomic quartile scored in the lowest literacy band or below, compared with 5% of the children in the highest quartile.

Why poor kids are more likely to be poor readers



- [In 2015](#), PISA again assessed the literacy of 15-year-olds. For Australian students, they found:
 - students in the highest socioeconomic quartile achieved (on average) significantly higher literacy scores than students in the lowest socioeconomic quartile: representing over one proficiency level or around three years of schooling! The score for students in the lowest socioeconomic quartile was significantly lower than for students across countries in the Organisation for Economic Cooperation and Development (OECD); and
 - only 5% of students in the lowest socioeconomic quartile were high performers compared to 8% of students in the second socioeconomic quartile, 12% in the third socioeconomic quartile and 21% in the highest socioeconomic quartile. (You can read more about these results [here](#).)

Why?

Well first, let's look at what we mean by 'socioeconomic status' (SES).

It doesn't mean 'not much money'; and different studies use

different definitions. For example, two measures used by the OECD to represent socioeconomic background are:

- the highest level of the father's and mother's occupation; and/or
- the index of economic, social and cultural status, based on three indices – the highest occupational status of parents; the highest educational level of parents in years of education; and home possessions.

Other studies use self-reported, sometimes slightly weird measures, such as the number of books in the family home (e.g., The Progress in Reading Literacy Studies, or PIRLS).

What's becoming clear is that SES (however defined) is just a proxy – a stand-in – for other things that are [more likely to affect literacy directly](#). It's also becoming clearer that a student's achievement is predicted not just by their own SES but by other factors, too.

So what are some factors that can affect literacy outcomes for low-SES students?

Researchers Dr Jennifer Buckingham, Professor Kevin Wheldall and Dr Robyn Beaman-Wheldall published a

wonderful paper on this back in 2013 outlining some key ideas. I've read it several times, and I think about it a lot when I'm working on improving services, or giving advice to families, students and teachers.

So here are 10 factors that may explain (at least in part) why low SES is a significant risk factor for poor reading outcomes. If you are like me, you won't be able to stop thinking about things we could try to help fix the problem. There are some great minds working on it. But all of us working with kids with reading difficulties have a part to play.

1. Differences in early pre-literacy skills

- [Studies have shown that](#) kids from low-SES backgrounds tend, on average, to demonstrate lower skills in [phonological awareness](#) and oral language (including [vocabulary](#)). Both skills are key elements to early literacy.
- Early literacy is a strong predictor of a child's literacy performance [throughout their school life](#). Reading ability is not set at five years of age – there is a lot of movement in the primary school years – but low-SES students are

more likely than high-SES students to remain poor readers if they start school as poor readers.

This research is the main reason I support high quality, free preschool instruction (including phonological awareness and vocabulary training), for all low-SES children (and, in fact, for all children).

2. Genetic factors – potential versus achievement

You can't change your genes. And genetic factors play a big part in determining a student's potential. But the extent to which that potential is realised depends on the student's environment. High-SES students tend to be limited by their innate abilities. But, for many low-SES kids, environmental factors can get in the way of students [reaching their true potential](#).

In my speech pathology clinic, I set high expectations for every student we meet. A few people think I sometimes push too hard, and there may be some truth to that. But my goal is always to help students reach their potential, never to settle.

3. Home factors

- **Parent attitudes/encouragement:** It turns out that values and parenting practices are [stronger factors than income](#) (over a basic level) or parents' education levels. In other words, low-SES kids' reading skills can be supported by parents having high educational aspirations and expectations for their kids, and encouraging their [kids to read and to reason](#). This isn't a case of thinking yourself literate. It's more about developing a student's motivation to read, and building a [self-concept as a reader and for self-regulated learning](#). Thus, parents' and students' expectations are strong [predictors of later achievement](#).
- **Books in the house:** [an Australian study](#) suggests that having books in the home has a greater impact on children whose parents had the lowest levels of education than

children with university-educated parents.

In my professional work, I work with parents to instil high expectations for school. We also have a free book borrowing program and encourage families to join and use the local library.

4. Time spent reading/print exposure/reading for pleasure

- The link between reading time and reading achievement is important for students of all abilities. Even reading just 10 minutes a day outside of school can have a [significant, positive effect](#) on reading skills for below average and average readers. [Some researchers think](#) that having dedicated reading time at home is more directly related to creating a positive home environment for reading, than simply reading itself.
- [Other researchers](#) think that the amount of [print exposure](#) is more reliable than how much time kids spend reading.
- Differences in time spent reading for enjoyment [appear to translate into literacy performance](#). Reading books outside of school time – fiction and [non-fiction](#) – is a [predictor of vocabulary growth](#). Interestingly, reading magazines, comics and newspapers seem to have very little or even negative effects on reading performance and vocabulary!
- With reading skills, good readers get better, and poor readers slip further behind – the so-called [Matthew Effect](#). Kids who don't master the basics tend to read less than peers who can decode easily (see below).

Children who need reading intervention benefit from both structured practice of fundamental skills, including through decodable books, as well as less structured reading for pleasure. Regular library visits where the student gets to pick any book they want, along with providing recommendations based on

Even reading just 10 minutes a day outside of school can have a significant, positive effect on reading skills for below average and average readers

Why poor kids are more likely to be poor readers



a [student's reading skills and interests](#), can make a big difference!

5. Physical health and sleep

- Kids in the lowest SES quartile [are twice as likely](#) to be rated as developmentally vulnerable in terms of physical health and well-being.
- Poor health [can impact school attendance](#).
- Some low-SES kids are at a heightened risk of early onset, chronic [otitis media](#), which can cause hearing loss and [affect speech and language development](#) (even if the effects are temporary).
- On average, lower SES kids [tend to get less sleep](#) than higher SES kids. [There is some evidence](#) that insufficient sleep may affect cognitive functioning, intellectual ability, language comprehension, letter-word recognition and passage comprehension.

For preschoolers at risk for communication and reading disorders, I inform parents about the importance of adequate sleep and sleep routines, with a view to establishing routines well before 'big school' starts. For older students, I counsel them

about the importance of sleep and limiting things like blue light exposure before bed.

6. Behavioural problems?

The link between SES and behaviour is complex and controversial. There is some evidence that the proportion of kids assessed as developmentally vulnerable increases as SES decreases. Kids with developmental language disorders [are at heightened risk of behavioural difficulties](#). But the direction(s) of the relationship(s) between SES and behaviour at different points of development are not clear, and it is usually not possible to establish cause and effect.

7. School attendance and mobility

There is a [clear positive relationship](#) between school attendance and literacy achievement from Kindergarten and Year 1.

- Children from low-SES backgrounds have, on average, lower attendance rates and a higher prevalence of chronic absenteeism (missing more than 10% of the school year), which places them at a higher risk for reading failure.

- Moving schools is also correlated with reading – kids who change schools a lot are at a higher risk of lower reading achievement throughout primary school and high school. The relationship between moving schools and reading [is stronger for low-SES families](#).

This research explains, in part, why so many schools in our area strongly discourage long school absences – especially in Kindergarten and Year 1.

8. School-level SES is more important than student-level SES

Now this is an important point: in most OECD countries, the literacy performance of 15-year-olds is [more strongly related to the SES of the school](#) than the individual student.

- [A strong body of research](#) supports the idea that school-level SES is more important than student-level SES.
- School SES is likely to be a proxy for other factors:
 - students with low SES are [more often found in lower quality schools](#) than students with high SES; and

Systematic, synthetic phonics instruction is important, especially for children at risk and from low-SES backgrounds, and children who begin school with poor phonological awareness and other pre-literacy skills

- the academic context of the school [may be more important than SES](#) – things like teacher expectations of students, how safe kids feel at the school, curriculum rigour, and homework completion.

Families need to know about this research so they can make informed choices. For families with a choice of local schools (and it's worth remembering, many families don't have a choice), the school with the higher SES may be the better option for reading and academic outcomes.

9. Teaching quality

- Note we're not talking about *teacher* quality.
- Teaching quality includes lesson content and the teaching philosophy used by teachers at the school. Things like direct instruction, teacher-student relationships, reciprocal teaching and feedback are [rated as "quality teaching" by students](#).
- Among other things, there are some clear implications for initial reading instruction (see below).

10. Initial reading instruction

- Effective early reading instruction in the early years is critical to help 'close the gap' between high-SES and low-SES kids. [Research shows](#) that the best reading programs develop the [Big 5](#) skills: [phonemic awareness](#), [phonics](#), [fluency](#), [vocabulary](#), and [language comprehension](#). You can read more about these principles [here](#).
- [Systematic, synthetic phonics instruction is important](#), especially for [children at risk and from low-SES backgrounds](#), and children who begin school with poor phonological awareness and other pre-literacy skills – again low-SES students [are over-represented in this population](#).
- Oral language skills also [need to be developed, especially vocabulary and comprehension skills](#).

Families deserve to know whether their child's future school trains its teachers to implement evidence-based reading instruction practices. Although many schools deliver evidence-based reading instruction based on the principles above, some do not, and poor reading instruction is particularly detrimental to students from low-SES backgrounds.

Clinical bottom line

Having a low-SES background does not condemn students to be poor readers. However, low-SES students are at a higher risk of [reading difficulties](#) than high-SES students; and we are beginning to understand why.

Evidence is growing that high-quality preschool and early school phonological awareness, oral language and evidence-based literacy instruction can play a major role in narrowing literacy gaps. We need to support both more research teasing out these contributing factors and 'boots on the ground' implementation of high-quality reading instruction in all schools.

Finally – and, yes, this needs to be said – we should never judge families or students on their backgrounds. In the real world, you can't think yourself rich, regardless of what the self-help business gurus say.

Further reading

The principal source for this article can be found [here](#). If you want to read more about Vonnegut's views on poverty, I recommend this excellent, [free article from Open Culture](#).

This is an edited version of an article that first appeared on the Banter Speech & Language blog (July 2019).

David Kinnane is a lawyer and the principal speech-language pathologist at Banter Speech & Language, a clinic in North Strathfield, Sydney. David has a special interest in helping children and adults with their speech, oral language, reading, and writing. He is also a lecturer at the University of Technology, Sydney, and a director of SPELD NSW.

Why phonology comes first

**Michael
Salter**



The very first essay I wrote in my undergraduate linguistics course was a defence of the English spelling system. My argument – inasmuch as my callow 18-year-old self was able to construct one – was that, given the unsuitability of the Roman alphabet to the English phonological system, not to mention the varied and often overlapping influences on the English language, our ramshackle orthography was not a bad compromise. (Those who like to draw social parallels could point to the trial-and-error accretion of English common law, or the outwardly bizarre ‘imperial’ system of weights, measures and currency.)

Morphology and etymology played an important role in the essay. I wrote about sign and signal, and how the morphemic identity outweighed the phonological discrepancies. About debt and debit. Receipt and reception. And I wrote, too, about the need to preserve the orthographic form of a morpheme in the wake of the shifting schwa vowels occasioned by the stress patterns of English (think informant versus information, or photograph versus photography).

Nearly three decades later, my view hasn’t substantially changed. I still think that, all things considered, the English spelling system is not nearly as bad or as capricious as it is sometimes depicted, and I am frankly pretty dismissive of those who advocate a wholesale, Bernard Shaw-esque reform of English orthography.

Given all this, you would expect me to be supportive of approaches to literacy which assign prominent roles to morphology and etymology. And in many ways, I am. It is important for young people learning English to get to know something about them, even if they do not become familiar with the exact terminology. The basic idea behind these currently popular approaches – of dividing a word into its etymological or morphemic units – is sound enough.

But there are good reasons why phonology should still come first. And that means phonics.

First of all, it is not as though familiarity with morphology and etymology will clear up all the mysteries and inconsistencies of English orthography. To go to the opposite extreme of the Bernard Shaws and claim that English orthography is entirely rule-governed and bereft of exceptions is futile; still less is it true that there is strict regularity in the adoption of Greek and Latin roots and morphemes into English. Recede and precede come from compounds of the Latin verb *cedere*, but so do succeed and proceed. The almost identical Latin verbal adjectives *nobilis* and *mobilis* give us noble, but mobile. (Yet, of course, nobility and mobility.) The Greek verbal noun suffix *-ma* looks to have entered English regularly enough if we consider schematic, idiomatic and dramatic, but not when we consider the base forms scheme, idiom and drama.

English morphology, too, is tricky territory for the uninitiated – and it is unlikely that trainee teachers will be able to negotiate it with confidence. Is the suffix that produces the noun which describes the process of a verb -tion/-sion or -ion? As a matter of fact it is the former, but this is a linguistic minefield. If -ing is a proper English suffix (it is), and if we can change make into making by removing the silent e, why should it not be the same for, say, create and creation?

The problems with this logic are numerous, but they can be quite hard to discern. (Here, for the record, are two of them: (1) we add -ation, not simply -ion, to verbs not ending in -ate such as condemn or flirt; (2) the letter i in the -tion ending has no phonetic value independently of its preceding consonant. Some of the other reasons have to do with Latin verb conjugations, and are rather obscure.)

Secondly, and far more importantly, there is a basic problem (another -ma word there!) with approaches to literacy which suggest a complementary focus on morphology and etymology from the outset. One such approach is known as SWI (Structured Word Inquiry), and [in an introductory article about SWI by Professor Jeffrey Bowers](#), one of its chief advocates, we find the following:

English prioritizes the consistent spelling of morphemes over the consistent spellings of phonemes ... A language that prioritizes the consistent spelling of morphemes over phonemes is not “fundamentally alphabetic”. (p. 4)

The problem with this plausible contention is that like is not being compared with like. Morphemes are not unitary in the way that phonemes are: indeed, they are made up of one or (usually) more phonemes, in a specific pattern. And the orthography of the basic morpheme is, of course, determined by the phonology: it is not arbitrary.

The clearest indication of this comes, in fact, with new additions to the language. Foreign words, onomatopoeic words, and borrowings from slang are all

initially adopted according to phonology (it could hardly be otherwise, since they will constitute a morpheme that doesn't exist yet in the language). They may acquire -ed, -s, -ing and others along the line, and morphophonemic changes may occur. But it is, of course, phonology which determines the spelling of the new word. A can hardly be more 'fundamental' than B if it depends on B for its component parts.

Furthermore, the number of English roots, rather than affixes, which undergo morphophonemic change is surprisingly small. Yes, we have please and pleasure, with /iz/ becoming /ɛz/, and sign and signal, with /aɪ/ becoming /ɪg/. But cast your eye over a random page in a book and you are unlikely to come across more than one word in ten which features such a morphophonemic quirk.

Elsewhere in [Prof. Bowers' article](#), there are hints (though not outright declarations) that a phonics-based approach ignores, rather than defers until a developmentally appropriate stage, issues of morphology and etymology:

However, unlike phonics, SWI considers grapheme-phonemes within the context of morphology and etymology... (p. 5)

[P]honics instruction ... explicitly teaches children grapheme-phoneme correspondences in English without reference to morphology and etymology. (p. 2)

It would have been fair of Prof. Bowers to note that no serious proponent of phonics instruction, not one, decries the value of morphology and etymology at a later stage, or claims that familiarity with grapheme-phoneme correspondences alone is sufficient to become a competent reader and writer of English, with its deep orthography.

Before we leave the article, a tangential but important issue:

There is an overwhelming consensus in the research community that systematic phonics is best practice for

early reading instruction in English.

This is undoubtedly true, but it is not the whole story. Those actually involved in proper research into early literacy have indeed consistently confirmed what common sense would already suggest, namely that thoroughly familiarising children with letter-sound correspondences initially is the most effective approach. But it is not in research publications that the battle for influence over the hearts and minds of trainee teachers is really fought. It is in the lecture theatres of initial teacher education courses.

What 20 years of interactions with trainee and first-year-out teachers has shown me is that attitudes to proper phonics teaching among initial teacher education (ITE) lecturers are almost uniformly negative, whatever the accumulated research may suggest. Phonics is simply lumped in with the other 'traditional' practices and attitudes, and trainee teachers are implicitly encouraged to react from the gut in such matters, not from the evidence.

Morphology and etymology are fascinating, and very important. But they have their place, and it is not at the very beginning of reading instruction. There is a good reason why, when field linguists produce a grammar of a language, they traditionally deal thoroughly with the phonology before moving to matters of morphology and syntax. It is simply the systematic way to proceed: deal with the building blocks first, then move on to the more exciting stuff. *Mutatis mutandis*, the same principle holds with initial literacy instruction, and for the same reasons.

Michael Salter has taught classics and modern languages in both government and non-government schools in Sydney for 20 years. He has written two e-books on English etymology, and has written problems for linguistics competitions both in Australia and overseas. He has twice led Australian teams at the International Linguistics Olympiad. He blogs about education issues at [pocketquintilian.wordpress.com](#).

Nomanis Notes

Issue 10 | November 2019

What is curriculum-based measurement of reading?

Alison Madelaine and Kevin Wheldall

Statement of the problem

Most reading tests are insensitive to small changes in reading progress and should not be used too frequently because of practice effects. Educators need to monitor the reading progress of low-progress readers on a very regular basis however, in order to make instructional decisions well before the conclusion of a program or the end of a school year.

Proposed solution/intervention

Curriculum-based measurement (CBM) is a method of assessing growth in basic skill areas. One skill area where this has been widely employed is that of reading. Several curriculum-based measures of reading exist (non-word fluency and word identification fluency for example), but perhaps the most widely used is oral reading fluency (ORF). ORF is measured by a passage reading test, which requires students to read aloud from a passage of text for 1 minute, to determine the number of words read correctly per minute.

The theoretical rationale

An essential feature of this assessment method is that test materials are drawn from the students' curriculum, sometimes taken directly from a basal reading series, and sometimes consisting of a set of generic passages that represent the students' curriculum. By reading a passage of text, the whole skill of reading is measured, rather than component sub-skills. Low-progress readers are closely monitored on, say, a weekly or fortnightly basis, using a set of curriculum-based passage reading tests. This information is then used to make instructional decisions such as increasing the intensity or frequency

of instruction, and can be used within a Response to Intervention (RtI) model.

What does the research say? What is the evidence for its efficacy?

Research on CBM of reading dates back to the early 1980s, and continues to the present day. As such, CBM of reading has a large and very sound research base. Many studies have provided evidence of the reliability and validity of CBM of reading. ORF has been found to be a valid indicator of general reading ability including reading comprehension. Research has also demonstrated that CBM of reading is an effective means of monitoring reading progress, particularly that of low-progress readers.

Conclusion

CBM is a quick, reliable, valid and cost effective method of tracking progress in reading. It provides valuable information which enables educators to monitor progress regularly and to make appropriate instructional decisions in order to maximize the reading progress of their students.

Key references

- Fuchs, L.S. (2004). The past, present, and future of curriculum-based measurement research. *School Psychology Review*, 33, 188-192.
- Hosp, M. K., Hosp, J.L., & Howell, K.W. (2016). *The ABCs of CBM: A practical guide to curriculum-based measurement*. The Guilford Press.
- Tindal, G. (2013). *Curriculum-based measurement: A brief history of nearly everything from the 1970s to the present*. ISRN Education, 2013, 1-29. doi:10.1155/2013/958530

© Alison Madelaine and Kevin Wheldall, 2019.

Nomanis Notes are offered in good faith as a service to the community. This Note may be copied or otherwise reproduced for not for profit purposes by individuals or organisations on the understanding that it is reproduced in its entirety and that the original source is clearly acknowledged. (Original unrevised version published as MUSEC Briefing 4, 2005.)





New series of InitialLit Readers coming soon

In July, MultiLit will release a new series of 60 decodable books for students just beginning to learn to read. InitialLit Readers Levels 1-9 Series 2 is a parallel series for students in their first year of school, and is designed to be used alongside InitialLit–Foundation, or to provide students with additional practice in reading decodable text.

Following the InitialLit sequence of sounds, this series includes both fiction and non-fiction titles, with colourful and charming illustrations to engage and entertain children as they put their developing decoding skills to work.

To register your interest in pre-ordering the InitialLit Readers Levels 1-9 Series 2, please email multilit@multilit.com.

