Journal of
THINK FORWARD EDUCATORS

TEACHERS & LEADERS + RESEARCH & EVIDENCE



APRIL 2024 ISSUE 1

How do you listen to your students read?

Evidence-based practices for complex needs

Daily review made for you

Resource review: ROAR screener

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Journal of THINK FORWARD EDUCATORS

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APRIL 2024

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Think Forward Educators is a grassroots community of teachers and school leaders implementing evidence based practices related to the science of learning.

The Journal of Think Forward Educators is published quarterly. It is available for free to Professional Members.

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Contribute to the Journal!

Are you a teacher or leader implementing evidence-based practice? We are taking submissions on a rolling basis for upcoming editions.

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Editorial

WHY CREATE THIS JOURNAL?



Teachers are motivated to implement evidence-based practices, but as we all know, the research can only take us so far.

Educators still have to do the hard work of figuring out how to translate research into daily teaching practice.

Katie Roberts-Hull

CEO of Think Forward Educators

Think Forward Educators began in 2019 when a group of teachers got together to figure out how to apply what they were learning from educational research to their classrooms. They discovered strong teacher demand to learn how to change their approaches. At the core was a desire to ensure that all children were taught in the most effective ways in order to address the huge inequities of outcomes for Australian students.

Now in 2024, Think Forward Educators has over 20,000 teachers and leaders in its community across Australia. Educators are getting more connected to the research on evidence-based practices. We have seen school systems, universities, not-for-profits, and government bodies producing incredibly useful summaries of research and evidence for the use of teachers and leaders.

Teachers are motivated to implement evidence-based practices, but as we all know, the research can only take us so far. Educators still have to do the hard work of figuring out how to translate research into daily teaching practice. While there are clear principles that can be applied in almost all settings, implementation can really vary depending on school context.

This is why we are starting the Journal of Think Forward Educators.

We want to support those in the Think Forward Educators community to document the different approaches they are taking to implementing evidence-based practices. We want to show what practice looks like in a disadvantaged school, a very small school, a specialist school; in subjects outside of just maths and reading; in multi-age classrooms; in early primary and senior secondary.

We know that seeing examples of what is working well - and hearing about what did *not* work so well - can help educators understand what research looks like in daily classroom teaching.

With the Journal of Think Forward Educators, we hope to provide teachers and leaders with more fine-grained information about how they might apply research on effective practice in their schools. We also want to provide a platform for the many excellent educators in Australia (and internationally) that have something incredible to share from their practice.

The contributors in this edition - from Victoria, Western Australia, and Queensland - have all written rich pieces with specific and detailed discussions of practice. We hope you enjoy this first edition of the journal.

See a preview of the first pages of each article on the next pages

HOW DO YOU LISTEN TO YOUR STUDENTS READ?

A common dilemma: If you don't use benchmarking systems, then how do you listen to your students read?

Karen Woods



Karen Woods is currently Year 5 Leader at Templestowe Heights Primary School

Let's face it, we've all had those moments when we go down a science of reading rabbit hole, taking you deeper and deeper into a topic.

It starts with reading one blog post, which leads to another, then a research article follows and suddenly you are onto a podcast, or a series of podcasts in the case of Sold a Story (Hanford, 2022).

While this is all very enlightening, it can also lead to a profound sense of overwhelm - that point when you are not sure where to begin, or how to implement new evidence into your classroom practice for the benefit of your students, which is of course why you started reading in the first place.

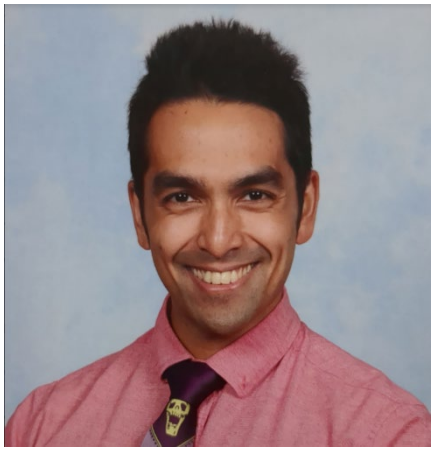
As I learnt more about how to teach and assess reading in the primary classroom, several things became apparent to me. The first was that running 'book groups' for upper years' primary students was, in my experience, time-consuming and inefficient.

For me, book groups took the form of distributing different books to the students, who had all been placed in up to six groups based on their identified reading ability. This meant I had the opportunity to spend ten minutes or less with each group during a single lesson. The remainder of the time was spent with the students reading in an unsupported format, something that leads struggling readers to practise poorly, often inscribing errors (Lemov, Driggs & Woolway 2016).

A short guide to…

COGNITIVE LOAD THEORY

Martin Ravindran



Martin Ravindran is the Grade 5 level leader at Templestowe Heights Primary School.

The purpose of this guide

This short guide provides teachers and leaders with an overview of key research evidence on a specific topic.

The guide includes a range of practical suggestions as well as links to resources for more in-depth learning.

"I've come to the conclusion Sweller's cognitive load theory is the single most important thing for teachers to know." - ***Dylan Wiliam (2017)***

What is cognitive load theory?

As popularised and developed most prominently through the works of John Sweller (2011), Proponents of cognitive load theory put forward that learning can only occur when one's working memory is not unduly overloaded. Consequently, the theory puts forth that the only way to overcome this limitation is using information stored in long-term memory.

The central tenets of cognitive load theory are based on the limitations of working memory which can only hold a finite amount of new information, as well as the degree of cognitive load associated with each task/activity.

What it isn't

Cognitive load theory does not refer to a specific set of materials, nor does it mandate the way in which instruction has to occur.

Cognitive load theory puts forward broader principles which can be implemented in a variety of ways. It does not claim to be the only way in which learning occurs, nor does it claim that other approaches to learning do not produce results. It merely posits that consideration for the learning conditions of the students and the material allows teachers to maximise learning opportunities.

EVIDENCE-BASED PRACTICES FOR STUDENTS WITH COMPLEX NEEDS

Implementing a structured literacy approach in a special school setting

Lucy Wings



Lucy Wings is primary school teacher in special education

Jeremy Barr



Jeremy Barr a teacher dedicated to special education

When we dived headfirst into the science of reading and started the journey to improve the quality of reading instruction in our school, we did not expect the road to be so arduous and complex.

It seemed obvious to us that the only way to improve reading outcomes was to ensure our students mastered fundamental skills using instruction that was informed by theory, research and practice, and delivered explicitly by teachers who have a strong knowledge base.

However, the research could only take us so far - we still had a lot of work to do to figure out exactly what day-to-day teaching should look like in our special school setting.

There are a growing number of exemplar mainstream schools in Australia which showcase specific examples of evidence-based practice. But there were very few examples of complex, special schools for us to draw upon.

We had to figure out how to adapt practices that work well in mainstream schools and apply them in our unique setting.

Our context

The school at which we both taught for over four years is situated in Melbourne and was comprised of an above-average

UNLOCKING PRIMARY STUDENTS' CODING POTENTIAL

Integrating cognitive load theory and explicit vocabulary instruction

Sarah Thomason



Sarah Thomason is Deputy Principal at Dayton Primary School in Western Australia.

In 2019, as a fresh-faced idealistic teacher with a few years of experience in a 'leafy green' setting, I ventured to Onslow, a secluded gem on the vast Western Australian coast, to teach a dynamic group of grade 5/6 students. This school, once lagging but now bustling with determination, was undergoing a significant transformation with the Fogarty EdVance School Improvement Program, which aims to foster academic excellence in challenging settings via strategic leadership and evidence-based change.

As a newly passionate advocate for educational practices rooted in cognitive science, I quickly found my place on the school improvement team, dedicating myself to enhancing pedagogy, and implementing low-variance mathematics and technology curriculum throughout the school.

I was fortunate to gain first-hand insights from educational thought leaders like Dr Lorraine Hammond and Joe Ybarra, whose teachings on the information processing model (see Figure 1) and instructional routines deeply influenced my educational ethos. Practical applications of cognitive load theory became part of my daily literacy and numeracy instruction; worked examples, checking for understanding, elaborative rehearsals and spaced retrieval practice were my new bread and butter. Witnessing my students confidently dissect and articulate complex vocabulary like ‘chortle’ and ‘subterranean’ filled the room with a sense of achievement.

RESOURCE REVIEW: THE RAPID ONLINE ASSESSMENT OF READING (ROAR)

Review of the free screening tool from Stanford University

Dr Gail Brown



Dr Gail Brown is an independent consultant in schools across Australia.

Schools today are increasingly better informed about how to effectively teach reading, with more classroom teachers understanding the science of reading (Australian Education Research Organisation, 2023) and the importance of evidence-based assessment. However, even with deep knowledge, it can be difficult to find enough classroom time to assess students efficiently. Many assessment and screening tools, although high-quality, are very time consuming to use.

That is why a new open-access reading screening tool from the Stanford Reading & Dyslexia Research Program is a promising development in this space of which Australian teachers should be aware. The Rapid Online Assessment of Reading, known as ROAR (https://roar.stanford.edu/), is a new evidence-based tool that has potential to support teachers to screen for reading difficulties more efficiently; pinpoint directions for specific, diagnostic assessments; and, provide more opportunities, resources and time for targeted, effective interventions.

What is a screening tool?

Screening tools help educators prioritise resources to:

a. identify individual students who are struggling in foundational reading skills;

MATHS DAILY REVIEW MADE FOR YOU

Why did Ochre create daily review resources and what do they look like?

Sue Davis



Sue Davis is Maths Lead at Ochre Education and an experienced primary school teacher and leader

How many times have teachers faced with a new year 5 class lament that the students don't know their times tables facts, despite having been taught so many times already? Unfortunately, being taught something does not equal learning something. Despite our best intentions, students may struggle to recall times tables and other taught knowledge as a result of the 'forgetting curve' (Ebbinghaus 1885). People tend to forget newly learned knowledge in a matter of days or weeks.

However, if students revisit knowledge periodically, for example with spaced repetition, there is a much greater likelihood that new information will be embedded in long-term memory.

Figure 1: Forgetting curve with spaced repetition

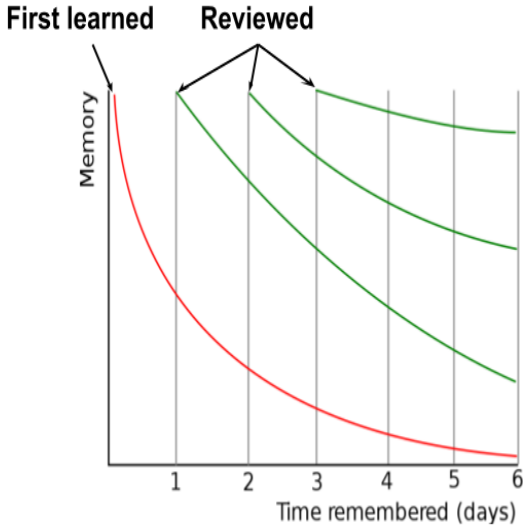
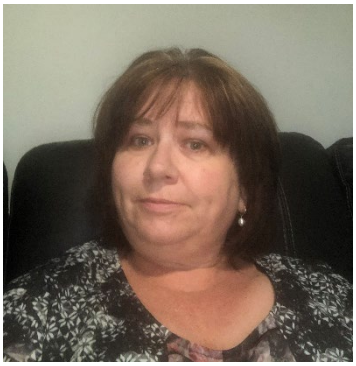


Image: Icez at Wikipedia Commons (link)

QUEENSLAND'S READING COMMITMENT

When we know better, we do better: Commentary on the Queensland State Schools' position on the teaching of reading

Jillian Robinson



Jillian Robinson is a coach and consultant to schools.

How I used to think I knew a thing or two about teaching reading? I've made all the mistakes.

I've led numerous professional development (PD) sessions on how to 'do a running record' and badgered teachers with the need for accurate understanding of the three-cueing system. I've led PD sessions on how to use 'Chunky Monkey', 'Skippy Frog' and 'Lips the Fish' as reading strategies. I've created scope and sequence documents for the teaching of comprehension skills with minimal consideration to how students might acquire the necessary background knowledge or vocabulary to comprehend the text.

What a learning curve the last few years has been! My moments of self-deprecation have only been salved by the knowledge that I was doing what I knew at the time to be 'best practice' within the system I worked. The majority of my career has been spent in Queensland State Schools. When we know better, we do better - and now Queensland State Schools know better!

The Department of Education (DOE) in Queensland has recently released a position statement[1] on the teaching of reading and an overview of the literature. These documents are a breath of fresh air and light for schools in the Sunshine State. From the front page of the position statement, it is clear that 'contemporary research evidence' is the basis for this

About Think Forward Educators

Think Forward Educators is a community of over 20,000 teachers, school leaders, specialists, parents, and researchers. We advocate for education that allows every child to succeed: Promoting social equity, using the science of learning.

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