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Grattan Institute Report No. 2024-01, February 2024

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We would like to thank the members of Grattan Institute's Project Advisory Committee for their helpful comments, as well as numerous government, university, school-sector and industry participants for their input.

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This report may be cited as: Hunter, J., Stobart, A., and Haywood, A. (2023). *The Reading Guarantee: How to give every child the best chance of success.* Grattan Institute.

ISBN: 978-0-6457978-1-7

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Overview

A fundamental promise of an education system is that almost every child who goes to school will learn how to read. Yet recent evidence shows about one in three Australian school students are not mastering the reading skills they need. Australia is failing these children.

Students from poor families, from regional and rural areas, and Indigenous students tend to face bigger barriers to reading success. But about one in four students from well-off families struggle too.

Decades of disagreement about how to teach reading have contributed to many students missing out on best-practice teaching. For too many students, learning to read well comes down to luck, not design.

Every child we fail to teach to read misses out on a core life skill, and Australia misses out on their potential too. For those students in school today who are hardest hit by poor reading performance, the cost to Australia is about \$40 billion over their lifetimes.

There is no reason our students should perform worse than students in similar countries. England and Ireland, and about 30 US states, have made big policy changes to help schools to teach according to the evidence – with great results. Australia should follow their lead.

The evidence is clear: there should be a strong focus on phonics-based decoding skills in the early years. Students also need a knowledge-rich curriculum to build the vocabulary and background knowledge that are critical for successful reading comprehension all through school. And schools need to track student progress, so they can intervene early to help struggling students to catch-up.

But governments can't leave schools to figure out on their own how to implement these evidence-informed practices. Australia's governments need to get serious about ensuring best practices are used in all schools, so no student falls through the cracks.

Change will not be easy. Getting this right consistently in every one of the nearly 10,000 schools across the country will involve a big shift. It will require many teachers to stop using familiar but less effective practices, and adopt new, more effective, ones.

Australia's governments, and Catholic and independent school sector leaders, should commit to a 10-year 'Reading Guarantee' strategy to meet the reading challenge. The strategy should include six steps.

First, they should commit publicly to ensuring that at least 90 per cent of Australian students learn to read proficiently at school.

Second, they should give schools and teachers specific, practical guidelines on the best way to teach reading.

Third, they should ensure schools have well-sequenced, knowledgerich curriculum materials and effective assessment tools.

Fourth, they should require schools to do universal screening of reading skills and help struggling students to catch-up.

Fifth, they should ensure teachers are equipped to teach according to the evidence through training, new quality-assured micro-credentials, and by creating specialist literacy roles.

And sixth, they should improve system monitoring and accountability by mandating a nationally consistent Year 1 Phonics Screening Check for all students, and strengthen school and principal reviews.

This will require significant investment and political commitment, but the gains will be worth it. If implemented well, Australia would finally deliver on a key promise of schooling: to teach children to read.

Recommendations

Australia's governments, and Catholic and independent school sector leaders, should commit to a 10-year 'Reading Guarantee' strategy, to be reviewed every five years. This should include six key steps:

Step 1: Commit to at least 90 per cent of students becoming proficient readers

- (a) Commit to a long-term goal of at least 90 per cent of students reaching proficiency in reading, as measured by the proportion of students in the 'strong' or 'exceeding' categories in NAPLAN, across Years 3, 5, 7, and 9.
- (b) Commit to a 10-year target of increasing by 15 percentage points the proportion of students across Years 3, 5, 7, and 9 who reach proficiency, based on 2023 state-level NAPLAN data. Averaged across all states, this will require an uplift from 68 per cent in 2023 to 83 per cent in 2033.
- (c) Report on progress on targets, including progress of highachievers and disadvantaged students, through a stand-alone annual report tabled in all Australian parliaments.*1

Step 2: Give teachers and school leaders specific guidelines on how to teach reading according to the evidence

(a) Develop national teaching practice guidelines on reading instruction and catch-up supports through a process led by the Australian Education Research Organisation.*

- (b) Review existing guidance provided to schools and teachers on reading instruction, and ensure advice is consistent and aligned to the evidence.
- (c) Invest \$20 million in education research over five years to strengthen the guidelines by filling research gaps and exploring effective ways to implement best-practice reading instruction in schools.*

Step 3: Ensure schools have the high-quality curriculum materials and assessments teachers need to teach reading well

- (a) Ensure teachers can get quality-assured whole-class curriculum materials and intervention programs for all year levels. As a priority, governments should invest in primary school knowledge-rich materials for the Humanities and Social Sciences (HaSS), Science, and English, and reading intervention programs and assessment tools for students in secondary school.
- (b) Invest in decodable readers for government and low-fee non-government primary and secondary schools, for early reading instruction and intervention support for struggling students.
- (c) Fund disadvantaged low-performing schools, regardless of their sector, through a one-off grant to purchase quality-assured curriculum materials, including evidence-informed reading programs.
- (d) Commit to phasing-out materials, reading programs, and reading assessment tools that are not aligned with the evidence.
- (e) Establish a rigorous, independent, quality-assurance mechanism, similar to the US quality-assurance body EdReports, to continually

^{1.} Recommendations that could be led by the federal government are marked with an asterix (*).

- evaluate and report on the quality of comprehensive curriculum materials available to schools. Reading programs should also be validated, as happens in England.*
- (f) Validate primary and secondary reading assessment tools to ensure schools know which reading assessments are effective.*

Step 4: Require all schools to do universal screening of reading skills and help students falling behind to catch-up

- (a) Require all schools to use evidence-informed reading assessment tools at least twice a year to screen students from Foundation to Year 2, in the transition to secondary school, and for any new school entrants.
- (b) Require all primary and secondary schools to embed a 'response-to-intervention' model, which includes additional catch-up support for students falling behind in reading, according to the best-practice guidelines (see Step 2a).
- (c) Ensure key data are built into student records that are attached to a national Universal Student Identifier (USI), so that students' academic record goes with them when they switch schools.*

Step 5: Ensure teachers have the knowledge and skills they need to teach reading well, through essential training and new quality-assured micro-credentials, and by creating specialist literacy teacher roles

(a) Develop and subsidise quality-assured micro-credentials in evidence-informed reading instruction for teachers, teaching assistants, specialists, and other educators, and provide incentive payments to schools that employ teachers and teaching assistants with these certifications.*

- (b) Require all primary school classroom teachers to spend at least 25 per cent of their professional learning hours for accreditation on quality-assured training on reading instruction.
- (c) Have an independent body quality-assure training in reading instruction, to ensure it is effective and in line with best-practice guidelines (see Step 2a).*
- (d) Coach teachers in reading instruction by creating a Literacy Instructional Specialist role in every school, a Literacy Master Teacher role in every region, and a Literacy Principal Master Teacher for every system.
- (e) Build the specialist supports pipeline by providing university scholarships for specialist roles, such as speech pathology and educational psychology degrees.*
- (f) Establish exemplar demonstration schools to showcase best practice, drawing on the 'English Hubs' model.

Step 6: Encourage best-practice teaching through closer monitoring and strengthened school performance reviews

- (a) Mandate a nationally consistent Year 1 Phonics Screening Check for all students, as a system 'health check' on early reading performance.
- (b) Commit to more frequent and more comprehensive school reviews. Reviews should be done at least every four years, and include a rigorous examination of student achievement, curriculum implementation, and instructional approaches to reading.
- (c) Enhance the performance reviews of school principals by including criteria on implementation of evidence-informed reading practices and assessment protocols, according to the best-practice guidelines (see Step 2a).

Summary of where we are and where we should be

From: situation today

One in three Australian students are poor readers

- Reading underperformance is persistent.
- Two in three disadvantaged students are not reading proficiently.
- Half of regional and remote students are not reading proficiently.

Huge differences in the way reading is taught in classrooms

- How students are taught to read varies significantly across the country, with many students not being taught according to the best evidence.
- Many students are not helped to catch-up if they are falling behind, resulting in some students being years behind their year-level.

Teachers lack the knowledge and skills to teach reading well

- Inadequate pre-service and in-service training on the best way to teach reading.
- · Not enough teachers with expertise in reading to coach other teachers.

School resources are poorly organised

- Different teaching practices between classrooms in a school, undermining development of reading skills as students progress through year-levels.
- Lack of access to and knowledge of which reading assessments, curriculum materials, or reading programs to use.
- · Not enough speech pathologists and educational psychologists.
- · Lack of accountability for poor instructional practice.

System doesn't provide enough support to schools and teachers

- Governments provide inconsistent guidance on reading instruction.
- Under-investment in supports such as guidelines, materials, etc.
- · Lack of accountability for students' poor reading performance.

To: Reading Guarantee

Almost all Australian students are proficient readers

- Proportion of proficient students increases by at least 15 percentage points over 10 years, and reaches 90 per cent in the longer term.
- Gaps between advantaged and disadvantaged students are small.

All students are taught reading according to the best evidence

- Students are taught how to read using a structured literacy approach, including building vocabulary and comprehension all through school.
- Students don't fall through the cracks. All those at risk of falling behind are helped to stay on track in small groups or one-on-one.

Teachers have the knowledge and skills to teach reading well

- Teachers get high-quality in-service training on reading instruction.
- Literacy Instructional Specialists and Literacy Master Teachers coach teachers to hone their teaching of reading across all year levels.

Schools have the resources they need to teach reading well

- Schools take a whole-school approach to reading instruction.
- Access to quality-assured programs, materials, and decodable readers.
- Schools have a 'multi-tiered system of support' (MTSS), with a robust screening approach and intervention supports for struggling students.
- Sufficient speech pathologists and educational psychologists
- Accountability for the quality of instructional practice.

A highly reliable system that gives every student the best chance

- Evidence-based guidelines set clear expectations for instruction.
- Investment in system-level supports, including materials and training.
- Mandatory Yr 1 Phonics Screening Check and stronger school reviews.

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1 Too many Australian students can't read proficiently

Australia has failed to ensure all students finish school with proficient reading skills. One in three students fall short. Even in the highest-achieving states, one in four students are not proficient.

Reading is a foundational skill in and beyond school. Failure to achieve proficiency has real personal costs for children and young people, as well as detrimental effects on schools, the economy, and for society as a whole. We calculate that for those students in school today who are hardest hit by poor reading performance, the cost to Australia is about \$40 billion over their lifetimes.

The good news is that Australia can turn this around. But it won't be easy. Australian governments, and Catholic and independent school sector leaders, must introduce substantial policy reforms to guarantee best practice in every school. Harder still, they must commit to staying the course, resisting the lure of distractions, or shifting priorities when reform gets hard.

1.1 While almost all students can learn to read, too many Australian students are poor readers

A fundamental expectation of our school system is that students will learn to read proficiently (see definition of 'proficient' in Box 1 on the following page). This is an achievable goal.

While learning difficulties or home factors can slow a student's learning to read, almost all students can achieve success if they are provided with enough high-quality teaching and support.² Only a small proportion of students, such as those with significant hearing and visual

impairments, developmental disorders, or language impairments, may not achieve proficiency. Therefore, for the vast majority of students, 'reading failure is unnecessary'.³

Australia has an unacceptably high number of children and adolescents who fail to reach minimum proficiency standards in reading.⁴ According to 2023 NAPLAN results, about one in three Australian students are not meeting grade-level expectations in reading (see Figure 1.1 on page 10).⁵ Australia has too many 'instructional casualties' – students who should read proficiently, but haven't been taught well.

At the same time, not enough Australian students are excelling in reading. According to PISA (the OECD's Programme for International Student Assessment), in 2022 only 12 per cent of Australian students were high performers in reading, compared to 22 per cent in Singapore.⁶

See, for example, J. Torgesen (2004, Table 1), Al Otaiba and D. Fuchs (2006), Mathes and Denton (2002) and Mathes et al (2005). Note acute learning difficulties are outside the scope of this report.

^{3.} As noted by Dr Louisa Moats, a US expert in reading instruction and teacher education: Moats (2020, p. 5). She notes that learning gaps 'are the result of differences in students' opportunities to learn – not their learning abilities'.

^{4.} Not only are too many students not proficient, some don't even have basic reading skills. According to PISA (the OECD's Programme for International Student Assessment), Australia has 21 per cent of 15-year-olds in the very bottom rung of performance, which is higher than similar countries such as Singapore (11 per cent), Ireland (11 per cent), and Canada (18 per cent): Thomson et al (2023, p. 163).

^{5.} The new NAPLAN proficiency bands reveal a problem that has been hidden by the previous minimum standard, which was set far too low: Goss and Sonnemann (2016, pp. 23–24).

^{6.} Thomson et al (2023, p. 164). While our report is focused primarily on meeting proficiency, there is good reason to think that improvements in reading instruction would also boost the proportion of high performers.

1.1.1 Reading under-performance is persistent

According to NAPLAN, reading performance has been mostly stagnant over the past 10 years.

There has been some improvement in reading performance in Years 3 and 5, with Year 3 students in 2022 nearly five months ahead of Year 3 students in 2012, and Year 5 students six months ahead.⁷ But this improvement is too slow. By 2023, 30 per cent of primary school students were still not proficient.

And improvements in primary school have not carried through to high school: Years 7 and 9 NAPLAN results have not significantly improved over time.⁸ In fact, things may be getting worse in high school. NAPLAN data show that in 2021, Year 7 students had only made one-and-a-half years of learning progress in reading, on average, over two years of schooling.⁹ This slowdown in learning progress started well before the COVID-19 pandemic.¹⁰

According to PISA, Australian 15-year olds' reading performance has been going backwards over time. Between 2000 and 2018, the average achievement of Year 10 students in Australia fell by about eight months of learning.¹¹ Between 2018 and 2022, Australia's overall PISA reading result held steady.¹²

- 7. Grattan analysis of ACARA (2022b) using mean achievement.
- 8. Grattan analysis of ACARA (ibid).
- 9. Grattan analysis of ACARA (ibid).
- 10. Grattan analysis of ACARA (ibid).
- 11. Note that due to historical year-level changes, only the Year 10 student sub-sample who make up the majority of students who sit the test has been included. See Ainley et al (2020, p. 216) and Thomson et al (2019, p. 33).
- 12. Between 2009 and 2018, Australia slipped in the international reading rankings from ninth to 16th. While Australia's ranking improved to 12th in 2022, this was due to other countries' worsening performance after the COVID-19 pandemic. See Thomson et al (2023).

Box 1: What does it mean to be a proficient reader?

The Australian Curriculum, Assessment, and Reporting Authority (ACARA) defines proficiency as:

'a challenging but reasonable expectation of student achievement at a year level, with students needing to demonstrate more than elementary skills expected at that year level'.^a

Students who fall short of this benchmark may have gaps in their foundational knowledge and skills, making it harder for them to keep up with their grade.

In 2023, ACARA set new NAPLAN benchmarks.^b Students are proficient if they are in the 'strong' or 'exceeding' categories. Students are not proficient if they are in the 'developing' or 'needs additional support' categories.

The new benchmark is based mainly on what students should have learnt in previous years. The proportion found to be below expectations broadly reflects what international tests set by the OECD, among others, have long told us.

This new benchmark is still achievable. For example, a Year 9 student who just meets the expected proficiency standard for reading is at about the level of the average Year 7 student.^c

- a. ACARA (2022a, p. 6).
- ACARA (2023a). ACARA noted the new achievement levels are set using the professional judgment of panels of expert teachers.
- c. Grattan analysis of ACARA (2023b), using the methodology for determining 'equivalent year levels' from Goss and Emslie (2018).

1.1.2 Reading under-performance is a problem for all states and sectors

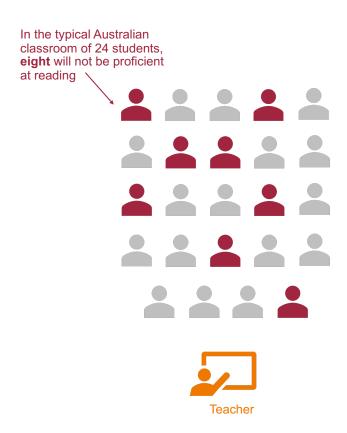
The Northern Territory and Tasmania perform particularly poorly on raw achievement results, but they also have high levels of community disadvantage. Similarly, government schools perform worse than Catholic and independent schools, but they have more students from disadvantaged backgrounds.

Even in the ACT and Victoria, the most socio-economically advantaged jurisdictions, about 25 per cent of students are not proficient at reading.¹³

1.1.3 Disadvantaged students struggle more, but many advantaged students fall behind too

Students from poor families are particularly struggling. In Year 7, students from the most disadvantaged backgrounds are 10 times more likely to have reading skills below the previously-used NAPLAN 'national minimum standard' than students from the most advantaged backgrounds. According to PISA, nearly 60 per cent of low socio-economic status 15-year-old students in Australia are not proficient readers (see Figure 1.2 on the next page). In 2018, this disparity was worse in Australia than in Canada and the UK, and on par with the US.

Figure 1.1: One in three Australian students are not proficient readers
The proportion of Australian Year 3, 5, 7, and 9 students who are **not proficient** in reading, NAPLAN 2023



Notes: Not being proficient includes students who fall within the 'needs additional support' and 'developing' NAPLAN proficiency categories (see Box 1 on the preceding page). Australian primary school classrooms have 24 students on average: OECD (2019).

Source: Grattan analysis of ACARA (2023b).

^{13.} Grattan analysis of ACARA (2023b).

^{14.} Lamb et al (2020, p. 2).

ACARA (2023b, p. 212). Note about 60 per cent of Year 9 students whose parents did not finish high school are not meeting grade-level expectations, according to NAPLAN: Grattan analysis of ACARA (ibid).

^{16.} According to 2018 PISA, about 30 per cent of disadvantaged Australian 15-year-olds were in the lowest rung of performance (below Level 2 on PISA, which is considered far below proficient). In Canada it was 22 per cent, and in the UK 25 per cent. Disadvantaged students are those in the bottom quarter according to PISA's definition of socio-economic status. See Annex B1.2 Results

According to 2023 NAPLAN data, disadvantaged Year 3 students were at least one year behind advantaged students in reading (see Figure 1.3 on the following page). In Year 9, this learning gap is more than five years.¹⁷

And the gap in performance is getting worse. For example, in 2012, students in Year 9 whose parents did not finish school were about 4 years and 7 months behind in reading compared to students whose parents had a university degree. Ten years later, this gap for Year 9 students had widened by about half a year – to 5 years and 2 months of learning.¹⁸ The trend is similar for Year 3 students.

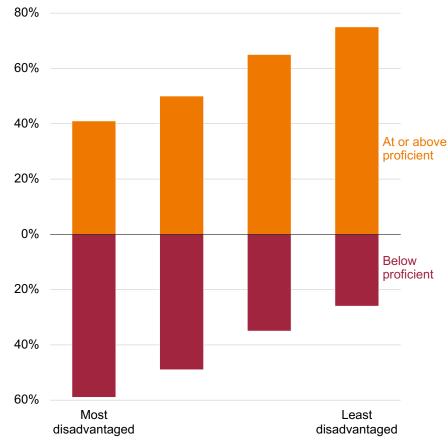
Students living in regional and remote areas, and Indigenous students, consistently perform worse, on average. For example, 2023 NAPLAN data show that more than 50 per cent of regional and remote students were not meeting grade-level expectations in reading (see Figure 1.4 on page 13). For Indigenous students, it was even higher: about 60 per cent in Year 3, and nearly 70 per cent in Year 9.

But many advantaged students are also behind. According to PISA, about one in four 15-year old students from advantaged backgrounds are not proficient.¹⁹

And boys consistently perform worse than girls in reading at school, and this gap widens in high school. On Year 9 NAPLAN, boys are

Figure 1.2: Disadvantaged students perform significantly worse in reading than advantaged students

Proportion of 15-year-old students at each reading performance level, PISA 2022



Notes: 'At or above proficient' includes students who scored in PISA Level 3 or above. 'Below proficient' is considered PISA Level 2 or under.

Source: Grattan analysis of Thomson et al (2023, p. 212).

tables in Thomson et al (2019). Note 2022 disaggregated PISA results by socio-economic background were not available at the time of publication.

^{17.} Grattan analysis of ACARA (2023b).

^{18.} Grattan analysis of ACARA (2022b).

^{19.} According to PISA, 25 per cent of advantaged 15-year-olds in Australia are not proficient readers: Thomson et al (2023, p. 212). According to NAPLAN, about 18 per cent of advantaged Year 9 students – students whose parents completed a bachelor degree or above – are not proficient. The PISA measure for socio-economic status is more robust because it combines a number of indicators, including parental education, parental occupation, and household possessions, whereas for NAPLAN, only parental education levels are used.

more than a year behind girls, on average.²⁰ According to the Progress in International Reading Literacy Study (PIRLS), Australia's reading gender gap is wider than other English-speaking countries. For example, in Year 4, the gap between girls and boys in Australia is nearly three times wider than in the US.²¹

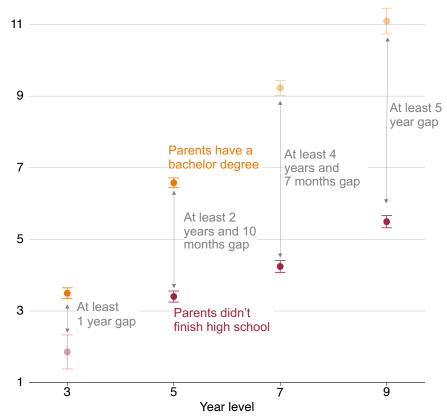
1.1.4 Once students are behind, they tend to stay behind

Gaps in student achievement widen over time.²² This is because successful academic learning involves the continual layering up of new knowledge and skills on a solid foundation, over 13 years of school. Early low-achievers often face an ongoing struggle through their schooling, while initial high-achievers continue to reap rewards from early success. Missing foundational concepts or skills can impede the learning of new skills that build on them. This is often referred to as the 'Matthew Effect', named after a verse from the Book of Matthew in the New Testament that says the rich get richer, while the poor get poorer.²³

For example, students who struggle to master how to decode spelling-sound combinations early on, tend to read fewer words than their peers.²⁴ With less text exposure and limited vocabulary, these students may get less enjoyment from reading, and spend less time practising, so their overall reading development and motivation slows. This can then affect self-confidence and participation in other subjects

Figure 1.3: Disadvantaged students are reading far below their expected reading level, and it gets worse in high school

Equivalent year level of achievement in reading, by parents' education, 2023



Notes: This analyses uses 2023 NAPLAN data and applies Grattan's methodology for determining 'equivalent year levels' – see Goss and Emslie (2018). Values have been estimated from a curve fit through the average achievement of Year 3, 5, 7, and 9 students. The NAPLAN time series reset in 2023, so the curve cannot yet be tested for stability against multiple years of data. The error bars represent a 95 per cent confidence interval of our estimations. Transparent points represent estimates below a Year 3 or above a Year 9 level (i.e. extrapolations from our curve).

Source: Grattan analysis of ACARA (2023b).

^{20.} Grattan analysis of ACARA (2022b).

^{21.} Thomson et al (2017, p. 27). Australia's gender gap is also more than 40 per cent bigger than the gender gap in England.

^{22.} Goss and Sonnemann (2016); and Productivity Commission (2023, p. 67).

^{23.} See further in K. E. Stanovich (1986) and Hanson and Farrell (1995). See also Grattan's previous work on this point: Goss and Sonnemann (2016, p. 22).

^{24.} Cunningham and K. E. Stanovich (1997).

which depend on reading to learn, and they can fall further behind in those subjects as well. 25

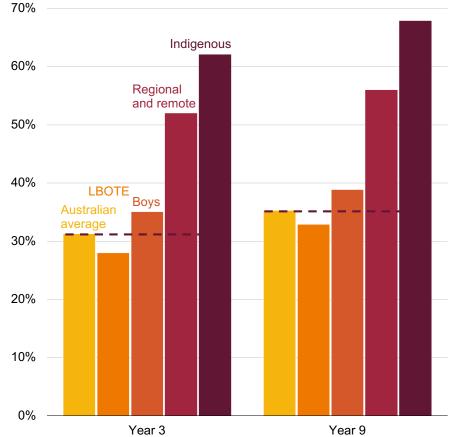
Students from disadvantaged backgrounds are even more at risk of falling behind. At age five, children from disadvantaged areas are four times more likely to have developmentally vulnerable language and cognitive skills, compared to children from the least disadvantaged areas.²⁶ And as they progress through school, disadvantaged students are also less likely to get family support, private tuition, or access to speech pathologists, to help them catch-up.²⁷

If students don't master how to read in early primary school, they will probably begin high school without the ability to read proficiently, making it very difficult for them to engage in their high school education and beyond.

According to 2023 NAPLAN results, at least 92,000 Year 7 students were not meeting grade-level expectations in reading.²⁸ But most high school teachers do not have the training or resources to teach these students the fundamental skills of reading, making it even harder for these students to catch up. If their reading skills are not addressed, these students will struggle throughout high school, and are likely to fall even further behind.

Figure 1.4: Indigenous students, and students living in regional and remote areas, face bigger barriers to reading success

Proportion of students not meeting grade-level expectations, NAPLAN 2023



Notes: LBOTE = Language background other than English. Regional and remote includes all students except those in major cities. Not meeting grade-level expectations means the proportion of students who fall within the 'needs additional support' and 'developing' NAPLAN proficiency categories.

Source: Grattan analysis of ACARA (2023b).

^{25.} K. E. Stanovich (1986) and Cunningham and K. E. Stanovich (1997), as cited in Goss and Sonnemann (2016, p. 22).

^{26.} Australian Early Development Census (2021, p. 33). This is a representative survey of more than 300,000 Australian five-year-olds.

^{27.} Using Household Expenditure Survey data, L. Watson (2008) shows that wealthier households spend double the amount on private tutoring as the average household. That trend is consistent with more recent findings cited by the Ontario Human Rights Commission (2022, p. 106).

^{28.} Grattan analysis of ACARA (2023b).

1.2 Poor reading ability has huge costs

Reading is a foundational skill (see Box 2). When children do not learn to read fluently and efficiently in early primary school, it can undermine their future learning across all subject areas, harm their self-esteem, and limit their life chances. It also imposes huge costs on families, the education system, the economy, and society as a whole.²⁹

1.2.1 Poor reading skills affect many parts of a student's life

At school, poor readers have more difficulty keeping up with grade-level learning. They are more likely to under-achieve academically, disengage, behave poorly, and get suspended.³⁰ They are also more likely to end up in the youth justice system.³¹

Struggling to read can harm a student's wellbeing. As a pediatrician noted in the Ontario Human Rights Commission's 2022 'Right to Read' inquiry report:

I have had a front-row seat to see the emotional distress, mental health disorders such as school avoidance, anxiety, depression, and suicidality, that are a result of unaddressed reading problems at school... Educational level and literacy are social determinants of health and economic outcomes.³²

Poor readers are also more likely to leave school early. A 2011 US longitudinal study of nearly 4,000 students found that those who were not proficient readers in Year 3 were four times more likely to

This report is focused on lifting reading performance. Reading is an essential building block for success in other literacy domains, such as Writing, Spelling, and Grammar, and in other subject areas, such as History, the Arts, Maths, and Science. For example, research suggests reading skills are correlated to performance in Maths and Science.^a

There are several important skills that underpin reading success, such as oral language skills, which are a critical focus of child development in the early years and should be further developed and refined across primary and secondary school.^b While acknowledging the importance of these skills, they are not the focus of this report.

There are also other barriers to improving student academic performance, such as poor school attendance, and factors outside the control of the school system, such as social disadvantage, and/or lack of parental support. To ensure all students can meet their full potential, these barriers should be addressed, but they are outside the scope of this report.

Box 2: Why focus on reading?

a. Akbasli et al (2016).

b. Snow (2016); and Snow (2021).

^{29.} NSW CESE (2016).

^{30.} See for example L. J. Graham et al (2020), Castles et al (2018), Cunningham and K. E. Stanovich (1997), L. Graham et al (2020), Arnold et al (2005) and Arcia (2006).

^{31.} Snow (2019).

^{32.} Ontario Human Rights Commission (2022, p. 6).

subsequently drop out of school.³³ And students who did not master even the basics of reading were six times more likely to drop out.

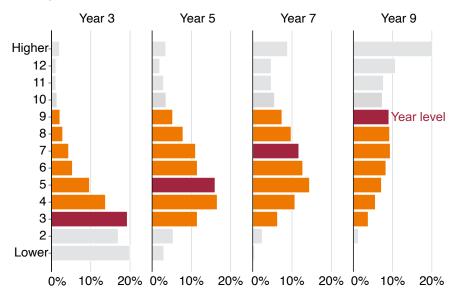
Young people who do not finish high school in Australia earn, on average, about 13 per cent less over their lifetimes, and are more likely to be unemployed.³⁴ This is particularly concerning given Jobs and Skills Australia estimates that nine out of 10 new roles over the next five years will require some form of post-school education.³⁵

Poor reading also affects families. Parents of poor readers can spend enormous sums on private tutoring.³⁶ If their child is struggling, parents may also need to pay for additional clinical assessments, technology, and mental health counselling.³⁷ Some parents even report giving up or changing their job to support their child with school.³⁸

1.2.2 Poor reading puts pressure on the whole education system

Teachers have a tough job when students in their classroom have vastly different reading skills. Analysis of 2022 NAPLAN data shows the spread in reading skills is very wide (see Figure 1.5). In fact, Australia has the eighth highest spread between low performers and high performers in PISA-participating countries – sitting behind the

Figure 1.5: Students' reading skills vary widely within each year level Proportion of Australian students performing at equivalent year levels for reading, 2022



Notes: Equivalent year levels is the cohort average for non-Indigenous metropolitan students over 2010 to 2017, using Grattan methodology from Goss and Emslie (2018). Values for Years 4, 6, and 8 have been estimated from a curve fit through the average achievement of Year 3, 5, 7, and 9 students. Grey bars represent equivalent achievement estimated below Year 3 and above Year 9.

Source: Grattan analysis of ACARA (2022b).

^{33.} Hernandez (2011). This translates to 16 per cent of students who are not proficient in Year 3 do not finish high school.

^{34.} Lamb and Huo (2017) estimate the lifetime fiscal and social costs to an individual who doesn't finish high school in Australia are estimated to be \$1 million. The effect on employment is discussed in more detail by the Productivity Commission (2023, p. 54).

^{35.} Jobs and Skills Australia (2023). The 2023 Intergenerational Report also shows that the proportion of jobs needing a bachelor degree or above has risen from 20 per cent in 1966 to 34 per cent in 2021: Treasury (2023, p. 75).

^{36.} One estimate suggests it could be up to \$20,000 a year: Juanola (2019). This is likely to vary depending on students' school year level.

^{37.} Ontario Human Rights Commission (2022, p. 105).

^{38.} Ibid (pp. 105-106).

United Arab Emirates, Israel, the Netherlands, Malta, Norway, the US, and Sweden (see Figure 1.6).

Poor reading performance may also make managing classroom behaviour more difficult for teachers. A 2019 Dutch study of about 600 students and 70 teachers found students with poor reading skills tended to have worse behaviour, and teachers were able to improve behaviour by providing high-quality reading instruction.³⁹

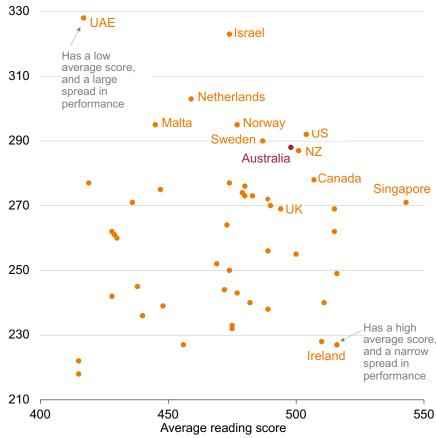
1.2.3 Poor reading is costing Australia

Poor reading skills at school lead to poor literacy in adult life.⁴⁰ The 2012 OECD Survey of Adult Skills found that about 40 per cent of working-aged Australian adults were not proficient readers, and about 13 per cent were functionally illiterate.⁴¹

The Business Council of Australia has raised concerns about the literacy skills of employees.⁴² A 2013 Australian Industry Group survey found 93 per cent of Australian employers identified low levels

Figure 1.6: Australia has more unequal reading performance than many other high-performing countries

Difference in PISA reading score between 10th and 90th percentile, OECD countries, 2022



Source: Grattan analysis of Thomson et al (2023, p. 162).

^{39.} Brokamp et al (2016). Another study also concluded that behaviour could be improved by improving students' reading: Morgan et al (2008). But note that another paper suggests this link may be over-estimated: Elies et al (2021).

^{40.} House of Representatives Standing Committee on Employment, Education and Training (2022).

^{41.} OECD (2012). This is lower than New Zealand, but higher than Canada, the UK, and the US. This is the most recent data available on adult literacy in Australia. The sample includes all working-aged Australians, including migrants with a non-English speaking background. Functionally illiterate refers to adults scoring Level 1 or below proficiency in literacy.

^{42.} See for example, Ittimani (2023) and Hare (2023). The BCA noted in 2022: 'With higher-level skills increasingly the key to securing well-paid jobs, we can't allow educational gaps to persist and turn into an unbridgeable divide between haves and have-nots... An underlying challenge is to ensure young people complete their schooling and leave with proficiency in foundational skills, including English [and] reading': Business Council of Australia (2022, p. 5).

of literacy and numeracy as having an effect on their business.⁴³ This included poor completion of workplace documents (42 per cent), material errors and wastage (32 per cent), and teamwork and communication problems (28 per cent).⁴⁴

Grattan Institute calculates that for those students in school today who are hardest hit by poor reading performance, the cost to Australia is about \$40 billion over their lifetimes (see Appendix A for methodology). Not only do students lose out on potential earnings, governments also lose out on tax revenue, and spend more on welfare, justice, and public health. 46

In fact, the cost is probably even greater, because our calculations don't account for broader economic costs of poor reading on, for example, workforce productivity and economic growth.⁴⁷

1.3 Australian governments face big barriers to change

Australian governments and Catholic and independent school sector leaders are not doing enough to address Australia's reading performance problem. While learning how to read is achievable for almost all students, the challenge is ensuring every school is providing high-quality teaching of reading according to the evidence on what works best.

43. Australian Industry Group (2013). The survey covered companies in industries including manufacturing, services, construction, and mining.

Governments and sector leaders should not underestimate the size of this challenge, given it is often hard for a single school to change practice, let alone a whole system.

First, there is the challenge of priority. Governments have shown too little ambition to lift reading performance. Yet there is no good reason why Australia couldn't perform as well as – or even better than – comparable countries.

Second, there is the challenge of accepting the evidence about the best way to teach reading. The ACT and Victorian governments, as well as many Catholic archdiocese and independent schools, need to catchup to other systems that are taking the evidence about how to teach reading seriously. Otherwise education departments and sectors risk leaving schools to make their own decisions based on limited advice, or giving mixed messages to schools about how they should be teaching reading.

Third, there is the challenge of scale. Governments are responsible for a large number of schools, teachers, non-teaching staff, and students spread out over a vast geography – from large schools in cities to small schools in regional and remote communities. For example, the NSW government manages more than 2,000 schools and more than 95,000 teachers and other staff, and educates nearly 800,000 students at any one time. No government has adequately grappled with this complexity to ensure all schools and teachers get the support they need.

Ensuring school leaders, teachers, and staff have the right training and supports to deliver best-practice reading instruction is made even more challenging by the churn of principals, staff, and students at schools, particularly in regional and remote areas.

^{44.} Australian Industry Group (2016, p. 17).

^{45.} This estimates the cost of students dropping out of school due to poor reading performance, and is based on the whole school population – from Foundation to Year 12.

^{46.} Lamb and Huo (2017).

^{47.} OECD (2010); Hanushek and Woessmann (2012); NSW CESE (2016, p. 9); Deloitte Access Economics (2016); and Productivity Commission (2023).

^{48.} NSW Department of Education (2023a); and ABS (2022).

Fourth, there is the challenge of high levels of school autonomy. Most education system leaders in Australia take a relatively 'hands-off' approach to managing instructional practices in schools. Australia has very few clearly enforced mandatory instructional requirements on schools. Governments in Australia also tend to have a limited understanding of what's happening inside the classrooms of their schools.

Fifth, there is the challenge of system accountability. Governments and Catholic sector leaders are responsible both for operating schools and for holding themselves – as a system – to account for performance. Unlike in the UK, or in other sectors in Australia such as early childhood education and aged care, there is no independent inspectorate to ensure schools are meeting expectations.

The following chapters outline the urgent work governments need to do to overcome these barriers and get implementation right, to ensure all Australian students learn how to read proficiently.

2 The evidence on how to teach reading is clear

Evidence-informed reading instruction involves teaching students how to decode words in the early years of primary school, building increasingly sophisticated reading comprehension skills all through school, and keeping a close eye on student progress to catch any students who fall behind.⁴⁹

A coordinated, whole-school approach to teaching reading is needed to ensure all students learn to read successfully. Schools need teachers trained in how to teach reading according to the robust evidence. They need carefully sequenced, high-quality curriculum materials all through school to develop students' background knowledge and sophisticated vocabulary. And they need a systematic approach to monitoring student progress so those who are falling behind can be identified and helped.

It is difficult for a school to do this well on its own, although some are managing to defy the odds. School system leaders need to step up and support schools to deliver best-practice reading instruction so that whether a child is taught how to read proficiently isn't left to chance.

2.1 Becoming a proficient English reader is a complex task

The goal of reading is to extract meaning from text.⁵⁰ Reading is not an innate skill that can be acquired effortlessly by most at an early age, unlike spoken language.⁵¹ It is not 'biologically primary', like learning to talk and walk.⁵² Box 3 gives a short example of the complexity of reading.

Box 3: Reading is complex

Reading requires us to complete a range of mental operations at the same time. This makes it particularly difficult for beginning readers. Consider these sentences from Castles et al (2018):^a

Denise was stuck in a jam. She was worried what her boss would say.

Although these two sentences appear simple, the process of deriving meaning from them is not. Firstly, we need to identify the individual words and distinguish them from other words we know. For example, the word *jam* looks similar to both *jar* and *ham*, and the word *stuck* is similar to *stick* and *truck*. We also need to identify words that are unfamiliar, such as *Denise*, and more complex words such as *worried*.

Beyond identifying the words, we need to understand their meaning within the specific context. For example, in this context *jam* refers to a traffic jam, not a condiment for toast. We need to make connections between the sentences to understand that *she* and *her* both refer to *Denise*.

Even though the sentences are short, we need to bring significant background knowledge to them as a reader to understand and infer their meaning. We can infer that Denise is probably on her way to work and stuck in heavy traffic, possibly in a car or on a bus. We could wonder whether Denise has already been late several times this week. Is she late for an important meeting? Does her boss have a short temper? We don't know, of course, but these interpretations are all possible.

^{49.} Given the extensive evidence on reading, this chapter provides only a high-level summary to illustrate the key features of evidence-informed reading instruction.

^{50.} See Box 1 in Castles et al (2018) for definition and examples.

^{51.} Geary (2008); and Sweller (2008).

^{52.} Geary (2008); and Sweller (2008).

a. This text has been adapted for brevity from Box 1 in Castles et al (2018).

English writing (orthography) is an imperfect code for spoken language. It was developed over hundreds of years, and has multiple roots. Unlike Italian, Spanish, and Finnish, English orthography is not completely transparent.⁵³

The English alphabet has 26 letters to represent 44 spoken sounds. Students need to crack the English code by learning specific letter combinations (graphemes) that represent spoken sounds (phonemes). For example, 'blue' and 'do' have the same vowel sound but different spellings. This can make the English orthography appear random, but it is not. It is governed by rules and patterns.

English also contains many more words than many other languages, including words with small, subtle differences in meaning, such as 'angered', 'humiliated', and 'aggrieved'. This gives English remarkable precision, but also means students need to know more words to be proficient readers.

Therefore, Australian students need about three years of high-quality reading instruction, on average, to learn to decode, unlike students learning transparent orthographies, who need less than one year.⁵⁴ Given this complexity, it is important that all students in Australia get high-quality teaching of reading.

Learning to read proficiently requires word decoding and language comprehension. These are encompassed in the 'Simple View of Reading'.⁵⁵

Decoding is the ability to accurately map print and speech to each other to read unfamiliar words. As word recognition becomes more automatic over time, it can seem as if students are reading 'by sight'. The brain is still processing letters, but for words that are orthographically mapped and stored in long-term memory, the connections between sounds and letters occurs rapidly and unconsciously. This allows decoding to give way to word recognition and reading to become more fluent and automatic over time.⁵⁶

Language comprehension provides the ability to understand the meaning of written text. It consists of vocabulary, knowledge of language structure (e.g., syntax), and background knowledge. To read proficiently, both decoding and language comprehension skills are needed.⁵⁷

While this framework may be simple, it does not mean that reading is simple, or that it is easy to teach. Teaching reading according to this framework requires high levels of teacher knowledge and skill.

Research on reading has also shown there are six key sub-skills needed for proficient reading:

^{2.2} Teaching students how to read involves several steps

^{53.} Even though English has an imperfect code, learning the sound correspondences of letters (i.e., phonics) can still take a student a long way. For example, more than 80 per cent of words with one syllable follow a regular letter-sound pattern, and if not, a partial decoding can help, as noted in Castles et al (2018).

^{54.} Kendeou et al (2013). Seymour et al (2003) estimate that students learning to read in English need two-and-a-half years or more to do simple decoding, whereas for most European languages, students reach this milestone within a year.

^{55.} Gough and Tunmer (1986). The Simple of View of Reading formed the backbone of recommendations in the UK's Independent Review of the Teaching of Early Reading: Rose (2006).

^{56.} Ehri (2014) and Moats (2020).

^{57.} For example, a 2019 Norwegian longitudinal study of 200 students found decoding and language comprehension skills explained almost 99.7 per cent of the variance in reading comprehension among 7-year-old students: Hjetland et al (2019).

- Oral language speaking and listening skills and the mental representations that sit behind them – is learnt naturally and is the foundation for early reading success.⁵⁸
- 2. Phonemic awareness is identifying speech sounds in spoken language, such as the three sounds in the word 'cat': /c/ /a/ /t/. This is a critical precursor to early reading success, because it prepares students to connect sounds with letters.⁵⁹
- Phonics is connecting speech sounds with letters to decode words. It enables students to approach unfamiliar words and sound them out.
- 4. Fluency is recognising words quickly and accurately, and reading them with the right expression. Poor fluency prevents the reader from being able to pay attention to the meaning of the text.
- Vocabulary is knowing the meaning of words in isolation and in context. Learning vocabulary is understanding the meaning of words when listening, speaking, reading, and writing.
- **6. Comprehension** is the ability to understand what is being read, remembering it, and communicating it to others.⁶⁰

58. Snow (2021); Snow (2016); and Nation and Snowling (2004).

Strong and well-established evidence also shows that adopting a 'multi-tiered system of support' (MTSS) is an effective way to ensure all students stay on track with their learning. For reading, this requires a whole-school approach to instruction, with high-quality classroom instruction, universal screening of students' reading ability, extra help for students who need more practice, and continuous monitoring of student progress. This is discussed in more detail in Section 2.5 on page 28.

2.3 Classroom teaching needs to be explicit and systematic

A 'structured literacy' approach to teaching reading is best.⁶³ It draws on decades of research evidence, including cognitive science, by explicitly and systematically teaching students the key sub-skills needed for reading, including phonics knowledge (as discussed in the previous section).

Because learning to read is *not* a natural (or 'biologically primary') process, students should be explicitly taught how to read.⁶⁴ This is done by clearly explaining, demonstrating, and guiding students to develop their skills, and providing ongoing feedback and support.⁶⁵

^{59.} The related term 'phonological awareness' is an umbrella concept that includes phonemic awareness. Phonological awareness also includes larger segments of spoken words, such as syllables and rhymes. See Bell et al (2023, pp. 99–100).

^{60.} These key sub-skills are known as the 'Big 5' or 'Big 6'. In 2000, the US National Reading Panel analysed more than 100,000 studies on how students learn to read, concluding that phonemic awareness, phonics, fluency, vocabulary, and comprehension – the 'Big 5' – are critical for reading success. Inquiries in Australia and England confirmed these findings: Rowe (2005) and Rose (2006). More recent studies have also included oral language, to make it the 'Big 6'. See, for example, Konza (2014) and Snow (2021). NSW CESE (2017a) and AERO (2023a) also provide a summary of the sub-skills for reading.

^{61.} This model involves an integrated set of whole-school practices to improve academic results and student behaviour. See Fletcher and Vaughn (2009), National Center on Response to Intervention (2010), Hempenstall (2012), Hempenstall (2013), D. Fuchs and L. S. Fuchs (2017), Haan (2021), Sailor et al (2021) and Bruin and K. Stocker (2021).

^{62.} AERO (2023b).

^{63.} United States National Reading Panel (2000). See, for example, some major systematic reviews and meta-analyses that support phonics instruction and intervention: Ehri et al (2001), Camilli et al (2003), Camilli et al (2006), Torgerson et al (2006), Suggate (2010), Adesope et al (2011), Galuschka et al (2014), Suggate (2016), McArthur et al (2018) and Peng et al (2023). Systematic reviews and meta-analyses are considered gold standard for critiquing and summarising the best available evidence.

^{64.} Clark et al (2012); NSW CESE (2017b); Moats (2020); and AERO (2023c).

^{65.} Buckingham et al (2013, p. 22).

Teaching should also be systematic. This means students learn sequentially, with increasingly complex concepts introduced and practiced over time. Knowledge should be layered, starting with simple consonants and vowel sounds and combinations, and building up from there. If students are taught in an unsystematic, unstructured way, as occurs in the so-called 'balanced literacy' approach, ⁶⁶ they risk missing concepts and/or being cognitively overloaded. ⁶⁷

While the evidence on how best to teach reading is robust, decades of debate about the evidence has added an unhelpful layer of complexity for schools (see Box 4 on the next page; see also common myths about the evidence in Table 2.1).

It can be hard for school leaders and teachers to distinguish between teaching approaches that are evidence-informed and those that are not. Despite a national Australian inquiry in 2005 clearly setting out the evidence and providing recommendations to government on how to ensure reading is taught well, the 'reading wars' slowed the uptake of evidence-informed reading instruction across Australia.⁶⁸

2.4 Schools need to carefully sequence learning across year levels and subjects

Primary school

Children need to master the foundational mechanics of reading in the early years of school so they can sound out unfamiliar words they see on the page and, over time, store these in their long-term memory for increasingly fluent reading.

66. Snow (2020).

To teach this well, schools need to adopt a systematic phonics sequence or program, starting in Foundation, which follows a careful learning progression and provides lots of deliberate opportunities for practice. ⁶⁹ Students from low socio-economic backgrounds can particularly benefit from being taught using phonics. ⁷⁰ The use of 'decodable' texts or books can help students to practice their phonics skills. ⁷¹ Decodable texts are like training wheels on a bike, and by the end of Year 2 most students should no longer need them. ⁷²

Getting instruction in these early years right is crucial because many students who struggle with reading have difficulties with decoding when they encounter unfamiliar words.⁷³ Therefore, without explicit teaching and lots of practice in phonemic awareness and phonics, many students are at risk of falling behind. When done well, this approach to learning to read is engaging and fun for students.

Cognitive load theory shows our brains can only process so much information at one time. For a summary of the evidence, see NSW CESE (2017b). See also AERO (2023d).

^{68.} Box 5 on page 25 shows how reading instruction can vary significantly depending on the approach taken at a school.

^{69.} Evidence shows students perform better if they begin to learn phonics in Foundation and Year 1 than if they begin to learn phonics after Year 1: United States National Reading Panel (2000, pp. 2–133).

^{70.} See Johnston and J. E. Watson (2005), who found that children from disadvantaged backgrounds performed as well as their peers if taught a synthetic phonics program up until Year 7.

^{71.} Decodable texts are books that match the sequence of letter-sound combinations students are learning. For example, after learning the / s / a / t / i / p / n / sounds, students can read books with a character called 'Stan' who 'taps' a 'tin'. See Section 1.4.2.3 in Castles et al (2018). These books can be interesting and culturally appropriate, see for example: SPELD (n.d.).

Mesmer (2005). While decodable texts are useful for practicing decoding skills, students should also be exposed to other types of literature, through, for example, class read-alouds.

^{73.} For example, a 2019 study of nearly 400 struggling fourth grade readers in the US found that inability to decode words accounted for up to 15 per cent of the variance in reading comprehension skills: Kang and Shin (2019). A 2014 study of more than 400,000 students in Years 1, 2, and 3 found that if a students' decoding and vocabulary skills developed normally, fewer than 1 per cent of students had problems with reading comprehension: Spencer et al (2014).

Box 4: The 'reading wars'

How to teach children to read has been hotly debated over the past 50 years across the English-speaking world, so much so that this debate has been dubbed the 'reading wars'.^a The debate has largely been between taking a 'whole-language approach' versus a 'structured literacy approach', often referred to as the 'phonics approach'.

The whole-language approach – popularised in the 1970s – follows the idea that learning to read is a natural, unconscious process.^b Teachers use 'predictable' or 'levelled' texts to build students' skills, and meaning cues (such as three-cueing), where pictures and context help students arrive at (in many cases, guess) the right word.^c

While this approach works for some, it doesn't work for *all* students.^d For example, some students can quickly become overwhelmed by how many words they need to memorise. This is problematic because reading is a language-based task, not a visual one.^e

Structured literacy, on the other hand, is supported by a large and robust body of evidence. Decades of research – including robust systematic reviews of the evidence, meta-analyses, and other empirical studies – was examined in major reports in the US, England, and Australia between 2000 and 2006, and they all came to the same

conclusion: a structured literacy approach was the best way to teach children how to read.^f Two decades of further research since have confirmed and consolidated the findings of these landmark reports.^g

A broad scientific consensus has been established about how children learn to read, what causes reading difficulty, what the essential components of effective reading instruction are, why they are important, and how to prevent or reduce reading difficulties (as set out in Section 2.2 on page 20).^h

In the early 2000s, the 'balanced literacy' approach emerged as a compromised position after three national inquiries dismissed whole language instruction; its proponents argue it draws on both sides of the reading debate. But because it takes a light-touch approach to teaching phonics and phonemic awareness, contrary to scientific recommendations, balanced literacy is not considered as effective for all students.

While there is now an established scientific consensus about the evidence, having this accepted and implemented reliably in classrooms across Australia remains a key challenge.

- a. Castles et al (2018); and K. Stanovich and P. Stanovich (1995).
- b. Snow (2016).
- c. For example, three-cueing involves teachers asking students to follow three cues: 'Does it make sense?' 'Does it sound right?' 'Does it look right?' See Hempenstall (2003).
- d. See Section 2.2 on page 20 and Section 2.3 on page 21.
- e. Learning whole words from sight would require memorising tens of thousands of individual printed words. Teaching some common sight words is fine such as 'the' and 'or', and evidence shows this does not interfere with phonics knowledge: Section 1.4.2.2 Castles et al (2018).
- f. United States National Reading Panel (2000); Rowe (2005); and Rose (2006).
- g. Moats (2020, p. 4). Respected education research bodies such as the Education Endowment Foundation in the UK, What Works Clearinghouse in the US, and Evidence for Learning, and the Australian Education Research Organisation (AERO) in Australia have all endorsed the consensus view. See Foorman et al (2016), Breadmore et al (2019), Evidence for Learning (2020a), Evidence for Learning (2020b), Evidence for Learning (2020c) and AERO (2023e).
- h. Moats (2020, p. 4).
- i. Snow (2016, p. 223).
- j. Snow (ibid). See also Section 2.2 on page 20 and Section 2.3 on page 21.

Table 2.1: Debunking common myths about reading

Myth	Fact
English is too irregular, so it is not worth teaching phonics.	English does not have a truly transparent orthography like Italian or Spanish, but it is still rule-governed and has patterns. Teaching these rules and patterns explicitly to students makes decoding unfamiliar words much easier.
Some students just learn to decode naturally, so we shouldn't bother teaching phonics to all students.	Given the high costs of intervention support for students who struggle with reading, it is most efficient for teachers to systematically teach all students how to decode from the outset. A typical student may only need to see a word a few times to automatically read it. Students with dyslexia need to see a word many more times. Learning how to decode will help many students and harm none. For those students who pick up decoding quickly, they can move onto more challenging texts for independent practice.
Structured literacy does not give students enough opportunities to read rich, authentic texts.	While much of the debate focuses on phonics, structured literacy is an integrated approach that includes many opportunities every week for students to read (or have read to them) complex, rich texts. For beginning readers, as well as reading decodable texts for independent practice, rich texts should be read together, led by the teacher, so all students are exposed to new and more complex vocabulary, sentence structure, non-literal language, and background knowledge. See Churchill Primary School's approach in Box 5 and Appendix B on how this integrated approach works in practice.
We want to teach students to comprehend text, so that is where we should start.	Comprehension is the product of both decoding and language comprehension. Decoding skills are a key step towards reading comprehension. Decoding practice need not take too long — students normally work through a phonics sequence within the first years of schooling with short sessions of phonics instruction. This builds key skills that ensure greater automaticity in their word recognition and fluency in their reading, which both support their ability to comprehend the meaning of what they read.
Structured literacy does not give students enough choice over what they read and it 'kills a love of reading'.	This myth reflects the confusion around how decodable books are best used. Decodable books are used only for a specific purpose: to help students practice their decoding skills. Once students have mastered enough of the alphabetic code, including through opportunities to practice using decodable books, they should move onto – and can be encouraged to choose from – a wider variety of books. This focus on foundational decoding skills is also more likely to instill a love of reading in students. Strong reading skills in the early years leads to greater reading enjoyment.

Sources: Gough and Tunmer (1986), Recht and Leslie (1988), Lyon (2002), Solity and Vousden (2009), Hempenstall (2013), He and Tong (2017), Castles et al (2018) and Bergen et al (2023).

Box 5: Churchill Primary School's big switch to a structured approach to teaching reading

At Churchill Primary – a small regional Victorian school serving a low socio-economic community – the switch to a structured reading approach was not easy, but has been a big success.

Previously, the school followed a whole-language approach to teaching reading, using Lucy Calkin's 'Readers Workshop Model' for their daily one-hour reading class. Classes focused on reading strategies – such as three-cueing or visualising while reading – and students were given a lot of independent reading time, even when they could not yet read. Decoding was not taught systematically or explicitly. While struggling students completed Reading Recovery intervention five times a week, this did not connect to what happened in class.

With so much independent reading time, students were disruptive and classes sometimes 'chaotic', the principal told us. NAPLAN results were consistently poor, and struggling students were not catching up.

In 2017, the principal introduced a school-wide, structured literacy approach. Now lessons look very different. Teaching is fast paced, engaging, and explicit — teachers break down the learning, model each step, and check every two minutes whether students grasp the content (e.g. through questioning and mini-whiteboards). Teachers now use this explicit approach to teach all the key reading sub-skills. In Foundation, teachers follow a systematic sequence, with students learning one or two sound-and-letter combinations a week. Students then practise at home using decodable texts.

Students also get plenty of opportunities to read more complex texts together. Students study a new book every week or two, with the teacher reading and re-reading it aloud, building oral language through rich class discussions, teaching new vocabulary, building background knowledge, and using comprehension strategies (e.g. making inferences). Older students also study a novel every term.

All students are screened upon arrival, and struggling students are identified (see Appendix B for detail). In junior years, a literacy specialist supervises trained teaching assistants to support about 25 students in small groups four times a week, following the MiniLit Sage and MacqLit programs. Students are grouped based on their decoding ability, and are assessed fortnightly to adjust groups for each student's progress. In upper primary, students are placed in targeted groups during class time. A speech therapist provides one-on-one twice-weekly support for four students with language disorders.

This was a huge shift in teaching practice for all staff. It required significant investment. The school bought decodable texts, developed its own detailed scope and sequence and lesson slides, and sent every staff member to the five-day Orton Gillingham instructional training. As the principal told us:

We needed to build our teachers' knowledge of how children learn to read, and make some big decisions to abandon things that teachers had been doing for 10-to-15 years. Not only were we learning new things, but we were unlearning things we'd previously been taught.

Results came quickly. In 2016, almost half of the Year 3 students and 65 per cent of Year 5 students did not meet national minimum standards in reading. By 2021, no student performed below this standard for reading, and Year 3 students did better than the state average. Today, fewer students receive catch-up support, because fewer students need it. And student behaviour has also improved — within three years there had been a 70 per cent reduction in students being sent out of class for poor behaviour.

The change required was huge, but as the principal told us: 'Probably our only regret is that we didn't know more about this sooner – because if we had, we could have helped more kids.'

Students should typically move on from learning to decode in the early years of school, but these skills set them up for the rest of school and life, where they will continue to come across unfamiliar words.

Once students have mastered decoding and word recognition, they can then focus more mental energy on identifying the meaning of the text – the ultimate purpose of reading. This involves teaching students strategies for developing and monitoring reading comprehension skills, including activating prior knowledge, questioning, summarising, and making inferences.⁷⁴

Students should also be supported to develop a rich bank of vocabulary and background knowledge so they can understand what they read, not just be able to say the words aloud (see Box 6).⁷⁵ Teachers should also do whole-class read-alouds using a variety of fiction and non-fiction texts (see Box 7 on the following page).⁷⁶ This gives students an important opportunity to develop their language comprehension skills while they are mastering decoding.

Read-alouds allow teachers to model good oral expression, and help build students' oral language skills, which begin developing in the preschool years. The more sophisticated the oral language skills a student has, the more likely they are to be able to read proficiently, provided they are exposed to high-quality reading instruction.⁷⁷

Box 6: Strong vocabulary and background knowledge are critical for good reading comprehension

Having knowledge about a particular topic helps readers to understand the meaning of words on that topic more easily. For example, a 1988 US study of 64 grade seven and eight students asked each student to comprehend a 625 word text about a half inning of a baseball game.^a They were asked to read, for example:

'Churniak swings and hits a slow bouncing ball toward the shortstop. Haley comes in, fields it, and throws to first, but too late.'

Knowledge of baseball was the key ingredient for effective reading comprehension. Students with knowledge about baseball, whether they were good readers or poor readers, performed best. Without background knowledge on a topic, students can struggle to comprehend the meaning of a text.

Schools can build students' background knowledge by using a sequenced, knowledge-rich curriculum. A 2023 US longitudinal study of 2,000 students found students who received a content-rich, knowledge-building curriculum for at least four years, beginning in Kindergarten (the first year of school), performed significantly better on Grade 3 reading comprehension tests than those who didn't.^b A knowledge-rich curriculum is particularly important for disadvantaged students, who are less likely to be exposed to a wide range of topics outside of school.^c

^{74.} Evidence for Learning (2020a, Recommendation 4).

^{75.} R. Smith et al (2021). See also AERO (2023f), which notes that 'knowledge is central to learning'.

^{76.} D. L. Baker et al (2020). Students at this level should build both Tier 1 and Tier 2 vocabulary. Tier 1 vocabulary includes common words such as 'dog' and 'happy', and Tier 2 vocabulary are words which students are unlikely to encounter in their day-to-day conversations, such as 'authority' and 'establish'. See Evidence for Learning (2020c).

^{77.} Snow (2021).

a. Recht and Leslie (1988).

Grissmer et al (2023). This paper, by researchers from The Annenberg Institute at Brown University, has not yet been peer reviewed or published.

c. See for example: Kosmoski et al (1990) and Hirsch (2006).

Eventually, reading is no longer a stand-alone subject, but becomes embedded across a wide range of subjects, from History to Science to the Arts.

Secondary school

By the start of secondary school, students should have mastered decoding, developed strong comprehension skills, and built a large vocabulary and knowledge across different subjects. Secondary school builds on this by further developing fluency, comprehension, and more sophisticated vocabulary, for example, 'photosynthesis' in Science and 'latitude' in Geography.⁷⁸

Secondary students should also be required to comprehend increasingly complex academic texts, drawing on their existing subject knowledge and reading strategies to improve their understanding. ⁷⁹ See Box 7 for an example of how Star Academies, a network of 35 schools across England, use a knowledge-rich curriculum to build students' vocabulary and have implemented daily read-alouds in their secondary schools to improve students' fluency and increase their exposure to great literature.

If students haven't mastered decoding or developed sufficient fluency by the start of secondary school, they should be given additional support to catch-up, otherwise they risk not being able to access the curriculum throughout high-school.

Teaching reading well all through school takes significant time, effort, and expertise. Box 5 on page 25 illustrates the work required for one Australian primary school to shift to an evidence-informed approach to teaching reading.

Box 7: Star Academies deliberately builds students' background knowledge and reading fluency

Star Academies – a network of 35 schools across England – focuses on building student vocabulary and background knowledge all through school. The curriculum is carefully planned so students accumulate deep disciplinary knowledge over several years and can then tackle increasingly challenging topics and tasks. Part of this planning involves building students' vocabulary over time across different subjects, such as 'diffraction' and 'electron' in Physics. Students are taught vocabulary explicitly, and revise it regularly using the adaptive app ReadingWise.

Since 2022, Star has also implemented daily whole-class read-alouds, to develop students' reading fluency and to broaden their horizons. As one leader told Grattan Institute: 'We wanted to expose more pupils to great literature. Without a strategy, disadvantaged students won't get there.'

All Year 7-to-10 home group sessions start with a 20-minute read-aloud, where the teacher or a proficient reader in the class reads a book aloud, stopping to unpack unfamiliar vocabulary and discuss key themes. All students in a year level read the same books, covering eight books a year and 24 books by graduation.

Schools choose the best books for their students from a network-wide list, including titles such as *Jane Eyre* or *A Tale of Two Cities*. These books are carefully selected to be complex but enjoyable to read, and so build students' love of literature.

Early results are promising. Average reading fluency proficiency for Star's secondary students has improved by 5 percentage points in 7.5 months (from 68 per cent to 73 per cent).^a

^{78.} These are known as Tier 3 words. See Recommendation 2 in Evidence for Learning (2020c) for an explanation of effective vocabulary instruction in secondary school.

^{79.} Ibid.

a. As measured by the New Group Reading Test.

2.5 Schools need to regularly assess their students' reading skills

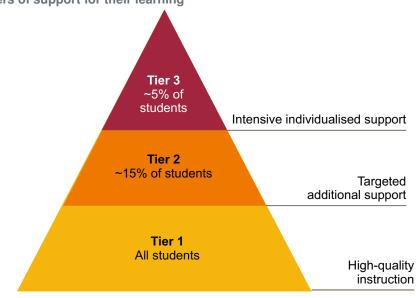
As part of the multi-tiered system of support (MTSS) model, schools should implement a response-to-intervention approach which provides different tiers of support to students, based on their needs (see Figure 2.1). All students should receive high-quality classroom instruction ('Tier 1'). Students who need more support should receive targeted additional teaching 'doses' for short periods in small groups ('Tier 2'). And more intensive, individualised support should be provided to a small number of students who need it ('Tier 3').⁸⁰

2.5.1 Students' reading skills should be screened regularly

To identify students who may be falling behind, teachers need to regularly screen the whole class to monitor their reading progress. This is particularly important in Foundation to Year 2, when students are developing their foundational reading skills.⁸¹

It is critical that students who struggle with decoding in the first few years of school are identified early before they fall too far behind the

Figure 2.1: Under a 'response-to-intervention' model, students get three tiers of support for their learning



Source: Bruin and K. Stocker (2021, p. 20).

^{80.} Hunter and Sonnemann (2023, p. 10). A review of the global evidence showed small-group tuition ('Tier 2') can boost student learning by as much as four months, on average, over the course of a year, and one-on-one tuition ('Tier 3') can provide about five months additional learning progress on average: Evidence for Learning (2021a) and Evidence for Learning (2021b). Targeted catch-up support can also improve student performance at scale: EEF (2023a).

^{81.} Tests need to accurately assess the different components of reading skills – such as oral reading fluency, word and non-word reading fluency, vocabulary, listening and reading comprehension – to pinpoint reading difficulties. For example, if students haven't grasped the basics of word recognition, but have instead memorised whole words, they may do well initially on general reading tests, but then start to fall behind by Year 3, because their bank of memorised words fills up. Moats (2020) recommends students be assessed three times a year until they are reading fluently.

rest of their class, because a student's ability to accurately decode words is a good predictor of their future reading achievement.⁸²

Universal screening is the most effective and cost-efficient way to ensure any student falling behind in their learning is identified early and can be given the help they need to catch up. This will reduce the number of students struggling with reading down the track.⁸³ For example, a 2017 US study of nearly 200 students found Year 1 and Year 2 students receiving additional help to catch-up on their word reading progressed twice as fast as students who received catch-up help in Year 3.⁸⁴

Schools need to have a robust and cost-effective assessment regime in place to identify struggling students. Teachers need to be trained to administer these tests, analyse the data, and know what to do with the results.

2.5.2 Additional support to help struggling students catch-up

If students are identified as falling behind, they should receive catch-up support through small-group ('Tier 2') or one-on-one ('Tier 3') tutoring. This may require additional diagnostic testing to determine exactly what extra help students need.⁸⁵ In most cases, the instruction should support work done in the classroom, rather than be a substitute for classroom teaching.

82. See for example Castles et al (2018), McGrane et al (2017) and Lindorff et al (2023).

Even in an average school classroom that teaches reading well, about 20 per cent of students will still need catch-up support, in addition to classroom teaching, to keep up with their classmates.⁸⁶ This is because some students take longer to master concepts, or have learning difficulties, and/or are from a non-English speaking background.⁸⁷

It is critical that struggling students are given timely and effective support in the early years of school, otherwise they risk falling behind all through school. A 2023 study found that only about one in five students who performed at or below the NAPLAN national minimum standard in Year 3 caught-up and stayed on track through to Year 9.88

Schools need to coordinate staff, including teaching assistants, to provide additional help to struggling students, and to monitor students' progress. Schools also need high-quality intervention programs and curriculum materials that can be used to help students who are struggling with their reading. And schools need sufficient access to allied health professionals, such as speech pathologists and educational and developmental psychologists, to help teachers give struggling students the targeted help they need, as well as supporting students with more complex reading difficulties.

If students who receive additional support still do not progress, they should be given more-intensive, one-on-one support, and potentially further testing to identify any potential underlying learning difficulties.

Box 8 on page 31 shows how one Australian high school has used a response-to-intervention model to help struggling readers catch-up.

^{83.} See for example Lovett et al (2017) and Vellutino et al (2006).

^{84.} Lovett et al (2017).

^{85.} Diagnostic assessments are tests for struggling students. These tests pinpoint weaknesses, which helps teachers design targeted supports for the students: Gillet et al (2011). For example, if a universal phonics screening test shows that a student is struggling to decode words, a one-on-one diagnostic test should give a teacher useful information about the student's level of phonemic awareness and letter knowledge: J. K. Torgesen (n.d.).

^{86.} Bruin and K. Stocker (2021); D. Fuchs and L. S. Fuchs (2017); and Hempenstall (2012).

^{87.} Some students struggle with reading because they have weak language skills. Language skills can be affected by neuro-disabilities, developmental language disorder, the quality of the home language environment, trauma or maltreatment, or coming from a non-English speaking background.

^{88.} AERO (2023g).

2.6 Schools cannot do it alone

Ensuring all students in a school are proficient readers in every year level and classroom is no small feat. Even where schools have managed to shift to evidence-informed practice, turnover of school leaders and teachers can make it hard to maintain. And even if an individual teacher has a good understanding of the evidence, they may struggle to implement it if their school leaders aren't on board, or there aren't broader school supports in place.

Schools need to have sound instructional programs in place that include comprehensive, knowledge-rich curriculum materials that are carefully sequenced across years of learning. They need to have an effective approach to identifying struggling students and providing them with catch-up support through a multi-tiered system of support. And they need to have teachers – across all year levels – trained in best-practice teaching of reading, supported by a literacy specialist who can help them refine their skills.

School leaders and teachers are so stretched that they simply do not have the time or deep expertise necessary to do it on their own. And often we are asking them to deliver a range of non-academic outcomes too (such as mental health improvements and broader 'life skills' such as financial literacy). Schools need more support from system leaders – including governments – to put this all in place, and ensure no student is left behind.

The schools we studied while preparing this report (see Box 5 on page 25, Box 8 on the following page, and Appendix B) demonstrate the scale of the effort needed for schools to switch to and sustain high-quality practice. Currently a lot of this workload falls on principals, who are expected not only to do their own research, but to lead change management in their schools. Box 9 on page 32 tells the story of how

one principal managed to implement a structured literacy approach at her school, demonstrating the heavy load this places on individual principals.

But the effort will be worth it – effective reading instruction has the capacity to change the lives of students and their parents. Box 10 on page 33 tells the story of a student and parent who struggled to get the support they needed to learn to read.

The next chapter argues that governments need to step up to better support schools to teach reading well.

^{89.} See Section 1.2.2 in Hunter et al (2022b).

Box 8: Parafield Gardens High School has implemented a multi-tiered system of support to help struggling readers catch-up

Parafield Gardens High – a large government secondary school in northern Adelaide that serves a low socio-economic community – uses a multi-tiered system of support to help struggling students catch-up in reading.

School leadership was vital from the start. The principal had to prioritise funding for the program, re-organise the timetable, hire a full-time speech pathologist, pay for 14 staff to complete the four-day Sounds-Write program training, and buy additional curriculum materials (including decodable books).

The principal told us the investment was worth it: 'There are lots of challenges. Money's a big one, so you've got to be really clear. You can't do everything, so you've got to go after what you think is going to make the biggest difference.'

The new approach starts with screening. The literacy team screen all Year 7 students, examining their NAPLAN and Progressive Achievement Test (PAT) results, as well as a writing sample. Students who are identified as 'at risk' are tested further on their decoding and comprehension ability. From there, the school builds a reader profile for each 'at risk' student and allocates them a corresponding tier of support. Some students are referred on for further specialist assessment of their language and/or cognitive abilities.

Parafield has many students who need further support – not just the 45 per cent of students who come from non-English speaking households. In 2022, about half of its 180 Year 7 students were identified as 'at risk'. Of these, about one in three had a decoding age of younger than 10.^a

At Tier 2, Years 7 and 8 students with poor decoding ability complete the Reading Acceleration Program (RAP). About 50 Year 7 and 20 Year 8 students attend RAP classes twice a week, instead of studying an additional language.^b Teaching is intensive and explicit. Teachers use the detailed Sounds-Write phonics scope and sequence and lesson materials, which gives lessons a predictable structure. Classes have one teacher or teaching assistant for every five students. This reduces disruptions, enables students to be taught a step at a time, and gives students lots of opportunities for practise and feedback.

At Tier 3, about eight students receive one-on-one tutoring twice a week from either a trained teaching assistant or school-based speech pathologist, alongside assistive technology support via the Reading Doctor Online platform.

The results speak for themselves. In 2022, Years 7 and 8 RAP students gained on average 2.25 years in decoding ability over just 3.5 terms.° Most students graduate out of the program after one year. As one RAP teacher told us: 'I see that shift in their thinking, that shift in their engagement and their behavior. When you see them so happy to finally get it and then so excited to see their results... It is incredibly rewarding when our kids graduate out of the program.'

Change was not easy. The lead speech pathologist told us their success rested on the school leadership's support for the tiered approach to instruction: 'It is hard, but not impossible. Where there's a will, there's a way — and the stakes are too high not to do it.'

a. Measured by the Woodcock Johnson Reading Mastery Test, Word Attack (non-word reading) subtest.

b. Students with average decoding ability, but low proficiency in English, complete the Tier 2 English as an Additional Language (EAL) support program. See Appendix B for details.

c. Measured by the Woodcock Johnson Reading Mastery Test, Word Attack (non-word reading) subtest.

Box 9: Lonely work – one principal's experience introducing a structured literacy approach at her school

Despite years of focusing on reading, the students at Marie's primary school weren't improving.^a 'As a principal, I had thrown everything I could at literacy,' Marie told us. Her school used a 'balanced literacy approach' to reading instruction, which had a light-touch focus on teaching phonics and phonemic awareness.

Marie knew the approach wasn't working well, but she didn't know what else to do:

Everything around me was telling me to do more of the same. We were just told that the English code is too complex and reading is just about meaning. If we read enough to kids and get the right books it should work. I didn't think to ask: 'how does the brain actually learn to read?'

Everything changed when Marie found the research evidence for a 'structured literacy approach'. As she explained:

I still remember the feeling of discovering those international reports – the Rose Report, the US Reading Panel Report, and the Australian Inquiry – and thinking 'why has no one told me these existed?' That feeling was devastating. Three governments had done investigations into this and found the same thing. Why weren't our programs at school based on this?

Even with this realisation, leading change was hard. The balanced literacy approach was deeply embedded, and getting staff on board to try a structured approach required a lot of emotional resilience:

There were some big emotions from the staff and I have had to push back. I tried to be sympathetic, because I had taught in a balanced literacy way before too.

a. Name has been changed.

Finding the right curriculum materials to support the new approach was tricky too. In the first few years, Marie was unsure what to invest in. Having previously invested heavily in materials that supported a balanced literacy approach, she 'didn't want to fall into the same trap'.

She worries that relying on principals to make these kinds of decisions without clear guidance makes them vulnerable. Currently, it is too easy to make poor decisions that waste schools' time and money, and ultimately undermine learning. Principals need good advice on what works. Marie has now has built up significant expertise in effective reading instruction, but not all principals have had the same opportunity:

You have to be careful which consultants you use, which professional learning you choose from external providers. You're making all those decisions, sometimes without knowledge.

Sometimes the burden made Marie feel 'incredibly lonely'. Even now, she says that 'very occasionally, I get emotional about it – the change process can consume you'. And she knows that as a principal she needs to change the hearts and minds of her staff, not just their practice: 'You can't be a superhero. It's not sustainable. It can't be just about you.'

But the pay-off has been worth it. Marie has seen her staff grow and her students improve:

I wish I'd been able to go quicker. Each year without change is more children that we didn't get off to a good start in Foundation. Or you look up at Year 5 and 6 students and think 'what can I do? The gaps are so big'. I always wish I could have gone quicker, but I did the best I could.

Box 10: Lisa's struggle to learn to read

Lisa's mother, Michelle, knew early on that Lisa had difficulty reading.^a In her first year of school, Lisa struggled with the simple books she brought home for reading practice. By Year 1, Lisa still wasn't making progress. Michelle was worried, but when she raised her concerns with Lisa's teacher, she was told Lisa was 'just going to be a kid that had to try harder than everyone else'.

During COVID lockdowns in Year 2, Michelle supported Lisa at home with her schooling for several weeks and knew 'something wasn't right – she couldn't read any of the instructions on her own'. When Michelle raised her concerns again, the principal told her further testing was unnecessary because Lisa 'was not going to qualify for funding'.

Frustrated, Michelle moved Lisa to a new school. Lisa's new teacher quickly saw that something wasn't right. Testing revealed that Lisa had Dyslexia. With this knowledge, Lisa's new teacher developed a catch-up program, with lots of systematic practice in phonemic awareness, phonics, fluency, and vocabulary.

For Michelle, this was a 'massive relief' because 'finally Lisa could get the help that she needed'. Now when they read aloud together at night, Lisa surprises Michelle with the words she knows. Lisa feels better about school too: 'I'm glad that my teacher made me get better at reading. It feels better now that I can read. I didn't enjoy reading before because I didn't do well at it.'

While Michelle is relieved, she still has regrets: 'I feel guilty. I knew it wasn't right. I should have stepped in earlier. All these teachers kept saying it will be fine, just wait. Because Lisa is a well-mannered, quiet kid, she slipped under the radar.'

a. Names have been changed.

3 Governments need to step up

Despite the robust evidence on how best to teach reading, many Australian schools are not implementing it in their classrooms.

Australia isn't the first country to face this challenge. But other countries have addressed it better than we have by taking the reading science seriously, and implementing widespread reforms to ensure all schools teach reading according to the evidence. And those countries have had great results.

While some Australian governments and Catholic sector leaders are heading in the right direction, much more work needs to be done. All governments, and all school sector leaders, should commit to a six-step strategy to break down the barriers to teaching reading according to the evidence.

3.1 Schools are struggling to teach reading according to the evidence

There are worrying signs from survey results and studies that evidence-informed reading instruction is not as widespread as it should be in Australia. 90

A 2023 national survey of nearly 300 primary school teachers found very little agreement among teachers about how to teach students to read. There was no consensus about what instructional practices are useful for reading, or how teachers should use their instructional time for reading effectively. In fact, the most common source of knowledge about reading instruction was teachers' own individual research, which is inefficient and would result in teachers using different approaches.

90. Australian reading experts say there is a 'very wide gap' between the research knowledge and teaching practice. See, for example, Castles et al (2018).

Several studies over the past 10 years suggest many teachers don't have a good grasp of the evidence. For example, a 2016 study of about 70 Prep teachers in Victoria found they scored only 55 per cent, on average, on a test about phonics and related concepts. A 2015 study of 30 early childhood educators in WA found they scored 60 per cent, on average, on a test about phonics and language structures relevant for teaching reading.

Even when teachers think they are teaching according to the evidence, they may not be doing so effectively. For example, when the Year 1 Phonics Screening Check (a test that assesses students' phonics knowledge by asking them to read aloud a total of 40 words and pseudo words) was introduced in South Australia in 2017, only about half of students demonstrated basic phonics skills. ⁹⁵ Numerous teachers said they were 'surprised and disappointed' by the results. Teachers had expected better, 'based on students known reading abilities and results on the Running Record'. ⁹⁶ A 2016 Australian study showed that teachers' self-rated ability to teach phonics did not correlate to their level of knowledge. ⁹⁷ In fact, teachers may overestimate their level of knowledge about phonics. ⁹⁸

^{91.} R. Smith et al (2023).

^{92.} Serry et al (2022); Stark et al (2016); and Hammond (2015).

^{93.} Stark et al (2016). The test covered phonemic, phonological, phonics, morphological, sentence/discourse, and other aspects of content knowledge.

^{94.} Hammond (2015). The participants took the Teacher Knowledge Survey. The average score was 24 out of 40.

^{95.} In SA, only about 45 per cent of students met the 'expected level' of achievement in the first year. In NSW, 57 per cent of students met the 'expected level' in the first year and in Tasmania it was 50 per cent.

^{96.} Hordacre et al (2017, p. 53). See Box 16 on page 56 for an explanation of Running Records.

^{97.} Stark et al (2016). Another study of pre-service teachers showed similar results: Fielding-Barnsley (2010).

^{98.} Hammond (2015).

Many students who struggle with reading are not being properly identified and given catch-up support. A 2023 study found that only about half of secondary schools consistently provide extra tutoring to students struggling with reading (see Box 11 on the following page).⁹⁹ And a 2020 Australian study found that only about half of primary schools provided literacy intervention supports to help students catch-up.¹⁰⁰

3.2 Overseas education systems have had success

Many international jurisdictions are stepping up to the reading challenge. Education systems in England, Ireland, some states in Canada, and even many states in the US, have introduced reforms over the past 10 years to close the gap between the research evidence and classroom practice (see more detail in Table 3.1 on page 39).¹⁰¹

These system reforms have included boosts to professional learning, improved curriculum, mandated reading assessments, and requirements to ensure struggling students are identified and helped.

3.2.1 England's approach

England made significant reforms to early years reading education over the past decade, in line with the recommendations of the 2006 Rose Report. It changed its national curriculum to require primary schools to teach systematic synthetic phonics. This was supported by the

99. Weldon et al (2023, p. 25).

publication of teaching guidance,¹⁰⁴ and tied funding to 'validated' early years reading programs.¹⁰⁵ To be validated, reading programs were required to meet 16 core criteria. For example, the program must begin by introducing a defined group of grapheme-phoneme correspondences (see the criteria in Appendix C on page 90).¹⁰⁶ Publishers completed an initial self-assessment, which was then reviewed by independent evaluators. Forty-five reading programs have been validated.

England has also increased its focus on developing high-quality curriculum materials.¹⁰⁷ Schools are required to have a knowledge-rich curriculum, and inspectors observe classes to assess whether the curriculum is being well-implemented.¹⁰⁸

Alongside this, the government monitors progress through a mandatory national Year 1 Phonics Screening Check and Year 2 re-sit process. All students complete the Phonics Screening Check in Year 1 and students who do not reach the 'expected standard' of achievement are re-tested in Year 2 to check they've caught up. In 2012, 58 per cent of students met the expected standard of achievement in Year 1, and 85 per cent by the end of Year 2. In 2019, results had lifted – 82 per cent of students met the standard in Year 1, and 91 per cent by the end of Year 2.¹⁰⁹

^{100.} Quick (2020).

^{101.} In Canada, the province of New Brunswick recently made changes to its curriculum: Blanch (2023). And the province of Ontario is implementing reforms in response to the 2022 'Right to Read' report: Ontario Human Rights Commission (2022).

^{102.} Rose (2006).

^{103.} UK Department for Education (2013).

^{104.} The guidance has continually been updated. See: UK Department for Education (2023a).

^{105.} UK Department for Education (2014).

^{106.} UK Department for Education (2023b).

^{107.} UK Department for Education and Oak National Academy (2022); Education (2021); and Ofsted (2021).

^{108.} Ofsted (2019a); and Ofsted (2019b).

^{109.} Note this is pre-COVID. The test wasn't done in 2020 and 2021, and 2022 scores show a drop in performance: UK Department for Education (2022). In 2023, scores improved, with 79 per cent of students achieving the expected standard in Year 1 and 89 per cent by the end of Year 2.

Box 11: Australian secondary schools are struggling to support students who fall behind in their reading

A new nationwide survey of nearly 400 secondary teachers and school leaders, by the Australian Education Research Organisation (AERO), shows that secondary schools are struggling to adequately support students who have difficulty with reading.^a

Across Australia, about a quarter of teachers and school leaders said they did not identify, or only sometimes identified, which students were struggling and needed support. Schools reported using a wide range of assessments. The most common were NAPLAN (76 per cent), Progressive Achievement Tests (59 per cent), and school-based assessments or teacher judgement (54 per cent).

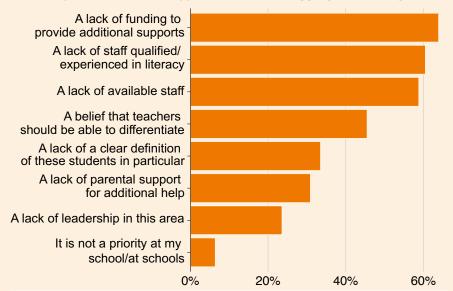
Some schools use assessments that are not as robust as others, nor aligned with the best evidence, such as Running Records, which one in five secondary schools are using (see Box 16 on page 56).

Poor school-based assessment has huge costs. Struggling students may be missed or identified late, when it is harder to help them catch up.

Only about a half of secondary school teachers said their school consistently provides catch-up support to students identified as struggling with reading. And about one in two teachers were not, or not really, confident in their school's approach to catching-up struggling students. Nearly two-thirds said a key barrier was not having staff with expertise in reading instruction (see Figure 3.1). And while teaching assistants regularly provide additional support, only about a third are trained to do so.

Figure 3.1: Schools face multiple barriers to supporting struggling students catch-up with reading

Proportion of teachers who cited the following issues that made it hard for the school to provide additional support to students struggling with reading



Notes: This survey question was answered by 280 teachers and school leaders. About 25 per cent of respondents cited 'Other'. Differentiation is where teachers adjust their teaching for students in their class, depending on students' skill levels.

Source: Weldon et al (2023, p. 26).

a. Weldon et al (2023).

By 2021, England was ranked a top performer in PIRLS (the Progress in International Reading Literacy Study) – higher than Australia. England also surpassed Finland, Poland, and Chinese Taipei – who had performed better than England in 2016.¹¹⁰ Only 14 per cent of England's Year 4 students were not proficient in reading, compared to 20 per cent of Australia's.¹¹¹

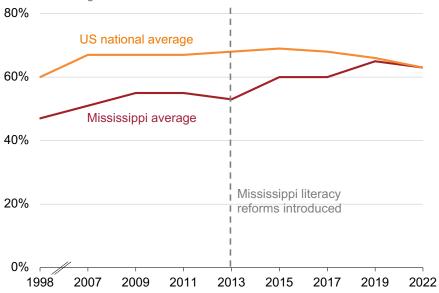
3.2.2 The Mississippi miracle

Mississippi – the poorest state in the US – was one of the first US states to implement comprehensive, evidence-informed literacy reforms, through its 2013 *Literacy-Based Promotion Act.* It invested US\$70 million in early years reading programs for schools, fully funded all early years teachers to do a 160-hour two-year training course in reading instruction, mandated that all students' reading skills in Foundation to Year 3 be assessed three times a year, and required Year 3 students to stay back a year if they were not meeting basic standards in reading (see more in Table 3.1 on page 39).¹¹²

Mississippi lifted the proportion of students who met the 'basic' standard in reading in Year 4 from 53 per cent in 2013, to 63 per cent in 2022 – a 10 percentage point improvement in nine years, meeting the US national average (see Figure 3.2).¹¹³ Over the same time, the

Figure 3.2: Mississippi's performance has improved significantly over the past 10 years

Proportion of students who were at or above 'basic' standard in the NAEP Grade 4 reading test



Notes: NAEP = the National Assessment of Educational Progress. NAEP assessments were not conducted in 2021 due to COVID and were instead completed in 2022.

Source: National Centre for Educational Progress (2022).

^{110.} Hillman et al (2023, p. 19). Note that due to COVID, results in 2021 could not be compared with Canada or the US.

^{111.} Thomson et al (2012, p. 21). In 2011, 17 per cent of England's Year 4 students were not proficient: Thomson et al (ibid, p. 18).

^{112.} Kaufman (2022); Mississippi Department for Education (2023); RMC Research Corporation (2019); and Folsom et al (2017).

^{113.} US Institute of Education Sciences (n.d.). Note that students who don't meet the 'basic' standard have problems with fluency and word reading: White et al (2021). The 'basic' standard is used because the 'proficient' standard does not reflect grade-level learning: Loveless (2016). In 2013, 21 per cent of Mississippi students met the proficiency standard, and by 2022, it was 31 per cent.

proportion of Year 4 Mississippi students who were highly proficient in reading doubled, from 3 per cent to 6 per cent.

Mississippi's remarkable achievement is known as the 'Mississippi Miracle'. Mississippi is one of only three US states that have improved Year 4 reading scores in the past decade. 114 Its success has encouraged other US states to commit to bold reading reforms. 115 In the past three years alone, 23 US states have introduced similar 'science of reading' laws. 116

3.3 Some Australian governments and Catholic school sector leaders have taken the first steps

Australian governments, and the Catholic school sector, have made efforts to lift reading performance over the past 10-to-20 years. For example, the 2018 National School Reform Agreement (NSRA) committed jurisdictions to improve academic performance for all students, although no measurable targets were set.¹¹⁷ Despite this, performance has not significantly improved.¹¹⁸

In recent years, some state governments and Catholic archdioceses have made stronger efforts to align school practice to the evidence base on the best way to teach reading. The NSW and South Australian governments, alongside the Catholic archdioceses of Canberra-Goulburn and Tasmania, have been leading the way.¹¹⁹ The

114. Loble (2023).

Tasmanian, Western Australian, and Queensland governments have also taken some important first steps forward.

Reforms have included mandating a robust Year 1 Phonics Screening Check, endorsing specific evidence-informed literacy programs, providing decodable readers to schools, and increasing investment in teacher training and coaching (see further in Box 12 on page 40).

But change hasn't always been easy. For example, the Education Lead at Canberra-Goulburn, noted:120

Changing practice can be hard and threatening at times. Teachers have had to make themselves quite vulnerable in accepting support and receiving coaching in the classroom. We don't criticise what was done in the past; that is what we knew then. We've encouraged teachers to approach the change as building upon where they are now with additional knowledge. When we know better, we do better.

In 2022, Australia also took a significant step forward by embracing an evidence-informed approach to reading instruction in the early years through the updated Australian Curriculum (which applies to all jurisdictions except Victoria and NSW). 121 The 2022 version removed references to outdated methods such as 'three-cueing' and using 'predictable texts'. It now requires Foundation to Year 2 students to develop phonic and word knowledge to decode text. 122

3.4 But much more work is needed in every state for all schools to teach according to the evidence

While the reforms introduced in Australia to date are a start, they are not enough to fully turn the dial on student reading performance.

^{115.} Kaufman (2022).

^{116.} Schwartz (2023). Given these reforms are still so recent, their effect on student performance is yet to be seen, or may have been confounded by the affects of the pandemic.

^{117.} The Productivity Commission's review of the NSRA found that the targets were 'incomplete and too vague to drive reforms', with 'only one target relating to academic achievement': see Productivity Commission (2023, p. 9).

^{118.} Ibid.

^{119.} The archdiocese of Lismore is also introducing system-wide changes to align their teaching practices with the reading science.

^{120.} Del Rio et al (2023, p. 53).

^{121.} Carey (2022).

^{122.} In Foundation, for example, students should 'read decodable and authentic texts using phonic knowledge', 'recognise... sounds (phonemes) in spoken words (phonological awareness)', and 'blend and manipulate phonemes in single-syllable words (phonological awareness)'.

Table 3.1: The England and Mississippi models

System	Context	Guidance and curriculum	Professional learning	Assessment	Intervention	Monitoring and accountability
England	• From 2012, implemented reforms to embed evidence-informed reading instruction in schools	 National curriculum requires schools to teach systematic synthetic phonics Published list of validated phonics programs Published practice guidance 	 Free National Professional Qualification in Leading Literacy English Hubs support schools to improve phonics teaching 	Compulsory Year 1 Phonics Screening Check, data publicly available	Published high-level practice guidance on catch-up support	Ofsted – the school inspectorate – reviews schools' implementation of effective reading instruction and the quality of the curriculum
Mississippi	• In 2013, passed the <i>Literacy-Based</i> <i>Promotion Act</i> , with the aim of ensuring all students can read at grade level by the end of Year 3	Invested US\$70 million in pre-Foundation reading programs	 Two-year free training through LETRS for F-3 educators (mandatory for low-performing schools) Literacy coaches for under-performing schools 	 Universal screening in F-3 at the beginning, middle, and end of the school year The Mississippi Reading Panel recommends which assessments to use 	 Mandatory intensive Tiers 2 and 3 support if students have a 'substantial deficiency in reading' Grade 3 retention policy for students who are still struggling with reading 	14 schools designated as 'Emerging Science of Reading Schools', to recognise exemplary schools

Notes: LETRS = Language Essentials for Teachers of Reading and Spelling. 'F-3' means Foundation to Year 3.

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Box 12: Some Australian state governments have started to take seriously the evidence on reading

In 2018, **South Australia** announced a state-wide 'Literacy Guarantee'. This included the mandatory Year 1 Phonics Screening Check at government schools, modelled on England's test, alongside 3-to-4 days of training and time release for all Year 1 teachers.^a A team of about 30 literacy coaches also helps schools to build their expertise in evidence-informed reading instruction. Over four years, South Australian students improved their decoding skills: 43 per cent of students met the expected level in 2018, and 68 per cent in 2022.^b

NSW has sought to encourage evidence-informed reading instruction from Foundation to Year 2 across all school sectors in its updated NSW Syllabus, starting from 2023. It specifies expected learning outcomes for each of the six sub-skills in reading instruction.^c In 2018, and again in 2021, it invested in decodable texts for all NSW Foundation students, alongside training for early years teachers on effective reading instruction and systematic synthetic phonics. From 2021, NSW mandated the Year 1 Phonics Screening Check for all government schools. NSW also mandates 'check-in assessments' for Years 3 to 9, which are mapped to the NSW Syllabus and National Literacy Learning Progressions. In response to COVID-19, NSW invested heavily in catch-up tutoring, including in reading. NSW also discontinued funding for outdated or non-cost effective methods of reading instruction.^d

In 2022, **Western Australia** revised its state curriculum to remove references to non-evidence-informed practices,^e introduced a 'Phonics Initiative', which includes publishing a list of 'endorsed' phonics programs and assessments, and mandated a Year 1 phonics assessment for public schools, although it is not prescribing a single test which makes tracking progress across the state much more difficult.^f

In 2023, **Tasmania** committed to a 'minimum guarantee' that reading instruction be done according to the evidence in every Tasmanian primary school (regardless of sector) by 2026, with an intermediate target of 25 per cent of primary schools by 2024. This includes teaching reading using a structured literacy approach, and providing a 'multi-tiered system of support' to ensure all students stay on track. And from 2023, it is rolling out the Australian Government's Year 1 Phonics Screening Check in every school.⁹

In 2023, **Queensland** announced a 'Reading Commitment' to teach reading consistently using an evidence-informed approach, which includes teaching systematic synthetic phonics, and building comprehension by teaching background knowledge and vocabulary. This was supported by a \$35 million investment, including in comprehensive reading materials for schools, and training for teachers.^h

a. While the teacher training was initially mandatory, there was enough interest each year that it was eventually made voluntary. Interest also spilled over into other year levels, and now Foundation and Year 2 teachers participate as well.

b. SA Department of Education (2023a).

c. NSW Education Standards Authority (2023a); and NSW Education Standards Authority (2023b).

d. See NSW Department of Education (2021), Bagshaw (2016), NSW Department of Education (2023b) and J. Baker (2020).

e. For example, it removed references to 'predictable texts': WA School Curriculum and Standards Authority (2022a). The new curriculum materials include a high-level 'phonics scope and sequence': WA School Curriculum and Standards Authority (2022b).

f. WA Department of Education (2022a) and Meyerkort (2022). Data from this assessment is not collected at a system-level.

g. Tasmania Literacy Advisory Panel (2023); and Rockliff (2023).

h. Grace (2023); and Queensland Department of Education (2023a).

Box 13: Some Catholic dioceses are requiring their schools to teach reading according to the evidence

The Catholic Education Archdiocese of **Canberra-Goulburn** has been leading the way. In 2020, it implemented a strategy called 'Catalyst' that aims to ensure every student is a competent reader and that all classes have high-impact teaching practices.^a Before then, many schools in the archdiocese were not using evidence-informed practices to teach reading.

The strategy introduced a suite of changes:

- All Foundation to Year 2 classrooms across the system's 56 schools are required to teach an endorsed, evidence-informed literacy program, either InitiaLit, Sounds-Write, or Let's Decode.
- Schools are required to use approved reading assessments to monitor student progress, including the Year 1 Phonics Screening Check and the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) screening tool.
- All schools were supported to purchase decodable readers.
- For catch-up support, there is a list of endorsed intervention reading programs, including MiniLit Sage (1-2), MacqLit (Years 3 to 10), and Reading Tutor Program (Years 3 to 12).
- Early years teachers are provided with a two-day training program in InitiaLit, and another five days of training in effective teaching practices, which includes theory, demonstrations, and coaching.
- Teachers are given additional planning days and release time to implement changes in their school.

a. Catholic Education Archiocese of Canberra and Goulburn (2023).

Students' results on the Year 1 Phonics Screening Check improved from 57 per cent of students meeting the expected level in 2021, to 70 per cent in 2023. Between 2019 and 2022, NAPLAN reading results for Catholic schools in Canberra also significantly improved. In 2019, 42 per cent of Catholic schools in Canberra performed below or well below similar schools in Year 3 reading. By 2022, only 4 per cent of Catholic schools in Canberra were below similar schools and none were well below.^b

In 2022 the Catholic Education Archdiocese of **Hobart** (which includes Catholic schools across Tasmania) introduced an initiative called 'Literate Learners for Life'. It mandated that all 32 primary schools use InitiaLit, a reading program for Foundation to Year 2 students that explicitly teaches students the key sub-skills needed for reading.^c All schools were provided with detailed lesson plans and assessments, and those that had already purchased them were refunded. From 2023-24, their schools will be using the DIBELS screening tool to identify students who are falling behind.

To up-skill teachers in evidence-informed reading instruction, all 38 schools (both primary and secondary) have a Literacy Practice Leader – a classroom teacher who is given 0.4 FTE release time to support improved reading instruction across the school. These literacy leaders provide information to system leaders. All Literacy Practice Leaders are required to do the LaTrobe University Science of Language and Reading introductory short course – 7.5 hours of online training over five weeks.

b. Del Rio et al (2023, p. 54).

c. Catholic Education Tasmania (2023).

Many policies are still too 'hands-off' or do not provide enough support to help schools get it right. Merely changing high-level curricula won't magically shift practice in classrooms. And most reforms to date have focused on the early years only, rather than ensuring reading proficiency is a priority all through primary and secondary school.

A more deliberate, hands-on, system-wide approach is needed. Governments need to introduce a suite of coordinated policy reforms, underpinned by sufficient investment and a strong implementation strategy, to ensure every school across the country is teaching reading effectively and that it is sustained and strengthened over time. Drawing on multiple policy levers at the same time is crucial to ensure that all students – including students living in regional and/or low socio-economic communities – are taught how to read effectively.

This won't be easy to get right. The healthcare sector began to take evidence seriously about 30 years ago, 123 and implementation is still a challenge. 124 About four in 10 patients still don't receive care in line with evidence-based guidelines. 125

Governments and sector leaders responsible for school education should look to the emerging body of research focused on 'implementation science' to help close the research-practice gap. This would help ensure government efforts result in more than a mere 'light-touch' adoption of the reading science in schools.

Getting implementation right across a system won't be easy, especially when there are multiple barriers to implementing substantial change

in Australia's education systems (see further in Section 1.3 on page 17). 127

At a system-level, these include a lack of real ambition to improve reading performance, a reluctance to take the research evidence seriously, and the challenge of introducing and sustaining improvements in teaching across the thousands of schools and tens of thousands of classrooms across the country. 128

Even if these system-level barriers are overcome, there are school-level and classroom-level barriers, such as lack of knowledge about the evidence, lack of high-quality resources, and – in some cases – ideological resistance to change.

Australian governments and Catholic and independent school sector leaders should take six key steps to break down these barriers (see Figure 3.3 on the next page). For example, committing to ambitious but achievable targets will help address the lack of policy priority on reading, and creating literacy specialist roles to coach teachers will help improve teachers' knowledge and skill.

The next chapter outlines these six steps in detail and shows what it will take to ensure all students become proficient readers at school.

^{123.} The evidence-based medicine (EBM) movement emerged in the 1990s. It sought to make clinical practice more 'objective, more immune to bias, and ultimately more effective at improving patient outcomes': Venus and Jamrozik (2020, p. 30).

^{124.} See Braithwaite et al (2014).

^{125.} Braithwaite et al (2020). This is drawn from large empirical studies across multiple conditions in the US, England, and Australia.

^{126.} Braithwaite et al (2014); and Grimshaw et al (2012).

^{127.} K. L. Stocker et al (2023).

^{128.} Albers and Pattuwage (2017).

Figure 3.3: Grattan's six-step strategy to break down the barriers to better reading

rigare con anatame om etop et ateg,	Step 1: Commit to targets	Step 2: Develop evidence- informed guidelines	Step 3: Ensure access to high- quality materials and tools	Step 4: Require universal screening and intervention	Step 5: Build expertise and create new roles	Step 6: Strengthen monitoring and accountability
System-level barriers						
Not a policy priority	✓					
Lack of alignment on evidence within departments		~				
Managing a big and diverse system	V	✓			V	V
Lack of knowledge about what's happening in classrooms				V		✓
Lack of knowledge about implementation science			V	V	•	✓
Lack of system accountability	✓					✓
School-level barriers						
Culture of school autonomy		✓		✓	V	V
Lack of school leader knowledge about the evidence		~			~	
Resistance to change	✓		✓	✓	✓	✓
Lack of access to expert teachers and specialist staff		~			~	
Lack of access to high-quality materials and assessments			V			
Minimal accountability	✓			✓		✓
Classroom-level barriers						
Teacher lack of knowledge		✓			V	
Teacher resistance to change			✓	✓	✓	V

Source: Grattan analysis.

4 Governments should take six steps

Australian governments, and the Catholic and independent school sectors, should commit to a six-step 'Reading Guarantee' strategy to implement effective teaching of reading in every school (see Figure 4.1). The strategy ensures a sustained effort through ambitious overarching targets, underpinned by recommendations that work at every level of the education system to achieve the targets.

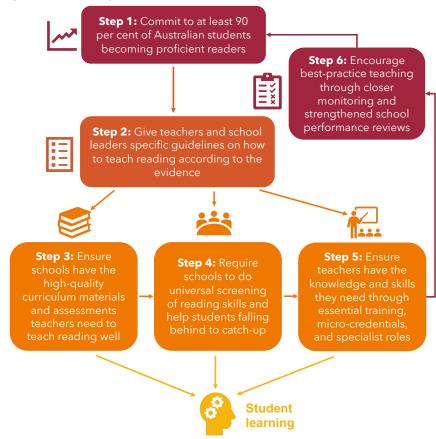
The strategy should be implemented over 10 years and evaluated every five years to ensure the policies are improving reading performance.

4.1 Step 1: Commit to at least 90 per cent of Australian students becoming proficient readers

Australian governments and the Catholic sectors should urgently raise their level of ambition and commit to a 'Reading Guarantee' – that all students have the best support to become proficient readers at school.

Given the evidence shows that almost all students can learn to read when provided with high-quality teaching and support (Section 1.1 on page 8), the strategy should have a long-term goal that at least 90 per cent of students meet the new NAPLAN proficiency benchmark (either in the 'strong' or 'exceeding' category) in reading across Years 3, 5, 7, and 9.129

Figure 4.1: Six steps to achieve the Reading Guarantee



^{129.} The target should be a weighted average across Years 3, 5, 7, and 9, rather than be a specific target for each year level. Note that every year about 5-to-10 per cent of students across Years 3, 5, 7, and 9 don't participate in the NAPLAN test (in the NT, this proportion is even higher). Non-participation rates should continue to be tracked so performance is not inflated in states or years where participation is low. Note the National School Reform Agreement Expert Panel's final report recommended that the next Agreement include specific targets (see Recommendation 7B): O'Brien et al (2023, p. 25). Dr Jordana Hunter was a member of the Expert Panel and is an author of this report.

The target should be set at 90 per cent, rather than 100 per cent, to acknowledge that a small proportion of students may not reach proficiency due to factors genuinely beyond the control of the school system.¹³⁰

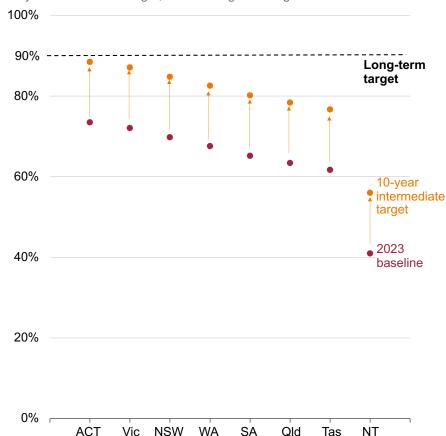
Hitting this target is possible. High-performing English-speaking education systems, such as in Singapore and Ireland, have achieved 90 per cent proficiency in Year 4 reading, according to the Progress in International Reading Literacy Study (PIRLS).¹³¹

To ensure Australia is on track to meet this long-term target, the federal, state, and territory governments, and Catholic and independent school sector leaders, should each set an ambitious but realistic intermediate target: to lift by 15 percentage points over the next 10 years the proportion of their students who meet the NAPLAN proficient benchmark in reading (see Figure 4.2).¹³²

Achieving this target would mean that in 2033, 46,000 more students across Australia should be able to read proficiently by Year 3, for example, compared to today – which translates to about six more Year 3 students per primary school, on average. This varies by state, with NSW (the largest state) lifting the number of Year 3 students who are proficient by about 14,000, and the Northern Territory (the smallest) lifting the number by about 400. See Table 4.1 on the next page for a state-by-state breakdown.

Figure 4.2: All governments should commit to targets to lift the proportion of students who are proficient readers

Proportion of students who are proficient in reading in 2023 (the baseline), the 10-year intermediate target, and the long-term target



Notes: Students are proficient if they are categorised as either 'strong' or 'exceeding' in 2023 NAPLAN data. Exempt students are not included. The 10-year intermediate target is a 15 percentage point increase from 2023 performance. The 2023 baseline for each jurisdiction is a weighted average across Years 3, 5, 7, and 9.

Source: Grattan analysis of ACARA (2023b).

^{130.} This includes, for example, students with acute learning difficulties, or recent migrants from non-English speaking backgrounds. Note that recent migrants may also be exempt from NAPLAN testing, if they have been attending school in Australia for less than a year, but exemption isn't automatic.

^{131.} Hillman et al (2023).

^{132.} This intermediate target should be part of the next National School Reform Agreement (NSRA). It could be pro-rated for the term of the agreement. This aligns with recommendations from the Productivity Commission's review of the NSRA and the NSRA Expert Panel's final report: Productivity Commission (2023, p. 2) and Department of Education (2023a).

While it may take some time to see an uptick in NAPLAN performance, as the reforms take effect and more children are taught to read effectively in the early years, results should improve significantly. It is possible that Victoria and the ACT could achieve the 90 per cent target within 10 years (or come very close), leading the way for other jurisdictions to follow.¹³³

Performance targets would focus government efforts

Setting ambitious, public targets would help focus government efforts to boost reading performance. It would help sustain commitment over time – preventing reading performance from falling back down the list of priorities. The targets would also signal the urgent step-change required in policy settings. Australia's children and young people can't wait any longer.

Many previous commitments to improve student learning, such as the vague goal in the 2018 National School Reform Agreement to 'lower the proportion of students in the bottom NAPLAN levels and increase the proportion of students in the top NAPLAN levels of performance', were not strong enough.¹³⁴ These vague goals don't create sufficient accountability for governments to deliver on their promises.

Other sectors and countries have used targets successfully to lift performance

Performance targets have been used successfully elsewhere, for example, to reduce wait times for elective surgery in England, ¹³⁵ and to improve the effectiveness of public services. ¹³⁶

Table 4.1: Grattan Institute's 10-year target is achievable – it requires only six more Year 3 students per school to be proficient

Jurisdiction	Proportion of proficient students in 2023 (baseline)	10-year target (+15 percentage points)	Additional Year 3 students who reach proficiency in 10 years	Additional Year 3 students who reach proficiency in 10 years, average per primary school
Australia	68%	83%	46,000	6
ACT	73%	88%	860	8
Victoria	72%	87%	11,800	6
NSW	70%	85%	14,400	6
WA	68%	83%	5,100	6
SA	65%	80%	3,000	5
Queensland	63%	78%	9,500	7
Tasmania	62%	77%	930	4
NT	41%	56%	420	3

Notes: The targets are an average across all year levels tested in NAPLAN. Special schools are not included in the school count.

Source: Grattan analysis of ACARA (2023b).

^{133.} Note that Grattan Institute recommended a 10 percentage point uplift in its submission to the NSRA, but the subsequent release of the 2023 NAPLAN data suggest a 15 percentage point uplift is possible.

^{134.} Department of Education (2018, p. 7).

^{135.} See Box 3.3 of Productivity Commission (2023, p. 95).

^{136.} Bryson and Seo (2022); and George and Monster (2019).

Australian governments have targets in public health and wellbeing (for example, in 2016 the Victorian Government set a target for a 30 per cent decrease in smoking by adults by 2025), ¹³⁷ as well as targets for reducing violence against women, ¹³⁸ reducing carbon emissions, ¹³⁹ closing the gap between Indigenous and non-Indigenous Australians, ¹⁴⁰ and reducing the number of people under 65 with a disability living in residential aged care. ¹⁴¹

Overseas, targets are used widely and successfully in high-performing school systems. 142 and UNESCO has 10 education targets as part of its Sustainable Development Goals. 143

For example, in 2011, the Irish *National Strategy for Numeracy and Literacy* sought to improve reading and maths performance by setting specific targets to lift poor performers and stretch high achievers by five percentage points over nine years.¹⁴⁴ The strategy included increased investment in training, such as professional learning courses, and increasing the class time spent on reading and numeracy in primary school.¹⁴⁵

In the event, Ireland over-shot almost all of its original targets in half the time.¹⁴⁶ In 2011, according to PIRLS, 85 per cent of Irish Year

4 students were proficient readers.¹⁴⁷ By 2016, the proportion had improved to 89 per cent, pushing Ireland's international ranking up from 10th place to 4th place.¹⁴⁸

Ontario, in Canada, set a goal to lift the proportion of Grade 6 students meeting the 'expected level' of reading, writing, and maths performance from 55 per cent in 2003 to 75 per cent in 2008. The strategy included a boost in school funding and investment in professional learning. While Ontario did not meet its 2008 target, by 2014 it had reached 72 per cent – a still-impressive 18 percentage point improvement in 11 years. 151

Australia's federal and state governments should track progress on Australia's targets, with an annual report tabled in all parliaments. The annual report should include both state and sector analysis of performance, as well as performance of high-achievers, disadvantaged students, to ensure none of these students get left behind.

^{137.} Victorian Department of Health (2021).

^{138.} Department of Social Services (2023).

^{139.} Australian Office of Financial Management (2022).

^{140.} Closing the Gap (n.d.).

^{141.} Department of Health and Aged Care (2023).

^{142.} Barrenechea and Rivas (2023); and Scheerens (2011).

^{143.} UNESCO (2019).

^{144.} See Ireland Department of Education and Skills (2011, pp. 17–18). Ireland also had targets to halve the percentage of students performing at or below Level 1 in PISA. Later, Ireland added targets for closing the gap between students from disadvantaged and advantaged schools: Ireland Department of Education and Skills (2017, p. 18).

^{145.} Ireland Department of Education and Skills (2011).

^{146.} Ireland Department of Education and Skills (2017, pp. 17–19).

^{147.} Thomson et al (2012, p. 18).

^{148.} Thomson et al (2017, p. 18). This ranking might have been one place lower if Croatia had participated in the 2016 test, given its students performed better than Ireland's in 2011.

^{149.} Boyd (2021, p. 39).

^{150.} Ibid.

^{151.} Faughey (2015).

^{152.} Note the Productivity Commission and the Expert Panel's review of the National School Reform Agreement recommended a stand-alone annual report be tabled in Federal Parliament that tracks progress against specific targets and reforms: Productivity Commission (2023) and O'Brien et al (2023, p. 25).

^{153.} According to NAPLAN, these are students, for example, whose parents did not finish high school.

4.2 Step 2: Give teachers and school leaders specific guidelines on how to teach reading according to the evidence

Australian governments should develop specific, practical guidelines for teachers and school leaders on best practices for teaching reading and helping struggling students to catch-up.

Current reading guidelines are inadequate

Where guidelines are available in Australia on reading and catch-up supports, they tend to be too high-level, may not align with the evidence, and don't tend to provide comprehensive advice to school leaders and teachers on the specific assessments, teaching strategies, or programs they can use.

The Australian Education and Research Organisation (AERO) has produced an introduction to the 'science of reading'. ¹⁵⁴ But it provides teachers only with a summary of the evidence, and theoretical frameworks for understanding the sub-skills involved.

Some state governments have provided more detail, but this is not always aligned to the evidence.

For example, Victoria's 'Literacy Teaching Toolkit' muddies the water on the reading science by promoting a confusing mix of both evidence-informed structured approaches and whole-language approaches to reading instruction. For instance, the toolkit acknowledges there is 'a place for explicit and systematic phonics instruction', but also promotes an incidental, unsystematic approach. It also recommends using the three-cueing method, as well as suggesting 'decodable' and

Western Australia has updated its curriculum, removing references to outdated methods – such as 'predictable texts' and 'three-cueing' – and published a 'Phonics Toolkit' that provides detailed teacher guidance. ¹⁵⁷ Yet, WA's website still includes some resources that promote a 'whole-language approach'. ¹⁵⁸

NSW's guidance on reading instruction is very detailed, providing a summary of the evidence underpinning a structured literacy approach, and outlining specific curriculum materials and teacher guidance, such as recommended instructional sequences for teaching each letter-sound combination and advice on specific instructional strategies to promote fluency. This is better than many other states, but still leaves teachers without specific examples of how to integrate guidelines into their curriculum planning and assessment scheduling (see Appendix B on page 74 for examples of the planning required at a school level).

The ACT and the Northern Territory have very limited public information on their recommended approach to reading instruction. This leaves parents and the community in the dark about the reading approaches used in their children's classrooms.

^{&#}x27;levelled' texts are appropriate for beginning readers, even though they are underpinned by entirely different instructional approaches (see Box 4 on page 23).¹⁵⁶

^{154.} AERO (2023e).

^{155.} See Victorian Department of Education (2023a), which cites Hornsby and Wilson (2010). While there are other evidence-informed resources on the Victorian education department's website, they sit separate to the literacy toolkit under 'literacy learning difficulties': Victorian Department of Education (n.d.[a]).

^{156.} Victorian Department of Education (2023b) and Victorian Department of Education (2023c). 'Levelled texts' have been criticised for not being a reliable indicator of text difficulty, and for having variable quality: Pitcher and Fang (2007).

^{157.} WA School Curriculum and Standards Authority (2023); and WA Department of Education (n.d.[a]).

^{158.} WA Department of Education (n.d.[b]).

^{159.} NSW Department of Education (2023c) and NSW Department of Education (2023d).

^{160.} See, for example, ACT Education Directorate (n.d.[a]), NT Department of Education (n.d.[a]) and NT Department of Education (n.d.[b]).

Box 14: Healthcare guidelines support evidence-based practice and improve patient care

In healthcare, the evidence-based medicine (EBM) movement resulted in the creation of clinical practice guidelines, which help clinicians align their practice to the best evidence available.^a EBM encouraged clinicians to embrace the findings from high-quality randomised controlled trials and observational studies, and combine the findings with practitioner experience and patient preferences.

Guidelines are developed by small teams of expert researchers and practitioners, who follow a systematic process to ensure the guidance supports the work of healthcare staff to improve clinical decisions.

In Australia, healthcare practice guidelines are developed by government bodies, such as the National Health and Medical Research Council (NHMRC). Others are developed by professional associations, such as the Royal Australian College of General Practitioners, or advocacy groups, such as the Cancer Council and the Heart Foundation.

The NHMRC approves guidelines if they meet specific quality standards, have been the subject of public consultation, and have been independently reviewed.^b The approval lasts for five years.

Healthcare practice guidelines are thorough and detailed. For example, guidelines may advise on specific diagnostic or screening tests to

order, how to provide certain medical services, and how long patients should stay in hospital. Guidelines are embedded in hospital processes and clinical practices through, for example, protocols and clinical care pathways, which set out written step-by-step plans for specific procedures.^c

There is compelling evidence that the implementation of guidelines has helped improve the quality of clinical practice, improved health outcomes for patients, and even reduced costs.^d

For example, a 2010 US review noted improved patient outcomes during labour in hospitals. The Hospital Corporation of America implemented guideline recommendations using check-list protocols for birth procedures, such as for the use of oxytocin administration during vaginal birth, and procedure-documentation templates. This was coupled with mandatory online training. Patient outcomes improved (for example, the caesarean delivery rate dropped), and there was a 50 per cent reduction in professional liability claims.

Another 2010 review found clinical care pathways reduced in-hospital complications – such as wound infections, bleeding, and pneumonia – by 40 per cent, and improved documentation.^f

- a. Venus and Jamrozik (2020).
- b. National Health and Medical Research Council (2016).
- c. A protocol is a written plan that specifies procedures to be followed in defined situations. Clinical care pathways set out more complex clinical processes of care. See Hewitt-Taylor (2004) and Rotter et al (2019).
- d. Setkowski et al (2021), Kirkpatrick and Burkman (2010) and Rotter et al (2010). Of course, it hasn't all been a smooth ride. For example, critics have argued clinical experience could be devalued and findings based on averages can't apply to real patients with unique issues. See Jacups and Bradley (2023) and Ratnani et al (2023).
- e. Kirkpatrick and Burkman (2010).
- f. Rotter et al (2010).

Better reading guidelines would help anchor best practice

Australian governments and the Catholic and independent school sectors should look to the health sector, which has had 30 years of experience in developing and implementing practical guidelines for health professionals (see Box 14 on the preceding page). Just as there is no way doctors or other health professionals can stay on top of all the emerging research evidence in their field, neither can teachers.

The US has been publishing rigorous guidelines for teachers and school leaders on evidence-informed reading instruction for decades. These include practice guidance on developing reading skills and assisting struggling students (see Box 15 and Figure 4.3 on the following page).

Australian governments should develop practice guidelines through a rigorous and transparent process, led by AERO, Australia's national education evidence institute. The guideline development process should be informed by an expert panel, including researchers and practitioners.¹⁶¹

Unlike healthcare, which publishes hundreds of guidelines, there needs to be only a small set of guidelines on the robust evidence on reading and catch-up support (as outlined in Chapter 2). They should acknowledge the strength of the evidence behind recommendations, and where there is limited evidence, the guidelines should recommend 'best bets' based on available evidence and expert advice.

To help ensure guidelines are effectively implemented, they should not only outline *what* teachers need to know, but also *how* they can

Box 15: The US produces detailed education practice guidelines

The US Institute of Education Sciences (IES) – an independent research body for the US Department of Education – publishes evidence-informed practice guides, including on reading instruction and intervention.^a

Topics are chosen in areas where there is sufficient research to make recommendations. The IES works with research organisations to develop guidelines, drawing on the advice of expert panellists, including researchers and practitioners. A research protocol is developed, followed by a literature review, which informs the draft recommendations. The protocol is then reviewed by the expert panel.

Each recommendation is rated against an established evidence hierarchy. Guidelines include specific steps teachers can take to implement each recommendation, clear advice on what practices are not aligned with the evidence, how to overcome potential teaching challenges, and a summary of the research literature (see a snapshot of what this looks like in Figure 4.3 on the next page).

To ensure transparency, information is also provided about the guideline development process, the expert panellists and staff (including disclosure of any conflicts of interest), and the rationale for evidence grades.

a. US Institute of Education Sciences (2023).

 $^{161. \ \} The \ appointment \ of \ experts \ should \ manage \ potential \ conflicts \ of \ interest.$

^{162.} For example, the US Institute of Education Sciences has published just six guidelines on reading instruction and intervention in the past 16 years. These guidelines could be used as a starting point – but there is value in doing this work in Australia to build trust in the evidence base, incorporating the latest research.

Figure 4.3: A snapshot of the 2009 US practice guide on 'Assisting Students Struggling with Reading: Response to Intervention and Multi-Tier Intervention in the Primary Grades'

It has high-level recommendations:

Recommendations	Level of evidence			
1. Screen all students for potential reading problems at the beginning of the year and again in the middle of the year. Regularly monitor the progress of students who are at elevated risk for developing reading disabilities.	Moderate			
Tier 1 intervention / general educa	ntion			
2. Provide differentiated reading instruction for all students based on assessments of students' current reading levels (tier 1).	Low			
Tier 2 intervention				
3. Provide intensive, systematic instruction on up to three foundational reading skills in small groups to students who score below the benchmark on universal screening. Typically, these groups meet between three and five times a week for 20-to-40 minutes (tier 2).	Strong			
4. Monitor the progress of tier 2 students at least once a month. Use these data to determine whether students still require intervention. For those still making insufficient progress, schoolwide teams should design a tier 3 intervention plan.	Low			
Tier 3 intervention				
5. Provide intensive instruction daily that promotes the development of various components of reading proficiency to students who show minimal progress after reasonable time in tier 2 small-group instruction (tier 3).	Low			

It has a checklist of steps teachers can take to implement the recommendations:

- ☐ Create a building-level [school-level] team to facilitate the implementation of universal screening and progress monitoring.
- Select a set of efficient screening measures that identify children at risk for poor reading outcomes with reasonable degrees of accuracy.
- ☐ Use benchmarks or growth rates (or a combination of the two) to identify children at low, moderate, or high risk for developing reading difficulties.



It includes more detailed examples for implementing each step:

Recommended target areas for early screening and progress monitoring					
Measures	Recommended grade levels	Proficiencies assessed	Purpose	Limitations	
Letter naming fluency	K-1	Letter name identification and the ability to rapidly retrieve abstract information	Screening	This measure is poor for progress monitoring since students begin to learn to associate letters with sounds. It is not valid for English learners in kindergarten but seems valid for grade 1.	
Phoneme segmentati on	K-1	Phonemic awareness	Screening and progress monitoring	This measure is problematic for measuring progress in the second semester of grade 1. As students learn to read, they seem to focus less on phonemic skills and more on decoding strategies.	
Nonsense word fluency	1	Proficiency and automaticity with basic phonics rule	Screening and progress monitoring	This measure is limited to only very simple words and does not tap the ability to read irregular words or multisyllabic words.	

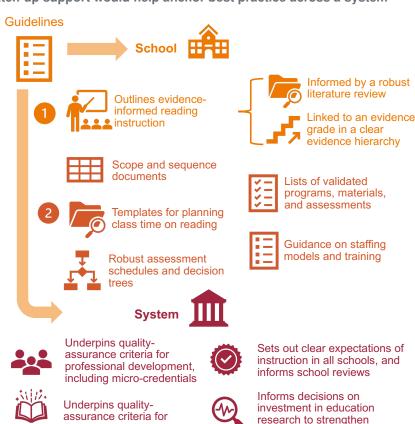
Notes: For illustrative purposes only. The guide is from 2009 and new evidence may supersede this example. A 'low' level of evidence reflects that there are few rigorous studies available. Source: US Institute of Education Sciences (2009).

effectively implement a whole-school approach to reading instruction (see Figure 4.4). Guidelines should be a one-stop-shop for the practical tools schools need to implement evidence-informed reading instruction – so that even a harried and/or inexperienced school leader can be confident they are adopting the best approach for their school, without having to do further legwork.

The guidelines should include:

- Clear guidance on what learning goals should be achieved at each year level, in more detail than provided in high-level curricula.
- Scope and sequence documents that show how phonics knowledge should be layered over time (see, for example, an extract of Churchill Primary School's scope and sequence in Appendix B). This could come with exemplar units of work and lesson plans.
- Recommendations for how class time should be spent on reading instruction, including how much time to spend on different components of reading at each year level.
- Robust assessment schedules and decision trees to support universal screening of student progress, and to track progress of students receiving extra help (see, for example, Parafield Gardens High School's decision-making process for tiered support in Appendix B).
- Lists of validated reading programs and curriculum materials, intervention programs, and assessment tools for different year levels across primary and secondary school (see Section 4.3 on page 57).
- 'Do-not-do' list of practices, programs, and/or assessment tools that have been shown, by the research evidence, to be ineffective.

Figure 4.4: Evidence-informed guidelines on reading instruction and catch-up support would help anchor best practice across a system



quidelines

Source: Grattan analysis.

curriculum materials

- Guidance on multi-disciplinary staffing models and training needs for best-practice classroom teaching and targeted catch-up supports for struggling students.
- Step-by-step recommendations on how best to change processes across a school, drawing on implementation science.

Because the research evidence on how most students learn to read is universal, there is no need for each state government to write its own; guidelines based on robust research evidence should all say very similar things. But states should adopt guidelines developed nationally and add in any state-specific resources or mandatory assessment requirements, so schools in their jurisdiction can find reliable and coherent advice all in one place.

State governments should also review existing guidance they provide to schools and teachers on reading instruction, and ensure all advice coming from the department is consistent and aligned to the evidence. Ensuring consistency across departments may require internal training for department staff – including regional offices and school review teams – on the research evidence and implementation science, and strengthening internal quality assurance processes for published material.

For example, as part of South Australia's Literacy Guarantee reforms, the Department ensured all school-level reading guidance was reviewed by a central team, and approved by the CEO, to ensure consistency across what was communicated to schools. This guidance was then embedded in the Department's school improvement model and became the 'go to' advice for schools to lift reading performance.

The cost of developing practical guidelines should be minimal. In the US, for example, it costs about US\$2 million to develop one set of practice guidelines over two years – a tiny amount given overall spending on school education.¹⁶³

Copies of the guidelines should be sent to all school leaders, along with free online training, and free resources. In jurisdictions where school autonomy is deeply entrenched, education departments will need to explain why providing clearer guidelines on evidence-informed reading instruction practices is in the best interests of teachers and students.

The guidelines should also be used by governments to inform their decisions on further investments in curriculum materials, assessment tools, and professional learning, and their implementation considered in school review processes (see Figure 4.4 on the preceding page). For example, South Australia's guidance underpinned the Department's investment in comprehensive curriculum materials for Foundation to Year 10.

Invest in education research

Australian governments should invest \$20 million in education research over five years to strengthen guidelines, in consultation with AERO.¹⁶⁴

The research could fill gaps in how best to teach reading in secondary school, and investigate effective ways to implement best-practice reading instruction in schools (and de-implement poor practices).

For example, research could explore how best to implement Tier 2 and Tier 3 supports for high school students struggling with reading.

^{163.} Consultation with the US Institute of Education Sciences. The guidelines could cost more in Australia than the US because we recommend additional operational guidance be included. However, the costs would still be a tiny fraction of overall education spending.

^{164.} The \$20 million research fund should cover the costs of evaluation, program cost contributions, and incentives for schools to participate in trials.

4.3 Step 3: Ensure schools have the high-quality curriculum materials and assessments teachers need to teach reading well

State governments and Catholic sector and independent school leaders should ensure all schools and teachers have access to quality-assured, comprehensive curriculum materials for all subjects and year levels, and for targeted catch-up support. All schools and teachers should also have access to effective reading assessment tools to identify students at risk of falling behind.¹⁶⁵

High-quality materials and assessments improve reading

High-quality curriculum materials are vital, not just for teaching decoding in early primary school, but for building vocabulary and background knowledge in every subject and every year level from Foundation to Year 12 (see Chapter 2).

A 2022 Grattan Institute survey of 2,243 teachers and school leaders across Australia showed that those who had access to comprehensive, high-quality curriculum materials were much more likely to report consistent learning for all students, a shared understanding among colleagues of what constitutes effective teaching, and greater satisfaction with their school's planning approach.

The workload benefits are big too – teachers who have access to comprehensive, high-quality curriculum materials spend on average three hours less each week sourcing and creating materials. Ensuring schools have shared materials for all learning areas could save 20 million teacher hours a year. 166

165. Note that reading programs have assessments embedded in them, but these focus on whether students are learning the program content, rather than looking more broadly at whether the materials and resources are working.

166. Hunter et al (2022a).

High-quality assessments are important too. School leaders and teachers need effective assessments to identify students at risk of falling behind, diagnose specific reading difficulties, and monitor students' reading progress. Some assessments do this better than others (see Box 16 on page 56).

But schools don't have the materials and assessments they need

Currently, many schools don't have the curriculum materials they need to deliver effective reading instruction all through school. Grattan Institute's research has found that about half of teachers in Australia are planning classes on their own. Only 15 per cent of teachers have access to a shared bank of high-quality curriculum materials for all their classes, and this is even less likely for teachers in disadvantaged schools.¹⁶⁷

Where externally-developed materials are available, such as early years reading programs, making the right choice isn't easy. Governments and sector leaders often take a 'hands-off' approach and don't provide advice on quality.

For example, the Victorian Department's Literacy Teaching Toolkit warns that the quality of commercial phonics programs varies, but then leaves it up to schools to assess quality on their own. ¹⁶⁸ In contrast, the WA Department publishes a list of endorsed reading programs and assessments, and updates this every year. ¹⁶⁹

Currently, schools are also using a range of assessment tools that are not always effective (see further in Box 11 on page 36). While most education departments mandate some specific early reading assessment tools and make recommendations about other

^{167.} Ibid.

^{168.} Victorian Department of Education (2023d).

^{169.} WA Department of Education (2022a, 10 and 11). This includes criteria for quality-assuring the Year 1 phonics assessment, but not for reading programs.

assessments to use,¹⁷⁰ these do not always align with the evidence or provide the information teachers need to monitor reading progress effectively.

For example, the Victorian government requires all Foundation and Year 1 students to complete a series of assessments, known as the English Online Interview (EOI).¹⁷¹ But the phonics component of the EOI assessment is not as robust as the Phonics Screening Check. In Year 1, the test includes only 10 words and non-words,¹⁷² compared to the 40 words and non-words in the Phonics Screening Check adopted by NSW, SA, and Tasmania (see Box 12 on page 40). Including fewer words in the test means students are tested on fewer letter-sound combinations, which means the test is less able to accurately identify students struggling with decoding.¹⁷³

And the EOI test assesses students' use of predictable picture-book texts, which encourages guessing rather than reading, and uses Running Records, which is not closely aligned to the evidence (see Box 16 on the following page).¹⁷⁴

In contrast, South Australia recommends a suite of effective early reading assessments to monitor students' phonological awareness,

170. For example, Queensland's 'Early Start' assessments for Foundation and Year 1 students, NSW's 'Best Start Kindergarten' assessments completed on entry into school, the NT's Foundations of Early Literacy Assessment (FELA), and the ACT's 'BASE' assessments completed in Foundation. See Queensland Department of Education (2023b), NSW Department of Education (2023e) and ACT Education Directorate (n.d.[b]).

171. Victorian Department of Education (2022a).

phonics, and fluency.¹⁷⁵ The Department's policy has discontinued the use of Running Records, and recommends that schools use DIBELS (Dynamic Indicators of Basic Early Literacy Skills) assessments instead.

Invest in more and better materials

Australian governments and Catholic and independent schools should invest in the development of high-quality curriculum materials, reading programs, and intervention programs for all year levels, where needed.¹⁷⁶ This will require auditing existing materials, investing to fill any identified critical gaps, and supporting teachers to use the materials effectively.

To start, governments should prioritise investing in the development of primary school knowledge-rich materials for the Humanities and Social Sciences (HaSS), Science, and English, as well as reading intervention programs and assessment tools targeted at struggling students in secondary school.

State governments and sector leaders should also invest in decodable readers for all public and low-fee non-government primary and secondary schools.¹⁷⁷ Making the switch to evidence-informed reading instruction means some schools will need to cease using, or re-purpose, outdated materials, such as 'levelled texts' and 'predictable texts', and introduce new materials, such as decodable texts.¹⁷⁸

^{172.} The 'Module 2' test is recommended for use in Term 1 of Year 1. This test contains five words and five non-words. The Department offers teachers the flexibility to choose a different module for individual students (there are four in total), which may include up to 14 words and non-words: Victorian Department of Education (n.d.lbl).

^{173.} UK Standards and Testing Agency (2017); and Department of Education (2021).

^{174.} Victorian Department of Education (2023e).

^{175.} Del Rio and Jones (2023, p. 35).

^{176.} For concrete examples, see Box 4 and Appendix A in Hunter et al (2022a). This includes detailed lesson-level materials, such as student assessments, and workbooks: Hunter et al (ibid, p. 9).

^{177.} Age-appropriate decodable texts should be given to secondary schools to help students who are receiving intervention support. See Mesmer (2005).

^{178.} For example, higher-level 'levelled texts' could be re-purposed by re-organising them into topic and knowledge areas. However, early years 'predictable texts' shouldn't be repurposed.

Box 16: What an evidence-informed reading assessment looks like

Some reading assessments are better than others. Robust reading assessment tools should:^a

- assess reading sub-skills relevant to students' reading ability.
- identify whether students are on track with their learning and what additional support they may need.
- be valid and reliable, i.e. the assessment measures what it is supposed to measure, and delivers the same result consistently.
- not be too difficult or costly for teachers and schools to administer.

For example, DIBELS (Dynamic Indicators of Basic Early Literacy Skills) has a suite of robust reading assessment tools. DIBELS (8th edition) has six short assessments of different reading sub-skills, such as phonemic awareness and fluency, that monitor students' progress from Foundation to Year 8. Having tests on different reading sub-skills enables teachers to identify precisely what students need to practice.

The assessments have been extensively tested for their validity and reliability,^b and are freely available. They are simple to administer, with each test taking about one minute to complete one-on-one with a student (except one assessment that takes three minutes and is done in a group), and are easy to score. For example, in the Phoneme Segmentation Fluency test, if the teacher says 'fish', and the student sounds out the three phonemes of /f/ /i/ /sh/, they get a full score of three.^c If the student sounds out /f/ /ish/, they get a score of two.

Achievement benchmarks for the beginning, middle, and end of the year enable teachers to determine whether a student is falling behind, on track, or ahead of where they should be. If a student receives help to catch-up, the assessments can also be used to monitor their progress more frequently (e.g. fortnightly).

But some reading assessment tools are not as robust. For example, Running Records is aligned with the 'whole-language' approach (see Box 4 on page 23), doesn't assess foundational reading sub-skills, such as phonological awareness, phonics, or fluency, and therefore doesn't provide useful information about what reading sub-skills a student may need more help with.^d It tests students' reading progress through 'levelled texts', which tends to over identify students as at risk of reading difficulty.^e

The process involves a student reading a text, with the teacher marking the words read correctly, the number and types of 'cues' that a student uses to mis-identify a word, and self-corrections. For example, if 'the *little* dog' is misread as 'the *small* dog', the student may have used the picture as a 'cue' to guess the adjective. But the student is not marked down for this; it is marked as a reading 'strategy'. This makes it hard for the teacher to identify *why* a student with poor reading skills is struggling – i.e. is it their decoding skills, or their vocabulary, or something else? The test can also take a long time to administer (depending on the text length and students' reading speed).

a. Bell et al (2023).

b. University of Oregon Center on Teaching and Learning (2018); Goffreda et al (2009); and Elliott et al (2001).

c. Acadience Learning (2021).

d. D'Agostino et al (2017), Denton et al (2006), Blaiklock (2004), Ontario Human Rights Commission (2022, p. 209) and Fawson et al (2006).

e. Denton et al (2006) and Fawson et al (2006). Scores vary considerably depending on the passages: students needed to read three separate passages to get a reliable score.

f. Bell et al (2023, pp. 333-334).

This could be expensive for schools to fund on their own. NSW sent decodable texts to all public primary schools in 2021, at a cost of about \$4.3 million.¹⁷⁹

State governments should also give a one-off grant to disadvantaged low-performing schools – regardless of their sector – to purchase curriculum materials, including evidence-informed reading programs, intervention programs, and assessments. This funding should extend to any relevant teacher training in the curriculum materials or programs.

And governments should commit to phasing-out materials, reading programs, and reading assessments that are not aligned with the evidence. For example, in response to findings from the NSW government's education research body (the Centre for Evaluation and Statistics in Education), NSW discontinued its \$55 million annual funding for Reading Recovery, given its limited effect on student reading performance in the longer-term and high relative cost. And in 2020, in response to findings from a report by the same research body, it removed its Language, Learning & Literacy (L3) program, which promoted teaching practices that were 'not consistent with current best practice, especially with regards to phonics and phonemic awareness practices'. 181

Quality-assure materials and assessments

Australian governments should establish a national quality-assurance body, similar to EdReports in the US. EdReports quality assures comprehensive curriculum materials, and publishes the results on

179. In 2018, NSW funded all public primary schools at \$50 per Foundation student to purchase decodable texts, but many schools did not take up the offer. In 2021, the government sent all public primary schools decodable texts. See J. Baker (2021).

its website. 182 The list of quality-assured curriculum materials should also be included in Australia's practice guidelines. To preserve its independence, this body could be funded by a one-off endowment from government. 183

EdReports' quality reviews are thorough.¹⁸⁴ Trained teams of reviewers spend four-to-six months reviewing each set of materials. They evaluate materials against detailed and evidence-informed criteria on quality and usability in the classroom. EdReports has had a significant effect on the quality of curriculum materials available to US teachers.¹⁸⁵

Early years reading programs, as well as primary and secondary reading assessment tools, should also be validated – drawing on England's 'validation' model (see Appendix C on page 90) – so schools know which programs and assessment tools are evidence-informed and effective. 186 The Five from Five's Primary Reading Pledge is an

^{180.} NSW Department of Education (2021); and Bagshaw (2016).

^{181.} NSW Department of Education (2023b); and J. Baker (2020).

^{182.} This aligns with Recommendation 1C in the Expert Panel's review of the National School Reform Agreement: see O'Brien et al (2023, p. 18).

^{183.} The cost should be small in the scheme of overall expenditure on school education. For example, EdReports' annual operating cost is about US\$8 million. See EdReports (2022a) and EdReports (2023).

^{184.} The criteria for reviewing early years literacy curriculum materials are set out in a 100-page guide, which helps reviewers assess whether materials meet requirements such as providing systematic and repeated instruction for students to hear, say, and read every new sound-letter combination they learn: EdReports (2022b). For further detail see Hunter et al (2022a, Box 19).

^{185.} Across 42 publishers, 87 sets of curriculum materials have been changed based on EdReports reviews. (EdReports [2023]). Currently 29 state education departments use EdReports reviews for state plans, policy, and advice to teachers and school leaders.

^{186.} Other international jurisdictions do this too. For example, the French Scientific Council of National Education – a group of multi-disciplinary experts – evaluated the content and design of instructional materials used to teach reading in France, and published the findings: Colleu Terradas (2023).

Australian example of a list of recommended reading programs and assessment tools that have been validated against published criteria. 187

State governments should not develop assessment tools unless they are prepared to subject them to rigorous review to assure their validity and reliability (see Box 16 on page 56).

4.4 Step 4: Require all schools to do universal screening of reading skills and help students falling behind to catch-up

Australian governments and the Catholic sectors should require all primary and secondary schools to embed a multi-tiered system of support to ensure all students stay on track with their learning.¹⁸⁸

Regularly screen students' reading skills

Australian governments and the Catholic sectors should require all schools to screen students' reading skills at least twice a year from Foundation to Year 2 (at the start and in the middle of the year). They should also screen any new school entrants, and all students in the transition to secondary school, to identify any students that may not have learnt foundational reading skills in primary school. Systems must do away with the 'wait-to-fail' approach and make sure every student at risk of falling behind is identified as early as possible.

The screening tools used should be from a 'validated' list (see Section 4.3 on the preceding page) to ensure they align with the best evidence (see Box 16 on page 56). Twice-yearly screening shouldn't significantly increase teacher workload. The DIBELS assessment suite, for example, takes about 10 minutes per student, which is about four hours of teacher time for a class of 24 students. This is much less time-intensive than other assessment tools, such as the Fountas and Pinnell Benchmark Assessment, which can take about 20-to-30 minutes per student.¹⁹⁰

Schools should ensure they have an efficient assessment schedule, so that teachers can get the most useful information about students' reading progress, with the fewest assessments possible. ¹⁹¹ This will require schools to set an end-date for phasing out assessment tools that are not aligned to the curriculum content and/or aligned to the evidence.

Other education systems use universal screening to ensure students stay on track with their learning. For example, Mississippi requires universal screening for all Foundation to Grade 3 students three times a year, and the Mississippi Reading Panel recommends which assessment tools to use. 192 Ohio requires universal screening at least once a year from Kindergarten to Grade 3, using one of three assessment tools from an approved list. 193 Schools report the screening results to the Ohio Department of Education. Both these systems mandate that students identified as struggling should be monitored further and provided with catch-up support (see Table 3.1 on page 39).

Since 2018, France has mandated a national screening test three times a year, in Year 1 and Year 2, as well as in Year 6, before students

^{187.} Five from Five (2020, pp. 12–17). AUSSPELD also publishes a list of evidence-aligned programs: AUSSPELD (2020).

^{188.} This aligns with Recommendation 1A in the Expert Panel's review of the National School Reform Agreement: see O'Brien et al (2023, p. 17).

^{189.} See US Institute of Education Sciences (2009). Recommendation 1 of the practice guide says: 'Screen all students for potential reading problems at the beginning of the year and again in the middle of the year. Regularly monitor the progress of students at risk for developing reading disabilities.'

^{190.} Fountas and Pinnell (2018).

^{191.} VanMeveren et al (2020).

^{192.} Loble (2023).

^{193.} Ohio Department of Education (2022).

transition to secondary school.¹⁹⁴ The Year 6 test is used as a system 'health check', and to identify students not reading at grade-level who need additional help. A 2020 survey found that 43 per cent of teachers said it influenced their teaching practices.¹⁹⁵

State governments and Catholic sector leaders should require schools to share the universal screening data with their Literacy Master Teacher, who oversees literacy instruction in a network of schools (see Section 4.5 for more detail on Literacy Master Teachers). This will give them oversight on whether schools have an effective assessment regime. This would also enable governments to identify areas of system weakness in reading skills, and provide targeted resources and professional learning where they are most needed. This data should not be made public, because that could detract from its primary purpose of giving teachers useful information about their students' progress.

Australian governments should also ensure key data are built into student records that are attached to a national (and fully implemented) Unique Student Identifier (USI), so that students' academic record goes with them if they switch schools. Each year, about 10,000 students switch schools. This would help teachers respond more quickly and effectively to students who move schools often and are at higher risk of falling through the cracks. 198

Require all schools to provide extra help to students struggling with reading

Australian governments and Catholic sector and independent schools should require primary and secondary schools to provide additional support to students at risk of falling behind. Grattan Institute's 2023 report, *Tackling under-achievement*, 199 shows that when delivered through a response-to-intervention model (see Figure 2.1 on page 28), small-group catch-up tutoring can help reduce learning gaps.

Success depends on how well classroom teaching (Tier 1), and Tier 2 and Tier 3 interventions are designed and implemented. Not all schools provide best-practice classroom instruction, or tutoring that is evidenced-based and well-targeted to student needs.

NSW and Victoria invested heavily in catch-up tutoring in response to COVID-19 lockdowns, together providing catch-up learning to hundreds of thousands of students since 2021.²⁰⁰ Initial evaluations of these programs found that schools reported improved student wellbeing and engagement and a positive effect on learning progress.²⁰¹ Public evaluations showed there were several delivery challenges, including finding tutors to deliver small-group tuition.²⁰² This coincides with a finding from a 2023 survey where nearly 60 per cent of secondary school teachers cited a lack of available staff as a reason for not providing additional support to students struggling with reading (see Box 11 on page 36).

Schools should consider expanding the pool of tutors to include, for example, teaching assistants, retired teachers, and trainee teachers,

^{194.} Colleu Terradas (2023, pp. 32–36). The Year 6 online screener includes two submeasures – an oral reading test and a test to distinguish between real words and non-words.

^{195.} Ibid (p. 35).

^{196.} This aligns with Recommendation 5B in the National School Reform Agreement Expert Panel's final report: see O'Brien et al (2023, p. 23).

^{197.} Rowe (2005, p. 48). The inquiry report noted that 'mobility is particularly an issue for the education of Indigenous children, newly arrived non-English speaking background children, and the children of Defence Forces personnel'.

^{198.} See also Recommendation 10 in Rowe (ibid, p. 48) in Appendix C.

^{199.} Hunter and Sonnemann (2023).

^{200.} Hunter and Sonnemann (ibid, p. 12). Since 2021, about \$2 billion has been invested or committed to small-group tutoring in NSW and Victoria. In 2023, the Victorian initiative was extended through 2024 and 2025.

^{201.} Victorian Department of Education (2022b, p. 3); and NSW Department of Education (2022).

^{202.} Hunter and Sonnemann (2023, p. 15).

provided they are given the right training. Evidence from the UK shows teaching assistants can deliver impressive student learning results under the right conditions.²⁰³

Implementing an effective response-to-intervention model across a school requires a significant shift in practice, including changes to timetabling, staffing, training for staff, and coordination to monitor student progress (see Box 8 on page 31 and Appendix B on page 74). Practical, evidence-informed guidelines (see Step 2 in Section 4.2 on page 48) and better investment in teacher expertise (see Step 5 in Section 4.5) would help schools to implement effective catch-up supports.

Australian governments should also investigate options to boost the cost-effectiveness of small-group tutoring.²⁰⁴

4.5 Step 5: Ensure teachers have the knowledge and skills they need through essential training and new micro-credentials, and by creating specialist literacy teacher roles

Australian governments and the Catholic and independent school sectors should invest in developing teachers' knowledge and skills on the best way to teach reading (see Figure 4.5 on the next page).

Current pre-service teacher training in Australia is not adequately preparing teachers to effectively teach reading,²⁰⁵ and it is not

developing sufficient numbers of teachers with specialist expertise.²⁰⁶ For example, a 2019 review of 116 literacy units across 66 education degrees in Australia found only 4 per cent had a specific focus on early reading instruction or early literacy.²⁰⁷

While the 2023 Teacher Education Expert Panel recommended reforms to strengthen the quality of pre-service training, such as mandating core course content in ITE programs, 208 it will take more than 40 years for the benefits to flow through to the whole workforce. 209

Effective professional learning to up-skill teachers is critical. But professional learning needs to be well designed to make sure teachers apply new knowledge in their own classrooms (see Box 17 on page 62). Grattan's proposed system-wide workforce model (see Figure 4.6) seeks to ensure that investment in professional learning is effective – through quality-assurance processes – and improves classroom practices – by having school-based Literacy Instructional Specialists work directly with teachers in their classrooms to hone their skills.

While staff shortages may make implementing these recommendations more challenging in the short-term, Grattan's proposed workforce model does not require governments to bring substantially more teachers into the workforce. Instead, the priority should be on investing to build the expertise of the existing workforce, and deploying the

^{203.} Sharples et al (2019) and Education Endowment Foundation (2021). The report notes positive effects are only observed when teaching assistants work in structured settings with high-quality support and training. When teaching assistants are deployed in more informal, unsupported instructional roles, they can impact negatively on pupils' learning outcomes.

^{204.} Hunter and Sonnemann (2023, pp. 8-10).

^{205.} A 2021 federal government review of Initial Teacher Education (ITE) found ITE courses in Australia do not adequately prepare graduates to teach reading: Department of Education, Skills and Employment (2022).

^{206.} Goss and Sonnemann (2020).

^{207.} Buckingham and Meeks (2019). The study also reviewed the six most prescribed textbooks and found they did not have sufficient content to prepare teachers to provide evidence-informed reading instruction.

^{208.} Department of Education (2023b). Education Ministers gave in-principle support for the Panel's recommendations and these recommendations have been endorsed by the National School Reform Agreement's Expert Panel's final report: see O'Brien et al (2023, p. 18).

^{209.} Goss and Sonnemann (2020, p. 10).

Figure 4.5: Grattan's proposed system-wide workforce model



System Instructional Specialists



Principal Literacy Master Teacher – new role

- Chief expert on literacy for a whole educational system.
- Support the development of evidenceinformed guidelines on reading instruction.
- Coordinate professional learning for Literacy Master Teachers, including training and coaching them.
- Lead and coordinate demonstration schools.
- Oversee all Literacy Master Teachers in their system.



Literacy Master Teachers – new role

- Coordinate professional learning within their network.
- Train and coach Literacy Specialists in schools.
- Support Literacy Specialists with all aspects of their role.
- Located in all regions, overseeing about 25 schools each.



School leadership and classroom teachers



Principa

- Be accountable for students' reading performance.
- Lead change-management process to embed a whole-school approach to evidence-informed reading instruction.
- Trained in both reading science and implementation science.



Literacy Instructional Specialist – new role

- Implement effective reading instruction according to the new guidelines, and coach teachers.
- Oversee student screening, progress monitoring, and the analysis of data, and manage the Tier 2 intervention workforce.
- Trained in both reading science and implementation science.



Curriculum Leader e.g., Head of Maths or Humanities

 Implement rigorous systematic reading programs and knowledge-rich curriculum materials.



Teachers

Teach effectively and track outcomes.



Intervention support



Teachers

- Provide targeted catch-up supports in small groups or one-on-one in line with new guidelines.
- Regularly monitor the progress of students receiving additional support.



Speech pathologists and educational psychologists

- Work collaboratively with teachers, tutors, and school leaders to identify and support students requiring targeted and individualised support (Tier 2 & Tier 3).
- Provide diagnostic assessments and support planning, where needed.
- Work collaboratively with school staff to develop and improve teaching of reading.



Tutors, including teaching assistants

- Provide targeted catch-up supports in small groups or one-on-one in line with new guidelines.
- Regularly monitor the progress of students receiving additional support.

Source: Grattan analysis.

workforce more strategically so that it can have the biggest effect on student performance.

Develop quality-assured micro-credentials on how best to teach reading

Australian governments – including the federal government – should develop and subsidise quality-assured micro-credentials on the best way to teach reading and provide catch-up supports.²¹⁰

High-quality micro-credentials are an effective way to up-skill teaching and non-teaching staff.²¹¹ High-quality micro-credentials will enable governments to ensure teachers and school leaders have an appropriate level of expertise in evidence-informed reading instruction for their specific role. Such credentials can also help to build expert career paths for teachers. For example, an evaluation by the UK Department for Education of the National Professional Qualifications for school leadership (see Box 18 on the next page) found nearly 70 per cent of participants agreed that it contributed to them securing a new role.²¹²

Micro-credentials could be developed for different skills and roles, including school leaders, Literacy Instructional Specialists, Literacy Master Teachers, early years teachers, specialists such as speech pathologists, and teaching assistants. For example, a suite of micro-credentials to support the 'Reading Guarantee' strategy could include:

Box 17: Effective professional learning

Evidence shows that professional learning can improve the quality of teaching, and that high-quality teaching improves student learning.^a For example, a student with a great teacher can achieve in half a year what a student with a poor teacher achieves in a full year.^b

A major systematic review in 2021 of more than 100 papers found that teacher professional learning was more effective if it included at least one of four different mechanisms:

- 1. Builds teacher knowledge effectively, for example, by managing cognitive load.
- 2. Motivates teachers, for example, by presenting information from a credible source.
- 3. Develops teaching techniques, for example, instructional techniques.
- **4.** Helps embed practice, for example, by providing teachers with prompts and cues.

The more mechanisms a professional learning program had, the greater the effect on student performance.

The study also found that professional learning should have a demonstrated value to teachers, should be aligned to school priorities, and should be supported by the school leadership. It should also come with useful resources, such as lesson plans, to make it easier for teachers to immediately apply their new knowledge and skills.

^{210.} The federal government has recently invested in a micro-credential on phonics, but more work needs to be done to build a suite of micro-credentials that have different levels of specialisation and coverage. This aligns with Recommendation 1C in the National School Reform Agreement Expert Panel's final report: see O'Brien et al (2023, p. 18).

^{211.} Tamoliune et al (2022).

^{212.} Leonardi et al (2021, p. 16). A 2023 interim evaluation of all National Professional Qualifications found that participants saw getting the qualification as helping them to develop the skills they needed for a new role: Leonardi et al (2023, p. 29).

a. Desimone (2009); Egert et al (2018); and Sims et al (2021).

b. Leigh (2010).

c. Sims et al (2021).

- Early years (Foundation to Year 2) evidence-informed reading instruction.
- Upper primary (Year 3 to Year 6) evidence-informed reading instruction.
- Secondary school evidence-informed reading instruction.
- Primary reading intervention support.²¹³
- Secondary reading intervention support.
- Literacy specialists, targeted at Literacy Instructional Specialists and Literacy Master Teachers.²¹⁴
- Specialist literacy support, targeted at speech pathologists and educational and developmental psychologists.
- Implementing a whole-school approach to literacy instruction and change management, targeted at school leaders.²¹⁵

Successful completion of a micro-credential should require passing a final assessment on the knowledge and skills covered by the course.

Governments should provide small annual incentive payments (for example, \$400 per teacher) to schools for every teacher or teaching assistant they employ who has completed a quality-assured literacy micro-credential.

Box 18: The UK's National Professional Qualifications

The UK has a suite of micro-credentials called National Professional Qualifications. This includes the 'National Professional Qualification in Leading Literacy', which is aimed at teachers who are aspiring to lead reading instruction across a school. It is a fully funded 12-month program, with a mix of face-to-face and online learning for one-to-two hours a week. The training is provided by accredited schools and intermediaries, such as the English Hubs, and must meet targets set by the UK Department for Education. Schools receive £200 for every teacher who has completed a National Professional Qualification.

National Professional Qualifications are subject to ongoing quality-assurance. An independent body – the Education Endowment Foundation – reviews and updates the learning requirements for qualifications, to ensure they are 'underpinned by robust evidence and that this evidence is applied according to research findings'.^b

Trained reviewers visit a qualification's lead provider at least once every two years. The quality assurance process is rigorous and involves a team of reviewers gathering evidence across four days. The team interviews and surveys trainers and participants, reviews documentation (such as the training program and training materials), and sits in on training sessions. After the visit, reviewers synthesise evidence collected against a quality framework, and use this to grade the qualification. Grades and reports are made public, so schools and teachers know where to go for high-quality professional learning.^c

^{213.} This could cover training in the essentials of evidence-informed reading instruction, with a focus on how to support the learning needs of students who typically require Tier 2 and Tier 3 support, such as students with dyslexia or developmental language disorder.

^{214.} This could cover training in practice guides, effective coaching, and school-wide assessment regimes and catch-up supports.

^{215.} This could include training on the importance of evidence-informed reading instruction and best-practice change management: Patfield et al (2022).

a. For example, United Learning is a group of schools in the UK which offers the training: see United Learning (2022).

b. EEF (2023b).

c. Ofsted (2022).

The micro-credentials should be quality-assured against rigorous guidelines by an independent body, drawing on the UK's National Professional Qualifications model (see Box 18 on the preceding page).

Set essential training requirements for all early years teachers

Australian governments should require all primary school classroom teachers to spend at least 25 per cent of their professional learning hours for accreditation on training focused on evidence-informed reading instruction.²¹⁶ This is equivalent to five hours a year.

NSW sets requirements for the number of hours teachers must do of accredited courses in 'priority areas'.²¹⁷ Professional learning courses are accredited if they reflect the principles of effective professional learning.²¹⁸ This approach should be used as a model for other states.

Training completed as part of the 25 per cent should be quality-assured by an independent body. Eligible training should include quality-assured micro-credentials, or training as part of a quality-assured reading program.²¹⁹

Establish demonstration schools that showcase best practice

Australian governments should establish demonstration schools across sectors and demographics to showcase best practice, drawing on aspects of the UK's 'English Hubs' program (see Box 19 on the next page). Schools chosen to be in the program should be provided with specific resources to manage the additional workload.²²⁰

Demonstration schools – ordinary schools with a demonstration function – are an effective way to spread best practice.²²¹ Demonstration schools can give visiting teachers and school leaders an opportunity to see how theory is put into practice.²²²

Coach teachers in reading instruction by creating an expert career path for specialist literacy teachers

Australian governments and the Catholic and independent school sectors should create an expert career path where the best teachers have dedicated 'day jobs' to improve reading instruction.

A principal Master Teacher in each system should oversee Literacy Master Teachers, who would work across a region to support school-based Literacy Instructional Specialists, who would build high-quality teaching of reading within their school.²²³

^{216.} Note Grattan also recommends at least 50 per cent of teachers' professional learning hours each year should be curriculum-specific: Hunter et al (2022a). These two content areas could overlap. For example, a seminar on building background knowledge.

^{217.} NSW Education Standards Authority (n.d.). For example, 'Proficient Teachers' must do a minimum of 50 hours (out of 100 hours in total) of NESA Accredited professional development across all priority areas over five years. Priority areas include, for example, students with disabilities.

^{218.} NSW's principles for effective professional learning are based on a consensus in the literature that has now been challenged by Sims et al (2021).

^{219.} This recommendation should only take effect once a sufficient number of professional learning courses on reading instruction have been developed, and quality-assured.

^{220.} Other adjustments might also be needed, such as seminar rooms where teachers can deliver content to visitors, and hallways that make it easier to observe

^{221.} NSW Department of Education (2023f).

^{222.} West (1925, p. 626) and Loughland (2012). As aptly noted in a 1928 survey on demonstration schools, it is 'much easier to evaluate educational principles and technique of classroom procedures when they are witnessed in a working situation than when they are merely discussed or read': W. Smith (1928).

^{223.} See further in Grattan Institute's 2020 report, Goss and Sonnemann (2020), which recommended Instructional Specialists and Master Teachers. This aligns with Recommendation 4C in the National School Reform Agreement Expert Panel's final report: see O'Brien et al (2023, p. 22).

Governments should start now to build the pipeline for these expert roles, and up-skill existing teachers to fill these roles.

Currently, in-depth, school-based specialist expertise in reading instruction is lacking. Instructional leader roles are not sufficiently subject-specific, and the people in them often don't have enough time to do their job effectively.²²⁴ Teachers report that instructional leader advice is inconsistent over time, ²²⁵ and principals report program funding chops and changes, making it difficult to embed change.²²⁶

High-performing education systems overseas, such as Singapore and Shanghai, use their best teachers – by subject – to lead and develop others through an 'expert teacher path'. 227 'Master Teachers' are overall pedagogical leaders for their subjects across many schools. They help train and guide 'Lead Teachers' or 'Instructional Specialists', who work within schools to develop other teachers. 228 At the pinnacle in Singapore is the Principal Master Teacher, who is the chief pedagogical expert for their subject at the system level. 229

To ensure best practices are communicated and implemented consistently across schools in Australia, a Principal Literacy Master Teacher should be the chief expert in literacy for a whole educational system

Box 19: The English Hubs program

In 2018, the UK Department for Education established the 'English Hubs' program – a school-to-school support program that has led to improvements in Year 1 phonics results.

The Department selected 34 'English Hub' primary schools with an excellent track record of teaching reading, to work with nearby 'partner schools' – about 30 schools on average – that needed help to improve reading in Foundation and Year 1.^a They also provide less-intensive support to many other schools.

The Department funds each English Hub to provide support to schools. Each hub is led by a trained 'Hub Lead' and five Literacy Specialists.^b Support ranges from showcasing best-practice teaching, auditing how schools teach reading (which includes developing an action plan to improve practices), providing funding to run training and/or purchase resources such as decodable books, to providing partner schools with nine days of in-house support from a Literacy Specialist over two years.

Results have been promising. A 2022 early evaluation of the program found partner schools outperformed non-partner schools on the Year 1 Phonics Screening Check.^c

- a. Shepherd and Fortescue (2023). English Hub schools and partner schools need to meet eligibility requirements. Hub schools, for example, need to have 90 per cent of students achieving the 'expected standard' in the Year 1 Phonics Screening Check, and have an Ofsted rating of 'good' or 'outstanding'. Partner schools have a lower-than-average percentage of pupils meeting the 'expected standard' in the Year 1 Phonics Screening Check: Whiteknights English Hub (2023) and Roade English Hub (2023).
- b. Ongoing training of Hub school staff is provided by a central English Hubs Training Centre.
- c. Shepherd and Fortescue (2023).

^{224.} Goss and Sonnemann (2020, p. 3).

^{225.} For example, more than half of teachers surveyed by Grattan Institute in 2019 indicated the pedagogical advice they had received over the past five years in a specific learning area was either 'fairly' or 'very' inconsistent: Goss and Sonnemann (ibid). Some teachers also questioned the quality and capability of instructional leaders: Goss and Sonnemann (ibid, p. 15).

^{226.} Ibid (p. 3).

^{227.} For discussion of how high-performing systems develop teachers, see Jensen et al (2012), Jensen et al (2016), OECD (2011) and Barber and Mourshed (2007), as cited in Goss and Sonnemann (2020, p. 11).

^{228.} For further information see Jensen et al (2012, p. 74). This research informed the recommendations in Grattan Institute's 2020 *Top teachers* report: Goss and Sonnemann (2020).

^{229.} Jensen et al (2012, p. 110).

and manage the team of Literacy Master Teachers. The Principal Literacy Master Teacher should also contribute to the development of evidence-informed practice guidelines and micro-credentials in reading instructions (see Section 4.2 on page 48).

Literacy Master Teachers should be responsible for improving teaching across schools by coordinating professional learning, supporting Literacy Instructional Specialists, and connecting schools with research. They should be remunerated at about \$80,000 more than the top rung of the teacher salary scale. They should be based in a region and work closely with school-based Literacy Instructional Specialists across about 25 schools to improve teaching practice.²³⁰ They would have no direct teaching load.

Literacy Instructional Specialists should work within schools to set the standard for good teaching, build teaching capacity, and ensure evidence-informed practices are implemented in line with the new guidelines. Central to these roles would be frequent opportunities to demonstrate practice and to observe and coach other teachers. They would also oversee universal screening and progress monitoring of student reading performance, collect and analyse screening data, and coordinate catch-up supports for students in their school.

These roles should be specific to the stage of learning, for example 'primary literacy' and 'secondary literacy'. In secondary schools, these specialists would work closely with all domain specific teachers to help them understand how to embed best practice teaching of reading in their subjects, and ensure students falling behind are getting help to catch-up (see, for example, Box 8 on page 31 and Appendix B).

While these specialists would be classroom teachers, they should be given at least 0.5 FTE release time for this specialist role.²³¹ They should be paid about \$40,000 more than the highest standard pay rate for teachers.

Both Literacy Master Teachers and Literacy Instructional Specialists should be required to complete a relevant micro-credential that qualifies them for the role (see the 'literacy specialists' micro-credential in Section 4.5 on page 62).²³²

Provide university scholarships for specialist support roles, such as speech pathologists and educational and developmental psychologists

Australian governments should invest in building the pipeline of specialist supports, by providing a capped number of university scholarships for specialist support roles, including speech pathologists and educational psychologists – provided that, after graduation, they spend at least three years working in the school education sector.

Scholarships could be provided as cash-in-hand bursaries, rather than as a waived HECS debt. Cash-in-hand scholarships are likely to be more enticing, given students may value money now rather than later.²³³

^{230.} This is consistent with Grattan's *Top Teachers* report, which assumes 1 per cent of teachers would be Master Teachers and that within that Master Teacher group a proportion would be literacy focused: Goss and Sonnemann (2020). We recommend the number of literacy specialists be tested in a pilot evaluation of the Master Teacher model, as recommended in Goss and Sonnemann (ibid).

^{231.} Previous instructional leader roles in Australia have suffered from insufficient allocation of time to work effectively with other teachers: Goss and Sonnemann (ibid).

^{232.} In England, the Reading Framework says that headteachers of primary and secondary schools should appoint a literacy lead, who should consider taking the National Professional Qualification in Leading Literacy. This course is designed to 'support current and aspiring literacy leads to learn how to teach and promote literacy effectively across the whole school': UK Department for Education (2023a, p. 126).

^{233.} A Grattan Institute survey showed that teachers valued cash-in-hand bursaries: Goss and Sonnemann (2020). In designing a bursary, governments would need to consider the tax and social security income test implications. See, for example, McIlroy (2022).

Currently, there are not enough speech pathologists and educational developmental psychologists to support all students in need.²³⁴ For example, only about 800 speech pathologists work in education settings in Australia today – about one speech pathologist for every 13 schools.²³⁵ There should be about 5,000, or about one for every two schools.²³⁶

Even where schools can get speech pathologists, they may not be trained in reading instruction or utilised effectively.²³⁷ For example, speech pathologists often focus their time on assessment and report writing, rather than therapy with students.²³⁸ Adopting Grattan's workforce model (see Figure 4.5 on page 61), including school-based literacy specialists, would enable speech pathologists to use their expertise where it is most needed. A micro-credential in school-based reading instruction that is targeted at speech pathologists could also help them to work effectively in schools, alongside teachers and teaching assistants (see Section 4.5 on page 62).

4.6 Step 6: Encourage best-practice teaching through closer monitoring and strengthened school performance reviews

Australian governments and the Catholic and independent school sectors should better track school progress to understand if

234. National Skills Commission (2022).

government policies are adequate and to provide robust information on where additional support for schools and teachers is needed.

Mandate a nationally consistent Year 1 Phonics Screening Check

Australian governments should mandate a nationally consistent Year 1 Phonics Screening Check to assess students' decoding skills (using knowledge of phonics) across 40 words and pseudo-words of increasing complexity.²³⁹ Currently, only some state governments mandate the Year 1 Phonics Screening Check (see Table 4.2).

All state and territory governments should require all schools to assess students in Term 3 of Year 1 using the Australian Government Year 1 Phonics Screening Check, which is freely available, accurate, and efficient. It only takes about seven minutes to administer one-on-one by a teacher or staff member (e.g. a trained teaching assistant).²⁴⁰

In Australia, there is no national measure of reading performance until Year 3 (via NAPLAN), by which time most students should already be well on their way from 'learning to read' to 'reading to learn'.

While Foundation year assessments are important for supporting students' early reading success, the Year 1 Phonics Screening Check is designed to be used in Term 3 of Year 1, to identify whether students have made the expected *progress* in decoding.

A national Year 1 Phonics Screening Check would provide a useful 'health check' on early reading performance across states, and provide governments with robust information on where additional support for schools and teachers is needed.²⁴¹ The student-level data would also

Speech Pathology Australia (2023, p. 18). Note education settings also include pre-schools and colleges.

^{236.} This assumes 2 per cent of students are identified with clinical levels of speech, language, or other communication impairment. This is based on a recommended ratio of one speech pathologist per 733 students. See The Senate Community Affairs References Committee (2014, p. 57) and Carruthers (2014, p. 7).

^{237.} Pre-service training for speech pathologists does not adequately cover reading instruction, making it more difficult for them to practice in education: Stephenson et al (2023).

^{238.} Speech Pathology Australia (2016, p. 11).

^{239.} This aligns with Recommendation 1B in the Expert Panel's review of the National School Reform Agreement: see O'Brien et al (2023, p. 17).

^{240.} Department of Education (2023c).

^{241.} Department of Education (2023d). This is only possible if consistent assessment data is collected at the system level. For instance, in WA government schools,

help teachers to identify those students who need more support with decoding.

All Year 1 students in all schools – government, Catholic, and independent – should be assessed, with aggregate results published at a state and sector level, and a report provided to students' parents. Students who do not meet the 'expected level' in Year 1 should be re-assessed in Year 2, after receiving additional catch-up support.

Well designed and conducted, the check would be a powerful early screener of reading performance among Australian students. UK studies have found results on the Year 1 universal Phonics Screening Check are correlated to later student performance in the Progress in International Reading Literacy Study (PIRLS) in Year 4.²⁴²

All Australian governments should set a target that at least 90 per cent of students achieve the 'expected level' by Year 2, with appropriate interim targets established once baseline data are collected. England had more than 90 per cent of students in Year 2 meet the 'expected level' within four years of introducing the Phonics Screening Check.²⁴³

The federal government should also continue to fund and support the Literacy Hub. This website hosts the federal government's online Phonics Screening Check. It also includes advice on how to administer the check and use the assessment data, as well as resources for teachers and school leaders on how to implement evidence-informed reading instruction.²⁴⁴

Table 4.2: Only some state and territory governments mandate the national Year 1 Phonics Screening Check

State/ territory	Year 1 Phonics Screening Check (40-items) mandated?	Coverage	Data published
Tas	✓	All schools	√(for government sector only)
NSW	✓	Government schools	✓
SA	✓	Government schools	✓
NT	From 2025	Government schools	?
Qld	?	?	?
Vic	X	NA	NA
WA	X	NA	NA
ACT	X	NA	NA

Notes: NA = Not applicable. This table does not include other phonics assessments completed in Foundation and Year 1 such as the ACT's BASE assessments, Victoria's EOI Interview, the NT's FELA assessments, and WA's Year 1 phonics assessment. In WA, a Year 1 phonics assessment is mandated for all government school students, but schools are able to choose which assessment they use. The NT has plans to mandate the Year 1 Phonics Screening Check from 2025 in government schools. In October 2023, the Queensland government committed to evidence-informed reading instruction, referencing the Year 1 Phonics Screening Check. At the time of publishing, it was not clear whether the check would be mandated.

Sources: NSW Department of Education (2023g), SA Department of Education (2023b), Victorian Department of Education (2022a), Rockliff and Jaensch (2023), WA Department of Education (2022a), Grace (2023), ACT Education Directorate (n.d.[a]), NT Department of Education (2024) and Tasmanian Department of Education (2023).

all Year 1 students have to complete a Year 1 phonics assessment, but principals only have to register that the assessment has been completed, not the student results: WA Department of Education (2022b).

^{242.} McGrane et al (2017) and Lindorff et al (2023).

^{243.} UK Department for Education (2022).

^{244.} Education Services Australia (2023).

More regular and more comprehensive school reviews

Australian governments and the Catholic and independent school sectors should strengthen regular school reviews to include a rigorous examination of student achievement, curriculum implementation, and instructional approaches to reading.

Currently, school reviews tend to be weak; they are often a 'tick and flick' exercise. Only some schools receive a thorough review of their curriculum approach and are provided with concrete, improvement-focused feedback and support. Other schools receive only a cursory review of their curriculum, and others still are simply required to self-assess their performance and submit limited documentation.²⁴⁵

School reviews provide one of the few windows into school and teacher practices on the ground. They are a key opportunity for government to provide additional tailored support to improve principal and teacher capacity, classroom practice, and student learning.

Departmental school reviews should be conducted by independent reviewers who are well trained in the reading science. The reviewers should understand and apply quality benchmarks, and provide constructive feedback to schools. Reviews should be conducted at least every four years, and poorer-performing schools – those that are not meeting the expected standard in the Year 1 Phonics Screening Check and/or have a high proportion of students not meeting the NAPLAN proficiency benchmark in reading – should be reviewed more regularly.²⁴⁶

A thorough examination of a school's curriculum and instructional approach is likely to take reviewers about three-to-five days (including two days on-site), depending on the size of the school. Reviews should consider the alignment between the planned, taught, and learnt

curriculum, using classroom walk-throughs, observations, and student assessment data. Reviews of poorer-performing schools should also include a thorough look at the extent to which their teaching aligns with the practical guidelines on best-practice reading instruction (see Section 4.2 on page 48), and provide targeted support to improve their teaching of reading.

State governments should publish annual aggregated reports of the proportion of primary schools that have implemented structured literacy successfully, and detailed descriptions of the 'top five' schools that provided excellent reading instruction.

As part of the five-year evaluation of Grattan's proposed 'Reading Guarantee' strategy, the effectiveness of school review processes should be analysed.

Enhance the performance reviews of school principals

Australian governments and the Catholic and independent school sectors should enhance the performance reviews of school principals to include criteria on evidence-informed practices and assessment protocols. Principals should be held accountable if reading progress is poor and practice falls short of the guidelines.

There is significant room to improve principal performance management processes. For example, a 2020 Victorian Audit Office report found there was no state-wide understanding of principal performance.²⁴⁷ In a survey of 1,300 principals, only 50 per cent said they had a clear understanding of the criteria that would be used to assess their performance. Principals were also not well supported with professional learning on how to lead change or better manage their resources.

^{245.} Hunter et al (2022a).

^{246.} See Ofsted's risk-based approach to inspections: Ofsted (2023).

^{247.} Victorian Auditor-General's Office (2020).

The principal performance review process should be used to ensure principals are implementing a whole-school approach to teaching reading and providing catch-up supports, according to the new evidence-informed guidelines.

4.7 Governments and school sector leaders will need to prioritise actions as part of a 10-year strategy

Implementing Grattan's proposed 'Reading Guarantee' strategy will require a long-term commitment and a comprehensive suite of reforms implemented in stages.

The state and territory governments and the Catholic and independent school systems are all at different starting points, and each will need to carefully chart their own 10-year implementation path. For state governments, this can align with the 10-year framework recommended as part of the NSRA Expert Panel's final report.²⁴⁸

Careful prioritisation and long-term planning will be required. For states and sectors which are just at the beginning, political commitment is an imperative – without leadership from the top, system-wide improvement is impossible. Leaders should commit publicly to implement the 'Reading Guarantee' strategy. This commitment will focus efforts and ensure buy-in across government departments and Catholic and independent systems.

Governments and sectors should audit the existing guidance, materials, and assessment tools they give to schools, to ensure they align with the evidence and are internally consistent. Without this review, governments and sectors risk confusing school leaders and teachers, and undermining their own commitments.

Building the pipeline of Literacy Master Teachers and Literacy Instructional Specialists should not be left too late. These are the staff who will

248. See Recommendation 7A in O'Brien et al (2023, p. 25).

make the biggest direct impact on classroom teaching, by coaching teachers to adjust their practice day-in-day-out. It will take several years to build up and train this workforce, so governments and sectors need to invest now. In the early years, Literacy Instructional Specialists should focus on supporting low-performing and disadvantaged schools, where the need is greatest.

4.8 These reforms will require additional funding, but the benefits will far exceed the costs

The reforms recommended in this report will require additional resources and funding.²⁴⁹ But the cost will be a small fraction of the about \$40 billion it costs to individuals and the government. And the reforms will deliver many other benefits of literacy for students, parents, teachers, schools, the economy, and Australian society long-term (as shown in Chapter 1).

Teaching students how to read proficiently is a minimum expectation of schooling – paying for these reforms must be a priority. If funding increases likely to be agreed on through the new National School Reform Agreement (NSRA) are not sufficient to cover the costs of these reforms, governments should examine departmental and school capacity to make trade-offs within existing budgets. Governments could, for example, better target exist expenditure to ensure these

^{249.} For example, improving literacy performance in Australia was estimated to cost \$942 million in 2023-24: Del Rio and Jones (2023, p. 7). This includes \$40 million for decodable readers for Foundation and Year 1 students, \$136 million for professional learning for Foundation to Year 2 teachers, \$137 million to introduce the Year 1 Phonics Screening Check and screening in the first year of high school, \$139 million for evidence-informed, high-quality curriculum materials for students in Foundation to Year 2, and \$491 million to provide small-group tutoring to students in all year levels from preschool to Year 12.

investments align with best-practice approaches. This is likely to involve limited additional ongoing costs.²⁵⁰

If budget constraints are tight, governments should prioritise reading improvements in all schools, and focus on disadvantaged schools first. This will accelerate the closing of learning gaps in reading.

Every effort must be made to ensure reading is taught well in every classroom in Australia. The future prosperity of Australia depends on it. And the future life chances of every Australian child depend on it.

^{250.} For example, some investments may not require significant new funds, because they would just involve updating materials to align with the evidence.

Appendix A: How we calculated the cost of illiteracy

We calculated that for those students in school today who are hardest hit by poor reading performance, the cost to Australia is about \$40 billion over their lifetimes. We made the calculation on a conservative basis by estimating the lifetime cost of current school students (Foundation to Year 12) not finishing school due to reading failure.

A.1 Methodology

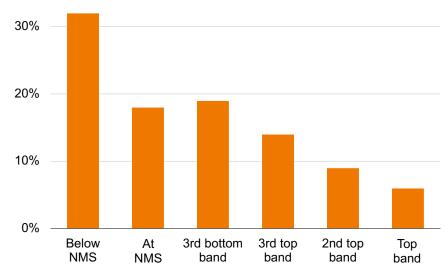
How we estimated the number of students who do not finish school because of poor reading skills

According to NAPLAN data, 8.13 per cent of Year 9 students do not meet the NAPLAN National Minimum Standard each year, on average (S_n) . We use research by the Australian Education Research Organisation (AERO), provided to us in correspondence, to estimate that 13 per cent of Year 9 students who do not meet the NAPLAN National Minimum Standard in reading do not end up completing Year 12 due to poor reading ability (S_f) . 252

AERO's analysis of the Longitudinal Study of Australian Children (LSAC) found that, after taking account of other characteristics, 32 per cent of Year 9 students who score below the National Minimum Standard in reading do not finish Year 12, and 19 per cent of students who perform in the third bottom NAPLAN band do not finish Year 12 (see Figure A.1).²⁵³

Figure A.1: Many students who perform below the National Minimum Standard do not finish school due to poor reading skills

Likelihood a Year 9 student does not complete Year 12 given prior achievement (NAPLAN band), after accounting for other characteristics



Notes: NMS = National Minimum Standard. Note the '3rd bottom band' and 'At NMS' are not statistically significant.

Source: AERO analysis of Longitudinal Study of Australian Children (LSAC) data, Wave 6 (2014) for Year 9 (cohort K) with outcomes derived from Wave 8 (2018). Provided in correspondence to Grattan Institute.

^{251.} This is a 10-year average from 2013 to 2022.

^{252.} Note that this estimate is a correlation, it is not causal.

^{253.} Note that AERO's definition for completing high school is slightly different to that used in Lamb and Huo (2017). Note also that Year 9 statistics are used because the gap in reading performance grows over time, and schooling is compulsory until Year 9.

We assume that the third bottom band represents students who are proficient at reading and that students in this band who do not complete Year 12 do so for reasons other than poor reading ability. Therefore, we take the difference between these two proportions as an estimate of the proportion of students who do not finish school due to poor reading ability (32 per cent minus 19 per cent, which gives 13 per cent). The estimate for Year 7 is similar: 12 per cent. On this basis, we conservatively estimate that 1.06 per cent of students in Year 9 do not finish school because of reading failure (F). This is calculated by:

$$F = S_n \cdot S_f$$

When applied to the whole school population from Foundation to Year 12 (P),²⁵⁴ we estimate about 43,000 students would not finish school due to reading failure (P_f) . This is calculated by:

$$P_f = F \cdot P$$

How we determined the economic cost of students not finishing school

Robust analysis by Lamb and Huo (2017) calculated the lifetime fiscal and social costs of students not finishing school in Australia at \$1,190,000 (in 2023 dollars) per student not finishing school (C_l).²⁵⁵

- Fiscal costs include costs to the taxpayer of reduced tax revenue, as well as increased public expenditure on crime, health, welfare, housing, etc. The lifetime fiscal cost per student not finishing school is \$420,000 (in 2023 dollars).
- Social costs include costs to the individual and the community, such as loss of personal earnings, the social consequences

of crime, and the excess burden of higher taxes required for additional social services. The lifetime social cost per student not finishing school is \$770,000 (in 2023 dollars).

Given our statistics on school completion are based on a survey of 21- and 22-year-olds, we assume that 80 per cent of students who don't complete Year 12 by this age remain lifetime drop outs (L). This is based on Lamb and Huo (ibid, p. 17), who note that about 50 per cent of 19-year-olds who don't finish high school eventually go on to complete Year 12 or an equivalent qualification by the age of 24.

When applied to the number of students who do not finish school due to reading failure (P_f) , it produces the total lifetime economic cost to Australia (C_f) . This is calculated by:

$$C_f = P_f \cdot L \cdot C_l$$

A.2 Limitations

Our estimate is conservative for several reasons.

- It only calculates the cost of people not finishing Year 12 due to reading failure; it doesn't look at the lifetime costs for those students with poor reading skills, but who do end up finishing school, yet with more-limited life opportunities.
- It only includes individual costs and costs to government. It does not include the loss of productivity spillovers and broader economic costs due to poor reading skills.²⁵⁶
- It does not account for future population growth.

such as loss of personal earnings, the social consequences

254. According to the ABS, there were 4.042.512 students enrolled in Foundation to

Year 12 in Australia in 2023. 255. Note that this analysis uses a discount rate of 3.5 per cent.

^{256.} Other studies have sought to calculate the productivity spillovers and broader economic benefits of improved student performance: OECD (2010), Hanushek and Woessmann (2012) and Deloitte Access Economics (2016).

Appendix B: Further detail on the approaches taken by our case study schools

B.1 Churchill Primary School

Churchill Primary is a small regional Victorian school serving a low socio-economic community. Historically, reading performance has been poor and, as the principal told us, 'some students have a really limited world experience'.

Starting in 2017, the school incrementally implemented a structured reading approach. This required school leaders to de-implement whole-language instructional approaches. Little-by-little, the school has been able to shift teaching practices – in the first years it focused on decoding, then fluency, and now it is working to improve the way comprehension is taught.

This has not always been easy and has come with a lot of change for school staff. But as the principal told us, while teachers had previously had a knowledge gap about the best way to teach reading, their commitment to student learning was unwavering: 'all teachers want to do the right thing, some teachers just don't know how'.

The section below describes the structured approach to reading instruction now taken at Churchill Primary.

Whole-class instruction

The six key reading sub-skills are explicitly taught to every student across the school and are reflected in the school's timetable.

In the early years (Foundation to Year 2), the weekly timetable includes:

 Four 40-minute phonics classes: students are introduced to one or two new letter and sound combinations a week. In class, students have the opportunity to practise segmenting and blending these, recalling sounds they've previously learnt, practising their handwriting, and learning and reviewing irregular words.

- One 40-minute morphology lesson, where students learn specific structures and meanings within words (e.g. how specific prefixes and suffixes form parts of – and change the meaning of – words). This is then reviewed throughout the week in literacy review lessons.
- Four 'Big Book' lessons: students and teachers study one book a week together, so that all students are exposed to complex vocabulary and rich stories, not just the content in the books students can read independently. Across the week, the teacher reads and re-reads aloud the book to students, introduces new vocabulary, and scaffolds student comprehension of the text (e.g. by predicting what will happen in the book, collectively answering literal and inferential questions, mapping out characters' emotions, and sequencing events from the book). In the final lesson of the week, once students have built up a strong understanding of the text and new vocabulary, they complete a related writing task. Texts for these classes are carefully selected to ensure students cover the necessary content for subjects such as Humanities and Science.
- Four 20-minute literacy review lessons, where students review new and previously learnt vocabulary, letter and sound combinations, and morphology. As well, students practise their fluency, reading sentences or passages with their teacher or another student.

These classes follow a detailed scope and sequence, which ensures students learn 'bite-sized' chunks of new knowledge in each lesson and have the chance to review new and old content throughout the year.

Figure B.1 on page 77 illustrates the scope and sequence for phonics, morphology, vocabulary, and spelling in Grade 1.

In the upper primary years (Years 3 to 6), the weekly timetable has several key differences:

- Students spend less time on phonics, because most have already made their way through the phonics scope and sequence early in Year 3. Instead, teachers focus on reviewing letter-sound combinations as needed, and spend more time on morphology.
 Figure B.2 on page 78 includes examples of lesson slides for an early years phonics class and a Year 3 morphology lesson.
- Students study fewer but more complex texts in class (instead of Big Book lessons). Students study a new fiction or non-fiction text together every fortnight and a novel each term. These texts are carefully selected to expose students to increasingly complex vocabulary and build more sophisticated conceptual knowledge across subject areas, such as Humanities and Science. Figure B.3 on page 79 gives an example of the kind of vocabulary and knowledge students learn in Years 3 and 4 as part of a History and Civic unit focused on government.

Response-to-intervention model

Robust and timely monitoring and assessment is the foundation for Churchill Primary's response-to-intervention approach. The school has designed a school-wide assessment schedule to identify students' reading difficulties, monitor student progress, and adjust classroom instruction and intervention supports.

This requires a coordinated, whole-school approach to assessment, which includes:

 Screening all students on school entry: all incoming Foundation students complete screening assessments in October-to-December in the year before they start school, and all new students complete a series of assessments upon entry.

- Progress monitoring of all students: the school has an assessment schedule that ensures all students' reading progress is tracked (see Figure B.4 on page 80 for an excerpt of this assessment schedule for Grade 2). The literacy team has designed this schedule to be easy to administer and provide accurate and reliable data on student progress (e.g. by using norm-referenced assessment tools, where possible).²⁵⁷ The leadership team then tracks this data to adjust school-wide or year-level instruction. For instance, noticing that students' fluency results were plateauing, the leadership team adjusted literacy review classes to include paired reading in each lesson.
- Tiers 2 and 3 intervention supports: About 25 students receive Tier 2 small-group tutoring support four times a week. Trained teachers or teaching assistants follow the MiniLit and MacqLit scope and sequence, and students are grouped based on their performance on a placement test. About four students with higher needs receive Tier 3 one-on-one support from a speech pathologist two-to-three times a week, using Orton-Gillingham curriculum materials.
- Constant collaboration and coordination from the literacy team and through the school's fortnightly professional learning team meetings. This ensures frequent analysis of student data and adjustments as required.

^{257.} Norm-referenced tests are standardised tests that are scored against the performance of a norm group (i.e. a large representative sample of students with similar characteristics, such as age or grade level).

Impact

Results have come quickly. In 2016, almost half of the Year 3 students and 65 per cent of Year 5 students did not meet national minimum standards in reading. By 2021, no student performed below this standard for reading, Year 3 students did better than the state average, and Year 5 students performed as well as the state average (see Figure B.5 on page 81). Today, fewer students receive catch-up support, because fewer need it.

Within three years of the new approach being taken, student behaviour had improved: there has been a 70 per cent reduction in students being sent out of class for poor behaviour. As the principal told us:

We used to have someone whose full-time job was to work out incidents on the oval and office referrals, but we don't have that role anymore. Now our classes are calm and orderly. We still have the same kids, but there's been a huge change in behaviour. Now the teaching's explicit, it's fast paced, the kids are doing something constantly.

The students are enjoying school more too. As one school leader told us:

Our kids read more than ever. They enjoy it because they have the skills now to be successful.

Figure B.1: Excerpt from Churchill Primary School's scope and sequence for phonics, morphology, irregular words, and spelling (Grade 1, Term 2)

Week	Monday	Tuesday	Wednesday	Thursday
	Phoneme - ed /ed/	Phoneme - ed /d/	Phoneme - ed /t/	Phoneme - review - ed (all)
2	Irregular words - pull, full	Irregular words - many, any	Irregular words - door/floor	Irregular words - review
			Morphology: -ed	Morphology: -ed
	Phoneme - a_e	Phoneme - a_e	Phoneme - e_e	Phoneme - e_e
	Syllable Type: Vowel consonant e syllable	Syllable Type: Vowel consonant e	Syllable Type: Vowel consonant e	Syllable Type: Vowel consonant e syllable
3	Irregular words - both	syllable	syllable	Irregular words - girl
		Irregular words - both	Irregular words - girl	Morphology: review
			Morphology: review	
	Phoneme - i_e	Phoneme - i_e	Phoneme - o_e	Phoneme - o_e
	Syllable Type: Vowel consonant e syllable	Syllable Type: Vowel consonant e	Syllable Type: Vowel consonant e	Syllable Type: Vowel consonant e syllable
4	Irregular words - wear, bear, tear, pear,	syllable	syllable	Irregular words - rich
	swear	Irregular words - wear, bear, tear, pear,	Irregular words - rich	Morphology: review
		swear	Morphology: review	
	Phoneme - u_e	Phoneme - u_e	Syllable Division: Reptile rule	Syllable Division: Reptile rule
5	Syllable Type: Vowel consonant e syllable	Syllable Type: Vowel consonant e	Irregular words - review	Irregular words - review
] 3	Irregular words - get	syllable		
		Irregular words - get		
	Phoneme - s=/z/	Syllable Division: Reptile rule	Phoneme - s=/z/	Syllable Division: Reptile rule
6	Irregular words - animal		Irregular words - animal	Morphology: -es
	Spelling Rule: s=/z/		Spelling Rule: s=/z/	
			Morphology: -es	
	Phoneme - all	Phoneme - all	Phoneme - oi/oy	Phoneme - oi/oy
7	Irregular words - buy, guy	Irregular words - buy, guy	Irregular words - which	Irregular words - which
			Morphology: mis-	Morphology: mis-
	Phoneme - oi/oy	Phoneme - oi/oy	Phoneme - ar(car)	Phoneme - ar(car)
8	Irregular words - shoe, canoe	Irregular words - shoe, canoe	Irregular words - walk, talk, chalk	Irregular words - walk, talk, chalk
			Morphology: ex-	Morphology: ex-
	Phoneme - ee	Phoneme - ee	Phoneme - or (corn)	Phoneme - or (corn)
9	Irregular words - carry, marry	Irregular words - carry, marry	Irregular words - pour	Irregular words - his
			Morphology: -ful	Morphology: -ful
10	Phonemes - review	Phonemes - review	Phonemes - review	Phonemes - review
	Irregular words - review	Irregular words - review	Irregular words - review	Irregular words - review
			Morphology - review	Morphology - review
	Phonemes – review	Phonemes – review	Phonemes - review	Phonemes - review
11	Irregular words - review	Irregular words - review	Irregular words - review	Irregular words - review
			Morphology - review	Morphology - review

Figure B.2: Examples of Churchill Primary School's slides for Foundation phonics lessons and Grade 3 morphology lessons

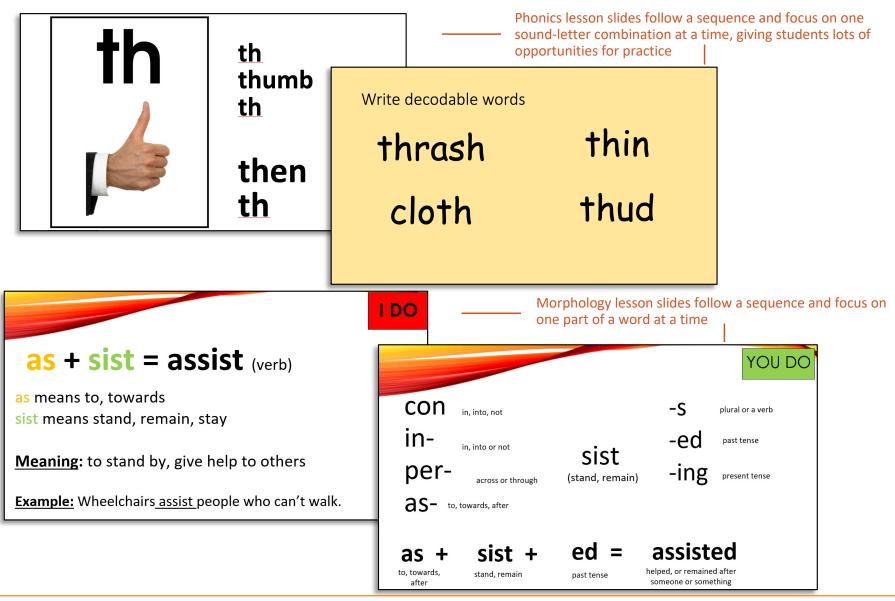


Figure B.3: Examples of Churchill Primary School's knowledge-rich lesson slides that are part of a Year 3 and 4 History unit focused on government

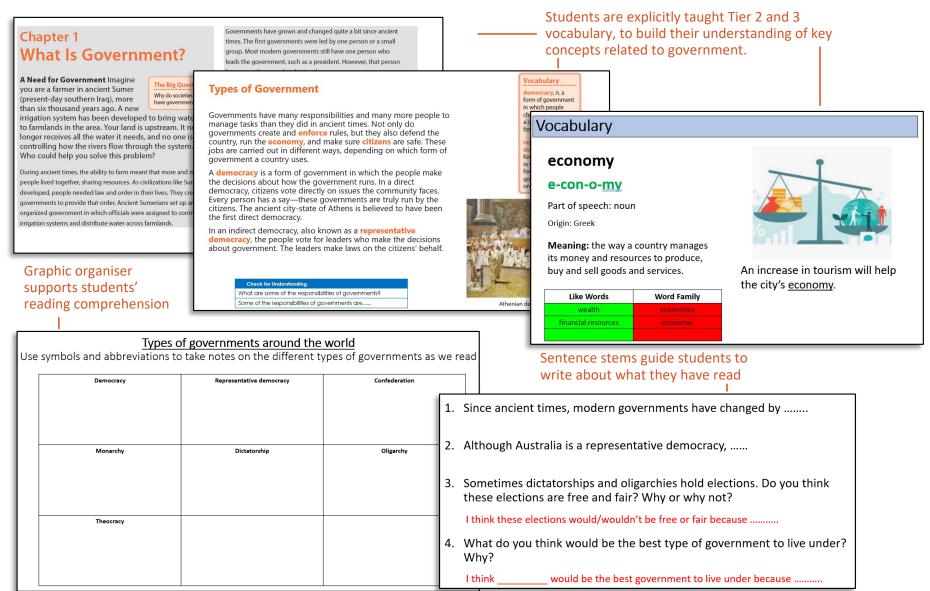
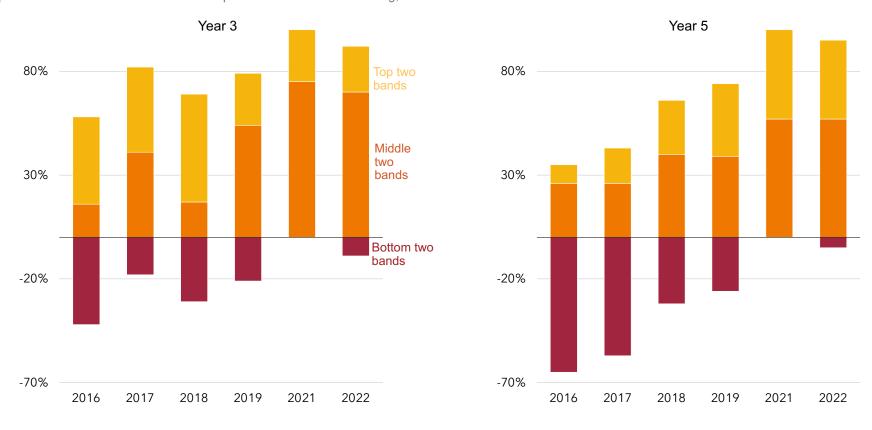


Figure B.4: Excerpt from Churchill Primary School's assessment schedule (Grade 2)

Assessment	Skill(s) assessed	Norm referenced	Purpose	Administration level and time	When to administer
Heggerty Phonemic Awareness Assessment	Phonological / phonemic awareness skills	N	Summative Formative	Individual 15-20 minutes	Term 1 Term 2 Term 4
Orton-Gillingham (OG) Sounds	Identify phonemes	N	Formative	Individual 5-10 minutes	Each term
OG Learned Words	Learned Words Reading irregular words Writing irregular words Writing irregular words N Formative Reading – Individual 5 minutes Writing - whole class 10-20 minutes		Each term		
OG Morphology Assessment	Meaning of morphemes	N	Formative Tracking	Individual 5 minutes	Each term
Dynamic Indicators of Basic Early Literacy Skills 8th Edition (DIBELS-8 th) Nonsense Word Fluency	Grapheme-phoneme knowledge when decoding	Y	Summative Formative	Individual 1 minute	Beginning - Term 1 Middle - Term 2 End - Term 4
DIBELS 8 th Word Reading Fluency	Oral Reading fluency (word)	Υ	Summative Formative	Individual 1 minute	Beginning - Term 1 Middle - Term 2 End - Term 4
DIBELS 8 th Oral Reading Fluency	Oral Reading Fluency (passage)	Y	Summative Formative	Individual 1 minute	Beginning - Term 1 Middle - Term 2 End - Term 4
DIBELS 8 th Maze	Comprehension Reading fluency	Υ	Summative Formative	Individual 3 minutes	Beginning - Term 1 Middle - Term 2 End - Term 4
Progressive Achievement Test - Reading (PAT-R)	Reading comprehension Vocabulary knowledge Spelling	Υ	Summative	Individual/small group 20-30 minutes	Term 3 *An adult can sit with child to make sure they are answering all questions
York Assessment of Reading for Comprehension (YARC) – Primary Reading accuracy Reading rate Comprehension		Υ	Summative Formative	Individual 20-30 minutes	Term 2 Term 4

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Figure B.5: Since making the switch in 2017, Churchill Primary has had big improvements in reading performance Proportion of students at different NAPLAN performance bands for reading, NAPLAN 2016 to 2022



Note: The NAPLAN scale changed in 2023, so results for 2023 are not included on this chart.

Source: Grattan analysis of data provided by Churchill Primary School.

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B.2 Parafield Gardens High School

Parafield Gardens High is a large government secondary school in northern Adelaide that serves a low socio-economic community, including students with complex issues. As the school's speech pathologist told us:

A lot of our students are from low socio-economic backgrounds, and culturally, linguistically, and neurodiverse backgrounds. They often present with trauma-related behaviour that makes it difficult for them to engage in the classroom.

Many students arrive at the school unable to read proficiently, not just the 45 per cent of students that come from non-English speaking households. Knowing this, the school leadership team decided to implement a response-to-intervention model for reading. In the words of the principal:

What we noticed was that a number of our students were coming to secondary school but not meeting the standard of education in terms of literacy and numeracy. So we really needed to think about why that was and see if we could do something to change it. It's pretty clear that if you can't read and write, it makes everything more difficult.

Since 2021, the school has gradually implemented a response-to-intervention model for reading, which is mapped in Figure B.6 on page 86.

Assessment and monitoring

Robust and timely assessment is key to Parafield Gardens High identifying students with reading difficulties and ensuring that they receive support tailored to their needs. This process involves several steps:

Universal screening of all incoming students: Where possible, the literacy team screens new students to identify those 'at risk'. For incoming Year 7 students, the literacy team examines their NAPLAN results, Progressive Achievement Test (PAT) reading scores, and New Group Reading Test (NGRT) scores, alongside a writing sample, triangulating this data to identify 'at risk' students.

For other new students, the school's speech pathologist follows a similar screening process, reviewing the student's available NAPLAN and PAT reading scores, previous grades, and whether they have previously been referred to or assessed by a speech pathologist or psychologist.

Diagnostic testing: Students identified through universal screening as 'at risk' are then assessed for their word reading and language comprehension skills, using the Woodcock Johnson Reading Mastery Test, Word Attack (non-word reading) subtest, the York Assessment of Reading for Comprehension (single word reading test), and the Clinical Evaluation of Language Fundamentals^{A&NZ} (5th Edition) screener.

These diagnostic assessments enable the literacy team to build a reader profile for every student. Figure B.7 on page 87 gives an example of Parafield Gardens High School's 2021 reader profile for the 146 students identified as 'at risk' that year.²⁵⁸

Allocating students to tiered support: Based on the diagnostic testing results, students are placed in different tiers of support:

If students are at or above the screening or diagnostic benchmarks, then they do not need intervention beyond the quality differentiated teaching practices used in Tier 1 whole-class instruction.

^{258.} Note that 2021 data include Year 6 students who transitioned to high school in 2022 and Year 7 students who were then attending the Reading Acceleration Program (RAP).

- Students who are below benchmark in phonics decoding attend
 Tier 2 Reading Acceleration Program (RAP) classes twice a week
 for a total of two hours. Those classes target phonics decoding,
 word reading, and morphology. These students attend RAP
 classes instead of language classes. Differentiated teaching
 practices that support word reading and spelling are also used
 during other classes students attend.
 - Additional Tier 3 support may be provided to RAP students who need a higher dose of intervention. This includes one-on-one intervention support twice a week for a total of 70 minutes from the school's speech pathologist or a trained teaching assistant and students are offered assistive technology that can be accessed for home practice (e.g. Reading Doctor Online software).
- Students who are below benchmark in word reading fluency but meet the benchmark for phonics decoding are supported through Tier 1 quality differentiated teaching practices across their classes. This includes, for instance, explicit vocabulary instruction, where students have multiple exposures to a new word by learning the word's meaning and morphology, using it repeatedly, learning antonyms and synonyms, and writing it in a sentence. Having this instruction in mainstream classes means that students are exposed to and can learn curriculum-related content across their subjects.
- Students who meet benchmarks for phonics decoding and word reading fluency but are below benchmark on language comprehension may have a language disorder or language difference (i.e. they may be learning English as an additional language and/or dialect (EALD)). The options for support are:

- EALD students attend Tier 2 English intervention classes, which target written language skills, twice a week for a total of two hours. Students are eligible for this support if:
 - * They have a LEAP (Learning English: Achievement and Proficiency) Level at or below Level 6 – the equivalent to writing skills at a Year 2 level – in Year 7.
 - * They have a LEAP Level at or below Level 7 the equivalent to writing skills at a Year 3 level in Year 8.
- Non-EALD students may be referred for a comprehensive language assessment provided by the school-based speech pathologist. EALD students may also be referred for a comprehensive language assessment if they have a history of language difficulties in their first language. Based on on assessment results, students will receive:
 - Speech pathologist coaching support for classroom teachers to ensure differentiated teaching practices support these students' language development through Tier 1 whole-class instruction.
 - * Referral to other service providers (e.g. a psychologist).
- Students whose results indicate that they may have a Specific Learning Disorder (e.g. dyslexia) are recommended on to a psychologist for further comprehensive cognitive and academic assessment.
- Some students may need reading intervention, but cannot attend a RAP class (e.g. because they are in Year 9 or 10). These students may be offered 30 minute one-on-one Tier 3 intervention support twice a week from the school's speech pathologist.

Continual progress monitoring: Student progress is monitored throughout the school year, according to an assessment schedule, and adjustments are made accordingly.

For example, Figure B.8 on page 88 outlines the assessment schedule for Tier 2 RAP intervention support. The literacy team use a collection of robust assessment tools to measure progress in different reading sub-skills. They first collect baseline data in the year before students begin RAP and then re-test these skills at the end of Term 2 and Term 4, to check student progress.

Students also complete a series of curriculum-based assessments that check student progress against the Sounds-Write scope and sequence covered in RAP classes. Sounds-Write lesson materials also have formative assessment embedded into daily classes, to give teachers immediate feedback on student progress. The literacy team use this data to differentiate classroom instruction, adjust groupings, and decide on future supports for students (e.g. whether they are ready to transition out of RAP intervention support).

Developing this sophisticated assessment and response-to-intervention approach has taken significant time and continual refinement by the school's literacy team. The literacy team carefully weigh up the time and effort required to administer an assessment against how accurate and useful the assessment data are for supporting students.

This means the team have made decisions to stop using certain assessments when the costs – including teacher and student time – are too great and the benefits too small. For instance, screening of all 'at risk' students used to include additional Sounds-Write tests of alphabetic code knowledge and phonological awareness (i.e. segmenting, blending, and manipulation), but the literacy team found that these tests didn't pass the 'effort for benefit' test. Not all at-risk students had poor decoding skills, so it was a waste to have all of these

students complete these tests. For this reason, now the Sounds Write tests are completed only by students with poor decoding skills.

Coordination, training, and professional learning

This response-to-intervention approach is school-wide, which requires significant coordination across the school. The literacy leadership team – consisting of the deputy principal, English coordinator, literacy lead teacher in charge of RAP, and speech pathologist – lead this approach, meeting every three-to-four weeks to discuss school-wide assessment results, teacher training and support requirements, and adjustments to intervention supports (e.g. transitioning students in or out of interventions).

In 2021 and 2022, the school's main focus was on setting up robust Tier 2 and 3 support. With this tiered support embedded, the school is now focusing on training all staff to use differentiated teaching practices in their classes.

Whole-school professional development ensures all teachers and teaching assistants have the skills needed to implement the school's instructional playbook – a detailed document that outlines the school's explicit instructional approach and core classroom strategies. This includes the specific strategies to support students who struggle with reading, including:

- providing visual information as well as spoken information to support understanding and recall (e.g. through graphic organisers);
- minimising language complexity, providing short and logically sequenced instructions, and simplifying text vocabulary;
- explicitly teaching the spelling of key vocabulary required to study a topic (e.g. 'chronological' in English, as shown in Figure B.9 on page 89);

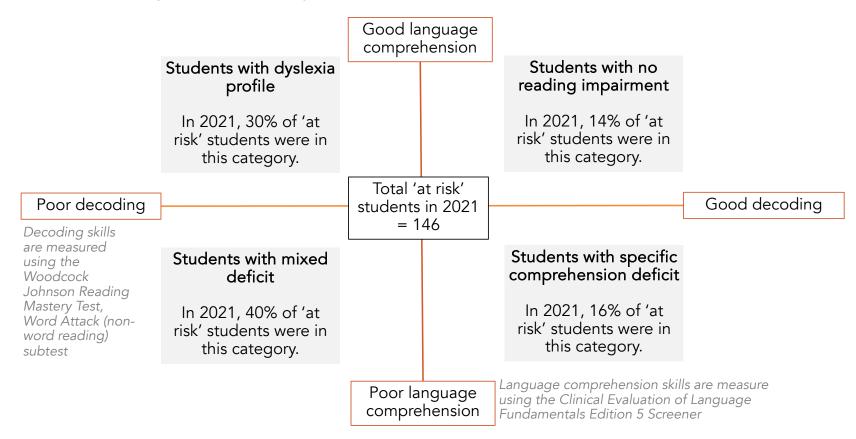
- regularly reviewing key vocabulary to provide multiple exposures and embed student understanding and recognition of new words;
- using sentence stems to guide students' use of key vocabulary (e.g. rain is a type of... 'precipitation'); and
- encouraging students to use text-to-speech programs or audiobooks (for EALD students, this can include translating text into their first language).

Teachers have regular curriculum planning meetings, where they collaboratively determine how to best use these strategies in their subject area. Whole-school professional development is delivered during student free days (one per term). Teachers are given time to share examples of their differentiated teaching practices and how they use recommended pedagogies (e.g. vocabulary instructional routine and approaches to checking for understanding). At the beginning of each year, teachers are given an opportunity to review the literacy screening data and consider how they might implement recommended differentiated teaching practices for the new Year 7 students.

Intervention support staff also receive external training. For instance, 12 teachers and five teaching assistants have completed the four-day Sounds-Write training, which teaches them to effectively use the detailed Sounds-Write lesson materials and administer the accompanying assessments. These staff are in contact throughout the week, as they collaboratively deliver and adapt lessons, and they have RAP curriculum planning meetings every term.

Figure B.6: Parafield Gardens High School's response-to-intervention decision tree for reading PAT = Progress Achievement Test Does screening data suggest the student has a reading challenge? If available, the literacy team examines the following for incoming Year 7 students: NGRT = New Group Reading Test Year 5 NAPLAN score: below Band 5 in reading assessment QDTP = Quality differentiated teaching practices • Year 6 PAT score: below 118 on reading assessment WRMT-III-Word Attack = Woodcock Johnson Reading NGRT score: at or below 10 years old on decoding Writing sample (paragraph) to evaluate letter formation, spelling ability (e.g. phonetic vs Mastery Test, Word Attack (non-word reading) subtest orthographic), vocabulary used (simple vs more technical), use of grammar, and RAP = Reading Acceleration Program CELF-5 Screener = Clinical Evaluation of Language Fundamentals^{A&NZ} – 5th Edition sentence structures (e.g. simple vs complex) Student data is triangulated to determine 'at risk' students who require further testing. EALD = English as an additional language and/or dialect YARC = York Assessment of Reading for Comprehension LEAP = Learning English Achievement and Proficiency Yes - below No – at or above QDTP used during Tier 1 benchmark benchmark whole-class instruction Continual progress monitoring and adjustment to supports (e.g. No – above benchmark students may progress from Tier Is there a word reading or language Attends Tier 2 RAP intervention 2 Year 7 RAP to Tier 2 Year 8 comprehension need? classes for all of Year 7 and Year 8 (if RAP, EALD students from Tier 2 For word reading: needed), targeting phonics RAP to Tier 2 English WRMT-III-Word Attack: 5 decoding, word reading, and intervention classes, or from Tier Yes – below benchmark minutes, individual administration morphology. QDTP used in Tier 1 in phonics decoding. 2 RAP to Tier 1 only). whole-class instruction. by a speech pathologist. Student May also be below flagged if their phonics decoding benchmark for fluent age for non-words is 10 years or Additional support for some word reading EALD students writing skills are below. students needing a higher dose tested for inclusion in the Tier 2 YARC-Single Word Reading Test: of intervention: English intervention (i.e. EALD) 5 minutes, individual Twice weekly 1:1 Tier 3 classes, targeting written language Yes – below benchmark administration by a speech support from speech skills. Students are eligible if their pathologist (or trained teacher). in fluent word reading pathologist or trained school Student flagged if their word but decoding at LEAP level is at or below Level 6 in services officer (learning benchmark Year 7 or Level 7 in Year 8. QDTP reading skills below 14th support) used in Tier 1 whole-class instruction. percentile/Standard Score of <85. Assistive technology For language comprehension: CELF-5 Screener: 20 minutes. Yes – below criterion Tier 1 ODTP in whole class If score not explained by a language individual administration by a score on CELF-5 instruction guided by speech difference (i.e. EALD student), speech pathologist (or trained Screener indicating pathologist in consultation with student is referred for comprehensive teacher). Student flagged if their potential language teachers. Referral onto other language assessment: 60-75 minutes, language comprehension is disorder or language service providers may be individual administration by speech below criterion referenced score. difference (i.e. EALD) provided (e.g. psychologist) pathologist.

Figure B.7: Parafield Gardens High School's 2021 reader profiles



Note: 2021 data include Year 6 students who transitioned to high school in 2022 and Year 7 students who were then attending the Reading Acceleration Program (RAP). Source: Data provided to Grattan Institute by Parafield Gardens High School.

Figure B.8: Parafield Gardens High School's Reading Acceleration Program assessment schedule

Test	Administration	Collection			
		Pre-RAP screening: Term 3 and 4	Start of Term 1	End of Term 2	Post-RAP screening: End of Term 4
Woodcock Johnson Reading Mastery Test, Word Attack (non-word reading) subtest	Individual Speech pathologist 5 minutes	√ Baseline		√	✓
National Group Reading Test (NGRT)	Whole class	Baseline			√
York Assessment of Reading (YARC) for Comprehension Single Word Reading Test	Individual Speech pathologist 5 minutes	√ Baseline			✓
Sounds-Write tests to evaluate phonological awareness skills and alphabetic code knowledge, including vowel digraphs	Individual Sounds-Write trained Student Support Officers 10 minutes		✓ Placement test	√	√

Ongoing formative assessment embedded into Sounds-Write lesson materials

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Figure B.9: Example of Parafield Gardens High School's whole-class approach to vocabulary instruction in Maths

Syllables: $\underline{\text{chro}} - \text{no} - \text{lo} - \underline{\text{gi}} - \underline{\text{cal}} (x5)$

Morphology: refer to whiteboard

CHRONOLOGICAL Definition: events arranged in time order (adjective)

Chronological order

(adj) (noun)

Etymology: Greek Origin

WHAT IS CHRONOLOGICAL ORDER

Synonyms: in time order, in sequence **Antonyms:** random, out of order



Johnny wrote a recount of his summer holiday in **chronological** order.

Activity: Place the following events in **chronological** order.

lunch arrive at school go to bed recess come home from school eat dinner eat breakfast

CHRONOLOGICAL

What word/phrase does NOT represent chronological?

- a) In sequence
- b) Random
- c) In time order

CHRONOLOGICAL

Which of these set of events are in chronological order?

- a) Johnny started school in 2000, was born in 1996 and began playing soccer in 2006
- b) Johnny was born in 1996, started school in 2000 and began playing soccer in 2006
- c) Johnny began playing soccer in 2006, was born in 1996 and started school in 2000

Appendix C: England's 16 core criteria for validation of phonics programs

In England, validated systematic synthetic programs (SSP) must meet all of the following criteria. ²⁵⁹ The program should:

- 1. constitute a complete SSP program providing fidelity to its teaching framework for the duration of the program;
- present systematic synthetic phonic work as the prime approach to decoding print;
- 3. enable children to start learning phonic knowledge and skills early in reception, ²⁶⁰ and provide a structured route for most children to meet or exceed the expected standard in the Year 1 phonics screening check and all national curriculum expectations for word reading through decoding by the end of key stage 1;
- 4. be designed for daily teaching sessions and teach the main grapheme-phoneme correspondences of English (the alphabetic principle) in a clearly defined, incremental sequence;
- begin by introducing a defined group of grapheme-phoneme correspondences that enable children to read and spell many words early on;
- progress from simple to more complex phonic knowledge and skills, cumulatively covering all the major grapheme-phoneme correspondences in English;
- teach children to read printed words by identifying and blending (synthesising) individual phonemes, from left to right all through the word;

- teach them to apply the skill of segmenting spoken words into their constituent phonemes for spelling and that this is the reverse of blending phonemes to read words;
- provide the opportunity for them to practise and apply known grapheme-phoneme correspondences (GPCs) for spelling through the dictation of sounds, words, and sentences;
- ensure they're taught to decode and spell common-exception words (sometimes called 'tricky' words), appropriate to their level of progress in the program;
- 11. provide resources that support the teaching of lower-case and capital letters correctly, with clear start and finish points, and that will move children on by teaching them to write words made up of learned GPCs, followed by simple sentences composed from such words and any common-exception words learned;
- 12. be built around direct teaching sessions, with extensive teacherchild interaction and a multi-sensory approach, with guidance on how direct teaching sessions can be adapted for online delivery, either live or recorded;
- 13. provide resources to enable teachers to deliver the program effectively, including sufficient decodable reading material to ensure children can practise by reading texts closely matched to their level of phonic attainment and that do not require them to use alternative strategies to read unknown words;
- 14. include guidance and resources to ensure children practise and apply the core phonics they've been taught

^{259.} UK Department for Education (2023b).

^{260.} Reception in the uK is the equivalent to Australia's Foundation year level.

- 15. enable their progress to be assessed, and highlight the ways in which the program meets the needs of those at risk of falling behind, including the lowest-attaining 20 per cent; and
- 16. provide full guidance for teachers and appropriate programspecific training, either directly through appointed agents or remotely, with assurances that there is sufficient capacity and those delivering it have both high levels of expertise and relevant experience.

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Bibliography

AFRO (2023a), Introduction to the science of reading, Australian Education Research ABS (2022). Schools. Australian Bureau of Statistics. https://www.abs.gov.au/statistics/people/education/schools/latest-release#:~: text=New%20South%20Wales%20791%2C435%20Government,%3B %20450%2C790%20Non%2DGovernment%20enrolments. Acadience Learning (2021). Phoneme Segmentation Fluency (PSF). https://acadience.zendesk.com/hc/en-us/articles/360060836012-Phoneme-Segmentation-Fluency-PSF-. ACARA (2022a). Measurement Framework for Schooling in Australia 2020. Australian Curriculum, Assessment and Reporting Authority. https://www.acara.edu.au/docs/default-source/default-documentlibrary/measurement-framework-2020-amended-may-12-2022.pdf?sfvrsn=4ddc4c07 0. (2022b). NAPLAN Results. https://www.acara.edu.au/reporting/nationalreport-on-schooling-in-australia/national-report-on-schooling-in-australiadata-portal/naplan-national-report. (2023a). New proficiency standards for NAPLAN. Australian Curriculum, Assessment and Reporting Authority. https://www.acara.edu.au/docs/default-source/media-releases/naplanproficiency-standards-media-release-2023-02-10.pdf. (2023b). NAPLAN Results. Australian Curriculum, Assessment and Reporting Authority. https://www.acara.edu.au/reporting/national-report-on-schoolingin-australia/naplan-national-results. ACT Education Directorate (n.d.[a]). Literacy and Numeracy. ACT Government. https://www.education.act.gov.au/schooling/resources-forteachers/literacy_and_numeracy#:~:text=Literacy%20is%20embedded%20i n%20all,spoken%2C%20written%20and%20multimodal%20texts... (n.d.[b]). Early years assessment. ACT Government. https://www.education.act.gov.au/public-schoollife/assessment_and_reporting/early-years-assessment. Adesope et al (2011). Adesope, O. O., Lavin, T., Thompson, T. and Ungerleider, C. "Pedagogical strategies for teaching literacy to ESL immigrant students: A Journal of Education and Practice 7.16. Publisher: IISTE ERIC Number: meta-analysis". British Journal of Educational Psychology 81.4, pp. 629-653. EJ1108657, pp. 108-121. ISSN: 2222-1735.

AERO (2	Organisation. https://www.edresearch.edu.au/sites/default/files/2023-01/AERO-Introduction-to-the-science-of-reading.pdf.
	(2023b). <i>Introduction to multi-tiered system of supports</i> . Australian Education Research Organisation. https://www.edresearch.edu.au/sites/default/files/2023-04/aero-intro-to-mtss.pdf.
	(2023c). Explicit instruction Know how to teach your students. Australian Education Research Organisation. https://www.edresearch.edu.au/sites/default/files/2023-11/explicit-instruction-optimises-learning-aa.pdf.
	(2023d). <i>How students learn best</i> . Australian Education Research Organisation. https://www.edresearch.edu.au/sites/default/files/2023-09/how-students-learn-best-aa_0.pdf.
	(2023e). Introduction to the science of reading. Australian Education Research Organisation. https://www.edresearch.edu.au/resources/introduction-science-reading.
	(2023f). Explainer: Knowledge is central to learning. Australian Education Research Organisation. https://www.edresearch.edu.au/sites/default/files/2023-09/knowledge-iscentral-to-learning-aa.pdf.
	(2023g). Learning outcomes of students with early low NAPLAN performance. Australian Education Research Organisation. https://www.edresearch.edu.au/sites/default/files/2023-08/aero-aip-2-learning-outcomes-early-low-naplan-performance-aa.pdf.
Ainley et	al (2020). Ainley, J., Cloney, D. and Thompson, J. "Does student grade contribute to the declining trend in Programme for International Student Assessment reading and mathematics in Australia?" <i>Australian Journal of Education</i> 64 (3). DOI: https://doi.org/10.1177/0004944120948654.
Akbasli e	et al (2016). Akbasli, S., Sahin, M. and Yaykiran, Z. "The Effect of Reading Comprehension on the Performance in Science and Mathematics". en.

https://eric.ed.gov/?id=EJ1108657 (visited on 17/05/2023).

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- Al Otaiba, S. and Fuchs, D. (2006). "Who are the young children for whom best practices in reading are ineffective? An experimental and longitudinal study". *Journal of Learning Disabilities* 39.5, pp. 414–431.
- Albers, B. and Pattuwage, L. (2017). *Implementation in Education: Findings from a Scoping Review*. Evidence for Learning. https://www.newcastle.edu.au/__dat a/assets/pdf_file/0012/378984/Implementation-in-Education.pdf.
- Arcia, E. (2006). "Achievement and enrollment status of suspended students: outcomes in a large, multicultural school district". *Education and Urban Society* 38 (3), pp. 359–369. https://doi.org/10.1177/001312450628694.
- Arnold et al (2005). Arnold, E. M., Goldston, D. B., Walsh, A. K., Reboussin, B. A., Daniel, S. S., Hickman, E. and Wood, F. B. "Severity of Emotional and Behavioral Problems Among Poor and Typical Readers". *Journal of Abnormal Child Psychology* 33, pp. 205–217. https://doi.org/10.1007/s10802-005-1828-9.
- AUSSPELD (2020). Examples of High Quality, Evidence-Based Phonics Programs and Resources. Australian Federation of SPELD Associations. https://auspeld.org.au/wp-content/uploads/2020/08/Information-Sheet-2-Examples-of-High-Quality-Evidence-based-Phonics-Programs-Updated-July-2020.pdf.
- Australian Early Development Census (2021). 2021 AEDC National Report. Australian Government.

 https://www.aedc.gov.au/resources/detail/2021-aedc-national-report.
- Australian Industry Group (2013). *Getting it Right: Foundation Skills for the Workforce*. https://webarchive.nla.gov.au/tep/145972.
- _____ (2016). Tackling Foundation Skills in the Workforce. https://cdn.aigroup.com.au/Reports/2016/AIG9675_EMAIL.pdf.
- Australian Office of Financial Management (2022). Australian Government Climate Change commitments, policies and programs. Australian Government. https://www.aofm.gov.au/sites/default/files/2022-11-28/Aust%20Govt%20CC%20Actions%20Update%20November%202022_1.pdf.
- Bagshaw, E. (2016). "Reading Recovery: NSW government ditches 30-year-old". https://www.smh.com.au/education/reading-recovery-nsw-government-ditches-30yearold-55m-a-year-program-20160921-grkv1n.html.

- Baker, J. (2020). F for fail: NSW Education dumps another reading program after review. The Sydney Morning Herald. https://www.smh.com.au/national/f-for-fail-nsw-education-dumps-another-reading-program-after-review-20200911-p55urz.html.
- (2021). 'Just so important': Huge deployment of new books to help kindy kids read. The Sydney Morning Herald. https://www.smh.com.au/national/nsw/just-so-important-huge-deployment-of-new-books-to-help-kindy-kids-read-20210716-p58aeq.html.
- D. L. Baker et al (2020). Baker, D. L., Santoro, L., Biancarosa, G., Baker, S. K., Fien, H. and Otterstedt, J. "Effects of a read aloud intervention on first grade student vocabulary, listening comprehension, and language proficiency". *Reading and Writing* 33, pp. 2697–2724. https://link.springer.com/article/10.1007/s11145-020-10060-2.
- Barber, M. and Mourshed, M. (2007). *How the world's best performing school systems come out on top.* McKinseyCompany. https://www.mckinsey.com/industries/social-sector/our-insights/howtheworlds-best-performing-school-systems-come-out-on-top.
- Barrenechea I. Beech, J. and Rivas, A. (2023). "How can education systems improve? A systematic literature review". *Journal of Educational Change* 24, pp. 479–499. DOI: https://doi.org/10.1007/s10833-022-09453-7.
- Bell et al (2023). Bell, N., Wheldall, K. and Buckingham, J. "Chapter 12: Assessment and Progress Monitoring". Effective Instruction in Reading and Spelling. Ed. by K. Wheldall, R. Wheldall and J. Buckingham. MRU Press, pp. 318–338.
- Bergen et al (2023). Bergen, E. van, Hart, S. A., Latvala, A., Vuoksimaa, E., Tolvanen, A. and Torppa, M. "Literacy skills seem to fuel literacy enjoyment, rather than vice versa". *Developmental Science* 26.3. https://onlinelibrary.wiley.com/doi/full/10.1111/desc.13325.
- Blaiklock, K. (2004). "A critique of Running Records of children's oral reading". *New Zealand Journal of Educational Studies* 39 (2), pp. 241–253. DOI: https://doi.org/10.1598/RRQ.41.1.1.
- Blanch, V. (2023). "The way we teach kids to read is changing but will it work?" https://www.cbc.ca/news/canada/new-brunswick/literacy-new-brunswick-reading-science-rebecca-halliday-kelly-lamrock-1.6720476#:~: text=The%20new%20curriculum%20from%20the,as%20the%20science%20of%20reading.

- Boyd, T. (2021). "Education Reform in Ontario: Building Capacity Through Collaboration". *Implementing Deeper Learning and 21st Century Education Reforms: Building an Education Renaissance After a Global Pandemic*. Ed. by F. M. Reimers. Springer. Chap. Chapter 2, pp. 39–58. https://link.springer.com/chapter/10.1007/978-3-030-57039-2_2.
- Braithwaite et al (2014). Braithwaite, J., Marks, D. and Taylor, N. "Harnessing implementation science to improve care quality and patient safety: a systematic review of targeted literature". *International Journal for Quality in Health Care* 26.3, pp. 321–329. https://academic.oup.com/intqhc/article/26/3/321/1792993?login=true.
- Braithwaite et al (2020). Braithwaite, J., Glasziou, P. and Westbrook, J. "The three numbers you need to know about healthcare: the 60-30-10 Challenge". *BMC Medicine* 18.102. https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-020-01563-4.
- Breadmore et al (2019). Breadmore, H. L., Vardy, E., Cunningham, A. J., Kwok, R. K. and Carroll, J. M. *Literacy development: evidence review*. https://educationendowmentfoundation.org.uk/education-evidence/evidence-reviews/literacy-development.
- Brokamp et al (2016). Brokamp, S. K., Houtveen, A. A. M. and Grift, W. J. C. M. van de. "The relationship among students' reading performance, their classroom behavior, and teacher skills". *The Journal of Educational Research* 112 (1), pp. 1–11. https://www.tandfonline.com/doi/abs/10.1080/00220671.2017. 1411878?journalCode=vjer20.
- Bruin, K. de and Stocker, K. (2021). "Multi-Tiered Systems of Support: Comparing implementation in primary and secondary schools". *Learning Difficulties Australia: Bulletin* 52 (3). https://www.ldaustralia.org/app/uploads/2021/12/1156-LDA-Bulletin-December-2021_WEB.pdf.
- Bryson J. M. George, B. and Seo, D. (2022). "Understanding goal formation in strategic public management: a proposed theoretical framework". *Public Management Review*, pp. 1–26.
- Buckingham et al (2013). Buckingham, J., Wheldall, K. and Beaman-Wheldall, R. "Why Jaydon can't read: the triumph of ideology over evidence in teaching reading." *Policy* 29.3, pp. 21–32.

- Buckingham, J. and Meeks, L. (2019). Short-Changed: Preparation to teach reading in initial teacher education. MultiLit.

 https://ldaustralia.org/research-papers/short-changed-preparation-to-teach-reading-in-initial-teacher-education/#:~:text=This%20report%20adds%20to%20the, most%20effective%20ways%20to%20teach.
- Business Council of Australia (2022). *Jobs and Skills Summit policy paper*. https://assets.nationbuilder.com/bca/pages/6889/attachments/original /1661486149/Jobs_and_Skills_Summit_-_Issues_Paper_-_Addressing_skills_shortages_and_getting_our_skills_mix_right_over_the_longterm.pdf?1661486149.
- Camilli et al (2003). Camilli, G., Vargas, S. and Yurecko, M. "Teaching children to read: The fragile link between science & federal education policy". *Education policy analysis archives* 11, pp. 15–15.
- Camilli et al (2006). Camilli, G., M. Wolfe, P. and Smith, M. L. "Meta-analysis and reading policy: Perspectives on teaching children to read". *The Elementary School Journal* 107.1, pp. 27–36.
- Carey, A. (2022). Phonics skills test to be mandated for Victorian grade 1 students. The Age. https://www.theage.com.au/national/victoria/phonics-skills-test-to-be-mandated-for-victorian-grade-1-students-20220913-p5bhlb.html.
- Carruthers, A. (2014). Submission 127 by Department of Education and Early
 Childhood Development to the Senate Inquiry on the Prevalence of different
 types of speech, language and communication disorders and speech
 pathology services in Australia. Department of Education and Early
 Childhood Development. https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Community_Affairs/Speech_Pathology.
- Castles et al (2018). Castles, A., Rastle, K. and Nation, K. "Ending the Reading Wars: Reading Acquisition From Novice to Expert". *Psychological Science in the Public Interest* 19.1, pp. 5–51. https://journals.sagepub.com/doi/10.1177/1529100618772271.
- Catholic Education Archiocese of Canberra and Goulburn (2023). Catalyst. https://catalyst.cg.catholic.edu.au/.
- Catholic Education Tasmania (2023). *Literate Learners for Life*. https://catholic.tas.edu.au/literate-learners-for-life.

- Clark et al (2012). Clark, R., Kirschner, P. A. and Sweller, J. "Putting students on the path to learning: The case for fully guided instruction". *American Educator* 36.1, pp. 5–11.
- Closing the Gap (n.d.). *Closing the Gap targets and outcomes*. Australian Government. https://www.closingthegap.gov.au/national-agreement/targets.
- Colleu Terradas, J. (2023). To identify effective language and literacy screening and intervention practices for at-risk students. Winston Churchill Trust. https://www.churchilltrust.com.au/fellow/jessica-colleu-terradas-wa-2020/.
- Cunningham, A. E. and Stanovich, K. E. (1997). "Early reading acquisition and its relation to reading experience and ability 10 years later". *Developmental psychology* 33.6, p. 934. https://psycnet.apa.org/record/1997-43226-005.
- D'Agostino et al (2017). D'Agostino, J. V., Rodgers, E. and Mauck, S. "Addressing Inadequacies of the Observation Survey of Early Literacy Achievement". Reading Research Quarterly 53 (1), pp. 51–69. DOI: https://doi.org/10.1002/rrq.181.
- Del Rio, J. and Jones, D. K. (2023). Saving Money by Spending: Solving Illiteracy in Australia. Equity Economics. https://www.equityeconomics.com.au/report-archive/saving-money-by-spending-solving-illiteracy-in-australia.
- Del Rio et al (2023). Del Rio, J., Noura, H., Jones, D. K. and Sukkarieh, A. *Raising the grade: How schools in the Australian Capital Territory can lift literacy outcomes for students and the economy.*https://www.equityeconomics.com.au/report-archive/raising-the-grade-how-schools-in-the-australian-capital-territory-can-lift-literacy-outcomes-for-students-and-the-economy.
- Deloitte Access Economics (2016). *The economic impact of improving schooling quality*. Australian Government Department of Education and Training. https://www.education.gov.au/research-schooling/economic-impact-improving-schooling-quality.
- Denton et al (2006). Denton, C. A., Ciancio, D. J. and Fletcher, J. M. "Validity, reliability, and utility of the Observation Survey of Early Literacy Achievement". *Reading Research Quarterly* 41 (1), pp. 8–34. DOI: https://doi.org/10.1598/RRQ.41.1.1.
- Department of Education (2018). *National School Reform Agreement*. Australian Government. https://www.education.gov.au/quality-schools-package/resources/national-school-reform-agreement.

 (2021). The structure of the Phonics Check. Australian Government. https://www.literacyhub.edu.au/media/h0eoj1so/attachment-2-structure-of-the-phonics-check.pdf.
 (2023a). Review to Inform a Better and Fairer Education System - Consultation Paper. Australian Government. https://www.education.gov.au/review-inform-better-and-fairer-education-system/resources/better-and-fairer-education-system-consultation-paper.
 (2023b). Strong Beginnings: Report of the Teacher Education Expert Panel. Australian Government. https://www.education.gov.au/quality-initial-teacher-education-review/resources/strong-beginnings-report-teacher-education-expert-panel
 (2023c). <i>Literacy Hub: Year 1 Phonics Check</i> . Australian Government. https://www.literacyhub.edu.au/teach-and-assess/year-1-phonics-check/.
 (2023d). <i>Year 1 Phonics Check</i> . Australian Government. https://www.education.gov.au/australian-curriculum/year-1-phonics-check.

- Department of Education, Skills and Employment (2022). Next Steps: Report of the Quality Initial Teacher Education Review. Australian Government. https://www.education.gov.au/quality-initial-teacher-education-review.
- Department of Health and Aged Care (2023). Younger people in residential aged care Priorities for action. Australian Government. https://www.health.gov.au/ourwork/younger-people-in-residential-aged-care/priorities-for-action.
- Department of Social Services (2023). Outcomes Framework 2023–2032: Under the National Plan to End Violence against Women and Children 2022-2032.

 Australian Government.

 https://www.dss.gov.au/sites/default/files/documents/08_2023/np-outcomesframework.pdf.
- Desimone, L. M. (2009). "Improving Impact Studies of Teachers' Professional Development: Toward Better Conceptualizations and Measures". en. *Educational Researcher* 38.3, pp. 181–199. ISSN: 0013-189X, 1935-102X. DOI: 10.3102/0013189X08331140. http://journals.sagepub.com/doi/10.3102/0013189X08331140 (visited on 15/03/2023).
- EdReports (2022a). EdReports 2021 Annual Report. EdReports. https://www.edreports.org/resources/article/edreports-2021-annual-report.

- EdReports (2022b). Evidence Guide: English Language Arts Foundational Skills. https://cdn.edreports.org/reviewtools/ag9zfmVkcmVwb3J0cy13ZWJyIAsSB 1N1YmpIY3QYGwwLEgpSZXZpZXdUb29sGIHC1y8M/evidence-guide.pdf.
- (2023). EdReports 2022 Annual Report.
 https://www.edreports.org/resources/article/edreports-2022-annual-report.
- Education, U. D. for (2021). *The complete curriculum programme pilot: research reports*. UK Government. https://www.gov.uk/government/publications/the-complete-curriculum-programme-pilot-research-reports.
- Education Endowment Foundation (2021). *Teaching Assistant Interventions*. https://educationendowmentfoundation.org.uk/education-evidence/teaching-learning-toolkit/teaching-assistant-interventions.
- Education Services Australia (2023). *Explore free resources and professional learning to help young students learn to read.* Australian Government Department of Education. https://www.literacyhub.edu.au/.
- EEF (2023a). National scale up of NELI to support COVID-19 education recovery. Education Endowment Foundation. https://educationendowmentfoundation.org.uk/projects-and-evaluation/projects/nuffield-early-language-intervention-scale-up.
- (2023b). Evidence guardianship. Education Endowment Foundation. https://educationendowmentfoundation.org.uk/support-for-schools/evidence-guardianship.
- Egert et al (2018). Egert, F., Fukkink, R. G. and G, A. "Impact of In-Service Professional Development Programs for Early Childhood Teachers on Quality Ratings and Child Outcomes: A Meta-Analysis". *Review of Educational Research* 88.3. https://journals.sagepub.com/doi/abs/10.3102/0034654317751918.
- Ehri, L. C. (2014). "Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning". *Scientific Studies of Reading* 18.1, pp. 5–21. DOI: https://doi.org/10.1080/10888438.2013.819356.
- Ehri et al (2001). Ehri, L. C., Nunes, S. R., Stahl, S. A. and Willows, D. M. "Systematic phonics instruction helps students learn to read: Evidence from the National Reading Panel's meta-analysis". *Review of educational research* 71.3, pp. 393–447.

- Elies et al (2021). Elies, A., Schabmann, A. and Schmidt, B. M. "Associations between Teacher-Rated Behavioral Problems and Reading Difficulties? Interactions over Time and Halo Effects". *Journal of Research in Special Educational Needs* 21 (4), pp. 368–380. https://eric.ed.gov/?g=reading+and+behaviour&id=EJ1315992.
- Elliott et al (2001). Elliott, J., Lee, S. W. and Tollefson, N. "A Reliability and Validity Study of the Dynamic Indicators of Basic Early Literacy Skills—Modified". School Psychology Review 30 (6), pp. 33–49. DOI: https://doi.org/10.1080/02796015.2001.12086099.
- Evidence for Learning (2020a). *Guidance Report: Improving literacy in lower primary.*(2020b). *Guidance Report: Improving literacy in upper primary.*
- (2020c). Guidance Report: Improving literacy in secondary schools.
- _____ (2021a). Small Group Tuition. Evidence for Learning. https://evidenceforlearning.org.au/education-evidence/teaching-learning-toolkit/small-group-tuition.
- (2021b). One on one Tuition. Evidence for Learning. https://evidenceforlearning.org.au/the-toolkits/the-teaching-and-learning-toolkit/all-approaches/one-to-one-tuition/.
- Faughey, D. (2015). "Learning from successful education reforms in Ontario". International Education News. https://internationalednews.com/2015/10/28/learning-from-successful-education-reforms-in-ontario/.
- Fawson et al (2006). Fawson, P. C., Ludlow, B. C., Reutzel, D. R., Sudweeks, R. and Smith, J. A. "Examining the reliability of running records: Attaining generalizable results". *The Journal of Educational Research* 100.2, pp. 113–126.
- Fielding-Barnsley, R. (2010). "Australian pre-service teachers' knowledge of phonemic awareness and phonics in the process of learning to read". *Australian Journal of Learning Difficulties* 15.1, pp. 99–110. DOI: 10.1080/19404150903524606.
- Five from Five (2020). Primary Reading Pledge: A plan to have all students reading by the end of primary school.

 https://fivefromfive.com.au/wp-content/uploads/2022/08/PRIMARY.

https://fivefromfive.com.au/wp-content/uploads/2022/08/PRIMARY-READING-PLEDGE_August2020Final.pdf.

- Fletcher, J. and Vaughn, S. (2009). "Response to Intervention: Preventing and Remediating Academic Difficulties". *Child Development Perspectives* 3.1, pp. 30–37. DOI: doi:10.1111/j.1750-8606.2008.00072.x.
- Folsom et al (2017). Folsom, J. S., Smith, K. G., Burk, K. and Oakley, N. *Educator outcomes associated with implementation of Mississippi's K–3 early literacy professional development initiative*. https://files.eric.ed.gov/fulltext/ED573545.pdf.
- Foorman et al (2016). Foorman, B. et al. Foundational Skills to Support Reading for Understanding in Kindergarten through 3rd Grade: Educator's Practice Guide.
- Fountas and Pinnell (2018). FAQ Friday: how long does it take to administer the benchmark assessment to a student.

 https://fpblog.fountasandpinnell.com/faq-friday-how-long-does-it-take-to-administer-the-benchmark-assessment-to-a-student.
- Fuchs, D. and Fuchs, L. S. (2017). "Critique of the National Evaluation of Response to Intervention: A Case for Simpler Frameworks". *Exceptional Children* 83.3, pp. 255–268. DOI: 10.1177/0014402917693580.
- Galuschka et al (2014). Galuschka, K., Ise, E., Krick, K. and Schulte-Körne, G. "Effectiveness of treatment approaches for children and adolescents with reading disabilities: A meta-analysis of randomized controlled trials". *PLOS ONE* 9.2.
- Geary, D. C. (2008). "An evolutionarily informed education science". *Educational Psychologist* 43.4, pp. 179–195.
- George B. Walker, R. M. and Monster, J. (2019). "Does strategic planning improve organizational performance? A meta-analysis". *Public Administration Review* 79 (6), pp. 810–819.
- Gillet et al (2011). Gillet, J. W., Temple, C., Temple, C. and Crawford, A. *Understanding reading problems: Assessment and instruction, 8th ed.* Pearson.
- Goffreda et al (2009). Goffreda, C. T., Diperna, J. C. and Pedersen, J. A. "Preventive screening for early readers: Predictive validity of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS)". *Psychology in the Schools* 46 (6), pp. 539–552. DOI: https://doi.org/10.1002/pits.20396.

- Goss, P. and Sonnemann, J. (2016). Widening gaps: what NAPLAN tells us about student progress. Report No. 2016-3. Grattan Institute. http://grattan.edu.au/report/widening-gaps/.
- Goss, P. and Emslie, O. (2018). *Measuring student progress: A state-by-state report card Technical Report*. Report No. 2018-5. Grattan Institute. https://grattan.edu.au/report/measuring-student-progress/.
- Goss, P. and Sonnemann, J. (2020). Top teachers: sharing expertise to improve teaching. Report No. 2020-02. Grattan Institute. https://grattan.edu.au/report/top-teachers/.
- Gough, P. B. and Tunmer, W. E. (1986). "Decoding, reading, and reading disability". Remedial and Special Education 7.1, pp. 6–10.
- Grace, G. (2023). *Queensland turns the page on reading in schools*. Queensland Government. https://statements.gld.gov.au/statements/98983.
- L. Graham et al (2020). Graham, L., White, S., Tancredi, H. and Snow, P. "Casualties in a game of hit and miss: Reading trajectories, identification of concerns and provision of support in the early years of schooling". *Learning Difficulties Australia Bulletin* 52 (2), pp. 20–24. https://eprints.qut.edu.au/206419/1/72584810.pdf.
- L. J. Graham et al (2020). Graham, L. J., White, S. L. J., Tancredi, H. A., Snow, P. C. and Cologon, K. "A longitudinal analysis of the alignment between children's early word-level reading trajectories, teachers' reported concerns and supports provided". *Reading and Writing*, pp. 1895–1923. https://doi.org/10.1007/s11145-020-10023-7.
- Grimshaw et al (2012). Grimshaw, J. M., Eccles, M. P., Lavis, J. N., Hill, S. J. and Squires, J. E. "Knowledge translation of research findings". *Implementation Science* 7.50. DOI: https://doi.org/10.17061/phrp3312303.
- Grissmer et al (2023). Grissmer, D. et al. A Kindergarten Lottery Evaluation of Core Knowledge Charter Schools: Should Building General Knowledge Have a Central Role in Educational and Social Science Research and Policy?

 Annenberg Brown University.

 https://edworkingpapers.com/sites/default/files/ai23-755.pdf.
- Haan, M. de (2021). "Supporting struggling adolescent readers through the Response to Intervention (RTI) framework". *Australian Journal of Learning Difficulties* 26.1, pp. 47–66. DOI: 10.1080/19404158.2020.1870512.

- Hammond, L. (2015). "Early childhood educators' perceived and actual metalinguistic knowledge, beliefs and enacted practice about teaching early reading".

 Australian Journal of Learning Difficulties 20.2, pp. 1–16. DOI: 10.1080/19404158.2015.1023208.
- Hanson, R. A. and Farrell, D. (1995). "The long-term effects on high school seniors of learning to read in kindergarten". *Reading Research Quarterly* 30.4, pp. 908–933.
- Hanushek, E. A. and Woessmann, L. (2012). "Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation". *Journal of Economic Growth* 17, pp. 267–321. DOI: 10.1007/s10887-012-9081-x.
- Hare, J. (2023). *Growing illiteracy, poor numeracy burden on business: BCA*. Australian Financial Review. https://www.afr.com/work-and-careers/education/growing-illiteracy-poor-numeracy-burden-on-business-bca-20230223-p5cn3r.
- He, X. and Tong, X. (2017). "Quantity matters: Children with dyslexia are impaired in a small, but not large, number of exposures during implicit repeated sequence learning". *American Journal of Speech-Language Pathology* 26 (4), pp. 1080–1091. DOI: https://doi.org/10.1044/2017 AJSLP-15-0190.
- Hempenstall, K. (2003). "The three-cueing system: Trojan horse?" *Australian Journal of Learning Difficulties* 8.2, pp. 15–23.
- (2012). "Response to intervention: Accountability in action". Australian Journal of Learning Difficulties 17.2, pp. 101–131. DOI: 10.1080/19404158.2012.704879.
- (2013). "What is the Place for National Assessment in the Prevention and Resolution of Reading Difficulties?" *Australian Journal of Learning Difficulties* 18.2, pp. 105–121. https://eric.ed.gov/?id=EJ1024451.
- Hernandez, D. J. (2011). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation.* The Annie E. Casey Foundation. https://assets.aecf.org/m/resourcedoc/AECF-DoubleJeopardy-2012-Full.pdf.
- Hewitt-Taylor, J. (2004). "Clinical guidelines and care protocols". *Intensive and Critical Care Nursing* 20.1, pp. 45–52. https://pubmed.ncbi.nlm.nih.gov/14726253/.
- Hillman et al (2023). Hillman, K., O'Grady, E., Rodrigues, S., Schmid, M. and Thomson, S. *Australia's results from PIRLS 2021: Progress in International Reading Literacy Study*. Australian Council for Educational Research. https://apo.org.au/node/322726.

- Hirsch, E. D. (2006). The Knowledge Deficit: Closing the Shocking Education Gap for American Children. Houghton Mifflin.
- Hjetland et al (2019). Hjetland, H. N., Lervåg, A., Lyster, S.-A. H., Hagtvet, B. E., Hulme, C. and Melby-Lervåg, M. "Pathways to reading comprehension: A longitudinal study from 4 to 9 years of age". *Journal of Educational Psychology* 111.5, p. 751.
- Hordacre et al (2017). Hordacre, A.-L., Moretti, C. and Spoehr, J. *Evaluation of the Trial of the UK Phonics Screening Check in South Australian schools*. Australian Industrial Transformation Institute, Flinders University. https://www.education.sa.gov.au/docs/curriculum/evaluation-uk-phonics-screening-check-sa.pdf?acsf_files_redirect.
- Hornsby, D. and Wilson, L. (2010). Teaching phonics in context. National Council of Teachers of English.
- House of Representatives Standing Committee on Employment, Education and Training (2022). *Don't take it as read: Inquiry into adult literacy and its importance*. Australian Government. https://parlinfo.aph.gov.au/parlInfo/download/committees/reportrep/024806/to c_pdf/Don'ttakeitasread.pdf;fileType=application%5C%2Fpdf.
- Hunter et al (2022a). Hunter, J., Haywood, A. and Parkinson, N. *Ending the lesson lottery: How to improve curriculum planning in schools*. Grattan Institute. https://grattan.edu.au/report/ending-the-lesson-lottery-how-to-improve-curriculum-planning-in-schools/.
- Hunter et al (2022b). Hunter, J., Sonneman, J. and Joiner, R. *Making time for great teaching: How better government policy can help*. Grattan Institute. https://grattan.edu.au/report/making-time-for-great-teaching-how-better-government-policy-can-help/.
- Hunter, J. and Sonnemann, J. (2023). *Tackling under-achievement: Why Australia should embed high-quality small-group tuition in schools*. Grattan Institute. https://grattan.edu.au/report/tackling-under-achievement/.
- Ireland Department of Education and Skills (2011). Literacy and Numeracy for learning and life: The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020. Republic of Ireland. https://curriculumonline.ie/getmedia/f4b76380-9c0c-4543-aa6b-f4e7074597e2/HMP7_Literacy_and_Numeracy_Strategy_English.pdf.

- Ireland Department of Education and Skills (2017). *National Strategy: Literacy and Numeracy for learning and life 2011-2020. Interim Review: 2011-2016, New Targets: 2017-2020.* Republic of Ireland. https://assets.gov.ie/24960/93c455d4440246cf8a701b9e0b0a2d65.pdf.
- Ittimani, L. (2023). Employers are being forced to teach reading and writing: BCA.

 Australian Financial Review.

 https://www.afr.com/work-and-careers/education/employers-are-being-forced-to-teach-reading-and-writing-bca-20230224-p5cnf6.
- Jacups, S. P. and Bradley, C. (2023). "Is the evidence-based medicine movement counter-productive: are randomised controlled trials the best approach to establish evidence in complex healthcare situations?" *Public Health Residential Practice* 33.1. DOI: https://doi.org/10.17061/phrp3312303.
- Jensen et al (2012). Jensen, B., Hunter, A., Sonnemann, J. and Burns, T. Catching up: learning from the best school systems in East Asia. Grattan Institute. https://grattan.edu.au/report/catching-up-learning-from-the-best-school-systems-in-east-asia/.
- Jensen et al (2016). Jensen, B., Sonnemann, J., Hunter, J. A. and Roberts-Hull, K. Beyond PD: Teacher Professional Learning in High-Performing Systems. National Center on Education and the Economy. ttp://www.ncee.org/beyondpd/.
- Jobs and Skills Australia (2023). *Employment Projections*. Australian Government. https://labourmarketinsights.gov.au/our-research/employment-projections/.
- Johnston, R. S. and Watson, J. E. (2005). The effects of synthetic phonics teaching on reading and spelling attainment: a seven year longitudinal study. Vol. 11. Scottish Executive Education Department. https://www.jet.org.za/clearinghouse/projects/primted/resources/languageand-literacy-resources-repository/scottish-executive-report-johnston-andwatson-2005.pdf/view.
- Juanola, M. P. (2019). WA parents spend thousands on tutoring fees to soothe ATAR anxiety. WAtoday. https://www.watoday.com.au/national/western-australia/wa-parents-spend-thousands-on-tutoring-fees-to-soothe-atar-anxiety-20191018-p53251.html.
- Kang, E. Y. and Shin, M. (2019). "The Contributions of Reading Fluency and Decoding to Reading Comprehension for Struggling Readers in the Fourth Grade". *Reading writing quarterly : overcoming learning difficulties* 3.25, pp. 179–192. DOI: https://doi.org/10.1080/10573569.2018.1521758.

- Kaufman, D. (2022). In Mississippi, a Broad Effort to Improve Literacy Is Yielding Results. The New York Times. https://www.nytimes.com/2022/10/06/education/learning/mississippi-schools-literacy.html.
- Kendeou et al (2013). Kendeou, P., Papadopoulos, T. C. and Kotzapoulou, M. "Evidence for the early emergence of the simple view of reading in a transparent orthography". *Reading and Writing* 26, pp. 189–204.
- Kirkpatrick, D. H. and Burkman, R. T. (2010). "Does standardization of care through clinical guidelines improve outcomes and reduce medical liability?" Obstetrics Gynecology 116.5, pp. 1022–26. https://pubmed.ncbi.nlm.nih.gov/20966684/.
- Konza, D. (2014). "Teaching reading: Why the 'Fab five' should be the 'Big six'". Australian Journal of Teacher Education (Online) 39.12, pp. 153–169.
- Kosmoski et al (1990). Kosmoski, G. J., Gay, G. and Vockell, E. L. "Cultural Literacy and Academic Achievement". *The Journal of Experimental Education* 58.4, pp. 265–272. ISSN: 00220973, 19400683. http://www.jstor.org/stable/20151818.
- Lamb, S. and Huo, S. (2017). Counting the costs of lost opportunity in Australian education. Mitchell Institute. https://www.vu.edu.au/mitchell-institute/educational-opportunity/counting-the-costs-of-lost-opportunity-in-australian-education.
- Lamb et al (2020). Lamb, S., Maire, Q., Doecke, E., Macklin, S., Noble, K. and Pilcher, S. *Impact of learning from home on educational outcomes for disadvantaged children*. Centre for International Research on Education Systems and the Mitchell Institute, Victoria University. https://www.vu.edu.au/mitchell-institute/schooling/impact-of-learning-from-home-for-disadvantaged-children.
- Leigh, A. (2010). "Returns to Education in Australia". *Economics Papers* 27.3, pp. 233–249. DOI: https://doi.org/10.1111/j.1759-3441.2008.tb01040.x.
- Leonardi et al (2021). Leonardi, S., Spong, S., Roberts, J. and Lamb, H. *Evaluation of the 2017 National Professional Qualifications: Final evaluation report for the 2017-18 cohort*. CFE Research. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1035430/Evaluation_of_the_2017_National_Professional_Qualifications.pdf.

- Leonardi et al (2023). Leonardi, S., Spong, S. and Harding, S. *Emerging findings from the NPQ evaluation: Interim report 1*. CFE Research.

 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1131108/Emerging_findings_from_the_evaluation_of_N ational Professional Qualifications_Interim_report_1.pdf.
- Lindorff et al (2023). Lindorff, A., Stiff, J. and Kayton, H. *PIRLS 2021: National Report for England.* UK Department for Education.

 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1156633/PIRLS_2021__national_report_for_England__May_2023.pdf.
- Loble, L. (2023). Australian schools should learn from Mississippi's education revolution. Australian Financial Review.

 https://www.afr.com/policy/health-and-education/australian-schools-should-learn-from-mississippi-s-education-revolution-20230712-p5dnqt.
- Loughland, T. (2012). "Teacher Professional Learning in Pursuit of the Common Good:

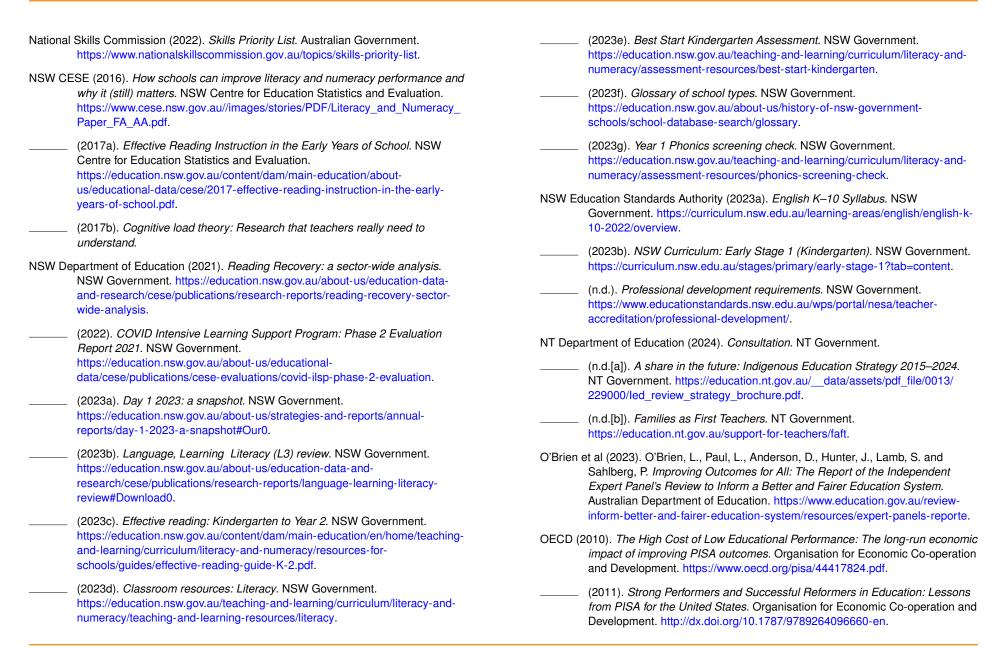
 A Discussion of the Role of demonstration schools in Teacher Education".

 McGill Journal of Education 47.1.
- Loveless, T. (2016). *The NAEP proficiency myth*. Brookings Institute. https://www.brookings.edu/articles/the-naep-proficiency-myth/.
- Lovett et al (2017). Lovett, M. W., Frijters, J. C., Wolf, M., Steinbach, K. A., Sevcik, R. A. and Morris, R. D. "Early intervention for children at risk for reading disabilities: The impact of grade at intervention and individual differences on intervention outcomes." *Journal of Educational Psychology* 109.7, p. 889.
- Lyon, R. (2002). *Testimonies to Congress: 1997-2002*. Center for the Development of Learning. https://files.eric.ed.gov/fulltext/ED475205.pdf.
- Mathes, P. G. and Denton, C. A. (2002). "The prevention and identification of reading disability". *Seminars in Pediatric Neurology*. Vol. 9. 3. Elsevier, pp. 185–191.
- Mathes et al (2005). Mathes, P. G., Denton, C. A., Fletcher, J. M., Anthony, J. L., Francis, D. J. and Schatschneider, C. "The effects of theoretically different instruction and student characteristics on the skills of struggling readers". Reading Research Quarterly 40.2, pp. 148–182.
- McArthur et al (2018). McArthur, G. et al. "Phonics training for English-speaking poor readers". *Cochrane Database of Systematic Reviews* 11.

- McGrane et al (2017). McGrane, J., Stiff, J., Baird, J.-A., Lenkeit, J. and Hopfenbeck, T. Progress in International Reading Literacy Study (PIRLS): National Report for England. UK Department for Education. https://assets.publishing.service.gov.uk/media/5a82ae72e5274a2e87dc26fb/ PIRLS 2016 National Report for England- BRANDED.pdf.
- McIlroy, T. (2022). Labor to recruit more high achievers into education. The Australian Financial Review. https://www.afr.com/politics/federal/labor-to-recruit-morehigh-achievers-into-education-20220508-p5ajjg.
- Mesmer, H. A. E. (2005). "Text decodability and the first-grade reader". *Reading Writing Quarterly* 21, pp. 61–86. DOI: https://doiorg.ezproxy.ecu.edu.au/10.1080/10573560590523667.
- Meyerkort, S. (2022). "Finally!" WA teacher applauds phonics test rollout. School News Australia. https://school-news.com.au/news/finally-wa-teacher-applauds-phonics-test-rollout/.
- Mississippi Department for Education (2023). *Universal Screener Companion Guide*. https://www.mdek12.org/sites/default/files/Offices/MDE/OAE/OEER/Literacy/universalscreenercompanionguidefinal_june_2023.pdf.
- Moats, L. C. (2020). "Teaching Reading *Is* Rocket Science: What Expert Teachers of Reading Should Know and Be Able to Do". *American Educator* 44.2, p. 4.
- Morgan et al (2008). Morgan, P. L., Farkas, G., Tufis, P. A. and Sperling, R. A. "Are Reading and Behavior Problems Risk Factors for Each Other?" *Journal of Learning Disabilities* 41 (5), pp. 417–436. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4422059/.
- Nation, K. and Snowling, M. J. (2004). "Beyond phonological skills: Broader language skills contribute to the development of reading". *Journal of Research in Reading* 27.4, pp. 342–356.
- National Center on Response to Intervention (2010). Essential Components of RTI A Closer Look at Response to Intervention.

 https://files.eric.ed.gov/fulltext/ED526858.pdf.
- National Centre for Educational Progress (2022). Explore Assessment Data. US

 Department of Education. https://nces.ed.gov/nationsreportcard/data/.
- National Health and Medical Research Council (2016). 2016 NHMRC Standards for Guidelines. Australian Government. https://www.nhmrc.gov.au/guidelinesforguidelines/standards.



- OECD (2012). Survey of Adult Skills (PIAAC). Organisation for Economic Co-operation and Development. https://www.oecd.org/skills/piaac/Country%20note%20-%20Australia final.pdf. (2019). Education at a Glance 2019. Organisation for Economic Co-operation and Development. https://www.oecd-ilibrary.org/education/education-at-aglance-2019 43dc8065-en. Ofsted (2019a). Inspecting the curriculum. Office for Standards in Education, Children's Services and Skills. https://assets.publishing.service.gov.uk/media/5d1dfeba 40f0b609dde41855/Inspecting the curriculum.pdf. (2019b). Education inspection framework. Office for Standards in Education, Children's Services and Skills. https://assets.publishing.service.gov.uk/media/6034be17d3bf7f265dbbe2ef/ Research for EIF framework updated references 22 Feb 2021.pdf. (2021). Research review series: science. Office for Standards in Education, Children's Services and Skills. https://www.gov.uk/government/publications/research-review-seriesscience/research-review-series-science#organising-knowledge-within-thesubject-curriculum. (2022). Guidance: Early career framework and national professional qualification inspection framework and handbook. Office for Standards in Education, Children's Services and Skills. https://www.gov.uk/government/publications/early-career-framework-andnational-professional-qualification-inspection-framework-andhandbook/early-career-framework-and-national-professional-qualificationinspection-framework-and-handbook#full-inspection. (2023). Guidance: Risk assessment methodology for good state-funded schools. Office for Standards in Education, Children's Services and Skills. https://www.gov.uk/government/publications/risk-assessment-methodology-
- Ohio Department of Education (2022). Ohio's Dyslexia Guidebook.

good-state-funded-schools.

Ontario Human Rights Commission (2022). *Inquiry report: Right to read.* Government of Ontario. https://www3.ohrc.on.ca/sites/default/files/FINAL%20R2R%20REPORT%20DESIGNED%20April%2012.pdf.

for-maintain-schools-and-academies/risk-assessment-methodology-for-

- Patfield et al (2022). Patfield, S., Gore, J. and Harris, J. "Scaling up effective professional development: Toward successful adaptation through attention to underlying mechanisms". *Teaching and Teacher Education* 116. DOI: https://doi.org/10.1016/j.tate.2022.103756.
- Peng et al (2023). Peng, P., Wang, W., Filderman, M. J., Zhang, W. and Lin, L. "The Active Ingredient in Reading Comprehension Strategy Intervention for Struggling Readers: A Bayesian Network Meta-analysis". *Review of Educational Research*, p. 00346543231171345.
- Pitcher, B. and Fang, Z. (2007). "Can we trust levelled texts? An examination of their reliability and quality from a linguistic perspective". *Literacy* 41 (1), pp. 43–51. DOI: https://doi.org/10.1111/j.1467-9345.2007.00454.x.
- Productivity Commission (2023). Review of the National School Reform Agreement: Study Report. Australian Government. https://www.pc.gov.au/inquiries/completed/school-agreement/report.
- Queensland Department of Education (2023a). *Queensland's reading commitment*.

 Queensland Government. https://education.qld.gov.au/curriculum/stages-of-schooling/queenslands-reading-commitment.
- (2023b). Early Start. Queensland Government. https://education.qld.gov.au/schools-educators/school-types/early-years/early-start.
- Quick, J. (2020). "Re-mapping the territory: an overview of learning and literacy intervention provision in Australian primary education". *Australian Journal of Learning Difficulties* 25 (2), pp. 109–133. DOI: https://doi.org/10.1080/19404158.2020.1776741.
- Ratnani et al (2023). Ratnani, I., Fatima, S., Abid, M. M., Surani, Z. and Surani, S. "Evidence-Based Medicine: History, Review, Criticisms, and Pitfalls". *Cureus* 15.2, DOI: 10.7759/cureus.35266.
- Recht, D. R. and Leslie, L. (1988). "Effect of prior knowledge on good and poor readers' memory of text." *Journal of Educational Psychology* 80.1, p. 16.
- RMC Research Corporation (2019). *Mississippi's Literacy-Based Promotion Act: An inside look*. https://files.eric.ed.gov/fulltext/ED613758.pdf.
- Roade English Hub (2023). What we offer. UK Department for Education. https://www.roadeenglishhub.co.uk/what-we-offer.

- Rockliff, J. (2023). *Investing to improve literacy outcomes in Tasmania*. Tasmanian Government. https:
 //www.premier.tas.gov.au/site_resources_2015/additional_releases/investing-to-improve-literacy-outcomes-in-tasmania.
- Rockliff, J. and Jaensch, R. (2023). *Improving literacy in Tasmanian Primary Schools*.

 Tasmanian Government. https://www.premier.tas.gov.au/site_resources_
 2015/additional_releases/improving-literacy-in-tasmanian-primary-schools.
- Rose, J. (2006). *Independent review of the teaching of early reading*. UK Department for Education and Skills. https://dera.ioe.ac.uk/id/eprint/5551/2/report.pdf.
- Rotter et al (2010). Rotter, T., Kinsman, L., James, E., Machotta, A., Gothe, H., Willis, J., Snow, P. C. and Kugler, J. "Clinical pathways: effects on professional practice, patient outcomes, length of stay and hospital costs". *Cochrane Database Syst Rev.* 17.3. https://pubmed.ncbi.nlm.nih.gov/20238347/.
- Rotter et al (2019). Rotter, T., Jong, R. B. de, Lacko, S. E., Ronellenfitsch, U. and Kinsman, L. "Clinical pathways as a quality strategy". *Improving healthcare quality in Europe: Characteristics, effectiveness and implementation of different strategies*. Ed. by R. Busse, N. Klazinga, D. Panteli and W. Quentin. European Observatory on Health Systems and Policies. Chap. Chapter 12. https://www.ncbi.nlm.nih.gov/books/NBK549262/.
- Rowe, K. (2005). "Teaching reading: National Inquiry into the Teaching of Literacy Australia". https://research.acer.edu.au/tll_misc/5/.
- SA Department of Education (2023a). 2022 phonics screening check summary. SA Government. https://www.education.sa.gov.au/docs/curriculum/2022-phonics-screening-check-results-fact-sheet.pdf.
- (2023b). Phonics screening check for student understanding of letters and sounds. SA Government. https://www.education.sa.gov.au/parents-andfamilies/curriculum-and-learning/literacy-and-numeracy/phonics-screeningcheck-student-understanding-letters-and-sounds.
- Sailor et al (2021). Sailor, W., Skrtic, T. M., Cohn, M. and Olmstead, C. "Preparing Teacher Educators for Statewide Scale-Up of Multi-Tiered System of Support (MTSS)". *Teacher Education and Special Education* 44.1, pp. 24–41. DOI: 10.1177/0888406420938035. https://doi.org/10.1177/0888406420938035.

- Scheerens, J. (2011). "Measuring educational quality by means of indicators".

 Perspectives on educational quality: illustrative outcomes on primary and secondary schooling in the Netherlands.

 Ed. by. J. v. R. J. Scheerens H. Luyten. Springer, pp. 35–50.
- Schwartz, S. (2023). Which States Have Passed 'Science of Reading' Laws? What's in Them? Education Week. https://www.edweek.org/teaching-learning/which-states-have-passed-science-of-reading-laws-whats-in-them/2022/07.
- Serry et al (2022). Serry, T., Snow, P., Hammond, L., McLean, E. and McCormack, J. "Educators' perspectives about teaching and supporting students with learning difficulties in reading". *Australian Journal of Education* 66.3, pp. 292–313. DOI: https://doi.org/10.1177/00049441221130551.
- Setkowski et al (2021). Setkowski, K., Boogert, K., Hoogendoorn, A. W., Gilissen, R. and Balkom, A. J. L. M. van. "Guidelines improve patient outcomes in specialised mental health care: A systematic review and meta-analysis". *Acta Psychiatrica Scandinavica* 144.3, pp. 246–258. https://onlinelibrary.wiley.com/doi/full/10.1111/acps.13332.
- Seymour et al (2003). Seymour, P. H., Aro, M., Erskine, J. M. and COST Action A8 Network, C. with. "Foundation literacy acquisition in European orthographies". *British Journal of Psychology* 94.2, pp. 143–174.
- Sharples et al (2019). Sharples, J., Webster, R. and Blatchford, P. *Making Best Use of Teaching Assistants: Guidance Report*. Education Endowment Foundation. https://d2tic4wvo1iusb.cloudfront.net/eef-guidance-reports/teaching-assistants/TA_Guidance_Report_MakingBestUseOfTeachingAssistants-Printable_2021-11-02-162019_wsqd.pdf?v=1635870019.
- Shepherd, H. and Fortescue, B. (2023). Early analysis of English Hubs phonics attainment: 2021/22 data. UK Department for Education.

 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1156797/English_Hubs_Programme_-_Early_analysis_of_2021_to_2022_Phonics_Screening_Check_attainment.pdf.
- Sims et al (2021). Sims, S., Fletcher-Wood, H., O'Mara-Eves, A., Cottingham, S., Stansfield, C., Herwegen, J. V. and Anders, J. What are the Characteristics of Effective Teacher Professional Development? A Systematic Review and Meta-analysis. Education Endowmen Foundation. https://files.eric.ed.gov/fulltext/ED615914.pdf.
- Smith, W. (1928). "The Function and the Value of a Demonstration School". *The Elementary School Journal* 29.4, pp. 267–272.

- R. Smith et al (2021). Smith, R., Snow, P., Serry, T. and Hammond, L. "The role of background knowledge in reading comprehension: A critical review". *Reading Psychology* 42.3, pp. 214–240.
- R. Smith et al (2023) ______ . "Elementary Teachers' Perspectives on Teaching Reading Comprehension". *Language, Speech, and Hearing Services in Schools* 54.3, pp. 888–913. DOI: https://doi.org/10.1044/2023 LSHSS-22-00118.
- Snow, P. (2016). "Language is literacy is language. Positioning Speech Language Pathology in education policy, practice, paradigms, and polemics". International Journal of Speech-Language Pathology 18.3, pp. 216–228.
- (2019). "Speech-language pathology and the youth offender: Epidemiological overview and roadmap for future speech-language pathology research and scope of practice". Language, Speech and Hearing Services in Schools 50, pp. 324–339.
 - https://pubs.asha.org/doi/10.1044/2018_LSHSS-CCJS-18-0027.
- (2020). "Balanced literacy or systematic reading instruction? Perspectives on Language and Literacy". Perspectives on Language and Literacy 46.1, pp. 35–39.
- (2021). "SOLAR: The science of language and reading". *Child Language Teaching and Therapy* 37.3, pp. 222–233.
- Solity, J. and Vousden, J. (2009). "Real books vs reading schemes: A new perspective from instructional psychology". *Educational Psychology* 29.4, pp. 469–511.
- Speech Pathology Australia (2016). Speech Pathology Australia's Submission to the Productivity Commission Issues Paper: National Education Evidence Base. https://www.pc.gov.au/__data/assets/pdf_file/0003/199650/sub035-education-evidence.pdf.
- (2023). Speech Pathology Workforce Analysis: Preparing for our future. https://speechpathologyaustralia.cld.bz/Speech-Pathology-Workforce-Analysis-Preparing-for-our-future.
- SPELD (n.d.). SPELD SA Phonic Books. https://www.speldsa.org.au/speld-phonic-books.
- Spencer et al (2014). Spencer, M., Quinn, J. M. and Wagner, R. K. "Specific reading comprehension disability: Major problem, myth, or misnomer?" *Learning Disabilities Research & Practice* 29.1, pp. 3–9.

- Stanovich, K. E. (1986). "Matthew Effects in Reading: Some Consequences of Individual Differences in the Acquisition of Literacy". *Reading Research Quarterly* 21.4, pp. 360–407.
- Stanovich, K. and Stanovich, P. (1995). "How research might inform the debate about early reading acquisition". *Journal of Research in Reading* 18, pp. 87–105. DOI: https://doi.org/10.1111/j.1467-9817.1995.tb00075.x.
- Stark et al (2016). Stark, H. L., Snow, P. C., Eadie, P. A. and Goldfeld, S. R. "Language and reading instruction in early years' classrooms: The knowledge and self-rated ability of Australian teachers". *Annals of Dyslexia* 66.1, pp. 28–54. DOI: https://doi.org/10.1007/s11881-015-0112-0.
- Stephenson et al (2023). Stephenson, C. F., Serry, T. A. and Snow, P. C. "Australian speech-language pathologists' self-rated confidence, knowledge, and skill on constructs essential to practising in literacy with children and adolescents". *International Journal of Speech-Language Pathology* 25 (3), pp. 426–439. DOI: https://doi.org/10.1080/17549507.2023.2202839.
- K. L. Stocker et al (2023). Stocker, K. L., Fox, R. A., Swain, N. R. and Leif, E. S. "Between the Lines: Integrating the Science of Reading and the Science of Behavior to Improve Reading Outcomes for Australian Children". *Behavior and Social Issues*, pp. 1–28.
- Suggate, S. P. (2010). "Why what we teach depends on when: grade and reading intervention modality moderate effect size." *Developmental psychology* 46.6, p. 1556.
- Suggate, S. P. (2016). "A meta-analysis of the long-term effects of phonemic awareness, phonics, fluency, and reading comprehension interventions". *Journal of learning disabilities* 49.1, pp. 77–96.
- Sweller, J. (2008). "Instructional implications of David C. Geary's evolutionary educational psychology". *Educational psychologist* 43.4, pp. 214–216.
- Tamoliune et al (2022). Tamoliune, G., Greenspon, R., Tereseviciene, M., Volungeviciene, A., Trepule, E. and Dauksiene, E. "Exploring the potential of micro-credentials: A systematic literature review". *Frontiers in Education* 7. https://www.frontiersin.org/articles/10.3389/feduc.2022.1006811/full.

- Tasmania Literacy Advisory Panel (2023). Final Consultation Report for the Development of Tasmania's Community-wide Framework. Tasmanian Government.
 - https://www.dpac.tas.gov.au/__data/assets/pdf_file/0031/282955/Final-Consultation-Report-for-the-Development-of-Tasmanias-Community-wide-Framework.pdf.
- Tasmanian Department of Education (2023). Student Learning Data. Tasmanian Government. https://www.decyp.tas.gov.au/about-us/policies-legislation-data/data-and-statistics/student-learning-data/.
- The Senate Community Affairs References Committee (2014). Senate Inquiry on the Prevalence of different types of speech, language and communication disorders and speech pathology services in Australia. https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Community_Affairs/Speech_Pathology.
- Thomson et al (2012). Thomson, S., Hillman, K., Wernert, N., Schmid, M., Buckley, S. and Munene, A. *Monitoring Australian year 4 student achievement internationally: TIMSS and PIRLS 2011.* Australian Council for Educational Research. https://research.acer.edu.au/cgi/viewcontent.cgi?article=1002&context=timss_pirls_2011.
- Thomson et al (2017). Thomson, S., Hillman, K., Schmid, M., Rodrigues, S. and Fullarton, J. *Reporting Australia's Results: PIRLS 2016*. Australian Council for Educational Research. https://research.acer.edu.au/cgi/viewcontent.cgi?article=1000&context=pirls.
- Thomson et al (2019). Thomson, S., Bortoli, L. D., Underwood, C. and Schmid, M. *PISA 2018: Reporting Australia's Results Volume I Student Performance*. Australian Council for Educational Research. https://research.acer.edu.au/ozpisa/35/.
- Thomson et al (2023) ______ . PISA 2022 Reporting Australia's results: Volume 1 Student performance and equity in education. Australian Council for Educational Research. https:
 //research.acer.edu.au/cgi/viewcontent.cgi?article=1056&context=ozpisa.
- Torgerson et al (2006). Torgerson, C., Brooks, G. and Hall, J. A systematic review of the research literature on the use of phonics in the teaching of reading and spelling. DfES Publications.

- Torgesen, J. (2004). "Avoiding the Devastating Downward Spiral: The Evidence That Early Intervention Prevents Reading Failure". *American Educator* 28.3, pp. 6–19. https://www.aft.org/ae/fall2004/torgesen.
- Torgesen, J. K. (n.d.). Recommendations for the use of Diagnostic Tests in Reading First Schools. Florida Center for Reading Research. https://fcrr.org/sites/g/files/upcbnu2836/files/media/projects/empowering-teachers/pdf/articles/RecommendationsTest%20inReadingFirstSchools.pdf.
- Treasury (2023). Intergenerational Report 2023: Australia's future to 2063. Australian Government. https://treasury.gov.au/sites/default/files/2023-08/p2023-435150.pdf.
- UK Department for Education (2013). The national curriculum in England: Key stages 1 and 2 framework document. UK Government. https://assets.publishing.service.gov.uk/media/5a81a9abe5274a2e8ab55319/PRIMARY national curriculum.pdf.
- _____ (2014). Department for Education 'Evidence check' memorandum: Phonics policy. UK Government.
 - https://www.parliament.uk/globalassets/documents/commons-committees/Education/evidence-check-forum/phonics.pdf.
- (2022). Key stage 1 and phonics screening check attainment. UK Government. https://explore-education-statistics.service.gov.uk/find-statistics/key-stage-1-and-phonics-screening-check-attainment.
- (2023a). The reading framework. UK Government. https://www.gov.uk/government/publications/the-reading-framework-teaching-the-foundations-of-literacy#full-publication-update-history.
 - (2023b). Guidance: Validation of systematic synthetic phonics programmes: supporting documentation. UK Government.
 - https://www.gov.uk/government/publications/phonics-teaching-materials-core-criteria-and-self-assessment/validation-of-systematic-synthetic-phonics-programmes-supporting-documentation.
- UK Department for Education and Oak National Academy (2022). Oak National Academy business case. UK Government. https://www.gov.uk/government/publications/oak-national-academy-business-case.

- UK Standards and Testing Agency (2017). Assessment framework for the development of the Year 1 phonics screening check. UK Government. https://assets.publishing.service.gov.uk/media/5a82b304e5274a2e8ab58e2c /Y1 Phonics assessment framework PDFA V3.pdf.
- UNESCO (2019). The promise of large-scale learning assessments: Acknowledging limits to unlock opportunities. United Nations Educational, Scientific and Cultural Organization.

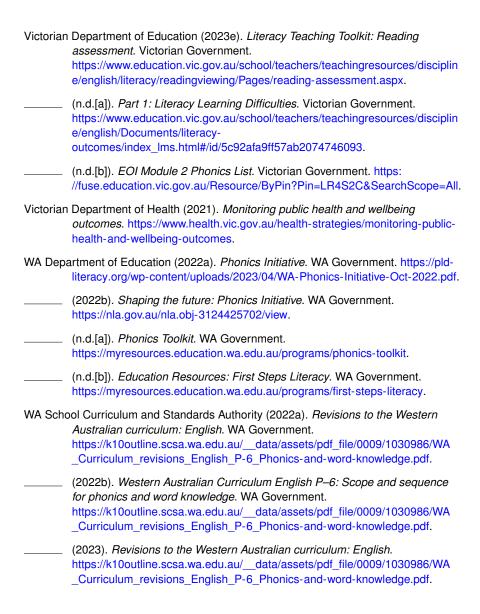
 unesdoc.unesco.org/ark:/48223/pf0000369697/PDF/369697eng.pdf.multi.
- United Learning (2022). *National Program Qualifications*. https://centrallondontsh.org.uk/programmes/npgs.
- United States National Reading Panel (2000). Report of the National Reading Panel:

 Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction:

 Reports of the subgroups. United States National Institute of Child Health and Human Development. https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf.
- University of Oregon Center on Teaching and Learning (2018). *Understanding the Research Behind DIBELS 8th Edition: Technical Report 1801*. https://dibels.uoregon.edu/sites/default/files/DIBELS8thEdition_TechRpt 1801_ResearchBrief.pdf.
- US Institute of Education Sciences (2009). Assisting Students Struggling with Reading: Response to Intervention (RtI) and Multi-Tier Intervention in the Primary Grades. US Department of Education.

 https://ies.ed.gov/ncee/wwc/docs/practiceguide/rti_reading_pg_021809.pdf.
- (2023). *Practice Guides*. US Department of Education. https://ies.ed.gov/ncee/wwc/practiceguides.
- (n.d.). The Nation's Report Card: NAEP Data Explorer. US Department of Education. https://www.nationsreportcard.gov/ndecore/xplore/NDE.
- VanMeveren et al (2020). VanMeveren, K., Hulac, D. and Wollersheim-Shervey, S. "Universal Screening Methods and Models: Diagnostic Accuracy of Reading Assessments". *Assessment for Effective Intervention* 45 (4), pp. 255–265. DOI: https://doi.org/10.1177/1534508418819797.

- Vellutino et al (2006). Vellutino, F. R., Scanlon, D. M., Small, S. and Fanuele, D. P. "Response to intervention as a vehicle for distinguishing between children with and without reading disabilities: Evidence for the role of kindergarten and first-grade interventions". *Journal of Learning Disabilities* 39.2, pp. 157–169.
- Venus, C. and Jamrozik, E. (2020). "Evidence-poor medicine: just how evidence-based are Australian clinical practice guidelines?" en. *Internal Medicine Journal* 50.1, pp. 30–37. ISSN: 1444-0903, 1445-5994. DOI: 10.1111/imj.14466. https://onlinelibrary.wiley.com/doi/10.1111/imj.14466 (visited on 27/03/2023).
- Victorian Auditor-General's Office (2020). Systems and Support for Principal Performance. https://www.audit.vic.gov.au/report/systems-and-supportprincipal-performance?section=.
- Victorian Department of Education (2022a). *English Online Interview Guide*. Victorian Government. https://www.education.vic.gov.au/Documents/school/teachers/teachingresources/discipline/english/assessment/English-Online-Interview-Guide%202022-081222.pdf.
- (2022b). Tutor Learning Initiative (TLI) What works? Implementation insights for 2022. https://www.education.vic.gov.au/PAL/tutor-learning-initiative-what-works.docx.
- _____ (2023a). *Literacy Teaching Toolkit: Phonics*. Victorian Government. https://www.education.vic.gov.au/school/teachers/teachingresources/discipline/english/literacy/readingviewing/Pages/litfocusphonics.aspx.
- (2023b). *Literacy Teaching Toolkit: Shared reading*. Victorian Government. https://www.education.vic.gov.au/school/teachers/teachingresources/discipline/english/literacy/readingviewing/Pages/teachingpracshared.aspx.
 - ___ (2023c). Literacy Teaching Toolkit: Use of decodable texts. Victorian Government.
 - https://www.education.vic.gov.au/school/teachers/teachingresources/discipline/english/literacy/readingviewing/Pages/phonics-decodable-texts.aspx.
 - (2023d). Literacy Teaching Toolkit: Guidance on commercial phonics programs. Victorian Government.
 - https://www.education.vic.gov.au/school/teachers/teachingresources/disciplin e/english/literacy/readingviewing/Pages/commercial-phonics-programs.aspx.



- Watson, L. (2008). *Private expectations and public schooling: the growth of private tutoring in Australia*. https://researchsystem.canberra.edu.au/ws/portalfiles/portal/9083332/2009000701.pdf.
- Weldon et al (2023). Weldon, P., Heard, J., Thompson, J. and Stephenson, T. Implementing effective tiered interventions in secondary schools: Survey of school and support staff. Australian Education Research Organisation. https://www.edresearch.edu.au/sites/default/files/2023-05/acer-implementingeffective-tiered-interventions-aa.pdf.
- West, R. (1925). "Teacher-training through a demonstration school". *The Elementary School Journal* 8, pp. 619–626. DOI: https://doi.org/10.3389/feduc.2022.1006811.
- White et al (2021). White, T. G., Sabatini, J. P. and White, S. "What Does "Below Basic" Mean on NAEP Reading?" SAGE Journals 50.1, pp. 570–573. https://doi.org/10.3102/0013189X211044144.
- Whiteknights English Hub (2023). *About English Hubs*. UK Department for Education. https://www.whiteknightsenglishhub.org.uk/about-english-hubs/.