SUBMISSION TO THE PRODUCTIVITY COMMISSION INQUIRY INTO THE NATIONAL SCHOOL REFORM AGREEMENT: IMPROVING LITERACY OUTCOMES IN AUSTRALIA

EQUITY ECONOMICS AND DEVELOPMENT PARTNERS AND CODE READ DYSLEXIA NETWORK

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About us

ABOUT EQUITY ECONOMICS

Equity Economics is a leading consulting firm, providing analysis, policy development, design and evaluation services to government, private sector and non-government clients.

We specialise in economic and social policy, and international development. We combine technical economic skills with policy and design expertise, helping our clients contribute to a more inclusive, equitable society. Our work addresses the persistent challenge of social and economic disadvantage, through new and practical solutions. We work in collaboration with our clients and are believers in life-long learning. We are committed, and in for the long haul.

ABOUT CODE READ DYSLEXIA NETWORK

Code REaD Dyslexia Network is a not for profit charity working to create a world where people impacted by dyslexia are acknowledged through early identification, understanding and inclusion; supported with evidence-based teaching, access to accommodations; and empowered with access to opportunity.

Code REaD’s mission is to: raise awareness about dyslexia; support and empower those with dyslexia and their families; and work with government and other decision makers to improve the education system and workplaces for those with dyslexia.

ACKNOWLEDGEMENT OF COUNTRY

Equity Economics acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Owners of Country throughout Australia and their continuing connection to both their land and seas. We also pay our respects to Elders – past, present and emerging – and generations of Aboriginal and Torres Strait Islander peoples now and into the future.

CITE THIS REPORT AS

Equity Economics (2022), Submission to the productivity commission inquiry into the national school reform agreement: Improving literacy outcomes in Australia.
PRIORITY MESSAGES

A significant number of Australian children are struggling readers, despite strong evidence showing reading difficulties can be prevented and overcome if identified early and provided with evidence-based instruction. These struggling students are visible - in NAPLAN and other assessments - but the system is failing to intervene early and effectively, so the number of students with low literacy is growing rather than shrinking as students progress from primary school to high school.

International evidence suggests around 20 per cent of the student population is likely to have reading difficulties. As a group they total 800,000 students currently in schools in Australia. These children have the potential to achieve and thrive at school if provided with evidence-based instruction and identified early through high quality screening and progress monitoring tools. Instead, the education system is stuck in a reactive and obsolete “wait to fail” model. This is despite having low-cost and highly effective screening and intervention tools available.

New analysis by Equity Economics reveals South Australia may be the most effective jurisdiction at identifying those children at risk of not reaching grade level literacy standards and of employing the evidence-based classroom practices that will support them to progress. The South Australian Government invested $20.9 million over four years from 2018-19 as part of the Literacy Guarantee Initiative, which included - amongst other measures - the roll out in 2018 of mandatory phonics screening for all first grade students. The 2021 South Australian Phonics Screening Check results show a remarkable improvement of 24 percentage points from 2018 in critical skills for literacy including significant increases for students from non-English speaking backgrounds, students from non-metropolitan areas, Aboriginal students, and students with a verified disability.

While some of the other jurisdictions have also introduced or announced the commencement of screening, a free phonics screener tool for students in first grade is not mandatory in Queensland, the Australian Capital Territory, and the Northern Territory. This simple, cost-effective tool could change the trajectory of children whose literacy difficulties are going undetected in Australia. Failing to universally detect and support struggling readers is an enduring cost to the child, their families, and the national economy. The cost of rolling out early detection tools with appropriate support for teachers and parents is extremely low, particularly in the light of the long-term benefits.

South Australia is identifying 17.2 per cent of enrolments as requiring cognitive support, compared to an average of 11.9 per cent across Australia. Three jurisdictions are below the national average: Tasmania, Queensland, and the Australian Capital Territory. South Australia had a 4.5 per cent increase in identification of children requiring cognitive assistance in the six-year period from 2015 to 2021, compared to the national average increase of 2.1 per cent. Were all jurisdictions to be identifying the same proportion of children requiring cognitive assistance as South Australia this would conservatively see around 200,000 additional children receiving the support they require.

The National School Reform Agreement should include a requirement for jurisdictions to seek out, find and support those students at risk of not reaching grade level literacy standards commencing in the first year of schooling and continuing throughout primary school. This will not only identify those students with a learning difficulty or disability but other students at risk including Aboriginal and Torres Strait Islander students, students from low-socio economic backgrounds, and students living outside of metropolitan locations. Students in all these latter categories are over-represented in what is often termed the “long tail of under-achievement” in Australia. Lifting literacy outcomes is a broad issue of equity for which the costs to the community are immense and the benefits enormous in human and financial terms from relatively simple, cheap, and tested interventions. NAPLAN scores in reading have stagnated since 2013. Reversing that trend and creating the equity needed to assist struggling readers and dismantle the predictability of achievement by socio-economic status requires national leadership and universal action across every state and territory.
AUSTRALIA’S LITERACY PROBLEM

It is safe to say that one in five students is at risk of having severe, moderate or mild difficulty with reading.\textsuperscript{b} This means that there around 800,000 students currently in the school population who are at risk of being struggling readers.\textsuperscript{x} Some of these students may meet diagnostic criteria for a learning disability (if their parents are affluent enough to access this), but many of them are simply children with learning difficulties who are instructional casualties.

Children with learning difficulties struggle to achieve academically for a wide range of reasons, including factors such as: sensory impairment; psychological or emotional issues; English as a second language; high absenteeism; ineffective instruction; or inadequate curricula. These children have the potential to achieve at age-appropriate levels if identified early and provided with evidence-based instruction. Most children with poor literacy are instructional casualties – children who would have learnt to read if they had been identified early and provided with high quality instruction.

Dyslexia is the most common form of learning disability and often presents with co-morbidities that can impact on reading, spelling, grammar, numeracy, and physical coordination. There is a significant under-identification of children with learning disabilities in Australia. Just three to five per cent of the student population is estimated to have a learning disability and most of these students will not have a formal diagnosis.\textsuperscript{i} However, this is a highly conservative estimate of the number of struggling readers in the student population. In other English-speaking countries the dyslexic population is estimated to be up to 20 per cent (United Kingdom, Canada). Regardless of whether a struggling reader is diagnosed with dyslexia or not, their intervention needs are the same.

Researchers estimate that 95 percent of all children can be taught to read by the end of first grade with effective instruction.\textsuperscript{v} High-quality classroom teaching must cover five key components: phonemic awareness, phonics, fluency, vocabulary and comprehension.\textsuperscript{vii} The role of background knowledge (and its explicit teaching in classrooms) in reading comprehension has also come into closer focus in recent years.\textsuperscript{viii}

ILLITERATE CHILDREN BECOME ILLITERATE ADULTS

Level 2 literacy is considered as the level required to meet the basic demands of work and life. According to the Programme for the International Assessment of Adult Competencies (PIAAC) survey, 13.7 per cent (2.3 million) of Australians aged 15 to 74 years had literacy skills below Level 2.\textsuperscript{x}

- Around 3.7 per cent (620,000) of Australians aged 15 to 74 years had literacy skills at Below Level 1 (pre-primary)
- a further 10 per cent (1.7 million) at Level 1 (pre-year 1 to year 6)
- 30 per cent (5.0 million) at Level 2 (year 7 to year 10)
- 38 per cent (6.3 million) at Level 3 (years 11 and 12)
- 14 per cent (2.4 million) at Level 4 (certificate IV) and
- 1.2 per cent (200,000) at Level 5 (diploma and above).
THE IMPORTANCE OF EARLY SCREENING

The Productivity Commission’s interim report suggests focusing on students who have fallen behind and are at most risk of staying behind, such as students with parents from low levels of educational attainment and Aboriginal and Torres Strait Islander students. The Commission sought feedback on how such an approach might be applied cost effectively in an Australian context. The most cost-effective intervention model would involve identifying children at risk of not reaching grade level standards before they fall behind. When it comes to learning differences the education system is stuck in a reactive system, based on a deficit driven, “wait to fail” model. Schools wait until children show a problem instead of proactively identifying children who are most likely to struggle and helping them so that they do not struggle.

A preventative education system operating in the same way that preventative health approaches operate would be far more effective than the current deficit-based approach. Under the health model of care GPs screen for preventable health conditions such as high cholesterol to prevent or minimise the risk of heart disease through interventions such as exercise, diet, and medication. Applying a similar preventative model in education would see teachers look for markers for learning difficulties in a child’s first year of schooling with continuous monitoring throughout primary school and appropriate early interventions to ensure learning problems are prevented or minimised.

There has been some movement in early screening for at risk learners. The Australian Government has developed a free phonics screener tool for students in first grade, but its use is dependent on teachers knowing the screener exists and having the time to administer the test.\textsuperscript{xii}

Some jurisdictions have introduced mandatory screening of children in year 1 including South Australia, New South Wales,\textsuperscript{xii} and Tasmania.\textsuperscript{xiii} Victoria and Western Australia have also announced screening will commence in 2023.\textsuperscript{xiv}
However, jurisdictions such as the ACT, Northern Territory and Queensland have yet to introduce appropriate universal screening.

Dyslexia refers to poor word-level reading despite adequate effort and instruction. Nearly all cases of dyslexia are caused by a phonological-core deficit (poor phonological awareness, rapid automatized naming, phonological short-term/working memory and or phonic decoding).\textsuperscript{xv} This deficit is present prior to a student’s first day of preschool with children entering classrooms with a less optimal neurodevelopmental capacity to learn to read.

The dyslexia paradox is that a discrepancy exists between the time when a child receives a diagnosis of dyslexia (often around third or fourth grade) and the window for most effective intervention (kindergarten/preparatory or first grade).\textsuperscript{xvi} Many dyslexic children are never diagnosed because teachers do not have the tools or critically, the foundational training required to screen for learning disorders and because the costs for a formal assessment by a psychologist (educational and developmental / clinical / neuropsychology) is prohibitively expensive (between $1,000 and $3,000). Dyslexia assessment and management is not covered by the Medical Benefits Scheme nor by the National Disability Insurance Scheme because it is considered by government to fall within the remit of education. This is why it is sometimes said that dyslexia is a rich person’s disability – because only those from high socio-economic backgrounds can afford to access diagnosis and treatment outside of the school system.

For those children whose family can afford a formal assessment, diagnosis often comes around four to five years after they commence school, too late for the student to efficiently close the gap with their peers and at a cost to school systems through the need for additional learning support and, or accommodation for these students.\textsuperscript{xvii} The earlier children at risk are identified, the better early intervention works. This is because the brain is more plastic for language development at an earlier age (making it easier to learn a language at four rather than forty), and because the gap between a good reader and poor reader widens day after day. It is commonly understood that it takes four times longer to remediate a fourth grader than a first grader.\textsuperscript{xviii}

None of the jurisdictions have sufficiently robust continuous screening commencing in the first year of schooling (kindergarten/preparatory).

**THE IMPORTANCE OF CONTINUOUS SCREENING**

None of the jurisdictions have continuous monitoring through rigorous tools throughout primary school to ensure all students are progressing their literacy acquisition as they move up through primary school grade levels and into highschool.

Struggling students are visible - in NAPLAN and other assessments - but the system is failing to intervene early and effectively, so the number of students with low literacy is growing rather than shrinking as students progress from primary school to high school.

In Australian schools, students’ literacy skills are diminishing over time. In 2015, 3.6 per cent of Year 3 students with an average age of 8 years and 7 months met the National Minimum Standards for reading
in NAPLAN. Six years later, now 14 years and 7 months old and in Grade 9, amongst this same cohort of students the percentage of students not meeting the National Minimum Standards for reading grew to 8.7 per cent. The cohort of children two years younger followed a similar trajectory with an increasing number of children falling below the National Minimum Standards over six years of education from grade 3 to grade 9.\textsuperscript{ix}

Children with reading difficulties known as “compensators” are later emerging poor readers. Compensators have strong verbal skills with a mild phonological-core deficit who compensate in their reading based upon strong language skills.\textsuperscript{x} They are often not recognised as having reading difficulties and most compensators do not receive remedial instruction because their overall reading scores tend to be in the average range. Universal screeners conducted in first grade occur before compensators’ problems typically surface. The compensator pattern is disabling in that it keeps the reading comprehension of these students substantially below their language and/or cognitive ability. The implication is that children who could be among the highest achieving students have trouble with reading because of an underlying lower-level skill (phonemic awareness) that is quite correctable. To find these children and ensure all students are progressing from year to year, continuous screening throughout their primary school education is required.

\textbf{SOUTH AUSTRALIA IS LEADING THE PACK}

The South Australian Literacy Guarantee provided $20.9 million over four years from 2018-19 to implement a comprehensive program to improve literacy and numeracy outcomes for all South Australian students.\textsuperscript{xi} Initiatives under the Literacy Guarantee program include:

- literacy coaches with experience in phonics and teaching students with dyslexia and other learning difficulties
- phonics check for all year one students in South Australia
- free dyslexia workshops for parents across South Australia
- parental engagement resources for schools and families
- working with non-government organisations to deliver evidence-based literacy and numeracy programs for disadvantaged children in their early years before they begin school
- reviewing how South Australian Certified of Education exams are conducted for students with dyslexia and other learning difficulties,
• Learning Guarantee conferences providing professional development opportunities for teachers,
• from 1 January 2019, all graduating Initial Teacher Education students have to had passed a Literacy and Numeracy Test for Initial Teacher Education.

By providing information how year 1 students are learning phonics, the South Australian Government aims to:

• ensure that students who are struggling in learning to read are identified early
• support schools to teach and assess phonics in schools
• improve reading and literacy for students throughout their schooling
• ensure that parents and the wider community are confident about the teaching of reading in schools.

2021 SOUTH AUSTRALIAN PHONICS SCREENING CHECK RESULTS

The 2021 South Australian Phonics Screening Check results show state-wide improvement in the ability of year 1 students to decode and blend letters into words. In 2021 13,184 year 1 students participated in the check across 427 schools. Of these students, 67 per cent met the expected achievement level. This is an improvement of 24 percentage points from 2018 when only 43 per cent of students met the benchmark.

- 71 per cent of students identified as speaking English as an additional language or dialect scored at or above the expected achievement score. This is an improvement of 23 percentage points from 2018.
- 58 per cent of students from non-metropolitan schools met the benchmark in 2021, an improvement of 22 percentage points since 2018.
- In schools serving the most disadvantaged communities, 38 per cent of students scored at or above the expected benchmark, an improvement of 20 percentage points.
- 38 per cent of Aboriginal students scored at or above the expected achievement score. This is an improvement of 17 percentage points from 2018.
- 37 per cent of students with a verified disability scored at or above the expected achievement score. This is an improvement of 23 improvement points from 2018.

The Nationally Consistent Collection of Data on School Students with Disability (NCCD) is an annual collection of information about Australian school students with disability. The NCCD enables schools, education authorities and governments to better understand the needs of students with disability and how they can be best supported at school. There are four categories of disability: physical; cognitive; sensory; and social/ emotional. The cognitive category includes: total or partial loss of the person’s bodily or mental functions; and a disorder or malfunction that results in the person learning differently from a person without the disorder or malfunction. Specific learning disorders like dyslexia fall within the cognitive category.

Analysis of NCCD data by Equity Economics indicates the average proportion of students across Australia falling into the NCCD cognitive category in 2021 as a percentage of total enrolments is 11.9 per cent. The average for government schools is 12.3 per cent and the average for Catholic schools is 11.7 per cent. There is significant variation across the states and territories. Tasmania, Queensland, and the Australian Capital Territory are below the national average. South Australia is significantly higher than the national average at 17.2 per cent (5.3 percentage points higher).
Examination of the data trends since 2015 indicates South Australia has had a 4.5 percentage point increase in the six-year period from 2015 to 2021, compared to the national average increase of 2.1 percentage points. While jurisdictions such as the ACT have also seen an increased number of children falling within this category the ACT still remains below the national average. South Australia may be the only jurisdiction that is effectively seeking out those children at risk of not reaching grade level literacy standards and of employing the evidence-based classroom practices that will allow them to progress.
Further investigation is warranted to test whether South Australia has a higher number of children identified as requiring cognitive assistance because of the investment by the South Australian Government in identifying and supporting children at risk of not reaching grade level literacy standards. As noted above, the cognitive category includes both students with learning disorders and students who have suffered a total or partial loss of bodily or mental functions, which means the NCCD data covers a broader group of children than just those with learning disorders. Many students with weak reading skills will not qualify for assistance yet they still have a “reading disorder”, most commonly due to poor instruction, and still requiring significant remediation.

Introducing a requirement for early and continuous screening would bring Australia into alignment with protections afforded to students in the United States under federal legislation through the “child find” requirement. The Individuals with Disabilities Education Act (IDEA) requires public schools to look for, find, and evaluate students who have special education requirements. Child Find covers children from birth through to age 21. This law requires public school districts to, among other things, find children with disabilities and provide them with a fair and appropriate public education. Schools must find and evaluate students thought to have disabilities – at no cost to families.

LITERACY, EQUITY AND THE ECONOMY

The next national school reform agreement should require jurisdictions to identify children at risk of low literacy outcomes in their first year of schooling and monitor their progress through appropriate continuous testing throughout primary school.

The barriers to literacy for children with dyslexia are also barriers for Aboriginal and Torres Strait Islander students, students from low-socio economic and low educational backgrounds, students living in regional, rural, and remote locations and students who have been historically disenfranchised. The common factor is poor instruction. When low socio-economic schools change their instruction, their results improve. Teachers must be supported to provide students with high-quality classroom teaching covering five key components – phonemic awareness, phonics, fluency, vocabulary, and comprehension so that the maximum number of children can become literate. Students are failing because of the persisting dominance of reading instructional approaches that are not based on scientifically proven classroom practices.

There is an individual and economic cost to inaction. The impacts of poor basic literacy skills can permeate throughout multiple facets of an individual's life, affecting social, health and economic experiences. Individuals with poor literacy are more likely to be unemployed, have lower levels of trust in others and civic participation, as well as worse physical and mental health compared to those with higher levels of literacy.

A recent Parliamentary inquiry into adult literacy noted that investments in language, literacy, numeracy, and digital literacy have economic benefits for individuals through higher wages, and increased employment and for the nation through increased productivity, and economic growth. The economic return on investment is significant through reduced costs in high public spend areas such as health, justice and welfare and increased government tax revenue.

According to a 2016 report on school quality prepared for the Australian Government Department of Education, a five per cent increase in cognitive capacity could contribute $12.26 billion to Australia’s GDP over a 50-year time period through higher wages and returns on further education, with economic growth driven by increased investment in physical capital and higher employment.

A 2020 report by BCG estimated the impact of dyslexia to the economy of California as having an annual cost of $US12 billion with a $US1 trillion cost over the next 60 years (the working life of current students). Losses due to unemployment had the greatest impact at $US421 billion over 60 years, followed by prison ($US359 billion), education ($US160 billion), and litigation ($US6 billion). In addition to
the state’s budget, California will miss out on nearly $US340 billion in GDP due to unemployment and lost taxes. Costs accumulate over time, starting in kindergarten and continuing throughout an individual’s lifetime.

The BCG report estimated that investing in early screening and teacher training would provide an 800-2,000 per cent return because the cost of addressing dyslexia early in a student’s development is minimal in comparison to the costs associated with the downstream impact of dyslexia if ignored. At a school level, benefits of early intervention have near-term cost savings through a reduction in more cost-intensive needs for students including special interventions and absenteeism. At a societal level, addressing dyslexia early would reduce homelessness, improve the economy, raise test results in the lowest performing schools, lower incarceration rates and increase access to higher education. Given literacy is a social determinant for physical and mental health, addressing dyslexia also improves overall wellbeing.

In Australia families can spend upwards of $355,000 on independent schooling, private tutoring and private evaluations to provide additional support for a child who is a struggling reader, with many spending much more. For families without the financial means to supplement their child’s education, reading difficulties can be insurmountable.

As noted by the Australian Council for Education Research, the effect of socio-economic background on education trajectories and the development of literacy and numeracy skills is well-documented. Creating the equity needed to assist struggling readers and dismantle the predictability of achievement by socio-economic standards requires national leadership and universal action across every state and territory.
literacy and access

Review: Productivity Commission Study Report, December 2020

The term ‘learning disabilities’ describes several conditions that may be experienced by learners, such as dyslexia, dysgraphia, dyscalculia, dyspraxia, auditory processing disorder and developmental language disorder.

It is estimated that 3–5 per cent of the student population have a learning disability, and the majority of these students will not have a formal diagnosis.


Australian Government (NCCD) Learning differences, learning difficulties, learning disabilities and the NCCD, accessed October 2022 https://www.nccd.edu.au/wider-support-materials/learning-differences-learning-difficulties-learning-disabilities-and-nccd - It is estimated that 3–5 per cent of the student population have a learning disability, and the majority of these students will not have a formal diagnosis. The term ‘learning disabilities’ describes several conditions that may be experienced by learners, such as dyslexia, dysgraphia, dyscalculia, dyspraxia, auditory processing disorder and developmental language disorder.

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xxii Late identification happens for a myriad of reasons including because of a lack of teacher training in how to recognise the indicators of learning difficulties, or because students mask their difficulties by remembering words in their visual memory which is often full by the time a student reaches year 3 or 4. Students who are learning this way can be identified early through the phonics screening check. Gaab N (2017) “It’s a myth that young children cannot be screened for dyslexia” Examiner, International Dyslexia Association, February 2017, https://dyslexiaida.org/its-a-myth-that-young-children-cannot-be-screened-for-dyslexia/


xxvii Don’t take it as read: inquiry into adult literacy and its importance, House of Representatives Standing Committee on Employment, Education and Training, March 2022, Canberra.


x xxviii Estimated by taking:

• plus an allowance for private tutoring based on two terms of one-on-one tutoring attended twice weekly for 1 hour, plus an initial assessment conservatively costing around $4,000 – noting costs vary depending on provider and according to whether a child has mild, moderate or severe reading difficulties. Costs based on actual costs for the Canberra Reading Clinic.

• plus a formal assessment/diagnosis process by a psychologist (educational and developmental/clinical/neuropsychology) estimated at $2,000 noting that costs range from $1,000 to $3,000 with no MBS rebate. According to the Australian Psychology Society (APS), private psychologists set their own rates and may adjust fees according to the client’s financial circumstances. The APS publishes a recommended schedule of fees as a guide for psychologists providing private psychology services. The 2021-22 Recommended Schedule of fees has set the standard 45 to 60-minute consultation fee at $267. This is a recommendation only.

An example of fees can be found at https://www.educationalpsychologist.com.au/services/

xxx Don’t take it as read: inquiry into adult literacy and its importance, House of Representatives Standing Committee on Employment, Education and Training, March 2022, Canberra.