REPORT

Years apart:

Australia's growing educational inequality

The Mitchell Institute, Victoria University

May 2026

Acknowledgement of Country

The Mitchell Institute at Victoria University acknowledges, recognises and respects the Ancestors, Elders and families of the Bunurong/Boonwurrung, Wadawurrung and Wurundjeri/Woiwurrung of the Kulin who are the traditional owners of University land in Victoria, the Gadigal and Guring-gai of the Eora Nation who are the traditional owners of University land in Sydney, and the Yulara/Yugarapul people and Turrbal people living in Meanjin (Brisbane).

About the Mitchell Institute

Established in 2013, the Mitchell Institute at Victoria University is a leading policy think tank and research centre. With a focus on education policy, systems and place, we are working towards a fairer and more productive society where every individual, regardless of their background, has the opportunity to thrive.

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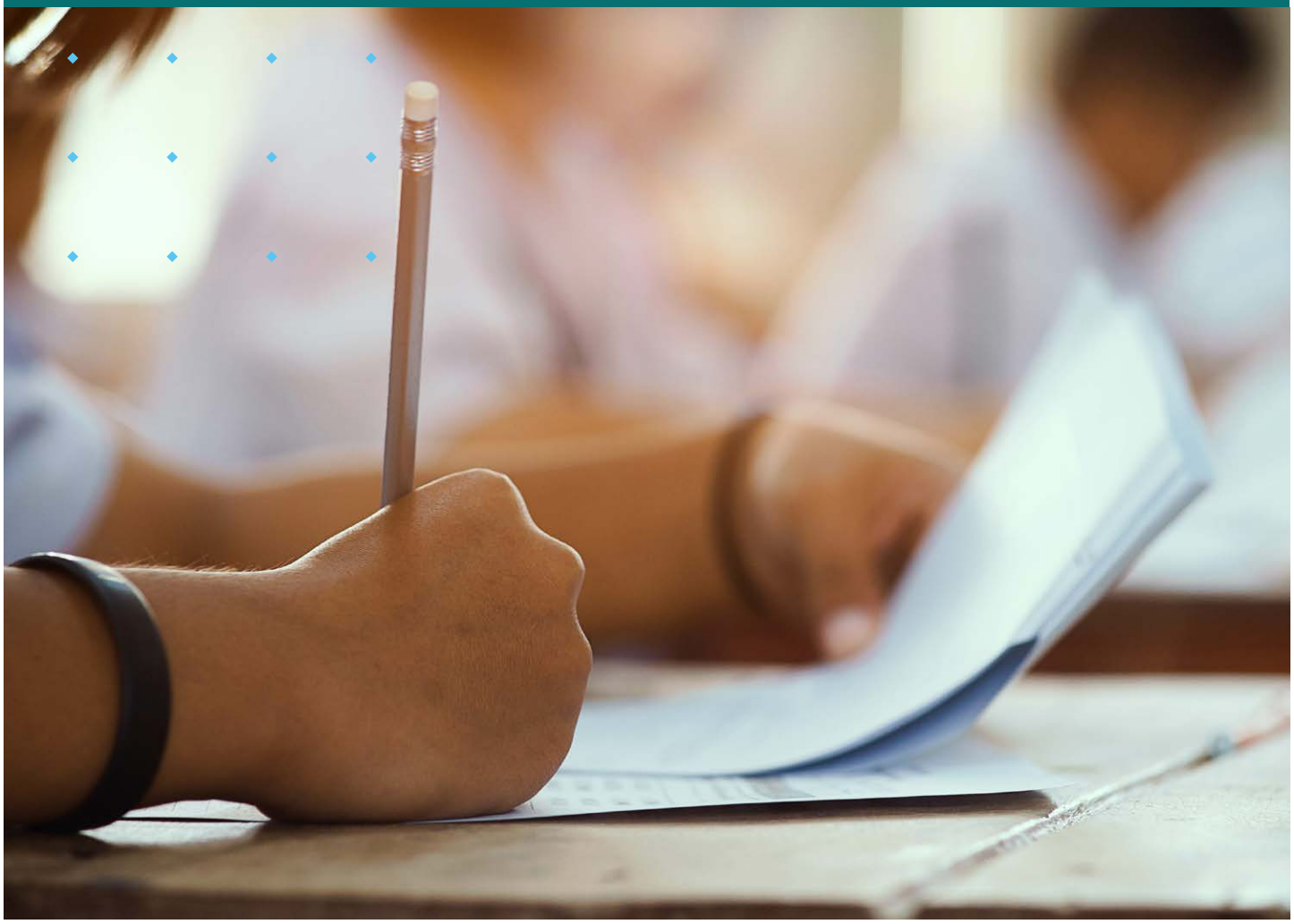
Contents

This research presents fresh analyses of almost twenty years of NAPLAN data to investigate the extent to which educational equity is shifting over time in Australia.



Director's foreword

One of the strongest findings in the study of education systems is the link between socioeconomic status and educational outcomes.

Children from more advantaged backgrounds generally outperform those from more disadvantaged backgrounds in most educational measures.

There have been huge efforts to counter this phenomenon over the past decades.

A key driver of the 'Gonski' reforms to school funding was "to ensure that differences in educational outcomes are not the result of differences in wealth, income, power or possessions" (Gonski et al., 2011, p. xxxi). Equity in education continues to be a key policy driver in education policy.

Understanding how Australia's education system is unequal is important. By transforming NAPLAN scores into 'Equivalent Years of Learning', this report makes it easier for all Australians to understand how more than 4 million students in Australian schools are faring.

The results are sobering. Students from more disadvantaged backgrounds are falling further behind their more advantaged peers.

The reasons for this are complex, as are the possible policy responses.

This report carries an important message – Australia needs to refocus its efforts to ensure our school systems support every student to succeed, not just those with greater levels of advantage.

Professor Peter Hurley
Director, Mitchell Institute, Victoria University

Executive summary

There has been a long-held view in Australia that every student should have the opportunity to succeed, regardless of their characteristics and circumstances. Yet, educational inequalities persist, with profound consequences for students and their families, communities and the nation.

As in many other countries, differences in students' backgrounds and circumstances, alongside school and system-level factors, have long contributed, and continue to shape inequalities in learning outcomes in Australia.

Systemic factors such as increased competition between schools, a large and growing private school sector, inequitable funding across schools, expanded parental choice, and selective enrolment practices have contributed to highly segregated school systems in Australia. Together, these factors can concentrate disadvantage in some schools, most often public schools, restricting their capacity to meet student needs and improve outcomes.

Despite having been dealt a more difficult hand, disadvantaged and residualised schools are expected to play in the same game as well-resourced schools: address the needs of their students, do well on standardised tests, develop the necessary skills for life and build students into successful and active members of the community. If they fall short, blame is often cast upon the schools themselves as if other factors did not interfere.

In this report, we contend that strong disparities in student outcomes are a reflection of the system-level features that shape and influence the capacity of individual schools to meet the needs of their students. As such, we argue that governments must recognise low student performance as a manifestation of education systems that, despite policy intentions and the sustained efforts of teachers and schools, create the conditions for inequality, and put some schools at a significant structural disadvantage.

Achieving both 'equity and excellence' has been a stated aim of schooling policy in Australia for a long time (e.g. Gonski et al., 2011; Karmel et al., 1973). These are also core goals outlined in the *Alice Springs (Mparntwe) Education Declaration* (Department of Education Skills and Employment, 2019), the blueprint and vision for Australian schooling.

A renewed commitment to achieving these goals has recently been agreed between the federal and state and territory governments, as part of the *Better and Fairer Schools Agreement – Full and Fair Funding 2025-2034* (Australian Government, 2023) and associated bilateral agreements.

Lifting the performance and outcomes of disadvantaged students has been highlighted as a priority and targets have been set, signalling an intent to address disadvantage over the next decade.

However, in order to understand the extent to which the policy aspirations for quality and fairness have been realised in Australia, and whether we are heading in the right direction, it is imperative to understand how the organisation of our school systems has resulted in unequal student learning outcomes over time. By doing so, we gain a sense of how the system-level features have affected the capacity of schools to bring about equity in learning.

We ask: What is the current state of play when it comes to all Australian students accessing equal opportunities through school? How equitable are Australia's school systems? How well are these systems tracking towards achieving the dual goals of equity and excellence? What do gaps in student skills suggest about the impact long-term system-level factors are having on performance?

The research presented in this report tackles these questions head on, by exploring the relationship between student socioeconomic status and learning outcomes, and how gaps have changed over time, both nationally and in all states and territories.

Australia has a broad National Assessment Program (NAP) comprising national and international tests which aim to monitor and track how our schools are progressing in promoting excellence and equity in student learning. Our research uses data from the National Assessment Program – Literacy and Numeracy (NAPLAN). NAPLAN assesses almost every student in Years 3, 5, 7 and 9 in reading, writing, conventions of language (spelling, grammar and punctuation) and numeracy.

We developed a methodology called 'Equivalent Years of Learning' (EYL) based on the methodology of 'Equivalent Year Levels' developed by Goss, Sonnemann, Chisholm, and Nelson (2016). It is well-suited to exploring socioeconomic gaps in learning outcomes using publicly available NAPLAN data. This approach converts NAPLAN scores into years and months of learning, relative to average levels of achievement for each year level. EYL provides a way of illustrating gaps between students from different socioeconomic groups that is easier to grasp than using scale scores or bands.

In particular, we examine how student learning gaps vary by parental education and parental occupation across the domains of reading and numeracy, examining all year levels (3, 5, 7 and 9) from 2008 to 2025. By comparing how these gaps have changed through cohort analyses, we are able to paint a picture of how equity in student learning is changing over time.

At a time when improving equity is increasingly prioritised in national policies and debates on schooling, this research presents fresh analyses of almost twenty years of NAPLAN data to investigate the extent to which educational outcomes are shifting over time. This is the first analysis of its kind conducted at scale over the entire period since NAPLAN was introduced in 2008.

Key findings

There are large and persistent learning gaps between advantaged and disadvantaged students in Australia

Our analysis of 17 years of NAPLAN data suggests that Australia is not tracking well in meeting its educational goals of equity and excellence.

Between 2008 and 2022, more advantaged students outperformed more disadvantaged students at every year level in the reading and numeracy NAPLAN domains.

Learning gaps between advantaged and disadvantaged students are generally larger in reading than in numeracy, especially in the primary school years.

Learning gaps in numeracy are smaller in the primary school years and larger in the secondary school years.

These learning gaps begin in Year 3 and widen as students progress through school, such that the largest gap is observed in Year 9. For example, looking at the average learning gap size in reading between 2008 to 2022, we find that Year 3 students with at least one parent with a bachelor's degree or higher are 2 years and 3 months ahead of students whose parents have not completed school. By Year 5, advantaged students are 2 years and 10 months ahead, in Year 7, the gap is 3 years and 10 months, and by Year 9, more advantaged students are 4 years and 3 months further ahead in their learning.

The enduring and persistent nature of these gaps suggests the issue is structural, rather than confined to particular years or the result of short-term factors.

Student inequality in Australia is growing over time

Learning gaps between advantaged and disadvantaged students have widened over time in all year levels, both by parental education and parental occupation, except for numeracy in Year 9. For example, the learning gap in reading between Year 5 students whose parents had a bachelor's degree or above and those whose parents did not complete school grew from 2 years and 3 months in 2008 to 3 years and 2 months in 2022.

Comparing two cohorts of students – an early group comprising Year 3 students in 2008 and a later group in Year 3 in 2015 – we find that there is greater inequality in outcomes in the later cohort compared to the earlier cohort, attributed to a greater decline in performance of disadvantaged students.

Disadvantaged students are faring worse over time

The widening gaps in student learning outcomes that we see over time are driven less by improvements among advantaged students, and more by the negative effects of inequality on disadvantaged students who experience a decline in performance over time compared to the Australian average.

Disadvantaged students are worse off in more recent years than their peers were in 2008. In reading, for example, Year 9 students in 2022, whose parents did not complete school, were almost 1 year and 6 months behind similarly disadvantaged students in 2008.

Inequality is a feature of schooling in all Australian states and territories

Despite some variation, we find large and growing socioeconomic gaps in most states and territories.

The reading and numeracy results of low SES students have generally declined over time across most Australian states and territories. However, the pattern is not the same everywhere, and not all NAPLAN domains show the same level of decline.

Among students whose parents did not complete school, reading performance has declined in every state and territory. The decline was steepest in Tasmania, the Northern Territory, and the Australian Capital Territory, but less steep in Queensland and Western Australia.

Numeracy results for disadvantaged students were more mixed. In Queensland primary schools and in Years 5 and 9 in Western Australia, students whose parents work in lower status occupations actually improved their average numeracy scores over time. In South Australia, the results for equivalent students remained relatively stable.

Policy implications

Australian governments must acknowledge and address the urgent challenge of growing educational inequality

One of the greatest barriers to excellence in Australian education is inequality. Education systems that do not adequately support struggling schools, teachers and students will never achieve the equity required for excellence.

While there are some clear policy aspirations and goals for the future aimed at addressing educational inequality, what is needed is a re-framing of the problem away from schools and teaching practice towards the socioeconomic factors that impact learning at the school level, and the systemic structures that sustain the inequality that is a defining feature of schooling in every Australian jurisdiction.

Funding models must address the 'double disadvantage' some students face

The Australian needs-based school funding model allocates additional resources to schools enrolling students with greater needs. But residualised schools often enrol high proportions of students from low SES backgrounds and struggle to lift learning outcomes due to challenging teaching and learning conditions.

With new funding agreements on the horizon, a more explicit policy focus on funding those schools operating on the front line of the residualisation battle could help break cycles of disadvantage.

Governments must address the factors driving the growing socioeconomic divide in Australian schooling

Australia's school systems have some of the highest levels of socioeconomic segregation across OECD countries, and the problem has tended to intensify over time (O'Brien et al., 2023). Fixing the drift in student enrolments and the process of school residualisation that comes with it – especially when children move from primary to secondary school – is key.

Every school in Australia should be able to give students the chance to reach their full potential, no matter the sector or the location. The more we progress towards this goal, the more local schools, starting with local government schools, become a great choice for families.

The relationship between tertiary (and particularly higher) education admission processes and school choice needs to be reconfigured to reduce the current strong impetus for families to choose schools based on tertiary education admission objectives.

Full-service school models should be encouraged to help disadvantaged students, schools, and communities

One targeted school-level policy intervention that has been effective at reducing inequality is supporting full-service schools (Molina, Doecke, & Hildebrandt, 2025).

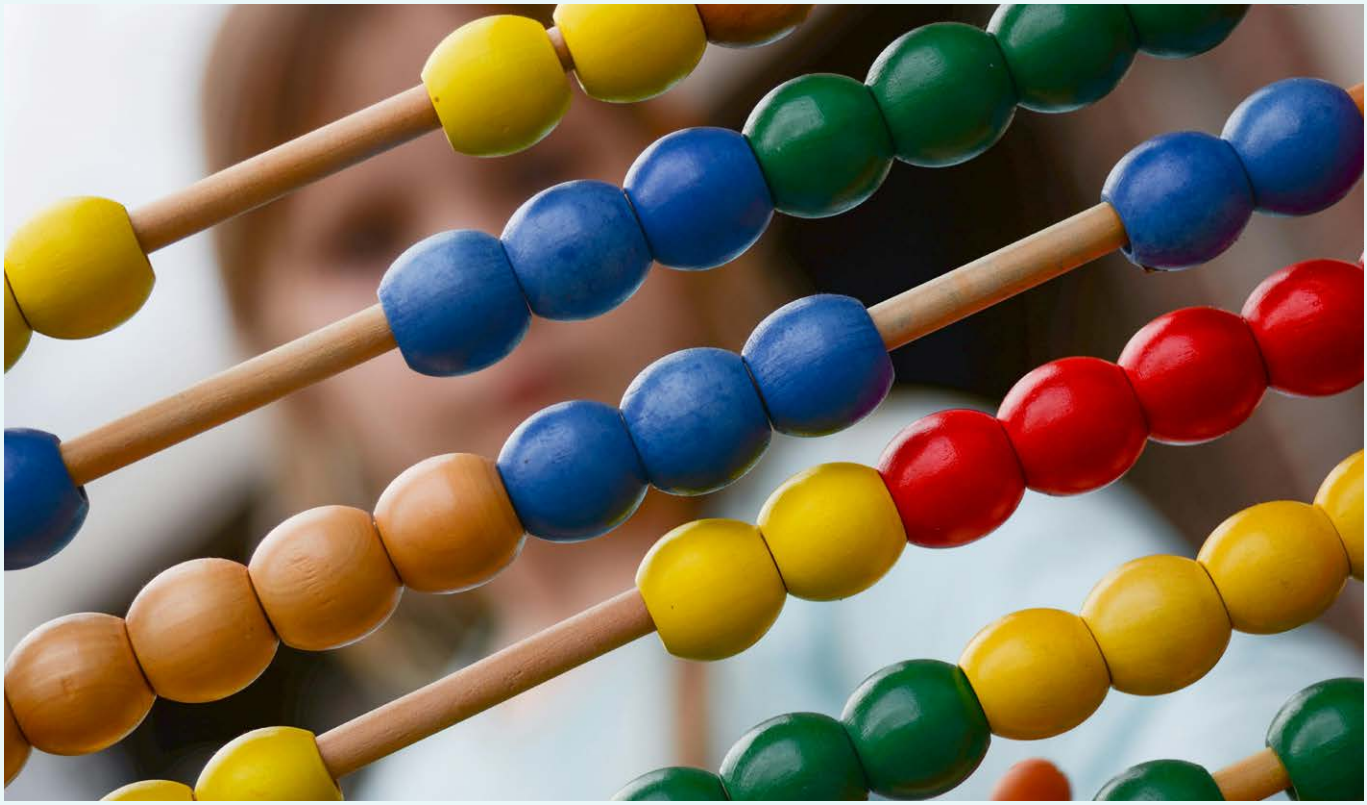
By providing wrap-around services in collaboration with the community in disadvantaged areas, full-service school models can effectively address the barriers disadvantaged students face outside the classroom. These supports help students to engage, learn, and participate in school, improving student outcomes and equity.

Governments should do more to address emerging inequality in the early years

Research highlights that the first three years of a child's life are crucial as socioeconomic learning gaps can appear at four-year-old preschool, putting children on an unequal footing even before they start primary school (Tham, Leung, Hurley, Pilcher, & Prokofieva, 2025).

Unlike the school system, there is currently no systematic response to direct additional resources to early childhood education and care services caring for children experiencing disadvantage, or to those operating in disadvantaged areas.

More needs to be done to put the needs of children at the centre of the funding model in the early years. Starting primary school on the best possible footing would help to ensure that early disadvantage does not result in a trajectory of poorer outcomes throughout schooling.



Introduction

Australian governments are committed to ensuring that every student can access a high-quality education and meaningful opportunities, regardless of their location, social background, or personal circumstances.

The *Alice Springs (Mparntwe) Education Declaration* sets two overarching goals for Australian schooling: an education system that delivers both excellence and equity, and the development of young Australians as confident and creative individuals, successful lifelong learners, and active, informed citizens (Department of Education Skills and Employment, 2019).

There is renewed momentum to achieve these twin goals as all states and territories begin implementing their 10-year commitments under the *Better and Fairer Schools Agreement* and associated bilateral agreements. These commitments aim to lift equity and excellence, strengthen wellbeing for learning and engagement, and build a sustainable education workforce. Lifting the performance and outcomes of disadvantaged students has been highlighted and targets have been set, signalling an intent to address disadvantage.

However, we know that student characteristics and circumstances, as well as school and systemic factors, have, and continue to influence inequalities in student learning outcomes in Australia, undermining these goals.

Persistent inequalities mean that not all students have the same opportunities to develop their abilities and reach their full potential. The impact of this inequality can run wide and deep, affecting not only individuals and their families, but long-term productivity and economic growth, entrenching social disadvantage and undermining social cohesion (Molina, 2021).

Despite a funding system that is 'needs-based' and a range of policies that aim to improve learning outcomes at the school and classroom level, we continue to see disadvantaged schools struggling and their students falling behind. This often manifests in low student engagement and attendance, low outcomes, decreased expectations and aspirations. For the schools, this can result in challenging teaching conditions, difficulties attracting new enrolments, high teacher turnover and reductions in curricula offering.

Central to this research is the need to re-frame how we understand poor performance. It is important that we look beyond individual schools and teachers and recognise the system-level features that create the conditions under which inequality is produced - inequality that manifests in persistent low performance.

Our national goals for education, and agreed reform efforts, are being undermined by social and policy forces that seriously affect the work of schools and limit their capacity to address inequality in learning.

This report shows the extent of the problem, and outlines the serious re-set required to ensure that renewed agreements deliver on their goals of improving performance, while also providing equitable opportunities for all students.

We developed a methodology called 'Equivalent Years of Learning' (EYL) based on the methodology of 'Equivalent Year Levels' developed by Goss, Sonnemann, Chisholm, and Nelson (2016) to explore gaps in student learning outcomes using publicly available NAPLAN data between 2008 and 2025.

NAPLAN is a national census of students' literacy and numeracy skills. Each year, students in Years 3, 5, 7 and 9 sit a series of tests to measure their proficiency in four learning domains: reading, writing, conventions of language (spelling, grammar and punctuation) and numeracy.

We examine how learning outcomes differ by students' socioeconomic (SES) background across all year levels from 2008 to 2025. Our analysis covers Australia and each state and territory, focusing on reading and numeracy trends between 2008 and 2022.

Assessing change in equity over time was undertaken in three broad steps. First, by conducting trend analysis within year levels over time. Second, through cohort analyses following and contrasting the outcomes of two cohorts of students – those who were in Year 3 in 2008 and Year 3 students in 2015.

Lastly, we undertook analysis to investigate how outcomes have changed in terms of EYL for the most disadvantaged students over time by comparing their relative achievement in 2022 to the corresponding group of students in 2008.

Box 1: Research focus and scope

The primary objective of our research is to quantify the extent and evolution of learning gaps over time between groups of students. Our methodology is designed to estimate how groups of students perform relative to the average Australian student.

Our methodology is not well-suited to judge whether the overall performance of all Australian students has improved or declined over time. Furthermore, it is not the purpose of this research to identify the specific causal drivers behind learning gaps and their change over time. While these topics represent important areas of research, their analysis requires different data and methodologies that fall outside the scope of the current study.

We asked three main questions:

1. To what extent do student reading and numeracy learning outcomes, as measured by NAPLAN, vary by student parental education and parental occupation?
2. If there are gaps in outcomes, have these widened or narrowed over time (between 2008 and 2022)?
3. Does the size of any gaps – and the way they change over time – differ by states and territories?

System-level features shaping educational inequality in Australia

Despite national commitments to prioritise equity, the evidence continues to show that some groups of students consistently achieve lower outcomes than their peers, highlighting persistent and deeply entrenched educational inequalities in Australia.

Despite the commitment of all governments to ensuring that every student can access a high-quality education and meaningful opportunities, Aboriginal and Torres Strait Islander students, those living in remote and regional areas, students with disability, and learners from disadvantaged backgrounds are disproportionately likely to achieve lower results on standardised assessments (De Bortoli, Underwood, Friedman, & Gebhardt, 2024), less likely to complete secondary schooling (Lamb, Jackson, Walstab, & Huo, 2015), and less likely to transition into university or other forms of tertiary education after school (Lamb et al., 2020).

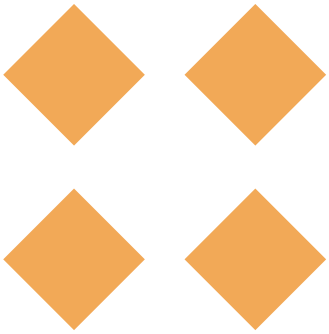
Schools and teachers are often singled out as being primarily responsible for weak student outcomes and persistent educational inequalities (Blackwood, 2025). However, research indicates that educational inequalities in Australia are driven less by the actions of individual schools and more by the structural and organisational features of Australia's education systems (Perry, Yoon, Sciffer, & Lubienski, 2026).

Some of the most prominent system-level drivers of educational inequality in Australia include an uneven and inequitable school-funding model (Perry, 2025; Rowe, 2025), the expanding role of the private sector in school provision (Predavec & Denniss, 2026), the organisation and definition of the curriculum and what is taught and learned in schools (Teese, 2013), the growing reliance on family choice, school competition, and academic selection in allocating students to schools (Tham, Huo, & Wade, 2024). Together, the evolution of these and other features – often described as the increasing marketisation of Australian education – have contributed to highly uneven patterns of student distribution across schools and have intensified existing inequalities.

There is no sole contributing factor towards inequality in student outcomes, but the concentration of disadvantaged students into disadvantaged schools is a strong driver. This has been described as a 'double jeopardy', as disadvantaged students not only face the disproportionate barriers to learning stemming from their family background and living circumstances, but also those derived from the social composition of the schools they attend (Cobbold, 2025). Concentration of students from similar socioeconomic backgrounds in certain schools, sometimes referred to as school socioeconomic segregation, has been associated with unequal learning outcomes (Willms, 2010), disparities in access to learning opportunities (Kucsera & Orfield, 2014), and broader risks to social cohesion (Molina, 2021).

Australia has high levels of school socioeconomic segregation, and research shows that it is increasing at a faster rate than in most Organisation for Economic Co-operation and Development (OECD) countries (O'Brien et al., 2023). Australian students are becoming increasingly divided across schools, particularly at the secondary level, where family choices have a bigger impact.

Further, the sectoral nature of our education landscape shapes and influences school socioeconomic segregation in Australia, with private independent schools enrolling large proportions of high-SES students and government schools enrolling an increasingly greater share of socially disadvantaged students. Concentration of disadvantage and processes of school residualisation in Australia happen mostly in government schools, as increasing numbers of academically strong and relatively advantaged families opt out from the government sector, choosing private schools instead.



Box 2: What do we mean by school socioeconomic segregation and residualisation?

School socioeconomic segregation can be understood as the extent to which students from different SES backgrounds are separated between schools and concentrated in schools. Compared to integrated schools, which have a mix of students from different SES backgrounds, segregated schools comprise mostly students from similar SES backgrounds.

School residualisation occurs when certain schools, often those serving disadvantaged families, gradually become the default option for families that have fewer choices and are avoided by more advantaged families seeking better opportunities for their children, resulting in increased concentrations of students with the highest needs. The impact of residualisation can include high teacher turnover, restriction of curriculum offerings, low expectations, increased behaviour management issues and low student enrolments (Lamb, 2007). Combined, these factors can negatively influence the teaching and classroom conditions in which students learn, affecting student outcomes.

This leaves government schools in Australia to do the heavy lifting of supporting the teaching and learning of disadvantaged students in environments that become increasingly less conducive to learning (Cobbold, 2025; Duffy, 2026).

The funding, sector and policy architecture of Australia's school system result in disproportionate pressures on government schools, which can leave their teachers and students struggling to achieve the academic and non-academic outcomes expected of them. At a system level, this ultimately restricts the ability of state and territory governments to realise their aspiration of providing every student with equal opportunities to succeed.

It is these systemic features – and their gradual intensification over time – that have allowed educational inequality to become firmly embedded within Australia's schooling landscape.

Disadvantaged government school communities are not the source of educational inequality in Australia; rather, they are the schools most disadvantaged by a system that produces and reinforces inequity, which leaves them under-resourced whilst simultaneously expecting them to meet ambitious educational goals.

The system-level arrangements that have residualised many government schools must be reconfigured so that schools with the highest needs are supported to fulfil their social responsibility and realise Australia's national aspirations for education.

What is NAPLAN?

NAPLAN is a national census of Australian school students' literacy and numeracy skills. Students in Years 3, 5, 7 and 9 take the NAPLAN tests each year. The results provide an annual national picture of how well students are performing in four domains: reading, writing, conventions of language (spelling, grammar and punctuation) and numeracy.

NAPLAN has five main purposes (ACARA, 2025a; McGaw, Louden, & Wyatt-Smith, 2020):

1. Monitoring progress towards national goals
2. Supporting school system accountability and performance
3. School improvement
4. Providing data on individual student learning achievement and growth
5. Providing Information for parents on school and student performance

The test content is underpinned by the Australian Curriculum, aligned to the English and Mathematics learning areas (see Appendix A for more information about the skills and knowledge assessed in each domain). The NAPLAN test takes place over nine days each year, with students having between 42 and 65 minutes for each of the four tests. In recent years, the tests have been held in March.

NAPLAN is one test that forms part of Australia's National Assessment Program (NAP), which aims to track and monitor student progress in a range of learning areas.

Box 3: NAPLAN, curriculum and student learning outcomes

Although NAPLAN tests are aligned with the Australian Curriculum, states and territories continue to implement the curriculum in different ways and use varied pedagogical approaches. As a result, NAPLAN does not capture the full breadth of teaching and learning that occurs across Australia's diverse classrooms.

NAPLAN is best understood as a standardised measure of core literacy and numeracy skills, rather than a comprehensive assessment of all student learning outcomes. While it reflects only a portion of the broader curriculum and the work of schools, the skills it measures remain essential indicators of the foundational competencies that students need to progress successfully through school and life.

We acknowledge these limitations when we treat NAPLAN outcomes as an indicator of student learning outcomes in this report.

Box 4: The National Assessment Program (NAP)

Other national tests include NAP – Science Literacy, NAP – Civics and Citizenship and NAP – Information and Communication Technology Literacy. A sample of students in Years 6 and 10 participate in these assessments every three years.

The NAP also includes international sample assessments overseen by international organisations:

- The Programme for International Student Assessment (PISA) is conducted every three years by the OECD. This is administered to 15-year-old school students.
- The Trends in International Mathematics and Science Study (TIMSS) is conducted every four years by the International Association for the Evaluation of Educational Achievement (IEA). This test is undertaken by students in Years 4 and 8 from different participating countries.
- Progress in International Reading Literacy Study (PIRLS) is conducted every five years. The test is also conducted by the IEA, and it is administered to students in their fourth year of schooling.

NAPLAN has undergone many changes in recent years. From 2018 to 2022, NAPLAN tests transitioned from a pen and paper format to online. No tests took place in 2020 due to the COVID-19 pandemic. Currently, almost all the tests are administered online – Year 3 students use a pencil and paper for the writing test only.

Online testing has enabled the introduction of adaptive testing, whereby test questions change or adapt, based on students' previous responses – the difficulty level of an item is determined by whether students answered the previous question correctly or incorrectly. This adaptive approach aims to provide a more accurate measure of student's literacy and numeracy skills, as well as increase student engagement (ACARA, 2025b). It is also argued that adaptive testing reduces the likelihood of schools teaching the test because no single test is the same within any domain (McGaw et al., 2020).

Adjustments can be made for students with disabilities or additional needs. In practice, however, many students with a disability are exempted or do not sit the NAPLAN tests.

Students receive their individual results relative to a proficiency standard. The proficiency standard for each year level and domain is intended to be at a 'challenging but reasonable level', expected for the student at the time of NAPLAN testing, based mainly on what has been taught in previous years of schooling' (ACARA, 2025a).

In 2023, the Australian Curriculum, Assessment and Reporting Authority (ACARA) introduced major changes to NAPLAN, including the shift from ten numerical bands to four proficiency levels, the move from May to March testing, and the introduction of a new scale in the calculation of results. These changes mean that results from 2023 onwards are not statistically comparable with previous years (ACARA, 2024).

Since 2023, NAPLAN results are reported through four levels of proficiency:

- **Exceeding:** the results exceed expectations for the year level
- **Strong:** the results meet expectations for the year level
- **Developing:** the student is working towards expectations
- **Needs additional support:** the student is not achieving the learning outcomes that are expected at the time of testing and requires additional support.

Appendix B shows the skills and knowledge that constitute 'strong' (meeting expectations) for reading and numeracy, for each year level.

The results for every school are published on the Myschool website (https://myschool.edu.au/), making them publicly available for parents, researchers and the general public. The Myschool website was launched in 2010 and aims to 'support national transparency and accountability' (ACARA, 2026a).

Over the years, NAPLAN has become the most comprehensive and consistent standardised national measure of student achievement in Australia. It is often used as the main national indicator of educational performance, yet it is far from perfect. A substantial body of research has raised concerns about its purpose, design, and the unintended consequences it creates for schools and the system (see Box 5).

Despite criticisms, NAPLAN is particularly useful to examine the extent to which different groups of students acquire the foundational skills required to progress successfully through school. The next section explains how we use NAPLAN in this research.

Box 5: Critiques of NAPLAN testing and reporting

- NAPLAN tests only a narrow range of knowledge and skills. The tests do not assess any general capabilities, creative abilities or scientific knowledge, nor do they assess student health and wellbeing, core components of schooling in Australia.
- Although NAPLAN is based on the national curriculum, it does not consider the local adaptations and, as such does not fully measure what is taught and learned in schools (Larsen, 2025).
- Despite ACARA advising against 'excessive practice' and preparation (ACARA, 2025a) there are reports of 'teaching to the test' to improve school test outcomes (McGaw et al., 2020).
- Although ACARA states that the test is not intended to be 'high stakes', students report feeling pressure to do well (Roberts & Barblett, 2024), especially those in the secondary years (Howell, 2017).
- There is uneven participation across different groups and year levels which means that NAPLAN does not reflect the full, national picture of student achievement (Lu, Williams, Groves, Wan, & Lee, 2023).
- Similarly, students can be excluded from NAPLAN for various reasons, such as low levels of English language proficiency or if they have been in Australia for less than a year, which means that NAPLAN is not representative of all students (Lu et al., 2023).
- The online testing format may inadvertently advantage students who are more proficient in keyboard use and navigating digital platforms.

Due to the tensions, challenges and burdens that NAPLAN places upon schools, students and teachers, there have been calls to scale the test back, rather than maintaining NAPLAN in its current form, as a national census. Some argue that NAPLAN should be scaled back to a sample test of fewer year levels such as the other NAP tests (Wilson, Piccoli, Hargreaves, Ng, & Sahlberg, 2021). Meanwhile, others argue that NAPLAN is the most widely available standardised test and hence, should be kept in its current form until a suitable replacement is developed (Goss & Sonnemann, 2019).

Our study

This research set out to examine how student learning outcomes differ by socioeconomic background and to assess whether these gaps have widened or narrowed over time, both nationally and across states and territories.

The best way to answer these research questions is to design a study that effectively compares the outcomes of advantaged and disadvantaged students across multiple years.

Using NAPLAN data to measure and track learning gaps over time

The analysis was conducted using publicly available NAPLAN data from 2008 to 2025[1]. Publicly available data provide information on the average NAPLAN results in each domain, year level, and calendar year at the national, state and territory levels, and for different subgroups of students, including by student parental education and parental occupation (see Box 7 and Box 8 for a description of student groups compared in this study).

The analysis of the data was conducted in six stages:

1. Comprehensive analysis of learning gaps using average NAPLAN scale scores
2. Conversion of reading and numeracy NAPLAN scale scores into EYL
3. Analysis of EYL and gaps between SES groups within each year level and domain
4. Cohort analysis
5. Analysis of EYL and gaps for low SES students
6. Analysis of stages 3, 4, and 5 for every Australian jurisdiction

The first stage of the analysis mapped out the average scaled NAPLAN scores in all domains and for all groups of interest across all year levels, for every year between 2008 and 2025.

The second stage of the analysis converted average NAPLAN reading and numeracy scale scores into EYL (see Box 9). EYL adjusts for the fact that NAPLAN growth is not linear and estimates the year level at which an average student would typically achieve a given NAPLAN score (Goss, Emslie, & Sonnemann, 2018; Goss et al., 2016) (see more information on EYL in Appendix C).

1 The data can be found here: https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/naplan-national-results

Box 6: Limitations of the study

Using publicly available NAPLAN data is useful to explore broad trends but presents some limitations. First, there is a risk of the 'ecological fallacy', whereby group-level averages are assumed to apply to individual schools or students. Second, the composition of comparison groups in Australia has changed over time, meaning that observed differences may partly reflect shifts in underlying population characteristics beyond parental occupation and education. Third, participation rates can vary across student groups and over time, potentially influencing results and limiting comparability. We acknowledge these and other limitations and note that the results in this report cannot be generalised to individual schools or students.

How did we measure student learning gaps by socioeconomic background?

This part of the analysis looked at how different groups of students, based on parental education and occupation, progressed in terms of their EYL over time. We then examined both the size of the learning gaps between groups of students and how those gaps changed within each year level and NAPLAN domain, as well as across different student cohorts. This analysis was also conducted for each Australian jurisdiction.

Our approach allows all results in this report to be expressed in years and months of learning compared to the Australian average, rather than raw NAPLAN scale points.

Changes over time are shown as the total number of months gained or lost between 2008 and 2022 (a 14-year span). Data from 2023-25 are excluded from the analysis of trends due to comparability issues. Changes over time are derived from the slope of a simple linear regression that links time with either EYL or the size of a learning gap.

For example, a result of -6.3 months in Year 5 reading EYL means that, overall, students in 2022 were performing about 6.3 months behind students in 2008 relative to the Australian average, based on the estimated linear trend.

To check whether these changes reflect a real long-term pattern – rather than normal year-to-year ups and downs – we used the Mann–Kendall test, which identifies whether there is a consistent upward or downward trend over time.

Box 7: Parental education and occupation as proxies for student socioeconomic background in NAPLAN

Parental education and occupation are often combined to measure student SES in research, as they reflect that student's family economic, cultural, educational, and social resources.

Publicly available NAPLAN data (ACARA, 2022b) provide the average student test scores grouped by parental occupation and education. These variables are self-reported by the student's family at school enrolment and the highest levels of either parent or guardian is recorded. The public dataset does not permit these indicators to be combined into a single measure of student SES, and students can be classified in both variables simultaneously. These variables are used in the report to compare NAPLAN results by student socioeconomic background, with results presented separately for each measure.

Parental occupation

- Group 1: Senior management in large business organisation, government administration and defense, and qualified professionals
- Group 2: Other business managers, arts/media/sportspersons and associate professionals
- Group 3: Tradespeople, clerks and skilled office, sales and service staff
- Group 4: Machine operators, hospitality staff, assistants, laborers and related workers
- Not in paid work in the last 12 months

Parental education

- Bachelor's degree or above
- Advanced diploma/Diploma
- Certificate I to IV (including trade certificate)
- Year 12 or equivalent
- Year 11 or equivalent. Includes students whose parents achieved year 10 or below.

Unequal learning outcomes in Australia

Our results show that year after year, Australia's NAPLAN results reveal significant and persistent disparities in learning outcomes by student socioeconomic background.

When average NAPLAN scale scores are examined, they show a clear and persistent pattern: students whose parents work in higher status occupations (Group 1) achieve higher scores than those from all other occupational groups every year. This pattern appears across all NAPLAN domains and year levels, and when we compare students' scores by parental education.

These gaps in NAPLAN average scale scores between groups of students by parental education and parental occupation vary over time, but noticeably, they have never been bridged since NAPLAN was created, suggesting that students from lower socioeconomic backgrounds do not catch up over time.

The next section presents these findings using EYL to more clearly show the extent to which learning outcomes differ by student socioeconomic background in Australia.

Box 8: Defining the student groups for the analysis of learning outcome gaps

Learning gaps in this report are assessed by comparing the most advantaged and disadvantaged students based on parental background.

For parental occupation, the analysis compares students whose parents work in Group 1 and Group 4 occupations. For parental education, the comparison is between students whose parents have a bachelor's degree or above, and those whose parents completed Year 11 or below. In effect, these students' parents did not complete senior secondary school, referred to as 'did not complete school' in this report throughout. These comparisons capture the widest observable gap in student outcomes.

For this report, if a student's parent reported Group 1 for occupational status or a bachelor's degree or above for education level, the student is considered high SES or 'advantaged'. If a student's parent reported Group 4 for occupational status or Year 11 or below for education level, the student is considered low SES or 'disadvantaged'. NAPLAN scores of students whose parents have other occupations and education levels fall between these extremes and are therefore expected to lie within this range.

Categories such as 'not in paid work' or 'not stated' are not considered due to small sample sizes or not providing reliable information about socioeconomic background. Although the total number of participating students whose parents did not complete school has declined over time in Australia (for example, NAPLAN numeracy participation across Years 3, 5, 7, and 9 fell from 99,408 in 2008 to 76,717 in 2022), this cohort remains large and continues to be important for monitoring educational disadvantage.

The data show clear and consistent learning gaps between advantaged and disadvantaged students

When comparing the average EYL of Australian students, results confirm large gaps by parental occupation and education level.

More advantaged students whose parents work in Group 1 occupations consistently outperformed the national average. In reading, for example, they demonstrated achievement levels typical of Year 4 students while still in Year 3, and skills approaching those of the average Year 9 student when assessed in Year 7 (see Figure 1).

In contrast, more disadvantaged students whose parents self-reported as Group 4 occupational status performed below the Australian average at every year level, equivalent to Year 2 and 5 months in reading while in Year 3, and to Year 5 and 9 months when they sat the test in Year 7.

Similar disparate patterns emerged in numeracy for both measures of student SES. For example, more advantaged Year 9 students whose parents hold a bachelor's degree or higher performed equivalent to 2 months above the average student in Year 11, while more disadvantaged students whose parents did not complete school performed almost equivalent to the average student in Year 7 (Year 6 and 11 months).

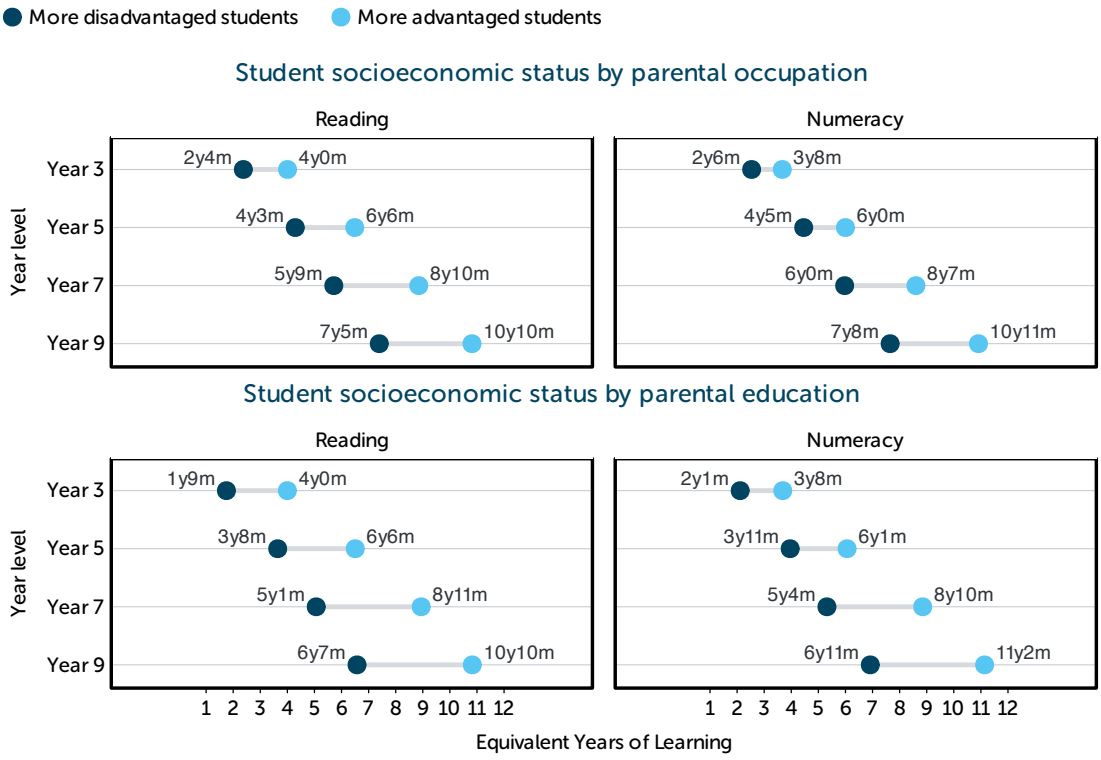
These unequal learning outcomes highlight a system marked by considerable socioeconomic disparities in students' reading and numeracy achievement.

Gaps in reading were consistently larger than those in numeracy across all year levels in Australia, and this pattern is particularly pronounced in primary school.

In contrast, numeracy gaps were relatively smaller in the early years but increased sharply between Years 5 and 7.

More advantaged students are consistently years ahead

Figure 1: Average Equivalent Years of Learning by NAPLAN year level, parental background and domain, 2008 to 2022



Source: Mitchell Institute analysis of ACARA data.

Note: Student SES by parental education uses 'Bachelor degree or above' for more advantaged students and 'Did not complete school' for more disadvantaged students. Student SES by parental occupation uses Group 1 for more advantaged students and Group 4 for more disadvantaged students.

Box 9: Focus on NAPLAN reading and numeracy

Gaps using scale scores were reviewed across all NAPLAN domains (which show the same trends of widening gaps and increasing inequity over time). However, the analysis of gaps and trends using EYL for the study was conducted for numeracy and reading only. These two domains have the most consistent and comparable data across the full NAPLAN time series (2008-2022) and are widely used in research as key indicators of students' foundational skills (Goss et al., 2018; OECD, 2019).

In contrast, writing data is only available from 2011 and has undergone significant assessment and marking changes over time (shifting from narrative to persuasive prompts in 2016) (ACARA, 2022a), which can limit the comparability of long-term trends. Spelling, grammar and punctuation are narrower components of literacy and are less commonly used as standalone indicators of overall achievement in large-scale trend analysis. Focusing on reading and numeracy, therefore, provides the most reliable basis for analysing long-term learning gaps using EYL.

Figure 2 illustrates the average size of these gaps between 2008 and 2022 across year levels, disaggregated by parental occupation and education.

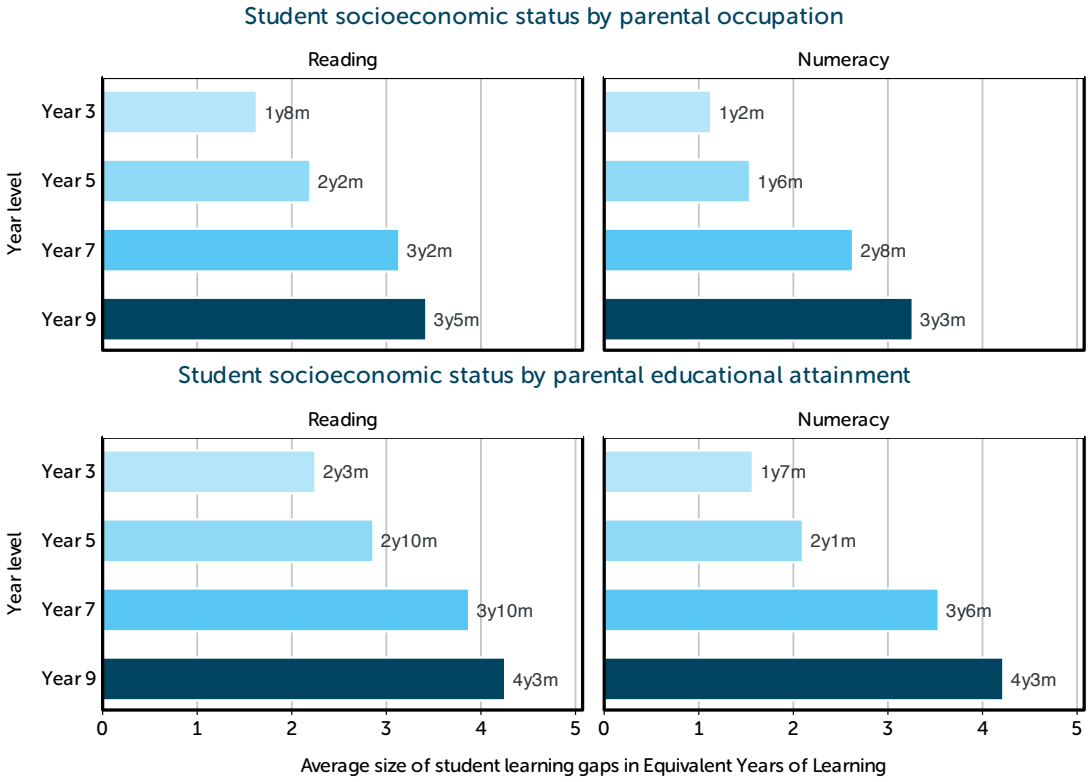
By Year 3, differences are already pronounced, ranging from 1 year and 2 months in numeracy by parental occupation to 2 years and 3 months in reading by parental education.

What's more, these gaps widen as students progressed through school, reaching approximately 2 years and 10 months in Year 5, 3 years and 10 months in Year 7, and up to 4 years and 3 months by Year 9 (reading by parental education).

Overall, the widening of learning gaps is most evident during the transition from primary to secondary school. For example, the average numeracy gap by parental education expanded by 1 year and 5 months between Years 5 and 7 (from 2 years and 1 month to 3 years and 6 months, respectively), while the reading gap increased by around 1 year over the same period (from 2 years and 10 months to 3 years and 10 months, respectively).

Learning gaps increase as students progress through school

Figure 2: Average gap in Equivalent Years of Learning between more advantaged and more disadvantaged students by NAPLAN year level, parental background and domain, 2008 to 2022



Source: Mitchell Institute analysis of ACARA data.

Note: Student SES by parental education uses 'Bachelor degree or above' for more advantaged students and 'Did not complete school' for more disadvantaged students. Student SES by parental occupation uses Group 1 for more advantaged students and Group 4 for more disadvantaged students.

Student learning gaps are widening over time

Our analysis shows that student learning gaps by student socioeconomic background are large in Australia, that achievement differences emerge early, and that they widen in later year levels.

This section examines whether these disparities are stable or have grown over the 14-year period from 2008 to 2022 within each NAPLAN year level. Data points are also presented for the most recent period between 2023 and 2025.

Box 10: The break in NAPLAN time series between 2022 and 2023

The trend analysis in this study is based on cross-sectional data and does not follow individual students over time.

Major changes introduced in 2023 – including the shift from ten numerical bands to four proficiency levels, the move from May to March testing, and the introduction of a new NAPLAN scale – mean that results from 2023 onwards are not statistically comparable with previous years (ACARA, 2024).

Although preliminary analysis of the 2023–2025 data suggests that achievement gaps remain broadly consistent with historical patterns, the three available post-reform waves of data are insufficient to confirm stable trends. Consequently, we prioritise the 14-year dataset (2008–2022) to provide a stable and reliable measure of long-term trends in educational equity.

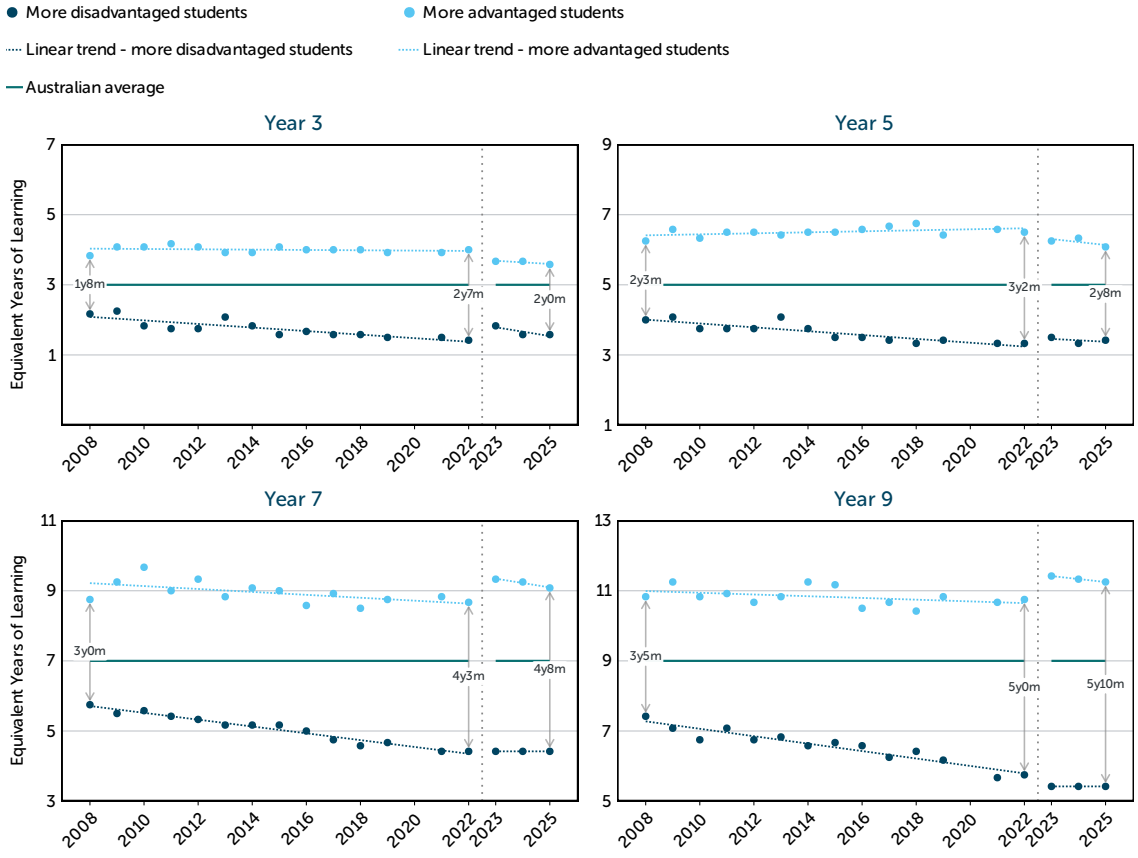
The analysis reveals that learning outcome gaps have widened over time in all year levels, both by parental education and parental occupation, except for numeracy in Year 9. Figures 3 and 4 illustrate how reading and numeracy outcomes have increasingly diverged by parental education between 2008 and 2022, resulting in wider gaps over time.

In 2008, the reading gap between Year 3 students whose parents had a bachelor's degree or above and those whose parents did not complete school was 1 year and 8 months; by 2022, it had expanded to 2 years and 7 months. For Year 5 students, the gap grew from 2 years and 3 months in 2008, to 3 years and 2 months in 2022. A similar pattern of widening gaps was evident in Years 7 and 9.

Although not comparable and too early to estimate trends over time, the new NAPLAN time series that commenced in 2023 confirms large gaps in reading by parental education and occupation. Reading gaps by parental education under the revised system are particularly large in Years 7 and 9, reaching 4 years and 8 months, and 5 years and 10 months in 2025, respectively.

Student reading gaps by parental education have grown over time in all year levels

Figure 3: Equivalent Years of Learning for reading by student parental education and NAPLAN year level, 2008 to 2025



Source: Mitchell Institute analysis of ACARA data.

Note: Student SES uses the highest level of parental education ('Bachelor degree or above' for more advantaged students and 'Did not complete school' for more disadvantaged students). Dotted vertical line marks the NAPLAN time series break between 2022 and 2023.

Figure 4 shows similar patterns for numeracy. Gaps between students with high and low parental education increase at every year level, and the gaps also tend to widen over time. The gaps observed in primary schools appear to grow in magnitude during the transition into secondary school, with the greatest widening of gaps occurring in Year 7, rising from 3 years and 2 months in 2008 to 4 years and 2 months in 2022.

Numeracy outcomes of Year 9 students are the exception to this trend, whereby both parental education groups decrease at a similar rate over time, resulting in gaps that remain stable throughout the period.

The revised NAPLAN introduced in 2023 shows that numeracy gaps by parental education are still large in more recent years, with gaps as wide as 5 years and 9 months among Year 7 students and 6 years and 9 months among Year 9 students in 2025.

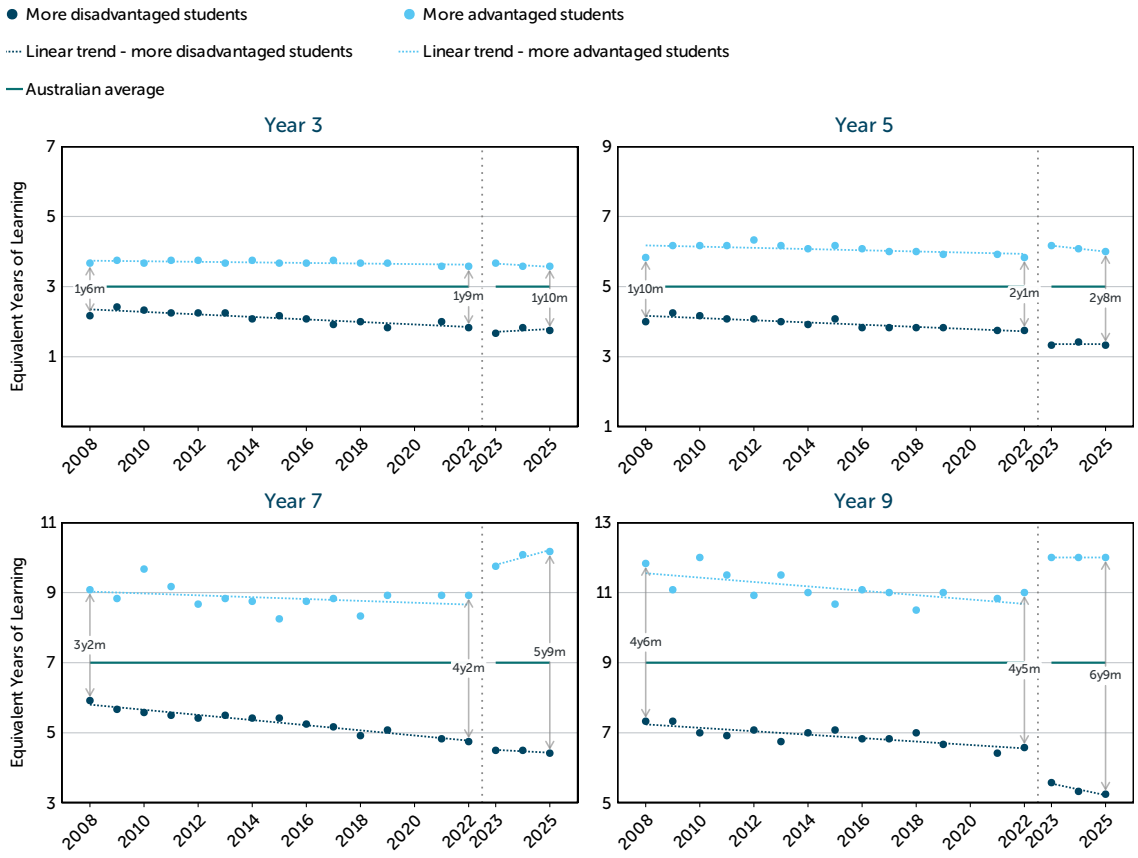
Figures 3 and 4 show that increases in skill proficiency of students with university-educated parents are relatively small. In contrast, the relative performance of more disadvantaged students whose parents did not complete school show a clear and consistent downward pattern over time.

This evidence suggests that disadvantaged students and the schools serving them, have been disproportionately affected by long-term policies and systemic features that produce inequality in Australia, resulting in a sharper, more pronounced decline in performance over time compared to their peers.

The persistence of gaps across 17 years suggests the issue is structural, not confined to particular years or short-term factors.

Numeracy gaps between more advantaged and more disadvantaged students have widened over time and across all year levels except in Year 9

Figure 4: Equivalent Years of Learning for numeracy by student parental education and NAPLAN year level, 2008 to 2025



Source: Mitchell Institute analysis of ACARA data.

Note: Student SES status uses the highest level of parental education ('Bachelor's degree or above' for more advantaged students and 'Did not complete school' for more disadvantaged students).

Dotted vertical line marks the NAPLAN time series break between 2022 and 2023.

Table 1 shows the average size of student learning gaps between 2008 and 2022 in Australia (left panel), and the estimated size of the gap change over the period (right panel).

Cumulative gaps on the right panel are expressed in months of learning, and positive values represent an increasing trend in the learning gap over time, while negative values signal a decreasing trend.

Except for numeracy in Year 9, gaps increased across the board. The largest gap increases occurred in reading by parental education, reaching an 11.6-month increase in Year 5 and almost a 14-month increase in Year 9 from 2008 to 2022.

Gaps in numeracy by parental education have also largely increased, particularly as students start secondary school, with a cumulative increase of almost 8 months in Year 7.

Table 1. Size and trends of student learning gaps in Australia between 2008 and 2022, by year level

		Average gap size				Gap change within Year level^			
		Year 3	Year 5	Year 7	Year 9	Year 3	Year 5	Year 7	Year 9
Reading	Parental occupation	1y8m	2y2m	3y2m	3y5m	3.3m*	5.8m**	3.8m	2.6m
	Parental education	2y3m	2y10m	3y11m	4y3m	7.7m**	11.6m**	9.4m**	13.7m**
Numeracy	Parental occupation	1y2m	1y6m	2y8m	3y3m	1.8m**	0.7m	3.7m	-3.2m
	Parental education	1y7m	2y1m	3y6m	4y3m	4.7m**	2.4m	7.8m**	-2.3m

^ The cumulative average change in EYL, expressed in months, associated with a one-year change (cumulated) over the 14-year period (linear association).

* Indicates that the trend is significant at P<0.1 using the Mann-Kendall test of association between gaps and calendar years.

** Indicates that the trend is significant at P<0.05

Inequality has intensified in more recent student cohorts

Earlier, we compared different groups of students from one year to the next. In this section, we analyse learning gaps across different student cohorts to understand how disadvantage accumulates and intensifies as young Australians move through school.

We focus on two groups of students who began Year 3 at different points in time: an **early cohort** who were in Year 3 in 2008 and reached Year 9 in 2014, and a **later cohort** who were in Year 3 in 2015 and progressed to Year 9 in 2021.

Box 11: Cohort analysis using publicly available NAPLAN data

Tracking the learning outcomes of the same group of students over time is a powerful way to measure genuine academic progress and changes in learning gaps. However, for privacy reasons, publicly available NAPLAN data only report aggregate group averages, which means individual students cannot be followed from one test cycle to the next. The composition of each year-level group changes over time, due to, for example, students moving schools or across states and territories, leaving the country or being absent from tests. Hence, the group of students making up the Year 3 cohort in 2008, for example, will be slightly different from the group of students in Year 5 in 2010.

Despite this limitation, most students usually sit each NAPLAN assessment as they progress through school, meaning the observed values should closely approximate true differences in learning gaps in the student cohort.

This study presents results for two student cohorts:

Early cohort: Year 3-2008 → Year 5-2010 → Year 7-2012 → Year 9-2014

Later cohort: Year 3-2015 → Year 5-2017 → Year 7-2019 → Year 9-2021

In both the early and later cohorts, more disadvantaged students whose parents did not complete school (shown in dark blue) consistently performed below the national average in reading and numeracy, and the gap widened as they moved through school (see Figure 5). This means that their level of achievement fell further behind the Australian average over time, indicating that disadvantage compounded as students progressed through their schooling years.

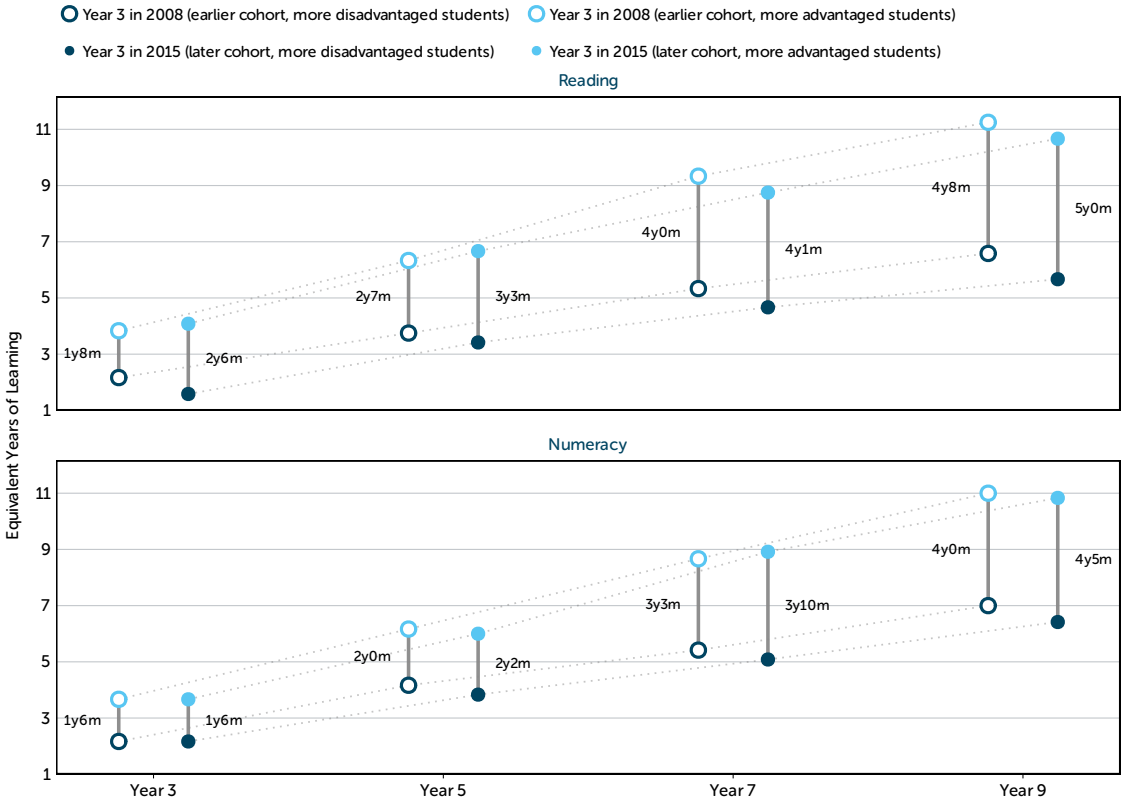
In contrast, more advantaged students from high parental education backgrounds (shown in light blue) consistently performed above the national average, and their skill proficiency generally increased as they progressed through school. The only exception was reading in the later cohort in Year 9, when their average EYL levelled off, narrowing the gap slightly relative to the Australian average. Similar results, although less pronounced, were found when comparing results by parental occupation groups.

As a result of these learning trajectories, both cohorts experienced a widening of learning gaps from Year 3 to Year 9.

For the early cohort, the reading gap by parental education grew from 1 year 8 months in Year 3, to 2 years 7 months by Year 5. Once students reached secondary school, the gap expanded further, from 4 years in Year 7 to almost 5 years by Year 9. Patterns for numeracy and for parental occupation followed a similar trajectory, although the increases were somewhat less pronounced.

Learning gaps widen as students progress through school and are larger in the later cohort

Figure 5: Reading and numeracy Equivalent Years of Learning and gaps between more advantaged and more disadvantaged students in two student cohorts by parental education, Year 3 in 2008 (cohort 1) and Year 3 in 2015 (cohort 2)



Source: Mitchell Institute analysis of ACARA data.

Note: Student SES status uses the highest level of parental education ('Bachelor's degree or above' for more advantaged students and 'Did not complete school' for more disadvantaged students).

Because learning gaps within each year level have widened over time in Australia, students in the later cohort experienced greater inequality than those in the earlier cohort, attributed to drops in performance for disadvantaged students. We can observe this trend slightly differently, although clearly, in both learning domains.

In reading, although students from high parental education backgrounds in the later cohort also saw their performance decline relative to the national average, the drop was less pronounced than that experienced by students whose parents did not complete school. As a result, the overall reading gap in the later cohort widened further than in the earlier cohort, driven primarily by the sharper decline among disadvantaged students.

In numeracy, for example, both cohorts began Year 3 with a similar gap of 1 year 6 months of learning. However, as students progressed through school, disadvantaged students in the later cohort fell further behind the Australian average than their disadvantaged peers did in the earlier cohort, resulting in a larger gap of 4 years 5 months by Year 9, considerably wider than that observed for the earlier cohort (4 years).

Unequal learning outcomes are a feature of schooling in all Australian states and territories

Each Australian state and territory differs in its student populations, schooling structures, and policy settings, all of which shape learning outcomes. They also vary in the size and composition of the student groups analysed in this report. As a result, comparing NAPLAN outcomes across jurisdictions using publicly available NAPLAN data has important limitations, as they do not include the student-level detail needed to account for such differences.

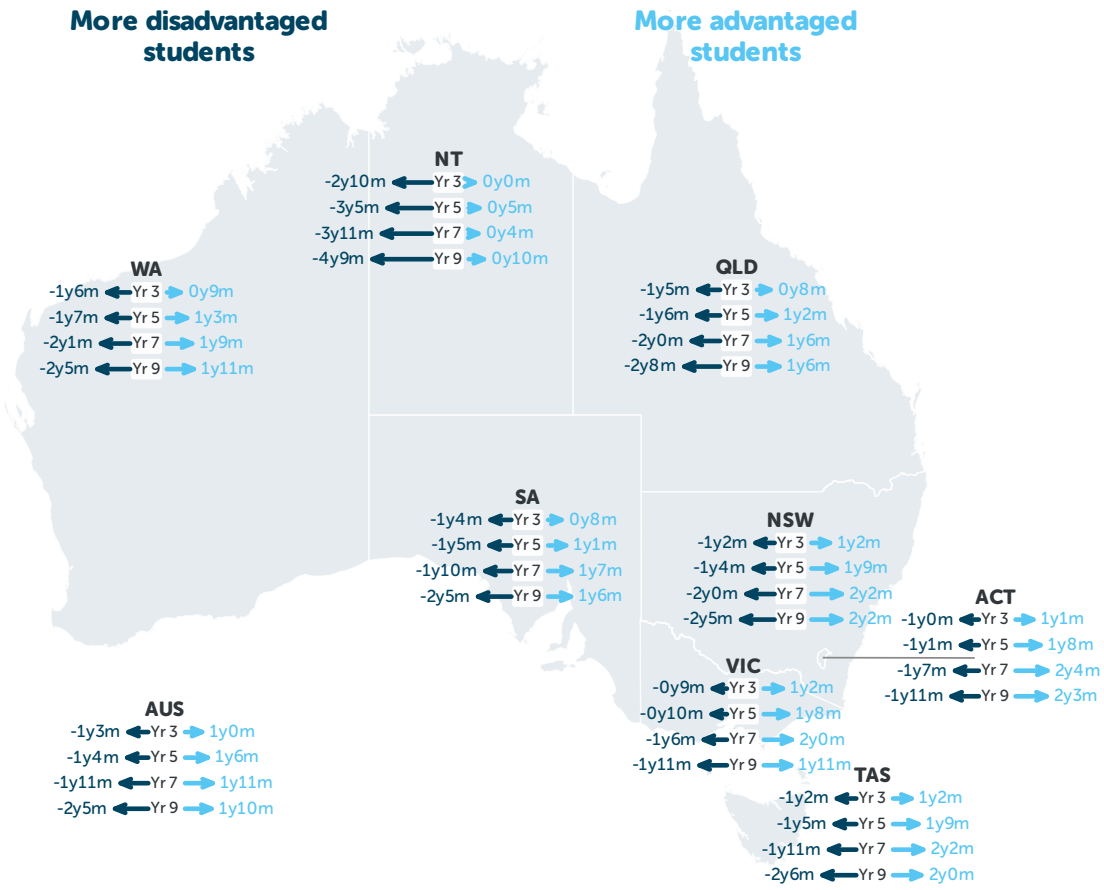
For this reason, this section does not seek to compare results between jurisdictions. Instead, it examines whether the magnitude and growth of student learning gaps observed at the national level are also evident within each state and territory. This approach helps determine whether national patterns are broadly consistent across jurisdictions or primarily driven by the largest states.

Figure 6 shows that students perform at different levels in reading by parental education in every state and territory, with some variations. In Victoria, New South Wales, the Australian Capital Territory and Tasmania, students whose parents had a bachelor's degree or higher tended to achieve reading levels that were similar to, or better than, the Australian average.

In contrast, the skill proficiency levels in reading for more advantaged students living in Western Australia, Queensland, South Australia and the Northern Territory, were below skill proficiency levels of the average advantaged student in Australia.

There are substantial disparities in student performance in all states and territories

Figure 6. Average difference in reading performance compared to the Australian average, by year level and parental education for each state and territory



Source: Mitchell Institute analysis of ACARA data.

Note: Student SES status uses the highest level of parental education ('Bachelor's degree or above' for more advantaged students and 'Did not complete school' for more disadvantaged students).

The performance of students whose parents did not complete school in Victoria and the Australian Capital Territory was higher than the performance of the average disadvantaged student in Australia. In contrast, more disadvantaged students living in the Northern Territory, Queensland, and Western Australia tended to perform below the average disadvantaged student in Australia in every year level. Disadvantaged students living in New South Wales, South Australia and Tasmania performed similar to the average disadvantaged student in Australia.

There are widening socioeconomic learning gaps in all states and territories

Unequal learning outcomes are a feature of every Australian jurisdiction.

Table 2 summarises the size and progression of learning gaps across the states and territories. The left panel shows that considerable gaps were already evident in every jurisdiction by Year 3, and that these gaps continued to widen in later year levels. Some states and territories showed larger gaps than the national average, while in others the gaps were smaller.

Victoria, Queensland, South Australia and Western Australia generally tended to record lower reading and numeracy gaps by parental education and occupation than the Australian average.

New South Wales showed consistently larger gaps than the Australian average in all year levels and domains.

There were no such clear trends across measures observed in the data from Tasmania, the Northern Territory and the Australian Capital Territory.

Box 12: Small cohort sizes in the Australian Capital Territory and the Northern Territory

Results for the Australian Capital Territory and Northern Territory should be interpreted with caution because some of the student groups analysed are very small. For example, only 111 Northern Territory students with parents with a bachelor's degree or above sat the Year 3 numeracy test in 2009, and just 136 students in the Australian Capital Territory whose parents did not complete school sat the Year 5 numeracy test in 2018. Small cohort sizes such as these reduce the statistical reliability of the estimates. They also make group averages more sensitive to individual performance fluctuations, resulting in greater year-to-year variation. In addition, estimates for students scoring below Year 3 or above Year 9 in these territories carry a higher margin of error and should be interpreted as indicative rather than definitive.

The right panel of Table 2 summarises the extent to which learning gaps increased or diminished over the 14-year period between 2008 and 2022 within each year level and jurisdiction.

Across Australia, reading and numeracy gaps by student socioeconomic background have tended to increase, though the pace of change differs across states and territories.

There were growing learning gaps across most states and territories. The gaps grew in line with those observed across Australia in Victoria and Western Australia, with larger increases at the primary to secondary school transition points. There were also large gap increases in Queensland and the Northern Territory, particularly in the middle years, while Tasmania saw notable gap widening in the later years of schooling. New South Wales had some of the largest gaps across all states. In contrast, the gaps grew relatively less in South Australia and the data indicate some gap reduction that was unique to the state. The Australian Capital Territory presents mixed results, with some gaps narrowing over time.

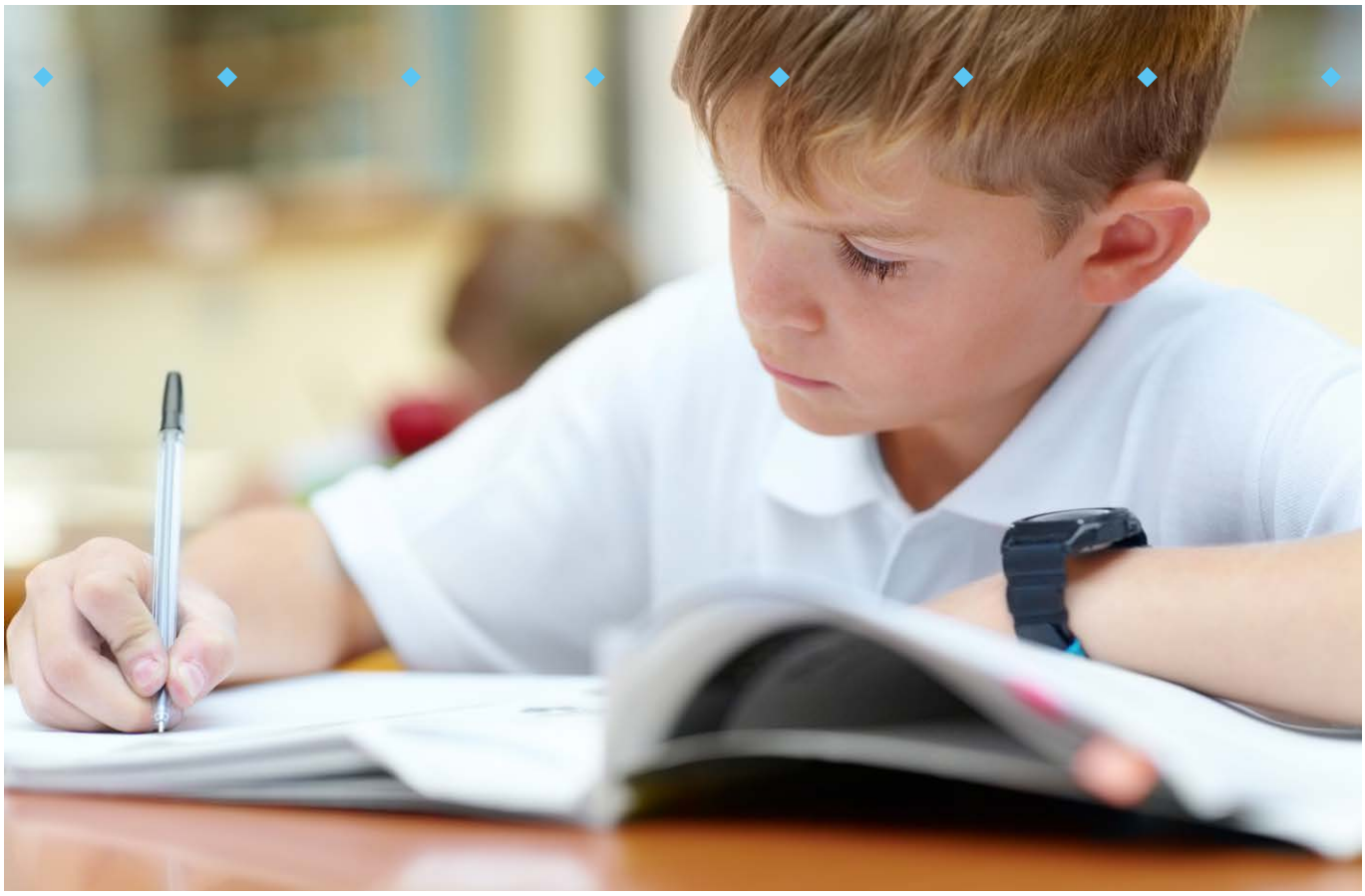


Table 2. Size and change in student learning gaps between 2008 and 2022 in states and territories, by Year level

		Average gap size				Gap change within Year level^			
		Year 3	Year 5	Year 7	Year 9	Year 3	Year 5	Year 7	Year 9
Reading	**Parental occupation**								
	Australia	*1y8m*	*2y2m*	*3y2m*	*3y5m*	*3.3m**	*5.8m***	*3.8m*	*2.6m*
	VIC	1y8m	2y2m	3y1m	3y3m	4.9m*	6.2m**	3.1m	1.8m
	QLD	1y7m	2y2m	2y11m	3y6m	0.9m	6.7m**	6.8m**	4.3m
	NSW	1y9m	2y5m	3y4m	3y6m	4.1m	5.4m	4.8m	7.7m
	SA	1y4m	1y10m	2y7m	3y1m	-0.6m	1.1m	-2.0m	-1.6m
	WA	1y6m	2y1m	2y11m	3y3m	0.0m	2.5m	5.0m*	1.7m
	TAS	1y8m	2y5m	3y4m	3y9m	-0.8m	3.2m	4.8m	9.5m
	NT	2y1m	2y7m	3y1m	3y11m	4.5m	6.1m*	11.0m**	3.9m
	ACT	1y8m^^	2y4m^^	3y6m	3y6m	-2.0m	2.9m	3.1m	-3.3m
	Parental education								
	Australia	*2y3m*	*2y10m*	*3y11m*	*4y3m*	*7.7m***	*11.6m***	*9.4m***	*13.7m***
	VIC	1y11m	2y6m	3y6m	3y10m	7.4m**	12.6m**	7.7m	11.5m
	QLD	2y2m	2y9m	3y6m	4y2m	7.9m**	14.9m**	13.5m**	14.2m**
	NSW	2y4m	3y1m	4y2m	4y7m	7.7m**	7.7m**	8.3m**	9.6m
	SA	2y0m	2y6m	3y4m	4y0m	5.7m*	8.7m**	6.1m*	9.3m*
	WA	2y3m	2y10m	3y10m	4y3m	5.7m**	9.4m**	13.3m**	11.3m*
	TAS	2y4m	3y2m	4y1m	4y6m	7.1m	11.5m*	4.1m*	17.8m*
	NT	2y10m	3y10m	4y3m	5y7m	1.2m	19.3m**	16.8m**	28.4m**
	ACT	2y1m^^	2y9m	3y11m	4y2m	6.8m	0.5m	2.2m	10.2m
Numeracy	**Parental occupation**								
	Australia	*1y2m*	*1y6m*	*2y8m*	*3y3m*	*1.8m***	*0.7m*	*3.7m*	*-3.2m*
	VIC	1y2m	1y5m	2y7m	3y1m	3.4m**	1.7m	2.7m	0.5m
	QLD	1y1m	1y6m	2y5m	3y3m	2.0m*	1.7m	4.9m**	-0.6m
	NSW	1y3m	1y9m	3y0m	3y5m	2.4m*	0.7m	4.8m	-0.5m
	SA	1y0m	1y4m	2y1m	2y11m	0.0m	-1.6m	0.0m	-8.0m
	WA	1y1m	1y6m	2y6m	3y2m	0.3m	-0.9m	8.0m**	-3.6m
	TAS	1y2m	1y7m	2y5m	3y2m	-1.9m	-2.8m*	3.7m	1.7m
	NT	1y5m	1y8m	2y4m	2y10m	5.1m**	0.1m	11.0m**	-6.9m
	ACT	1y1m^^	1y6m^^	2y6m	3y3m^^	-2.4m	-4.6m	-8.8m**	-12.8m
	Parental education								
	Australia	*1y7m*	*2y1m*	*3y6m*	*4y3m*	*4.7m***	*2.4m*	*7.8m***	*-2.3m*
	VIC	1y4m	1y10m	3y1m	3y9m	6.0m**	5.1m**	3.0m	3.0m
	QLD	1y6m	1y11m	3y1m	3y9m	7.0m**	6.8m**	9.9m**	3.7m
	NSW	1y8m	2y5m	4y1m	4y8m	3.8m**	0.0m	2.9m	-0.7m
	SA	1y5m	1y9m	2y10m	3y8m	4.7m**	3.3m**	7.1m	-2.5m
	WA	1y6m	2y0m	3y5m	4y3m	4.6m**	3.7m*	14.8m**	5.3m
	TAS	1y6m	2y0m	2y11m	3y8m	2.2m	1.8m	9.4m	4.0m
	NT	2y3m	2y7m	3y3m	4y2m	13.8m**	8.0m**	24.3m**	3.1m
	ACT	1y5m^^	1y11m	3y1m	3y11m	3.5m	-4.0m	-6.6m	-7.9m

^ The cumulative average change in EYL, expressed in months, associated with a one-year change (cumulated) over the 14-year period (linear association).

^^ Calculated over a 13-year period

* Indicates that the trend is significant at P<0.1 using the Mann-Kendall test of association between gaps and calendar years.

** Indicates that the trend is significant at P<0.05.

Learning gaps are increasing because systems are failing to meet the needs of disadvantaged students

Gaps in student learning outcomes over time can widen for different reasons. They may grow because the outcomes of one group improve more quickly, and/or because the performance of another group declines. Gaps can also increase even when both groups improve or decline in performance over time, if they do so at different rates.

While improving learning outcomes over time is important for all groups of students in Australia, it is particularly important to make sure that students who are experiencing disadvantage are not left behind. This is part of the core educational aspirations in every state and territory. However, our results show that this is not being achieved.

Table 3 presents the trends in the learning outcomes of more disadvantaged students whose parents work in the lowest occupation group and those whose parents did not complete school, showing how their EYL results have changed over time across all year levels and jurisdictions.

Results show that student learning gaps in Australia are growing mostly because of consistent declines in the performance of disadvantaged students.

This decline in the reading and numeracy proficiency of disadvantaged students in Australia reflects the structural constraints under which disadvantaged schools operate, and the increasing struggles they face to meet the needs of their students.

The performance of more disadvantaged students in both reading and numeracy has generally declined compared with the average Australian student.

The rate of decrease is particularly steep for reading among students whose parents did not complete school. Between 2008 and 2022, Year 7 students in this group fell behind the national average by an additional 16.4 months in reading, from an EYL of 5 years and 9 months on average in 2008 to an EYL of 4 years and 5 months in 2022.

Similar results were found for numeracy, although less pronounced: performance in Year 7 declined by just over a year over the period, from an EYL of 5 years and 11 months in 2008 to an EYL of 4 years and 9 months in 2022.

Table 3. EYL trends of more disadvantaged students between 2008 and 2022, by year level and states and territories^

		Parental occupation – Group 4				Parental education – Did not complete school			
		Year 3	Year 5	Year 7	Year 9	Year 3	Year 5	Year 7	Year 9
Reading	*Australia*	*-2.2m***	*-1.7m*	*-8.4m***	*-7.5m***	*-8.5m***	*-9.2m***	*-16.4m***	*-17.8m***
	VIC	-4.1m**	-3.1m**	-8.6m**	-10.1m**	-8.6m**	-11.0m**	-15.0m**	-21.1m**
	QLD	4.8m*	4.1m	-3.1m**	-5.3m	-2.4m	-4.7m*	-13.8m**	-16.7m**
	NSW	-4.8m**	-6.1m**	-11.3m**	-12.5m**	-9.9m**	-9.7m**	-15.2m**	-16.4m**
	SA	-1.7m	0.1m	-5.8m**	-6.3m**	-8.8m**	-8.3m**	-14.0m**	-17.6m**
	WA	0.7m	1.5m	-8.2m**	4.6m**	-6.2m**	-7.3m**	-17.2m**	-8.8m**
	TAS	-3.9m**	-4.6m**	-12.5m**	-16.6m**	-10.4m**	-10.6m**	-17.6m**	-23.7m**
	NT	-6.1m	-6.5m*	-15.2m**	-17.4m**	-8.9m**	-26.8m**	-32.9m**	-44.0m**
	ACT	-5.9m**	-8.7m**	-13.8m**	-10.1m	-15.8m**	-6.9m	-17.4m**	-22.9m**
Numeracy	*Australia*	*-1.7m***	*-1.7m**	*-5.0m***	*-4.0m***	*-6.0m***	*-5.3m***	*-12.3m***	*-8.2m***
	VIC	-4.8m**	-4.1m**	-7.2m**	-11.9m**	-8.0m**	-8.7m**	-12.4m**	-16.0m**
	QLD	1.9m	2.6m	-6.2m**	-0.6m	-3.5m*	-3.0m*	-13.0m**	-7.7m**
	NSW	-3.9m**	-5.7m**	-6.5m**	-8.5m**	-5.6m**	-7.1m**	-9.1m**	-8.0m**
	SA	-0.7m	1.4m	-2.4m*	-0.3m	-6.2m**	-4.2m**	-10.2m**	-7.2m**
	WA	1.2m	2.6m**	-2.8m*	10.1m**	-4.1m**	-2.8m**	-11.1m**	-0.9m**
	TAS	-3.3m**	-2.5m*	-5.8m**	-4.3m*	-6.1m**	-6.6m**	-11.4m**	-8.1m**
	NT	-6.3m**	-3.1m**	-9.3m**	-2.4m	-19.2m**	-14.6m**	-28.7m**	-19.0m**
	ACT	-2.4m	-4.6m*	-5.3m*	-4.2m	-8.2m**	-4.5m*	-9.8m*	-10.3m

^ The cumulative average change in EYL, expressed in months, associated with a one-year change (cumulated) over the 14-year period (linear association).

* Indicates that the trend is significant at P<0.1 using the Mann-Kendall test of association between EYL and calendar years.

** Indicates that the trend is significant at P<0.05.

Table 3 also shows that the declining performance of more disadvantaged students has occurred in most Australian states and territories.

This highlights the persistent challenge systems face in meeting the needs of disadvantaged students, and that this challenge is growing over time. However, the pattern is not the same everywhere, and not all NAPLAN domains show the same level of decline.

Students whose parents reported Group 4 occupational status experienced noticeable declines in reading performance over time, especially in New South Wales, Tasmania, the Northern Territory, and the Australian Capital Territory. In contrast, results for similar students in Queensland (Years 3 and 5), South Australia (Years 3 and 5), and Western Australia (all years except Year 7) were stable or even improved slightly.

For students whose parents did not complete school, reading performance fell in every state and territory. The decline was steepest in Tasmania, the Northern Territory, and the Australian Capital Territory, and somewhat less severe in Queensland and Western Australia.

Numeracy results for disadvantaged students did not decline everywhere. In Queensland primary schools and in Years 5 and 9 in Western Australia, students whose parents work in Group 4 occupations actually improved their average numeracy scores over time. In South Australia, their results remained relatively stable.

However, in Victoria, New South Wales, the Northern Territory, and the Australian Capital Territory, disadvantaged students recorded increasingly lower numeracy scores compared with the Australian average.

The evidence indicates that in some cases, both advantaged and disadvantaged students saw declines, but the drop was greater for disadvantaged students, leading to a growing gap over time.

Nevertheless, we can see that in most jurisdictions, widening gaps in learning outcomes are not due to advantaged students improving. Instead, they are largely driven by sharp declines in the performance of socially disadvantaged students relative to the national average, underscoring the increasing struggles faced by disadvantaged schools across Australia.

The evidence indicates that in some cases, both advantaged and disadvantaged students saw declines, but the drop was greater for disadvantaged students, leading to a growing gap over time.

Why does this matter?

If the high-level goals of the Australian school systems are 'equity and excellence', then our analysis of 17 years of NAPLAN data suggests that Australia is not tracking well.

When we take a closer and long-term look at educational equity, we see that learning gaps by student SES are large and persistent across the nation and are a feature of every Australian jurisdiction.

What's more, these gaps do not close with increasing years of schooling but instead widen from Year 3 to Year 9.

Perhaps the most alarming observation is that this trend is intensifying in more recent cohorts of students.

School systems in some states and territories have shown small improvements compared to the national average, but overall **more disadvantaged students can be years behind the Australian average across year levels**, whilst more advantaged students can be years ahead.

More concerning than the ongoing presence of learning 'gaps' is the worsening of inequality over time. Our cohort analysis shows that the learning gaps are wider among more recent groups of students taking NAPLAN tests than among those taking the tests years earlier.

We can see this when we focus only on the most disadvantaged students and explore how their outcomes have changed over time, in terms of EYL.

In reading, for example, Year 9 students in 2022 whose parents did not complete school were almost 1 year and 6 months behind similarly disadvantaged students in 2008.

In both the cohort analysis and analyses of trends for disadvantaged students, the data suggest that low SES students were substantially worse off in 2022 than their peers were in 2008. This pattern was observed repeatedly across every state and territory (with only one exception, numeracy Year 9). These learning gaps are formed by the relative decline in more disadvantaged students' performance, while advantaged students have generally remained stable or declined in performance at a slower rate.

Students who are behind the average Australian student at their year level should be able to catch up

The reality is that students who are behind at any given point have more learning to catch up on and need to do so at a faster rate in order to meet expected outcomes for their year level as they progress through school.

Since there are very few studies using the EYL approach, it is difficult to say how likely it is that students catch up. We know from other studies that utilise National Minimum Standards (NMS) as cut offs that around two out of three do not catch up (Adams, Hancock, & Taylor, 2020; Williams, Groves, Wan, Lee, & Lu, 2023).

The Productivity Commission (2022) found similar results from 2021 data. For numeracy, of the Year 3 students who did not meet the NMS, 34% did not meet the NMS in Year 5. In secondary school, of the Year 7 students who did not meet the NMS, 28% remained below in Year 9. The results were the same for reading from Year 3 to 5, but worse in secondary year levels- of the Year 7 students who did not achieve the NMS, almost half (47%) did not catch up by Year 9.

A converging and growing evidence base on persistent inequality

Our study is not isolated, but rather builds on and extends a previous body of evidence showing persistent and entrenched educational inequality in Australia.

Studies using other national datasets have found significant learning gaps exist even before Year 3. For example, the level of developmental vulnerability in children living in the most disadvantaged communities increased from 2009 to 2024, while children living in the most advantaged communities showed some improvement and stability (Mitchell Institute, 2025).

International studies measuring student performance have also highlighted the large gaps in learning outcomes by student SES in Australia. The most recent Australian PISA results in 2022 indicated that the learning outcome gaps by socioeconomic backgrounds have grown over time. Researchers (De Bortoli et al., 2024) report large disparities between advantaged and disadvantaged Australian students, with these differences having been interpreted as equivalent to approximately 3 to 5 years of learning (Cobbold, 2025).

While Australia continues to exceed OECD averages in maths, science and reading scores overall (OECD, 2023), educational researchers (De Bortoli et al., 2024; OECD, 2023) concur that the link between student SES and performance remains deeply rooted in Australia.

Our analysis of the magnitude and evolution of student learning gaps suggests, together with existing evidence, that the issue of the growing educational inequality in Australia is a compelling case that can no longer be ignored.

Reducing inequality requires a systemic approach

Despite decades of policy intent and reform in Australia, educational inequality is still increasing.

The reality is that Australian governments' current policy efforts to promote educational excellence and equity fall well short of what the challenge demands.

Box 13: How is inequality currently tackled in Australia?

Over the years, Australian education policy has addressed equity primarily through targeted approaches focused on students and schools, often at the expense of the systemic drivers of inequality.

- The primary policy to advance educational equity is the *Better and Fairer Schools Agreement* (2025-2034) that replaced the *National School Reform Agreement* (2019-2024).
- A needs-based funding model (Australian Government, 2026) to direct more resources to disadvantaged students and schools, with loadings given to students with disability, Aboriginal and Torres Strait Islander status, socio-educational disadvantage and low English proficiency.
- Major investments flowing through to schools over the next ten years for:
  - A nationwide move toward mandated, 'high-impact' instruction, particularly structured literacy, Year 1 phonics checks and numeracy checks, and explicit teaching in numeracy.
  - More individualised support for students who need it, such as intensive, small group tutoring for students falling behind (Clare, 2026).
  - Teacher professional development: ongoing investment in the teacher workforce aims to attract and retain high-quality teachers, including in rural, remote and low-SES metropolitan schools, through financial incentives and specialised professional development (Australian Government, 2025).
  - Wellbeing initiatives: schools are increasingly being funded to integrate mental health practitioners (Victoria Government, 2026) and support measures like breakfast clubs (Victoria Government, 2025) to improve student attendance and engagement.

The *Alice Springs (Mparntwe) Education Declaration* and the bilateral agreements that make up the *Better and Fairer Schools Agreement* provide the policy rationale and framework to tackle educational inequalities. However, the focus needs to change, to look beyond schools and classrooms to the systemic features that promote and entrench inequality in Australian schooling.

We draw attention to the widening inequality that is showing up in NAPLAN outcomes, to ask ourselves what needs to change to make meaningful improvements in this area.

Without such a shift, well-intentioned school level policies aimed at increasing excellence, such as the promotion of phonics and explicit instruction, will only have marginal effects on reducing the large and widening learning gaps in Australia.

Policy implications

In a fair and socially just school system, we should not see disadvantaged students years behind national year level averages, and years apart from their more advantaged peers. Seeing this problem getting worse over time means that something needs to change.

The current extent of inequality impacts not only individual students but also restricts the ability of schools and systems to deliver good educational outcomes for all their students.

Yet, there is no simple solution when it comes to addressing the widening inequality in Australian school outcomes.

School leaders and teachers working in increasingly difficult conditions brought about by school socioeconomic segregation and residualisation can only do so much to shift disadvantage at the school or classroom level. The system-level architecture is a major driver of inequality in student outcomes, and it is at the system-level that we see opportunities for real change.

Australian governments must acknowledge and address the urgent challenge of growing educational inequality

The most successful education systems in the world focus on excellence and equity simultaneously (OECD, 2023). One of the greatest barriers to excellence in Australia is inequality, and an educational system that does not adequately support struggling schools, teachers and students will never achieve the equity required for excellence.

We are not far away from a new education declaration that will set new goals for the next decade, and equity must be a central priority. Governments should prioritise closing learning gaps so that all systems provide equal opportunities for students to achieve their full potential.

NAPLAN itself can play a role in this, by providing a means of setting goals and measuring our progress. NAPLAN targets have already been set out in the *Better and Fairer Schools Agreement – Full and Fair Funding 2025-2034* (Australian Government, 2023). By 2030, the goals are to:

- reduce the proportion of students that Need Additional Support by 10%
- increase the proportion of students in the Strong and Exceeding groups by 10%
- trend upwards in the proportion of priority equity cohort students (including Aboriginal and Torres Strait Islanders, outer regional, remote and very remote, and parental education (Year 11 or below) in the Strong and Exceeding proficiency levels.

Increasing the proportion of students from equity cohorts completing Year 12 up 7.5 percentage points is also a stated objective.

While there are some clear policy aspirations and goals for the future aimed at addressing educational inequality, what is needed is a re-framing of the problem away from schools and teaching practice towards the socioeconomic factors that impact learning at the school level, and the systemic structures that sustain the inequality that has been allowed to shape Australian schooling for too long.

Part of this involves broadening knowledge and understanding of educational disadvantage. Specifically, how different forms of disadvantage intersect to pervade educational experiences and, importantly, how they compound over time to shape student outcomes. It also involves prioritising support for disadvantaged and residualised schools, and putting government schools at the forefront of efforts to reduce educational inequality.

Funding models must address the 'double disadvantage' some students face

Students can arrive at school with additional needs stemming from socioeconomic, linguistic or cultural characteristics. The Australian needs-based school funding model accounts for this by allocating additional resources to schools enrolling students from six equity categories: low SES students, students with disabilities, small schools, remote schools, First Nations students and students with English as an Additional Language/Dialect (EAL/D).

Despite this and the increases to school-based funding over the past two decades, our findings show widening inequality, as do international datasets such as PISA.

New funding agreements are approaching, presenting new opportunities to address inequality through a redistribution of resources to support schools that need it the most. Proportional support at the school level is crucial, and our findings suggest that timing may also be important, since gaps increase steadily over the schooling journey.

Residualised schools often enrol high proportions of students from low SES backgrounds and struggle to lift learning outcomes due to challenging teaching and learning conditions.

A more explicit policy focus on funding those schools operating on the front line of the residualisation battle could help break cycles of disadvantage.

Governments must address the factors driving the growing socioeconomic divide in Australian schooling

Australia's school systems have some of the highest levels of socioeconomic segregation across OECD countries, and the problem has tended to intensify over time (O'Brien et al., 2023). An international comparative study of school socioeconomic segregation trends over the last 20 years (Molina & Sciffer, forthcoming) finds that Australia not only has one of the highest levels of segregation within OECD countries, but also the fastest growing rate of socioeconomic segregation in all 50 countries compared.

Fixing the drift in student enrolments and the process of school residualisation that comes with it - especially when children move from primary to secondary school - is key. Families switch schools for many reasons, but two issues matter most if we want a fairer and more integrated school system.

First, every school in Australia should give students the chance to reach their full potential, no matter the sector or the location. This goal is already explicitly stated in the *Alice Springs (Mparntwe) Education Declaration.*

Making every school, or even most schools, excellent is challenging. It means rethinking school funding and support so that those facing the biggest hurdles are able to lift student engagement, learning, and wellbeing.

However, the more we progress towards this goal, the more local schools – especially local government schools – can become recognised as a great choice for families to ensure their child's future opportunities.

Second, university admission has become an important force shaping Australian senior secondary schooling, contributing to worsening school residualisation and inequality through parental choice and enrolment drifts. Therefore, tertiary (and particularly higher) education admission processes need to be reconfigured to reduce the current strong impetus for families to choose schools based on tertiary education goals, starting with the role played by the Australian Tertiary Admission Rank (ATAR) system and the way it defines opportunities to access tertiary education.

Full-service school models should be encouraged to help disadvantaged students, schools, and communities

One targeted school-level policy intervention that has been effective at reducing inequality is the establishment of full-service schools (Molina et al., 2025). By providing wrap-around services in collaboration with the community in disadvantaged areas, full-service school models can effectively address the barriers disadvantaged students face outside the classroom. This support helps students to engage, learn, and participate in school, improving student outcomes and equity.

If implemented correctly, full-service schools are place-based initiatives that can help residualised schools address the 'double jeopardy' faced by disadvantaged students studying in disadvantaged schools, and reduce the growing gaps observed in all Australian jurisdictions.

Importantly, full-service models aim to address the particular needs of students and families outside school at every stage of learning so that students are supported to learn from the early years until they graduate from school.

Governments should do more to address emerging inequality in the early years

Our findings consistently show socioeconomic gaps in Year 3, but disparities in learning trajectories are also observed before school, highlighting the importance of the early years.

The early years lay the foundations upon which later academic, social and emotional skills are developed. Research highlights that the first three years are crucial (Cusick & Georgieff, 2016), as socioeconomic learning gaps can appear as early as preschool at age four, putting children on an unequal footing when they start primary school (Tham et al., 2025).

In recognising the crucial role that the early years play in child development, there have been major reforms implemented at the federal level, working towards a wider vision for a future universal early childhood education and care (ECEC) model.

This year, the *Three-Day Guarantee* has come into effect, enshrining the right to subsidised education and care for all children and families. Coinciding with this and expanding access is the abolishment of the Activity Test so that subsidised care is no longer dependent on the employment status of parents and carers for three days a week.

While lowering out of pocket costs for families helps to improve access to all, there is still a long way to go when it comes to addressing equity in the early years because, unlike the school system, there is currently no systematic response to direct additional resources to ECEC centres caring for children with greater needs, or centres operating in disadvantaged areas.

Community hub models that offer wraparound services for children and families and operate in communities with high needs. There is evidence to show that these can make a difference to the outcomes of children (Deloitte Access Economics, 2023). Research has pinpointed the communities that would benefit the most from community hubs or integrated service models (Social Ventures Australia, Deloitte Access Economics, & Mitchell Institute, 2025), but implementation has not yet taken place.

Starting primary school on the best possible footing would help to ensure that socioeconomic disadvantage does not continue to put disadvantaged children on a lower learning trajectory.

Conclusion

In Australia, instead of seeing progress towards our goals of equity and excellence through closing learning gaps, we are observing the opposite – persistent and widening inequality, where disadvantaged students have fallen further behind in recent years, compared to previous years.

Disadvantaged students were worse off in 2022 than they were in 2008 and the rate at which their outcomes dropped compared to the average Australian student in terms of EYL is steeper than ever before.

The remarkable consistency across 14 years of data suggests the issue is more related to structural factors and conditions and less related to short-term factors.

When there is persistent and widening inequality within school systems, it permeates classrooms and creates challenging teaching and learning conditions for those schools that educate disadvantaged students. This impedes students' ability to benefit from the schooling experience and can place them on a trajectory of lower outcomes throughout school and beyond.

Some initiatives currently in place are important to increase the quality of education in Australia, like building a stronger teaching force and having early phonics and numeracy checks, but they will have limited impact if the systemic forces that result in growing educational inequalities seen in Australia are not addressed.

Glossary of terms and abbreviations

Australian Early Development Census (AEDC): A nationwide data collection that measures the development of children in their first year of full-time school across five domains, including physical health, social competence and emotional maturity.

Australian Tertiary Admission Rank (ATAR): a percentile rank, ranging from 0 to 99.95, used to compare students' Year 12 results for admission into tertiary education

Equivalent Years of Learning (EYL): A metric used to express differences in student achievement as the equivalent amount of learning progress typically made over a period of time (for example, one school year).

National Assessment Program (NAP): A suite of national assessments in Australia that measure student performance across key areas, including literacy, numeracy, science, civics and citizenship, and ICT literacy.

National Assessment Program – Literacy and Numeracy (NAPLAN): An annual assessment within the National Assessment Program that tests students in Years 3, 5, 7 and 9 on reading, writing, conventions of language and numeracy.

Programme for International Reading Literacy Study (PIRLS): An international assessment conducted every 5 years that measures reading comprehension and literacy achievement of Year 4 students across participating countries.

Programme for International Student Assessment (PISA): An international assessment conducted every 3 years that evaluates the reading, mathematics and science literacy of 15-year-old students across participating countries.

Socioeconomic status (SES): A measure of an individual's or group's social and economic position relative to others, typically based on factors such as income, education and occupation.

Trends in International Mathematics and Science Study (TIMSS): An international assessment conducted every 4 years that measures mathematics and science achievement of Year 4 and Year 8 students across participating countries

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Appendix A

Outline of skills, knowledge and example questions in each NAPLAN domain

Domain	Skills and knowledge	Example questions
Reading	Tests students' ability to comprehend, understand, interpret and assess a range of narrative, persuasive and general texts. Students locate explicit information, make inferences, interpret vocabulary, and analyse different forms of language.	Year 5: Students are given a text about birds and asked, why did the birds leave the tree? From which they choose the best answer from four options.
Writing	Tests how well students compose narrative or persuasive texts. Students are assessed on the quality of their ideas, organisation, sentence structure, vocabulary, spelling, grammar and punctuation.	Year 3: Write a story that begins with: 'One morning, I woke up and something had changed…'
Conventions of language	Tests students' knowledge of spelling, grammar and punctuation in Standard Australian English.	Year 7: Which sentence is correct? (a) The dog wagged it's tail. (b) The dog wagged its tail. (c) The dog wagged its' tail.
Numeracy	Assesses students' knowledge and application of numbers, algebra, measurement, geometry, statistics and probability. Students may be asked to solve problems using whole numbers, fractions, decimals or algebraic expressions within real-world contexts.	Year 9: A train travels 120 km in 1.5 hours. What is its average speed in km/h?

Source: ACARA (2025b)

Appendix B

Examples of key skills in 'Strong' proficiency category of reading and numeracy

Year level	Reading	Numeracy
3	Students can interpret information from short texts with everyday vocabulary. They can identify cause-and-effect from familiar situations and locate facts from texts.	Students can recognise and compare numbers up to 100, can add, subtract, multiply and divide small numbers. They can continue number patterns, read clocks, recognise common shapes and interpret simple graphs.
5	Students can identify main ideas within longer texts and use basic text structures such as headings and diagrams. They can draw simple inferences and understand vocabulary that is less familiar or outside their everyday experience.	Students can compare and order numbers up to 10,000, work with simple fractions and decimals, and solve single-step problems. They can use metric units for length, mass, and capacity, identify symmetry, compare angles, and interpret common data displays.
7	Students can interpret information and infer meaning in a variety of texts. They can identify language choices that form an argument. They can understand how language and text structure supports meaning.	Students can use numbers, fractions, decimals and percentages. They can solve multi-step problems, convert numbers into different forms and use unknowns in equations. They can apply metric conversions, calculate durations, interpret complex graphs, and use probability.
9	Students can interpret and evaluate ideas in complex texts, integrating information across longer passages. They can analyse persuasive techniques, figurative language, and tone, and distinguish between fact, opinion, and inference in varied text types.	Students can solve multi-step problems involving fractions, decimals, percentages, rates, and ratios. They can use algebra to represent and solve problems, expand/factorise expressions, and graph linear relationships. They can calculate perimeter, area, volume, apply angle properties, interpret statistical data and calculate probabilities.

Source: ACARA (2026b)

Appendix C

Why use EYL?

Comparing groups of students using NAPLAN scale scores is problematic for a few reasons. NAPLAN scale scores are a numerical expression of student performance on a continuous national scale for each domain, from 0 to approximately 1000. Scale scores are intended to be comparable across year levels and test years, providing a consistent measure of student achievement over time in a certain domain. For example, a student who scored 570 in Year 7 reading in 2012 is assumed to be at the same skill level (high level of performance at that year level) as a student who scored 570 on the Year 9 reading test in 2014 (low level of performance at that year level).

Scale scores indicate whether a student meets the national minimum standard for their year level, but the number itself has no particular meaning. Hence, assessing learning gaps between groups of students using scale scores has no particular meaning either, and as such, is hard to interpret and understand.

Additionally, NAPLAN results consistently show that scale scores do not increase in a linear way as students move through year levels. Instead, the rate of learning growth changes between year levels and differs across NAPLAN domains – it resembles a curve more than a straight line. For example, the score gap between Year 3 and Year 5 is not equal to the gap between Year 5 and Year 7- and these differences also vary by calendar year and by NAPLAN domain. Across most years and domains, students tend to make faster progress in the earlier years (Years 3 and 5) and slower progress in the later years (Years 7 and 9).

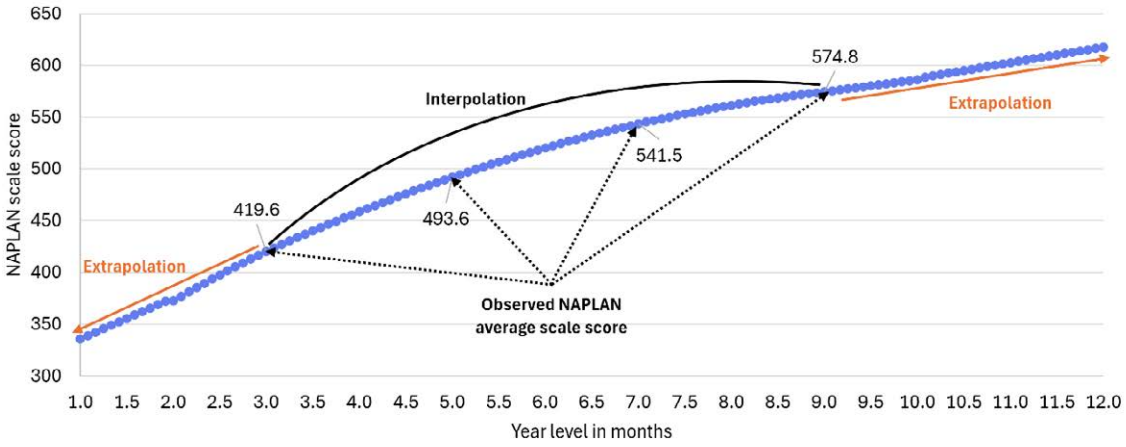
Put simply, a 40-point gap between two groups in Year 3 does not represent the same difference in learning as a 40-point gap in Year 9. And that same 40-point gap can mean something different again in another year or in another NAPLAN domain.

Because the learning curve is not linear, it becomes difficult to use NAPLAN scale scores to compare how different groups of students are progressing. This is especially true for students from different backgrounds, who may be at very different points on the achievement scale, even when they are the same age and in the same year level (Goss et al., 2018).

To address these issues, the second stage of the analysis converted average NAPLAN reading and numeracy scale scores into EYL (Goss et al., 2018; Goss et al., 2016). We developed EYL based on the methodology of 'Equivalent Year Levels' developed by Goss, Sonnemann, Chisholm, and Nelson (2016). EYL adjusts for the fact that NAPLAN growth is not linear and estimates the year level at which an average student would typically achieve a given NAPLAN score.

Because NAPLAN tests are only conducted in Years 3, 5, 7 and 9, we used interpolation to estimate scores between those year levels, and extrapolation to estimate achievement below Year 3 and above Year 9. Using a combination of linear, quadratic and cubic functions in an iterative process, we produced average EYL estimates for each month up to Year 12 for every calendar year in reading and numeracy (see Figure A for an example using average NAPLAN reading observed scores in 2012).

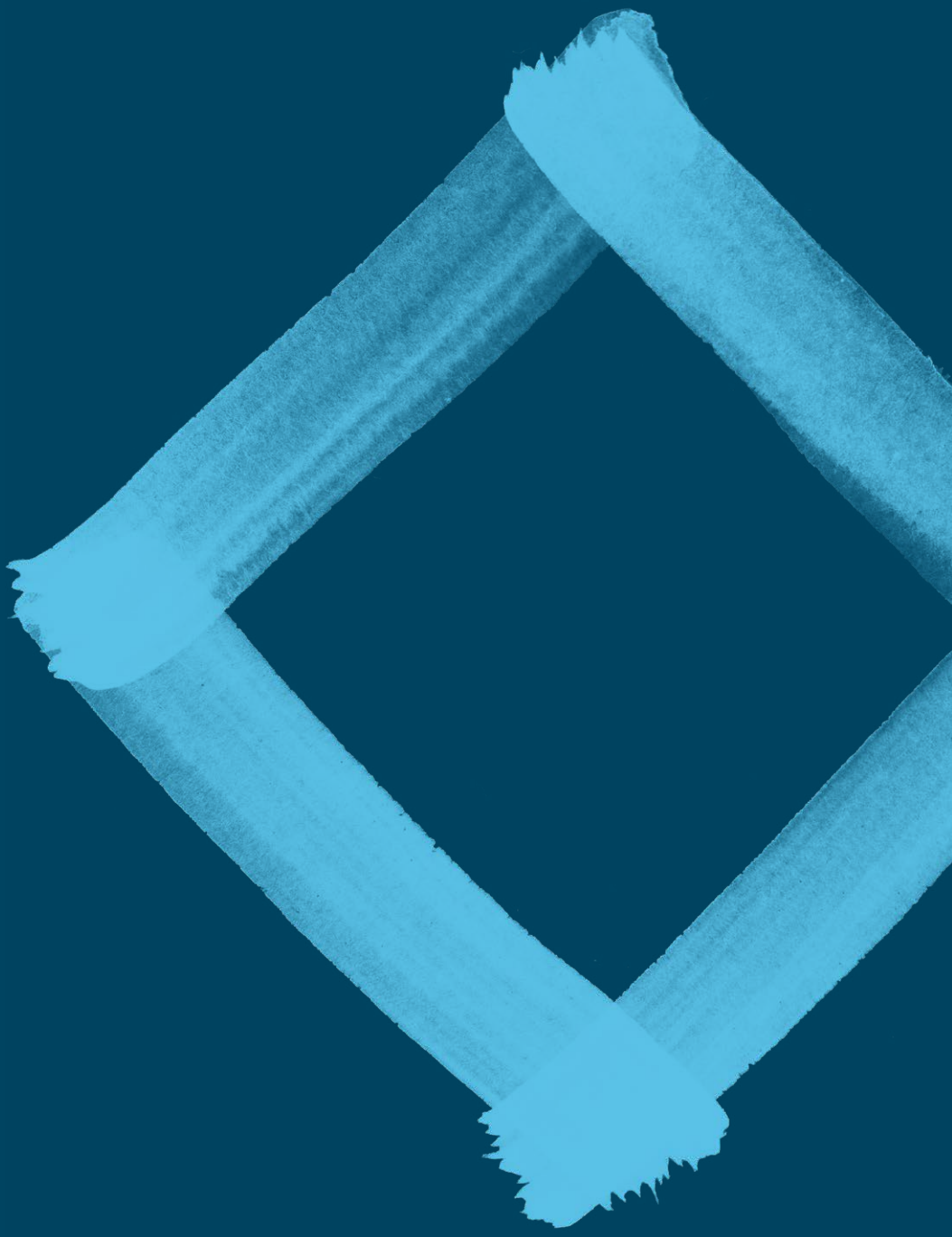
Figure A. Interpolation and extrapolation of NAPLAN scale scores based on average NAPLAN reading scale scores in 2012



Each group of students' observed average scale score was then matched to the closest EYL value, allowing us to express their achievement in terms of 'years of learning' relative to the average Australian student, rather than scale scores.

Robustness of EYL estimates outside Year levels 3–9

While the EYL metric provides a more accurate and intuitive measure of student progress, it is less reliable for the earliest and latest years of school, outside of the NAPLAN testing years where data is unavailable. Because NAPLAN assessments only occur in Years 3, 5, 7, and 9, EYL values for students performing below a Year 3 level or above a Year 9 level must be calculated through statistical extrapolation. Specifically, EYL between Year 0 and 1 month and Year 2 and 11 months, and between Year 9 and 1 month and Year 12 rely on projected growth curves rather than observed data points. This makes these estimates less robust than those within the Year 3–9 range, as they assume that the rate of learning remains constant outside of the observed NAPLAN years.



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