Australian Government
Productivity Commission

December 2022

Review of the National School Reform Agreement

Study report

The Productivity Commission acknowledges the Traditional Owners of Country throughout Australia and their continuing connection to land, waters and community. We pay our respects to their Cultures, Country and Elders past and present.

The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long-term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).

ISBN 978-1-74037-756-0 (online)
ISBN 978-1-74037-755-3 (print)

An appropriate reference for this publication is:
Productivity Commission 2022, *Review of the National School Reform Agreement*, Study Report, Canberra.

Publication enquiries:
Media, Publications and Web | phone 03 9653 2244 | email publications@pc.gov.au

Foreword

The Australian, State and Territory Governments share responsibility for school education and have a long history of working together to build the national institutions, systems and tools that support better student outcomes.

This review considered the most recent focus for collaborative reform efforts, the National School Reform Agreement. The Commission was asked to assess the effectiveness and appropriateness of the National Policy Initiatives included in the agreement, and the appropriateness of the national Measurement Framework for Schooling in Australia in measuring progress towards outcomes. Importantly, the Commission was also asked to make recommendations to inform the design of the next school reform agreement.

This report presents the Commission's analysis of progress on national reform efforts, and assessment of performance reporting and accountability arrangements. It also identifies potential reform options for a successor agreement. In doing so, the Commission focussed on factors that influence student outcomes that are amenable to intergovernmental collaboration.

In undertaking this review, the Commission has benefited from engagement with students, teachers, school leaders, unions, representatives from the Catholic and Independent school sectors, academics and officials from the Australian, State and Territory Governments. In addition, the Commission consulted with key education entities such as the Australian Curriculum, Assessment and Reporting Authority, the Australian Institute for Teaching and School Leadership, the Australian Education Research Organisation and Education Services Australia. The Commission would particularly like to thank those young people who took time out of their busy learning schedules to share their experiences of school, including over the past few challenging years.

The Commissioners would like to express their appreciation to the staff who worked on the review.

Michael Brennan
Presiding Commissioner

Malcolm Roberts
Commissioner

Natalie Siegel-Brown
Commissioner

December 2022

Terms of reference

I, Josh Frydenberg, Treasurer, pursuant to Parts 2 and 4 of the *Productivity Commission Act 1998*, hereby request that the Productivity Commission undertake a review of the National School Reform Agreement.

Background

The National School Reform Agreement (NSRA) is a joint agreement between the Commonwealth, states and territories to lift student outcomes across Australian schools. The NSRA outlines a set of strategic reforms in areas where national collaboration will have the greatest impact, builds on current national reform efforts, complements state and territory leadership and supports local implementation. Ongoing implementation of these shared commitments remains a condition of funding under the *Australian Education Act 2013* (Cth) (Act).

The objective of the NSRA is that Australian schooling provides a high quality and equitable education for all students. The NSRA sets out long-term national outcomes for school education in Australia and national targets and sub-outcomes to track progress. To achieve these outcomes, the NSRA sets out three reform directions which are supported by eight national policy initiatives as well as bilateral agreements specific to each state and territory.

The Measurement Framework for Schooling in Australia, including the schedule of key performance measures, provides the basis for Australian education ministers to report to the community on the performance of schooling, in accordance with the Education Goals for Young Australians as expressed in the *Alice Springs (Mparntwe) Education Declaration*.

Scope of the review

In undertaking the review, the Commission should assess, as required under section 29 of the National School Reform Agreement:

1. the appropriateness of the National Measurement Framework for Schooling in Australia in measuring progress towards achieving the outcomes of the NSRA.
2. the effectiveness and appropriateness of the National Policy Initiatives outlined in Part 3 of the NSRA, recognising that national reform takes time to implement and mature, and for the effects of nationally coordinated reform efforts to materialise.

In the context of the National Measurement Framework for Schooling in Australia, consideration should be given to current and planned measures and data projects, and their application, utility and relevance to NSRA outcomes.

Section 30 of the NSRA expressly provides that the review will not include any assessment of compliance with section 22A of the Act.

Process

The Productivity Commission should consult broadly and extensively, including with all parties to the NSRA as well as the Catholic and independent school sectors, and key education entities such as the Australian

Curriculum, Assessment and Reporting Authority, the Australian Institute for Teaching and School Leadership, the Australian Education Research Organisation and Education Services Australia.

As managers of the largest school systems, states and territories will have broad and deep insights into the impacts of the National Policy Initiatives and National Measurement Framework on students, schools and systems. In recognition of the role of states and territories, appropriate weight should be given to their feedback.

The Commission should provide a final report no later than 31 December 2022 to allow time for the review's findings to inform the development of the next national agreement. The Commission will present the findings of the review to Education Ministers prior to publication. Within the scope set out above and at Section 29 of the NSRA, the final report should include recommendations to inform the design of the next intergovernmental school reform agreement and improvements to the National Measurement Framework for Schooling in Australia.

The Hon Josh Frydenberg MP
Treasurer

[Received 7 April 2022]

Disclosure of interests

The *Productivity Commission Act 1998* specifies that where Commissioners have or acquire interests, pecuniary or otherwise, that could conflict with the proper performance of their functions they must disclose those interests. Commissioner Siegel-Brown advised that she is a board director of Aged and Disability Advocacy Australia and a member of Queensland's Path to Treaty Independent Interim Body.

Contents

Overview

Key points

All Australian governments have endorsed the national goal of a high quality, high equity education system and have a long history of collaborating on reforms to pursue this goal.

- The most recent vehicle for national collaboration — the National School Reform Agreement (NSRA) — outlines eight National Policy Initiatives (NPIs) to lift outcomes in student achievement, attainment and engagement.

The NSRA's initiatives have done little, so far, to improve student outcomes.

- Some NPIs are complete but will take time to produce results, while others have not yet led to actual reforms.
- Two important NPIs — the Unique Student Identifier and Online Formative Assessment Initiative — have been delayed. In December 2022, Education Ministers announced progress in addressing sticking points.

Even so, the NSRA is a sound platform for intergovernmental collaboration.

- The objective, outcomes and many of the NSRA's sub-outcomes are still relevant and should continue to set the direction of reforms in the next school reform agreement. A new outcome on student wellbeing should be added, as wellbeing is both a desired outcome of schooling, and a means of improving learning outcomes.

The next school reform agreement should include firm targets for improving academic achievement for all students, including students from priority equity cohorts, in each jurisdiction.

- New state-level targets would provide jurisdictions with greater discretion about how they improve achievement (compared to NPIs), while strengthening accountability for results (compared to national performance indicators that are directional and open ended).
- The basis of each new target should be common to all jurisdictions; however, there should be scope for the Commonwealth and each jurisdiction to negotiate the level of the target.

All jurisdictions face common reform challenges — addressing these should be the focus of the next school reform agreement. Governments should advance reforms to:

- *support quality teaching and effective school leadership*: priorities could include reducing low-value tasks and out-of-field teaching, disseminating best practice, and producing evidence-backed resources that teachers and leaders trust and use — the last of these could be the basis of new NPIs.
- *support all students to achieve basic levels of literacy and numeracy:* tens of thousands of students do not achieve basic levels of literacy and numeracy each year. The next school reform agreement should include specific targets and measures to support these students.
- *reduce differences in achievement across students*: many students identified as priority equity cohorts in the NSRA, along with other students (such as those in out-of-home care), face significant challenges. Governments should consider augmenting the priority equity cohorts, and adopt new approaches, developed and implemented in consultation with the relevant parties, to lift outcomes for all students.
- *promote wellbeing*: many children and young people struggle with poor wellbeing because of experiences in and outside their schools. Teachers need more support to help students to manage these issues and achieve their potential.

Greater flexibility in progressing reforms should be accompanied by increased accountability for and transparency of results.

- Along with better use of targets, bilateral agreements will need to be more of a focal point for jurisdictions to advance reforms, and annual performance reporting will need to be improved.

What is this review about?

Four years ago, on the back of a $319 billion funding deal,[1] and amid concerns that Australia's performance in international testing had fallen, the Commonwealth, States and Territories struck an agreement on national reforms to lift education outcomes — the National School Reform Agreement (NSRA).

The objective of the NSRA is for Australian schools to provide a high quality and equitable education for all students. This continues a longstanding commitment by Education Ministers to equity and excellence in schooling. While equity and quality are not defined in the NSRA, these concepts are embodied in the NSRA's outcomes, targets and national performance measures (sub-outcomes).

To lift outcomes in student achievement, attainment and engagement, the NSRA outlines three reform directions, supported by eight National Policy Initiatives (NPIs) and bilateral agreements between the Commonwealth and each State and Territory government (figure 1). Implementing the reform initiatives is a condition of Commonwealth funding.

The Australian Government has asked the Commission to:

- assess the effectiveness and appropriateness of the NPIs under the NSRA, recognising that reforms take time to implement and mature
- assess the appropriateness of the Measurement Framework for Schooling in measuring progress towards achieving the outcomes of the NSRA
- make recommendations to inform the design of the next school reform agreement and to improve the National Measurement Framework.[2]

Funding is outside the scope of the Commission's Review.

In making recommendations to inform the next school reform agreement, the Commission recognises:

- the COVID-19 pandemic and recent natural disasters have disrupted education systems but also revealed their resilience and opportunities for innovation
- there are factors 'outside the school gates', that can significantly affect students' performance and wellbeing. Schools usually cannot change these factors, but they can make a positive difference to the impact of these factors on student learning, and offer students the best chances of success
- all governments have committed to the National Agreement on Closing the Gap and Australia's Disability Strategy 2021–2031, which embed obligations for education departments and school systems
- a new agreement will form part of a broader policy landscape. All states and territories have their own reform agendas and there are other intergovernmental initiatives in education underway, such as the National Teacher Workforce Action Plan.

[1] As part of its Quality Schools package, the Australian Government committed to increasing funding for schools from $18.7 billion in 2018 to $33 billion in 2029, bringing funding to an estimated $318.9 billion over 2018 to 2029.

[2] The Measurement Framework for Schooling underpins the National Report on Schooling in Australia.

Figure 1 – Snapshot of the National School Reform Agreement (2019–2023)[a]

Aims for Australian schooling to provide a high quality and equitable education for all students

Sets out 3 outcomes …

- Achievement
- Attainment
- Engagement

… to be assessed against 7 performance measures (sub-outcomes) …

- 5 Achievement
- 1 Attainment
- 1 Engagement

… and 3 existing targets

- Lift educational attainment by 2031 (two targets, one applies for Aboriginal and Torres Strait Islander students)

- Lift international standing by 2025

Specifies three reform directions …

Supporting students, student learning and student achievement	Supporting teaching, school leadership and school improvement	Enhancing the national evidence base

… to be progressed through national and state-specific initiatives …

Parties agreed to 8 National Policy Initiatives

- Progressed by all jurisdictions
- Concentrated on 'key enablers'
- Building on existing national and state-based reforms

And state-specific bilateral agreements

- Outlining local initiatives
- Including reforms to lift outcomes for priority equity cohorts

… with reporting and public transparency to give the community confidence

Parties agreed to report on implementation …

- Annual public reports on national initiatives
- Annual reports on state-specific initiatives

… and progress towards meeting targets …

- Reported under COAG arrangements (National Measurement Framework)

… and an independent review

- To assess effectiveness of National Policy Initiatives and appropriateness of the National Measurement Framework

a. On 11 December 2020, Education Ministers agreed to amend the Council of Australian Governments (COAG) targets on attainment to reflect the adoption of the updated national target for school education endorsed by State and Territory First Ministers through the National Agreement on Closing the Gap. On 29 May 2020, National Cabinet agreed to the formation of the National Federation Reform Council and the abolition of COAG. The targets are still in effect.

How have national reforms fared?

Progress on initiatives has been slow and many focus on enablers rather than achieving outcomes

Parties intended for the NPIs to provide teachers, school leaders, and policy makers with resources to make informed decisions and improve practice. But progress on some of the initiatives that would make the most difference has been slower than expected.

Two NPIs — the Online Formative Assessment Initiative (OFAI) and the Unique Student Identifier (USI) — have the potential to provide much needed tools to better understand student progress.

- The USI could unlock insights on students' progress, the factors that influence the paths they take, and the outcomes they achieve. As the New South Wales Department of Education (sub. 12, p. 13) observed: '… the USI has the potential to provide a new, unique and rich data source to inform policy in a way which was never possible before.' Already more than 13 years in the making, differences about data use have hindered progress.[3]
- The OFAI could enable teachers to better assess a student's knowledge, skills and understanding, identify next steps in learning, and track progress over time. Given the significant variation in student achievement in any given year level — spanning, on average, as much as 4 years of learning in numeracy within individual schools and about 6 years across all schools — the OFAI would help teachers tailor their teaching to a student's level of knowledge and understanding. But as progress has flagged, some jurisdictions have pressed ahead with local (albeit typically less comprehensive) solutions.

Two NPIs — the establishment of the Australian Education Research Organisation (AERO) and a requirement for Initial Teacher Education (ITE) providers to include teacher performance assessments (TPAs) — are complete but will take time to yield results.

- AERO was created to help build the national education evidence base, and it was identified by many participants as one of the NSRA's key achievements. AERO's success will depend on its capacity to undertake or commission relevant research and see its advice shape policy and practice. But it will take time for AERO to raise awareness of, and engender confidence in its work.
- As of September 2021, all accredited ITE programs require their students to undergo a final year TPA. Given that ITE providers have only just implemented TPAs, and TPAs focus on new entrants to the profession, it will be some time before this initiative influences teacher workforce quality.

Two NPIs, while complete, have not yet led to actual reforms. Governments are yet to indicate what, if any, reforms will follow the reviews of senior secondary pathways and teacher workforce needs. The latter was intended to provide the resources required by school systems and ITE providers to identify and plan for future workforce needs but did not fulfil this purpose.

The final NPI on national data quality comprised eight projects to improve the measurement of student outcomes, along with a project to develop NAPLAN proficiency standards — these are either complete or well underway.

[3] Governments committed to introducing a national USI as far back as 2009 (MCEETYA 2009, p. 19). In contrast, a USI has been in place in VET since 2015 and will begin to operate in the Higher Education sector in 2023.

Figure 2 – Progress implementing National Policy Initiatives

Expected outputs and implementation status as reported by Education Council, and issues identified by the Commission

NPI	Expected outputs	Complete?	Issues
Online Formative Assessment Initiative	New learning progressions and formative assessment capability aligned to the Australian Curriculum and nationally available online on-demand formative assessment resources, from 2022.	✗	Progress has been slow. Some jurisdictions have pressed ahead with their own tools, which will now be the basis of a less ambitious national bank of assessments.
Senior secondary pathways review	Education Council to have implemented, or be progressing, agreed recommendations by the end of the Agreement.	✓	The senior secondary pathways review is complete, but it has not given rise to substantial national reforms.
Teacher workforce review	Education Council to have implemented a national teacher workforce strategy to respond to workforce needs.	✓	It is not clear how jurisdictions will employ the outputs of the review. The new National Teacher Workforce Action Plan may help respond to workforce needs.
Initial Teacher Education (ITE) accreditation	National quality assurance activities to have commenced from January 2019, with states and territories ensuring that accredited ITE programs require final-year performance assessment before graduation.	✓	Teaching Performance Assessments have only recently been implemented and are only one aspect of ITE. Governments should monitor their quality.
Unique Student Identifier (USI)	Schools and systems to progressively work to create a national USI for each student from 2021.	✗	Progress towards the unique student identifier has been slow. Ministers have agreed on a model to roll out a USI nationally and a baseline use.
Evidence institute	The national evidence institute to commence operations from 2020, and develop and implement a national research and evidence plan.	✓	AERO has been established as planned. It will take time for AERO to raise awareness of its work and see its advice translate into classroom practice.
Improving national data quality	Education Council to agree equity and proficiency standards and consider opportunities to enhance the national evidence base through a number of data projects over the life of the Agreement.	P	Proficiency standards have been developed. Some projects (such as measures of student learning gain) are complete, while others are well underway.

P = Partly

Where to with the NPIs?

On 15 December 2022, Education Ministers announced that they had made progress on the two substantive NPIs that remain incomplete — the USI and OFAI. They agreed on a model to roll out the USI nationally to all school students. Ministers also endorsed a pathway forward on the OFAI, which will leverage and align

existing resources from New South Wales, Victoria, and Queensland to establish a national bank of assessments that jurisdictions can use on an opt-in basis.

These announcements are an important step forward. But further action would help realise the potential benefits of these two tools. The agreed models for progressing the USI and OFAI do not appear to reflect the original ambitions for, and anticipated benefits of, these NPIs. For example, many of the potential benefits ascribed to the USI (such as facilitating research to inform policy development) rely on the USI being integrated with other data sets. It is not clear the baseline use proposed for the USI (focused on information exchange across jurisdictions) will provide these benefits. Similarly, it was envisaged that the OFAI would provide time-poor teachers with a tool 'to efficiently and effectively identify where students are in their learning, make informed decisions about what to do next, and monitor student learning to continually drive progress over time'[4] — a pooled assessment bank appears to fall short of this ambition.

Governments should set firm deadlines to complete these important projects. Once established, governments should consider opportunities to realise the full potential of the USI for informing education policy by linking the USI with other data sets and permitting additional uses. A national bank of high quality curriculum resources (discussed below) would provide some of the other functions originally envisaged as part of the OFAI.

Education Ministers also agreed the National Teacher Workforce Action Plan, which aims to address teacher workforce shortages. The Action Plan effectively supersedes the review of national teacher workforce needs NPI, with one of its five key priority areas being '[b]etter understanding future teacher workforce needs [to] improve the information available for teacher workforce planning'.[5]

Initiatives are unlikely to have affected student outcomes so far

The measure of success of any reform is its effect on outcomes. Reflecting their early stages of development, the NPIs are unlikely to have yet had an impact on agreed NSRA outcomes. Educational attainment rates (both for Australian students overall and for Aboriginal and Torres Strait Islander students) are below the 2031 agreed targets, average outcomes in national literacy and numeracy testing have improved little, and differences in outcomes across students remain (figure 3).

[4] EMM (2022a, p. 1)

[5] EMM (2022c, p. 27)

Figure 3 – Performance against targets and sub-outcomes in the National School Reform Agreement, 2018-2022[a,b]

Targets in the National School Reform Agreement are yet to be achieved

Attainment below 2031 targets, including for Aboriginal and Torres Strait Islander students

There is no new data to assess whether Australia is a high quality and high equity schooling system by international standards

Few of the National School Reform Agreement sub-outcomes have been achieved

Achievement outcomes between 2018 and 2022:

National reading and numeracy testing of years 3,5,7,9 generally worsened (sub-outcomes 1 and 3)

	Numeracy results declined for most cohorts								***Reading results were mixed***							
	Lower % in bottom levels of performance				Increase % in top levels of performance				Lower % in bottom levels of performance				Increase % in top levels of performance			
	Y3	Y5	Y7	Y9	Y3	Y5	Y7	Y9	Y3	Y5	Y7	Y9	Y3	Y5	Y7	Y9
All students	↑	↑	↑	↑	↓	↓	↑	↓	↑	↓	↓	↑	↑	↑	↑	↑
Aboriginal and Torres Strait Islander students	↑	↑	↑	↑	↓	↓	↑	↓	↑	↓	↓	↑	↑	↑	↑	↑
Students in remote locations	↑	↑	↑	↑	↓	↓	↓	↓	↑	↓	↓	↑	↑	↓	↓	↓

Attainment increased marginally

% young people completing Year 12 or equivalent or gaining AQF Certificate III+ (sub-outcomes 5, 7) increased slightly between 2018 and 2021 (for all students and students from regional or remote locations)

Engagement deteriorated

% students in Years 1-10 attending school 90% or more of the time (sub-outcome 6) decreased (for all students, Aboriginal and Torres Strait Islander students, and students from regional or remote locations)

However, there are data gaps in a range of areas…

No outcomes data for students with disability

No definition of 'educational disadvantage'

Census data on attainment for Aboriginal and Torres Strait Islander students are only available infrequently

No new data since 2018 to assess achievement sub outcomes relating to international performance (sub outcomes 4 and 5) or the target on international standing

Any future shift in reporting from National Minimum Standards to Proficiency Standards may cause a break in the time series

a. National Assessment Program – Literacy and Numeracy (NAPLAN) tests for literacy skills other than reading. **b**. The former National Education Reform Agreement used Australia's achievement in Programme for International Student Assessment relative to the OECD average as an indicator for the target 'Australia considered to be a high quality and high equity schooling system by international standards by 2025'.

What are the lessons from the NSRA for the next school reform agreement?

The Australian Government asked the Commission to make recommendations to inform the design of the next school reform agreement. The Commission has identified three broad areas that could be improved in a future agreement to help lift student outcomes.

The Agreement's outcomes and targets were incomplete

The existing outcomes in the NSRA (achievement, engagement and attainment) do not capture student wellbeing. Since the NSRA was signed, all governments have acknowledged, through the Mparntwe Education Declaration, the importance of student wellbeing, which is a desired outcome in itself, as well as a means of supporting student learning.

The NSRA's targets are incomplete and too vague to drive reforms. The NSRA has only one target relating to academic achievement, namely that 'Australia [is] considered to be a high quality and high equity schooling system by international standards by 2025'[6]. This target is carried over from a previous agreement, which assessed schooling quality and equity based on Australia's performance relative to the OECD average in the Programme for International Student Assessment (PISA) of 15-year-olds. As such, it omits performance in the critical early years of schooling, does not capture absolute improvements over time, and is not assessable for the period the NSRA has operated (the most recent PISA data relates to 2018).

Reform activity has at times lacked focus and flexibility

The nexus between the NSRA's targets, outcomes and sub-outcomes and the NPIs is often tenuous, and national and bilateral reform initiatives do not work together to systematically address key priorities.

The NSRA was heavily focused on NPIs, usually pursued through a single, centralised approach. While this can be an effective, and in some cases necessary, way to advance reform, it requires a sustained commitment by all parties and does not allow them to adapt initiatives to their needs. When agreeing a single national approach takes time, some (particularly larger) jurisdictions with more capacity can forge ahead with their own reforms. Arguably some of the NPIs that adopted this approach could have left matters to state reforms in bilateral agreements (such as student pathways) or could have been better executed by embedding greater flexibility in the design and implementation process (for example, the OFAI).

The bilateral agreement initiatives, which set out jurisdiction-specific reforms, are patchy, lack additionality (they often catalogue existing measures), and give little sense of what they are trying to achieve. Some persistent, common issues faced by all jurisdictions, such as a lack of equity in outcomes across students, were largely left unaddressed.

Reporting and transparency arrangements have not had bite

Public reporting and transparency arrangements (national performance reporting on outcomes and progress updates on national and state reforms) are intended to give 'the community confidence that outcomes are being achieved and reforms to improve the quality and equity of Australia's schooling systems are being implemented by all Parties'[7]. However, the NSRA's arrangements have failed to impose strong discipline to progress agreed reforms, and have not operated effectively as a cohesive whole.

Although performance reporting against the NSRA sub-outcomes provides a health check of the school system, progress in sub-outcomes for priority equity cohorts is mostly reported for Australia, rather than at the jurisdictional level. As such, it is not clear whether individual jurisdictions' reform efforts have been effective in some areas. Along with gaps in reporting (figure 3), this limits transparency and accountability. Further, results are published in different reports, and there is no stand-alone source where the public can gain a 'clear read' of progress against the NSRA outcomes.

[6] NSRA, s. 36.

[7] NSRA, s. 51.

What issues should be the focus of the next school reform agreement?

Parties should focus the next school reform agreement on directly lifting student outcomes …

There are no hard-and-fast rules for determining which priorities should be elevated to the national arena. Inevitably, the priorities on which jurisdictions seek to coordinate action will be influenced to some extent by alignment of views and community expectations.

The Commission considers the next school reform agreement should concentrate on directly lifting student outcomes: ensuring effective teaching and school leadership, reducing differences in outcomes across students, and supporting student wellbeing. These three issues lend themselves to being areas of focus in the next school reform agreement for two reasons.

- *There is broad consensus that these are significant issues that can and must be addressed*: These are common and persistent issues that governments will need to address to ensure that Australian schooling provides high quality and equitable schooling to all students. Problems related to teacher shortages, inequalities in schooling outcomes, and poor student wellbeing predate the NSRA. However, reforms under the agreement have done little to alter the trajectory of outcomes or assuage concerns expressed by students and their families, the teaching profession, and education experts. Community interest in these problems has intensified in recent years amid concerns about teacher burnout and student wellbeing during the COVID-19 pandemic.
- *All governments have agreed that addressing these issues is a priority and recognised the merits of national collaboration*: Since signing the NSRA, all Australian governments have reaffirmed this through national policies to support teachers and improve wellbeing in schooling, and through statements such as the Mparntwe Education Declaration. In addition, all governments have now formalised commitments to reducing inequities and to inclusive education through the National Agreement on Closing the Gap, and Australia's Disability Strategy 2021–2031.

To give effect to these priorities, parties will need to significantly revise or augment aspects of the NSRA's design. This includes strengthening the accountability mechanisms surrounding state-specific reforms.

… and adapt accountability mechanisms to reflect a greater role for state-specific actions

Addressing the future reform priorities outlined above will require greater flexibility than the 'one in, all in' approach to NPIs under the NSRA. In many cases, jurisdictional differences will demand more tailored responses, and bilateral agreement initiatives will need to do more of the heavy lifting than they have in the past. However, parties will need to address existing weaknesses with the accountability mechanisms in the NSRA, including those governing bilateral actions.

Parties should clarify ambitions through firm targets for academic achievement …

A successor agreement should include new targets for academic achievement for all students, and students from priority equity cohorts, with clear benchmarks and timelines.[8] The new targets would help drive reform

[8] The targets would augment existing commitments to the National Agreement on Closing the Gap target on lifting education attainment.

by drawing attention to key performance measures for which governments are willing to be held to account, and by making success or failure against those measures more transparent and verifiable (compared to existing national performance reporting). Experience, in Australia and overseas, highlights the value of well-designed targets in a range of policy contexts.

The new targets would be in line with community expectations around transparency and improved performance. The community should expect to see an improvement in student outcomes over the course of the next five years — funding will remain at all-time highs, current initiatives will have had time to mature, and a new generation of reforms will be underway.

To maximise their impact, targets should be few in number. The NSRA's sub-outcomes (which reflect agreed goals) provide a starting point — an independent body (such as the Australian Curriculum, Assessment and Reporting Authority (ACARA)) could provide advice on how to convert these into a tight set of meaningful targets.

The basis for measuring the targets should be common to all jurisdictions (and set out in the main agreement). However, jurisdictions should 'own' their target and each state and territory should negotiate a realistic but ambitious target with the Commonwealth, reflecting their circumstances.

… and specify basic content, process, and reporting requirements for bilateral agreements

Rather than being a stocktake of existing measures, bilateral agreements will need to be more of a focal point for jurisdictions to advance reform initiatives.

In addition to (and to support) the new targets, parties should ensure jurisdictions develop, document and report on bilateral reform actions in a more systematic and meaningful way than under the NSRA. Greater flexibility in implementation will need to be balanced by enhanced accountability and public transparency mechanisms, such as basic content, process and reporting requirements for reforms in bilateral agreements.

What might this mean in practice?

Jurisdictions should support quality teaching and effective school leadership

Supporting teaching, along with school leadership and school improvement, is identified as one of the three national reform directions under the NSRA. The next school reform agreement should continue this focus.

Effective teaching is the single most influential 'in-school' factor for student outcomes. Effectiveness is determined by both teacher quality (the attributes of an individual teacher) and quality teaching (effective teaching practices).

Fostering a high-quality teaching workforce requires a portfolio of actions that allow teachers to refocus their efforts — freeing up teachers from low-value tasks, using teaching assistants more effectively, and making best practice pedagogy and materials more easily accessible. Some of these issues are being concurrently advanced by Education Ministers as part of the National Teacher Workforce Action Plan.

Freeing up teachers to focus on teaching

Teachers' workload is high and increasing. Surveys suggest that fulltime teachers work between 44 to 57 hours a week during term time. Reported working hours are similar for primary, secondary and early career teachers, and even higher for Aboriginal and Torres Strait Islander teachers. International measures

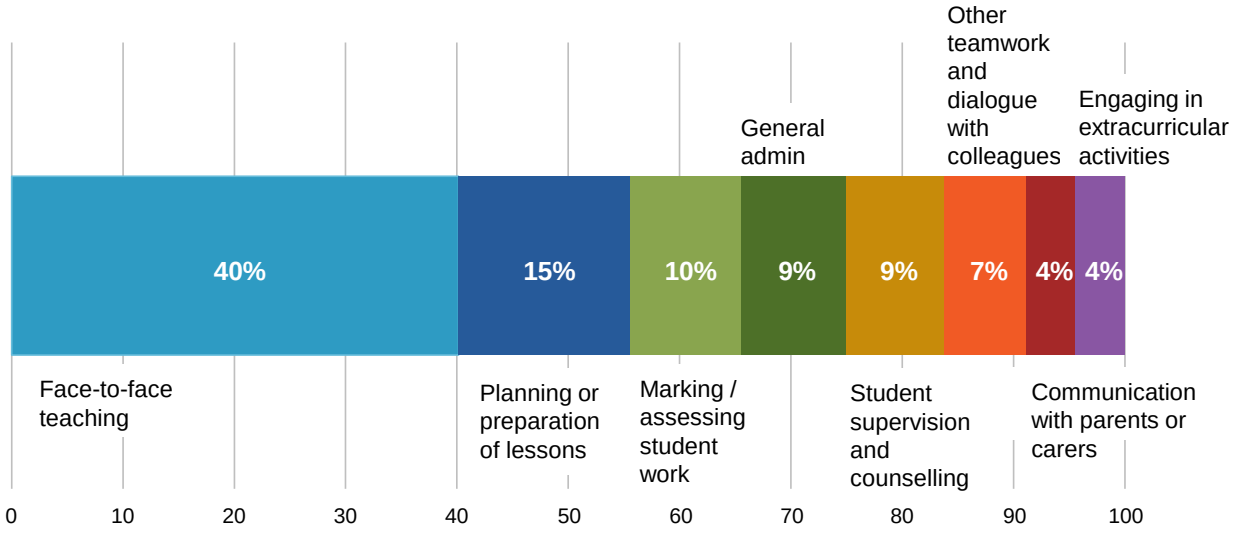
suggest that the working hours of Australian secondary teachers have increased from about 43 hours in 2013 to 45 hours in 2018 (figure 4).

Despite working more hours than their international counterparts, Australian teachers spend less time teaching, both in terms of absolute hours and as a proportion of their working week. Teachers spend more time on general administration, such as communication, paperwork and other clerical duties. At just over 5 hours a week, this is the fifth highest number of hours in the OECD.

Principals spend an even greater share of their time (more than one-third of their working hours) on administration, along with leadership tasks and meetings, while on average spending just 5 per cent on professional learning for school staff.

Figure 4 – Teachers typically spend most of their time teaching, lesson planning, marking and on general administration[a]

Average share of weekly hours spent on teaching tasks by full-time teachers in 2018

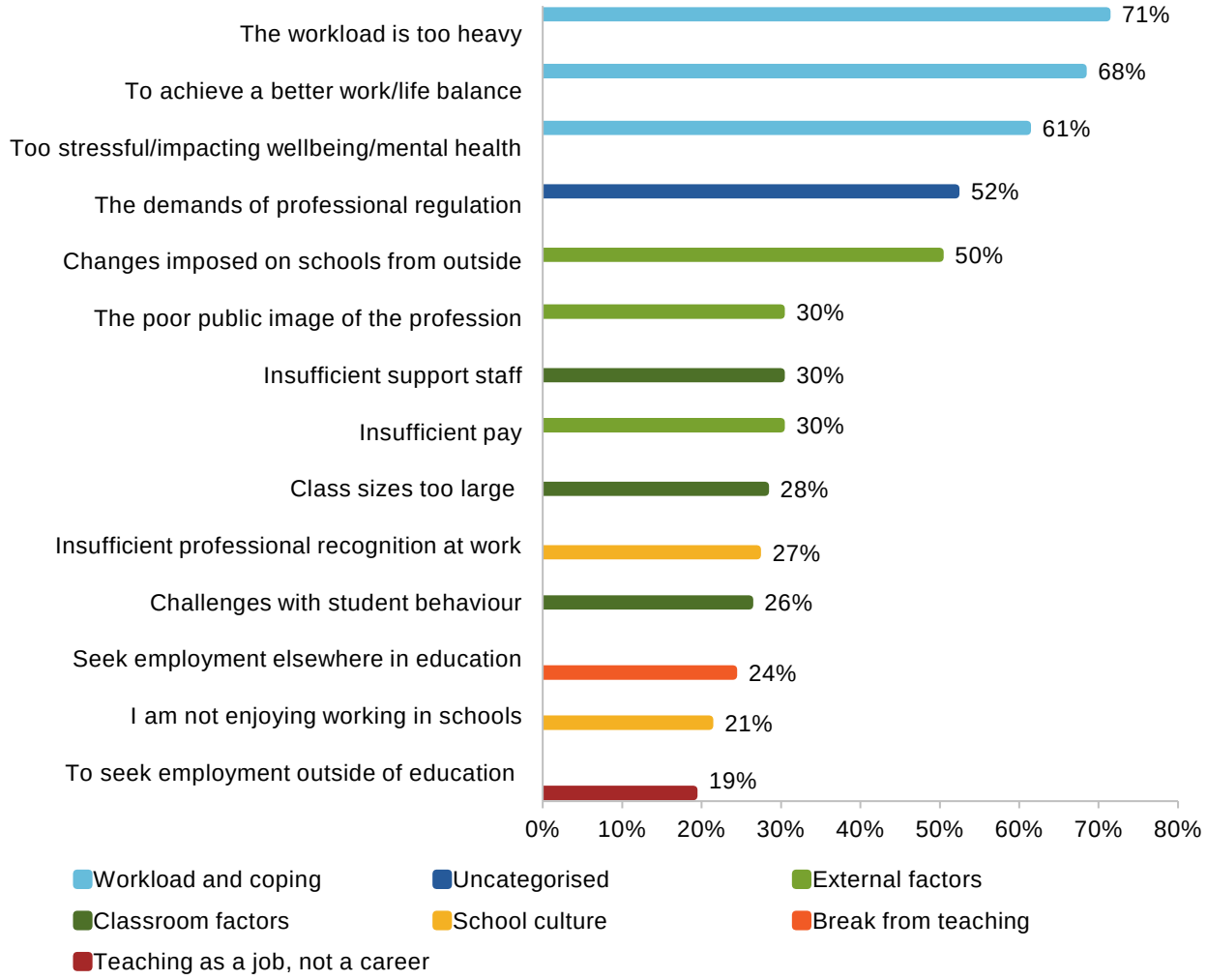


a. Based on a survey of teachers from New South Wales, Northern Territory and South Australia in 2018.

Source: Commission analysis based on AITSL (2021a, pp. 67–70).

Reducing low-value tasks would not only improve teacher effectiveness — by increasing the time teachers have available to prepare for lessons and undertake professional development — it could help retain more teachers. High workload is the main factor behind teachers' intention to leave the profession (figure 5). More manageable workloads might also encourage some former teachers to return to the profession — survey estimates suggest that just over one-in-ten registered teachers are not working in education. Teacher registration data in some jurisdictions point to a much larger number.

Figure 5 – Reasons for considering leaving the teaching profession[a]



a. 3216 survey respondents from New South Wales, South Australia and the Northern Territory.

Source: AITSL (2021c, p. 108).

Some jurisdictions and sectors in Australia have processes underway to reduce the administrative burden on teachers, and Education Ministers recently agreed to 'continue to implement existing actions designed to address teacher workload issues' under the National Teacher Workforce Action Plan (2022, p. 19). The Commonwealth has also offered interested states and territories access to a $25 million Workload Reduction Fund to pilot initiatives to maximise the value of teachers' time.

But governments must make more consistent and concerted efforts. The Action Plan does not provide a systematic way to identify and reduce burdens on teacher workload across all jurisdictions and sectors. Nor does the Action Plan address principal workload — about two-thirds of Australian principals cite heavy workload (along with 'level of responsibility' in their job) as a factor limiting their effectiveness, with recent surveys suggesting that they work just over 61 hours per week. Freeing up teachers and school leaders so that they can focus on the things that matter should be a priority for the next school reform agreement. Jurisdictions should set out in their bilateral agreements measures they will put in place to free up teachers' and leaders' time and set clear benchmarks to gauge their success.

Supporting teaching assistants to support teachers

At the same time that teacher (and principal) workload has increased, the number of teaching assistants and other support staff has grown to just over 129 000 in 2021. Their remit is broad — working under the direction of teachers to support students (especially students with special needs) and helping with day-to-day running of the classroom, including administrative tasks.

When used effectively and supported well, international evidence has found that teaching assistants can help reduce teacher workload, allow teachers more time to teach, and improve the outcomes of some students. However, it is not clear how school leaders use teaching assistants and other support staff in Australian schools. Some review participants observed that the use of teaching assistants varies significantly within and across schools and jurisdictions, and they do not always receive the support or training they need to undertake the myriad of tasks they perform.

Participants highlighted the importance of gaining a better understanding of how teaching assistants are, and could best be, used.

As part of the National Teacher Workforce Action Plan, Education Ministers have agreed to review the role of teaching assistants and school support staff, along with initial teacher education students, to determine how they can be deployed to reduce teacher workload. In undertaking this work, parties should seek to preserve the benefits that come with being able to employ teaching assistants flexibly across schools, sectors and jurisdictions and identify ways to better prepare and support teaching assistants to take on their varied roles.

Making best practice approaches and materials more accessible

There is a growing evidence base on what works best to help students learn. But that evidence base will only matter if it leads to pedagogies and resources that teachers trust and use. Some Australian teachers are not using high quality, evidence-based pedagogical techniques and classroom materials. For example, AERO surveyed teaches across Australia about how often they used specific teaching strategies, and concluded that '[s]ome of these strategies are evidence-based, while others are not — in fact some have been found to be ineffective for student learning' (2021a).

Governments and school systems can promote the diffusion of best practice by peer-to-peer professional learning through school-based networks. A recent survey has found that teachers are more likely to trust research shared by colleagues than research from any other sources.

Besides providing career pathways for highly effective teachers, the purpose of initiatives such as Highly Accomplished and Lead Teachers (HALT) is to help fulfil this role. But efforts to build a cohort of highly accomplished teachers has been slow — since the introduction of HALT certifications in 2012, only 0.3 per cent of the workforce (about 1 000 teachers) have become certified. And many certified teachers say they have too little time or opportunity to lead the development of colleagues in their school.

Processes to build, recognise and deploy best practice teaching expertise can take many forms. Like HALT, Master Teachers and Instructional Leaders are also intended to recognise expert teachers and support the dissemination of best practice. Employed by high-performing school systems overseas, Master Teachers are intended to be the pedagogical leaders in their subjects, working across schools in their region to identify teacher needs, coordinate training, and connect schools with research. Unlike Master Teachers, who have no classroom load, Instructional Leaders split their time between classroom teaching and instructional leadership, working in their own schools to support and guide other teachers in specific subjects.

Peer-to peer collaboration, where teachers work together in small groups to analyse and improve their practice, has also been found to improve teaching quality and student academic achievement. These models provide an accessible avenue for time-poor teachers to improve their practice.

These models are not mutually exclusive. Governments recently announced plans to expand Quality Teaching Rounds (a model that employs peer-based observation and analysis), and set a target to increase the number of HALTs and streamline their accreditation. The next school reform agreement is an opportunity for governments to leverage this work and support HALTs to disseminate evidence-based practice.

Governments could also increase the uptake of best practice by curating high-quality, evidence-based curriculum resources and making them easily accessible for teachers and school leaders. Many teachers develop lesson plans from scratch, or use materials from private platforms that are difficult to quality-assure. In a recent survey of Australian teachers, about half of respondents indicated they were the main person responsible for producing lesson plans for their classes, while a further 28 per cent reported that they shared responsibility for producing plans with others.

International studies have found that improving teaching through better curriculum materials can have a positive effect on student achievement, especially when partnered with professional development programs for teachers. Providing teachers with classroom resources would also free up teacher time. One study found teachers who had access to a comprehensive bank of lesson plans typically spent three hours less per week on sourcing and creating classroom materials than those who did not.

Governments tasked ACARA to examine ways 'to develop and make available to teachers, optional supports to assist the implementation of the national curriculum,' as part of the National Teacher Workforce Action Plan (EMM 2022, p. 22). However, a more concrete response — encompassing whole-school curriculum plans, whole-subject sequences, lesson plans and classroom tools — is needed to effectively support teachers. This could form the basis of a new NPI under the next school reform agreement.

Reducing out-of-field teaching

Notwithstanding recent attention, teacher shortages in key subject areas and locations are longstanding, and have resulted in high rates of out-of-field teaching (box 1).

Out-of-field teaching poses significant challenges. Teachers without subject expertise tend to be less effective, particularly in upper secondary school. Out-of-field teaching can also add stress to teachers and principals which, in turn, affects their wellbeing and ability to teach. Given that out-of-field teachers are often less experienced, the additional pressures placed on them can contribute to workforce attrition.

Governments have several options to attract teachers into in-demand subjects and to support out-of-field teachers. Options include better deployment and retention of in-field teachers; online delivery of classes from in-field teachers; reskilling teachers in areas of demand; attracting new and former teachers into in demand subjects; and providing access to learning resources and better sharing expertise for teachers teaching out-of-field.

Mid-career professionals have been identified as an important source of teachers in subject areas and locations where rates of out-of-field teaching are high. Recent surveys reveal up to four in 10 mid-career professionals would consider a career in teaching, with one in 10 planning a career change to become a teacher, and three in 10 open to the idea.

Many factors motivate mid-career professionals considering the switch to teaching, including the desire to make a social contribution. But they face significant switching costs, especially the time taken to undertake an ITE course (recently raised from a one-year graduate diploma to a two-year Master's degree) and loss of income while studying and building a new career. Governments have committed to develop a framework to better recognise prior learning and experience, including for mid-career professionals. Reintroducing 12-month qualifications, for individuals who have demonstrated suitability for secondary teaching in areas of high workforce demand, would further encourage mid-career professionals to switch to teaching.

Jurisdictions should set out in their bilateral agreements measures they have in place to reduce out-of-field teaching and support educators teaching out-of-field, and report annually on progress.

Box 1 – Evidence of teacher and school leader shortages

Over the past decade, the teacher workforce has grown more quickly than the student population, particularly in primary schools, where student-teacher ratios are lower than a decade ago. In secondary schools, student-teacher ratios are relatively unchanged.

Rates of out-of-field teaching point to significant shortages in secondary subjects such as maths, science, technology and English. In 2018, almost one-quarter of surveyed teachers teaching mathematics had limited or no training in the subject; a trend echoed in science (18 per cent) English (18 per cent), design and technology (30 per cent) and languages other than English (29 per cent).

There continue to be longstanding shortages in regional, rural and remote areas. School principals in these areas report greater difficulty recruiting staff and higher rates of out-of-field teaching.

Some stakeholders suggested that many of the factors that have contributed to localised shortages are likely to persist. These factors include rising school enrolments, a drop in the number of people enrolling in teaching degrees, and an ageing workforce.

But gauging the extent of future shortages is difficult. Estimates of future shortages are contingent on assumptions, including about how school systems deploy teachers across tasks and schools, rates of teacher attrition, and in particular, the ratio of students to teachers.

Improving the representation of Aboriginal and Torres Strait Islander teachers

While subject specific or geographic shortages often draw attention, teacher shortages can also result in a lack of workforce diversity. As an example, Aboriginal and Torres Strait Islander teachers are underrepresented in schools, making up only about 2 per cent of the Australian teaching workforce, while the share of Aboriginal and Torres Strait Islander students was closer to 6 per cent in 2018.

One option identified by participants for growing the Aboriginal and Torres Strait Islander workforce was to provide better career pathways for community educators. These educators work alongside classroom teachers, combining pedagogical knowledge and practice with community-specific understanding.

Retaining existing Aboriginal and Torres Strait Islander teachers is equally important. In many instances, Aboriginal and Torres Strait Islander teachers play an important role within their schools and the broader community, building cultural awareness and supporting cultural safety for students and fellow educators. Some participants commented that this role was not always adequately recognised, resulting in difficulties managing workload and competing priorities for already stretched teachers. Aboriginal and Torres Strait Islander teachers can also face discriminatory attitudes. These attitudes, along with workloads, can be a major contributor to poor wellbeing and workforce attrition, which can have flow-on effects for students.

The Australian Government recently committed to co-design a new national strategy to attract and retain First Nations teachers, which they will develop in close partnership with Aboriginal and Torres Strait Islander education organisations. All jurisdictions should contribute to the development of this strategy to address these important issues.

Supporting school leaders to reduce differences in outcomes across schools

There was broad recognition among participants of the importance of effective school leadership for improving the efficiency and equity of schooling. School leaders are second only to teachers in terms of creating an effective learning environment, though the difference is small. Parties to the NSRA and the (then) Education Council have both recognised that '[s]chool leaders are an important part of the national teacher workforce landscape' and that '[t]his is an area where there may be scope for more national collaboration in the future' (2020b, p. 2).

While it is not possible to disentangle principal, teacher, peer and other school-based effects using NAPLAN data, Commission analysis confirms differences in average student outcomes across schools. As an example, students from priority equity cohorts demonstrated, on average, less learning growth (expressed in equivalised years of learning) if they attended a school with higher concentrations of students experiencing disadvantage. Similarly, students performing below NAPLAN minimum standards who attended a school with higher concentrations of students experiencing educational disadvantage were less likely to transition to performing at or above the minimum standard two years later.

In part this could reflect peer effects — research shows that students benefit from being in a class with high achieving students. Evidence also suggests that schools with higher concentrations of students experiencing disadvantage tend to have less experienced teachers on average and are more likely to struggle with staff shortages and classroom management.

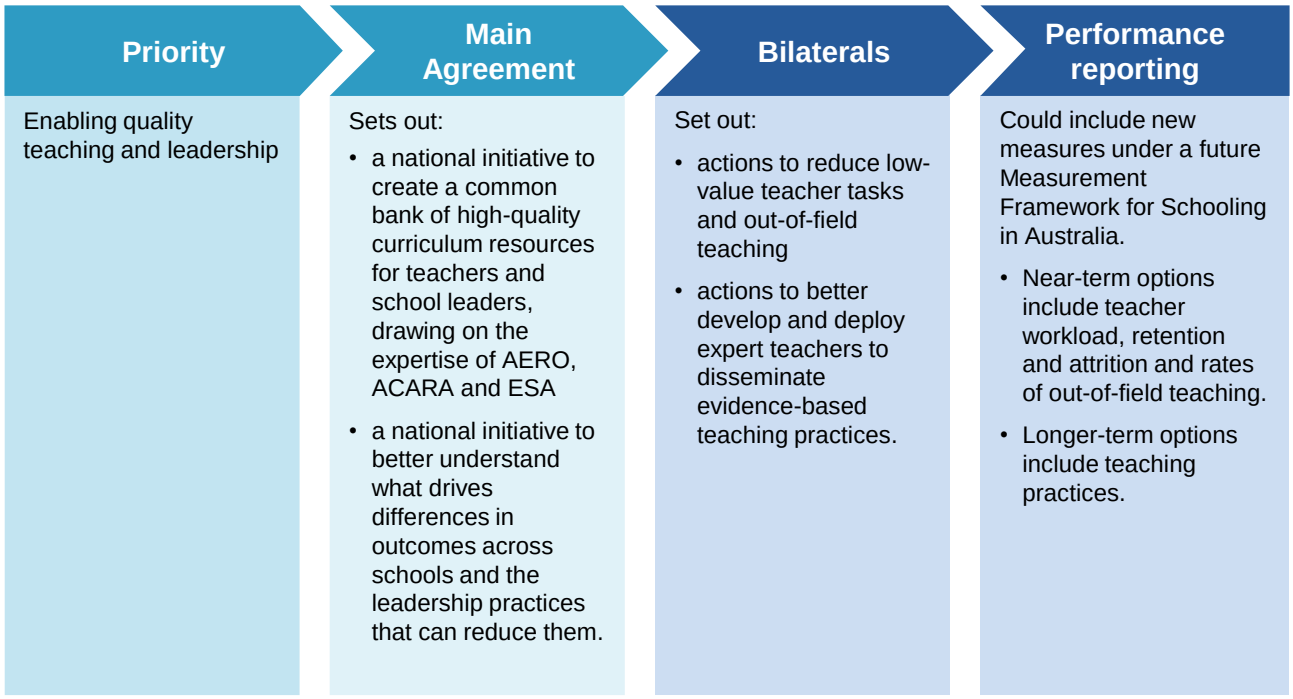
However, there are also differences in average student outcomes across schools with students with similar characteristics. For example, among primary schools within the lowest quintile of socio-educational advantage, there was a difference of 21 NAPLAN points in numeracy learning gain and 23 NAPLAN points in reading learning gain from year 3 to year 5 between higher and lower performing schools.[9]

These differences suggest that some between-school disparities in student performance may reflect the extent to which schools adopt effective practices. There is some consensus around what effective school practices might entail — such as fostering high expectations or providing opportunities for teachers to collaborate in evaluating and improving their day-to-day teaching — but more needs to be done to better understand their relative importance, and to develop and disseminate evidence-based programs that support school leaders to readily adopt effective practices.

There is a strong case for jurisdictions to come together to progress this critical work. There are substantial opportunities for sharing learnings and best practice — it would avoid duplication of effort and enable jurisdictions to better utilise national education institutions, such as AERO and the Australian Institute for Teaching and School Leadership. This could form the basis of a NPI under the next school reform agreement (figure 6).

[9] For a student performing at the average numeracy score of schools in the lowest ICSEA quintile, the difference in learning translates to about 6 months of learning. In reading, the difference translates to about 8 months of learning.

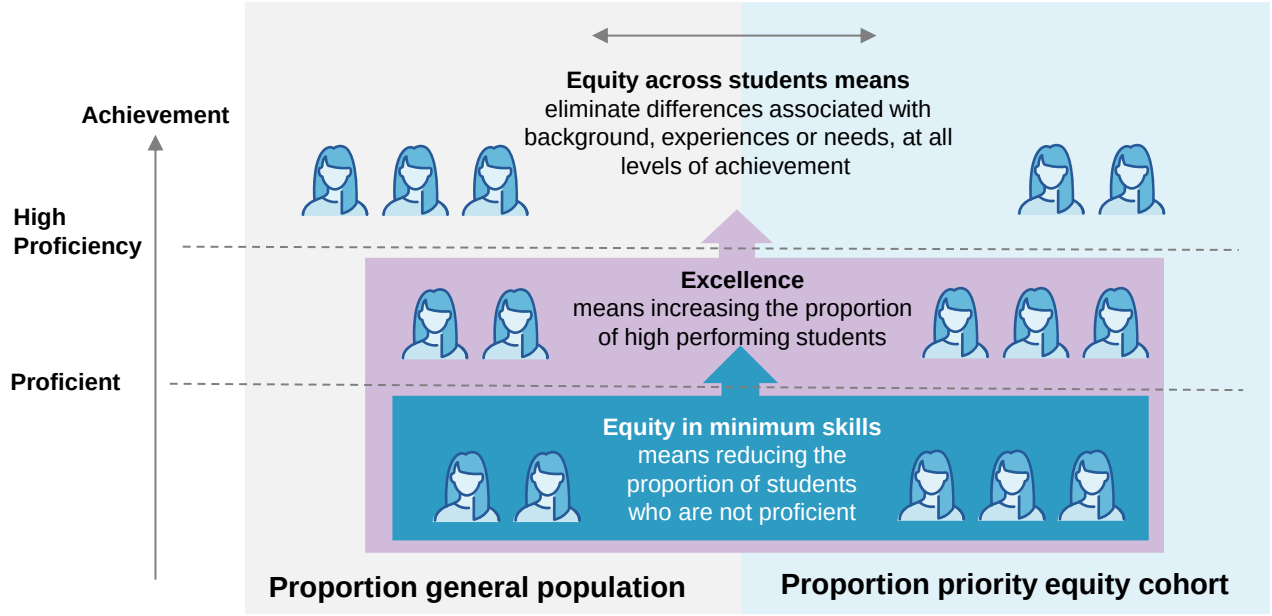
Figure 6 – Enabling quality teaching and leadership



Jurisdictions should make clear commitments, expressed in targets, to reduce inequalities in achievement among students

The NSRA's outcomes, which collectively articulate parties' ambitions for school education, embody two distinct concepts of equity (figure 7). The first is to ensure schooling equips each student with the basic skills required for success in life (equity in minimum or basic skills). The second is to reduce or eliminate differences in outcomes across students with different backgrounds, experiences and needs (equity across students), particularly for the 'priority equity cohorts' in the NSRA — Aboriginal and Torres Strait Islander students, students living in regional, rural and remote locations, students with disability and students from educationally disadvantaged backgrounds.

Figure 7 – Equity and excellence in school achievement

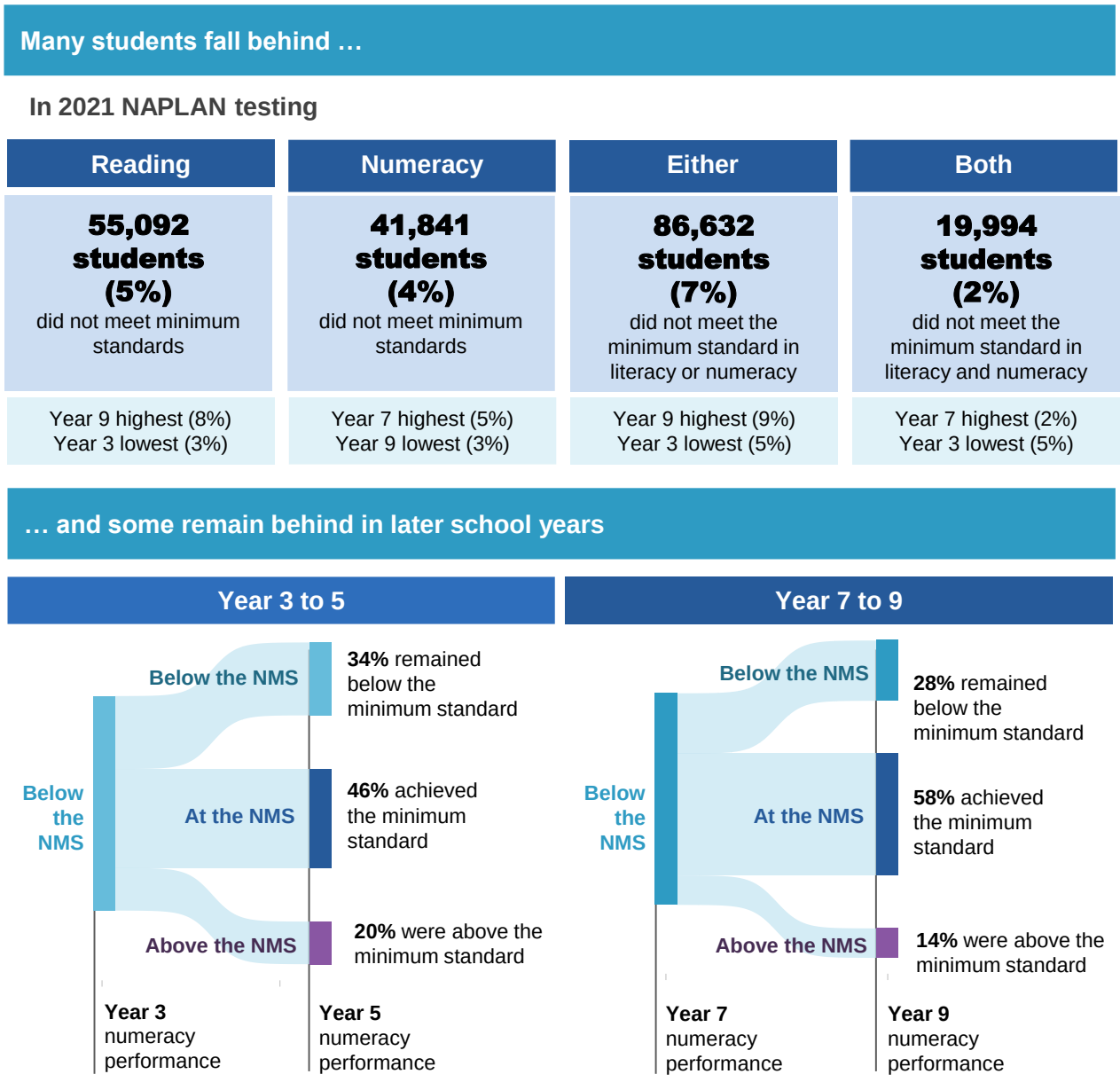


Each year, tens of thousands of students do not meet minimum literacy and numeracy standards

One measure of equity in minimum or basic skills is the share of Australian students who do not meet year-level expectations. In 2021, between 5 and 9 per cent of Australian students did not meet NAPLAN minimum standards in reading or numeracy. About one-third of the students who do not meet minimum reading standards in year 3 also do not meet minimum standards in year 5. Similar patterns are evident in numeracy and across years 7 and 9 (figure 8).

However, a recent review of NAPLAN queried whether these standards are set too low, including by international standards, and so underestimate the share of students who do not meet basic levels of literacy and numeracy.

Figure 8 – Share of students not meeting minimum standards in NAPLAN[a]



a. The bottom of the figure shows Commission estimates of the shares of students who were below the national minimum standard (NMS) in year 3 and subsequently remained below NMS, achieved the NMS, or achieved above the NMS in year 5, respectively. The Commission conducted the same analysis for students from years 7 to 9.

Such experiences can have lasting effects on students

When students do not achieve basic levels of numeracy and reading year after year, the experiences can negatively affect their feelings about themselves and towards learning and puts them at risk of not progressing satisfactorily at school and not fulfilling their aspirations in later life. The Australian Council for Educational Research observed:

> [These students] tend to start each school year behind most of their age group and they are poorly equipped for the material they are about to be taught. Most struggle, and this is reflected in their poor performance on the year-level curriculum. Many students receive low grades year after

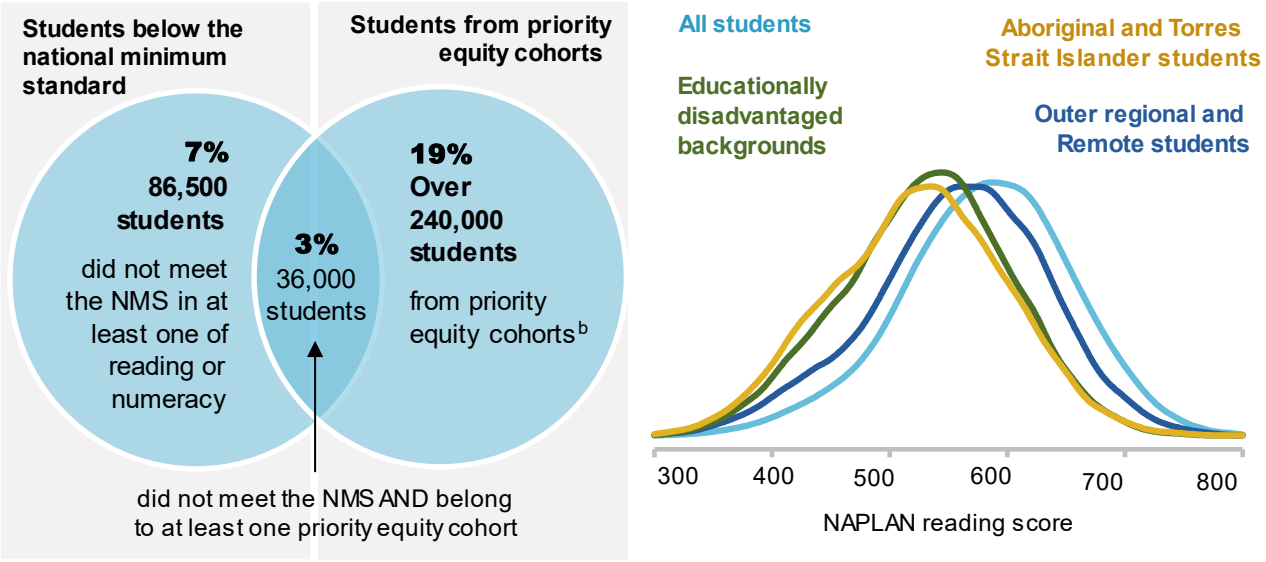
> year, reinforcing the message that they are not succeeding at school – or worse, that they are inherently poor learners. (Masters 2016, p. 1)

When students do not progress through school it can also have flow on effects for their families, communities and broader society.

Most students not meeting minimum standards do not belong to priority equity cohorts

Whether a student belongs to a priority equity cohort is not a strong predictor of whether they meet minimum standards (figure 9). While students from priority equity cohorts are three times more likely to be among those who have fallen below minimum standards, they still represent less than half of all students who fall behind. The precise number is uncertain because there are limited data for students with disability.[10] As such, focussing solely on the barriers affecting students from priority equity cohorts would not improve outcomes for the majority of students not meeting minimum standards.

Figure 9 – The overlap between students below the national minimum standard and students from the NSRA priority equity cohorts, years 3, 5, 7 and 9, 2021[a]



a. Students with disability are a priority equity cohort in the NSRA but ACARA does not publish NAPLAN performance data for students with disability. Commission analysis found similar distribution results for NAPLAN numeracy scores in year 9. **b.** This comprises: 80 000 Aboriginal and Torres Strait Islander students, 126 500 students in outer regional areas and 95 000 students of parents with low educational attainment

Source: Commission estimates based on NAPLAN de-identified student level data (2022).

Parties should adopt a suite of policies to help all students achieve basic levels of literacy and numeracy

Ensuring all students achieve basic literacy and numeracy skills is a fundamental purpose of schooling. Indeed, one of the goals of the Mparntwe Declaration is that 'All young Australians become … successful lifelong learners … [who] have the essential skills in literacy and numeracy as the foundation for learning.'

Parties to the next school reform agreement should pursue a suite of policies to reduce the proportion of students who do not meet basic levels of literacy and numeracy. These include general policies to increase

[10] Further, not all students participate in NAPLAN.

student achievement at all levels (such as policies to support teacher and school leader effectiveness), policies to reduce barriers to learning that affect students from priority equity cohorts (such as policies supporting culturally inclusive practices), and policies that have the express purpose of assisting students who do not have basic skills to catch up, regardless of their background, experience or needs. While it is up to parties to determine the right policy mix in their jurisdictions, given their commitments to ensure all students receive a quality education, they should give consideration to intensive targeted support measures, particularly where other approaches appear to be failing (box 2).

Box 2 – Efficacy of small group tuition

Small group tuition involves a teacher, trained teaching assistant or tutor working with a small group of students together in a group. This allows the teaching to be better tailored to the specific needs of the students and gives them additional focussed attention, with more opportunities for interaction and feedback.

Meta analysis of studies pertaining to small-group tuition identifies 'moderate' evidence that small-group tuition improves learning outcomes in reading by up to 4 months, and mathematics outcomes by up to 3 months.

Tutoring has proven to be successful in many contexts. Two high-performing nations — Finland and Singapore — have adopted this approach. In Finland for example, a specialist teacher, who has undergone additional training, is assigned to each school to work closely with teachers to identify students who need extra help.

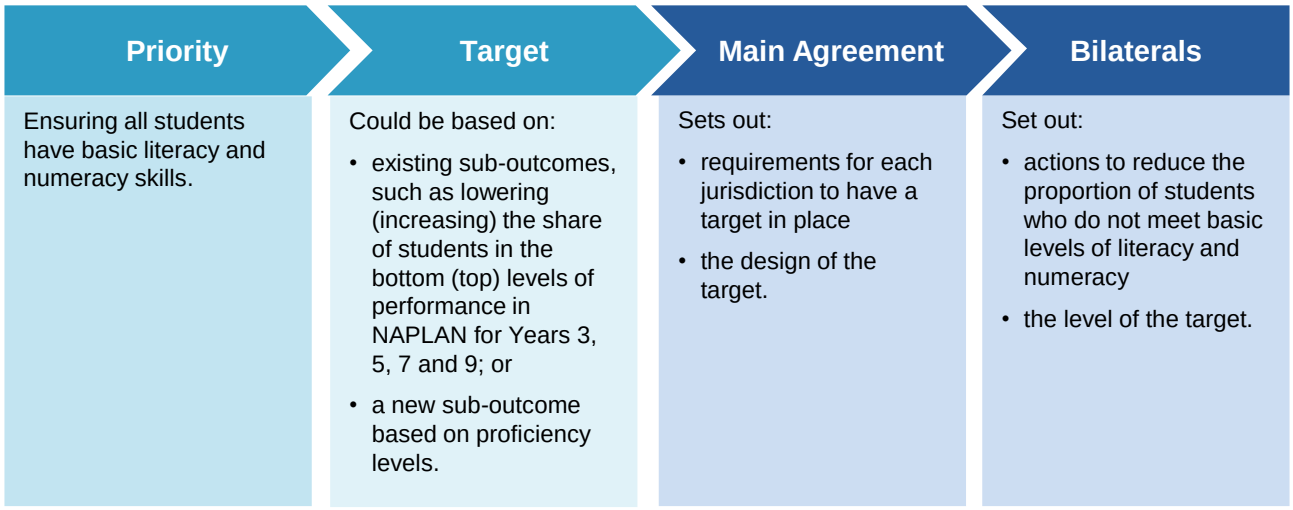
The Smith Family has run a successful program targeted at students from low socioeconomic backgrounds, which took place at home with involvement from parents. By the end of Smith Family's catchup learning pilot, seven in 10 students achieved higher than expected progress in literacy, and just under half of all students achieved higher than expected progress in numeracy.

Further, all parties should adopt targets, based on a common measure, for reducing the proportion of students who do not meet basic levels of literacy and numeracy. This measure could be adapted from one of the existing NSRA sub-outcomes or ACARA's proposed proficiency standards (figure 10).

Adopting a public target would elevate the issue, signal a strong commitment to delivering equitable education for all students, and promote greater accountability.

Parties to the agreement should clearly identify in their bilateral agreements the reforms that they will undertake to achieve their targets over the life of the next school reform agreement.

Figure 10 – Ensuring all students have basic literacy and numeracy skills[a]



a. The Commission is proposing that the next school reform agreement's NAPLAN sub-outcome align with the related measure in the Measurement Framework for Schooling in Australia, which uses proficiency standards rather than top and bottom levels (chapter 9).

Differences in outcomes across students persist

While parties to the NSRA recognised the importance of supporting and facilitating the achievement of students from 'priority equity cohorts', it should not be taken as given that students belonging to these groups have low levels of educational achievement. Each year, many students from priority equity cohorts excel academically at school. And most students who identify as belonging to a priority equity cohort achieve at or above national minimum standards.

Indeed, participants to this review stressed that equating belonging to a priority equity cohort with disadvantage (in terms of ability or low achievement outcomes) contributes to a deficit discourse around students and hinders their ability to succeed at school.

> [The] labelling of Aboriginal and Torres Strait Islander students and families as disadvantaged continues to play into a culture of deficit discourse and low expectations that stymie Aboriginal and Torres Strait Islander students' ability to thrive in their education … While Aboriginal and Torres Strait Islander students and communities face a range of complex and compounding circumstances that impact their educational engagement and outcomes, they are not inherently disadvantaged by being Indigenous. (Indigenous Education Consultative Meeting, sub. 52, p. 3)

The term priority equity cohort denotes that, generally, students from these groups experience lower academic outcomes than the population across the full spectrum of results (figure 9) and this often stems from systemic barriers in education systems (and society generally).

Similarly, belonging to a priority equity cohort does not imply that students are homogenous in their learning needs. Students from priority equity cohorts have diverse education needs, experiences and ambitions.

Parties are yet to reduce differences in achievement across student cohorts

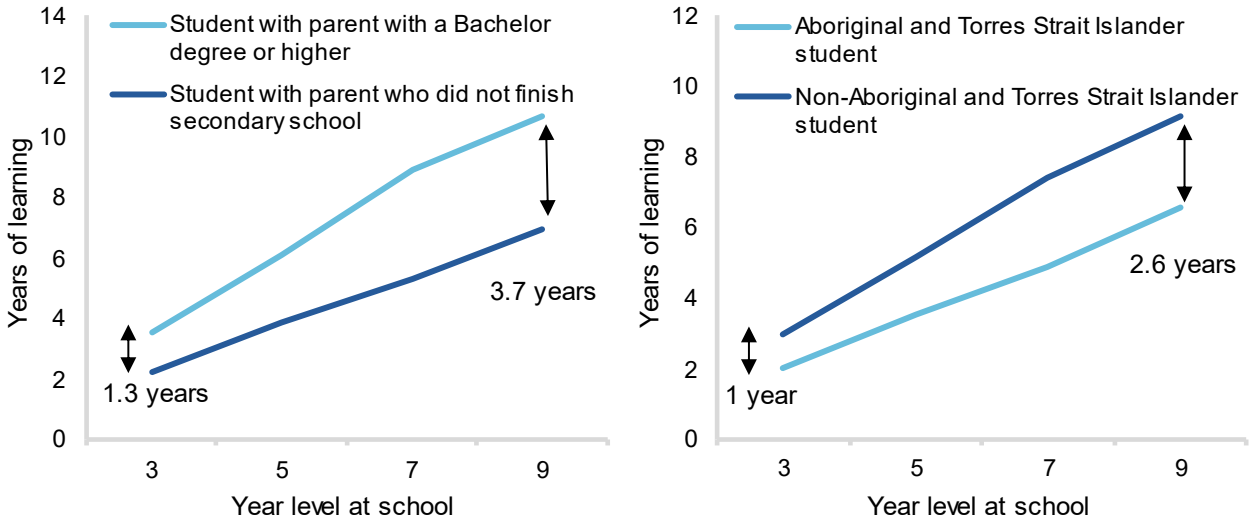
Along with improving outcomes for all students, parties to the NSRA also set themselves the goal of improving outcomes for students from priority equity cohorts and agreed to track progress against national performance measures.

So far, parties have failed to demonstrate that they are achieving the agreed outcomes for students from the priority equity cohorts. Performance against most of the national outcome measures in the NSRA (for which data are available) has declined for these students.

Rather than narrowing, the gap in learning (expressed as the time it would take for students from priority equity cohorts to catch-up) widens as students progress through their schooling (figure 11).

Figure 11 – Gaps widen as students progress through schooling

Difference in numeracy NAPLAN scores between students from equity cohorts and other students, expressed as equivalised years of learning



Source: Commission estimates based on 2022 NAPLAN de-identified student level data.

A new, inclusive approach is needed for students from priority equity cohorts

Parties to the next school reform agreement need to overhaul their approach to promoting equity in outcomes across different student cohorts.

Parties should ensure the next school reform agreement reflects new commitments and ways of working

Since agreeing the NSRA, governments have made further national commitments to support young people who are at higher risk of experiencing educational disadvantage, including through the *2019 Alice Springs (Mparntwe) Education Declaration*, the *National Agreement on Closing the Gap*, and *Australia's Disability Strategy 2021–2031*. These agreements represent a fundamental change to the way schools respond to the needs of their students.

Some of these commitments (such as those relating to shared decision-making and transforming the way governments respond to the needs of Aboriginal and Torres Strait Islander people under the National Agreement on Closing the Gap, and the vision for inclusive education under Australia's Disability Strategy) will significantly shape how governments develop and implement reforms under the next school reform agreement. These commitments will need to be reflected across the schools reform agenda — from teacher and leadership training through to performance reporting.

Parties should consider whether to identify other cohorts as priority equity cohorts

The 'priority' equity cohorts do not capture all students that experience educational disadvantage. Children and young people living in out-of-home- care, for example, are considerably less likely than their peers to attend school, engage with education, or achieve the national benchmarks for reading and numeracy. And, in the Mparntwe Declaration, governments identified learners in out-of-home care as being at higher risk of educational disadvantage and noted these learners could benefit from targeted policy interventions. As such, there are reasonable grounds for asking why governments would not include them as priority equity cohorts in the next school reform agreement. Governments should develop an agreed approach for evaluating and prioritising new cohorts for inclusion in the next school reform agreement and apply these to cohorts commonly cited as at risk of educational disadvantage, particularly those mentioned in the Mparntwe Declaration.

Parties should address the barriers faced by students from priority equity cohorts

To achieve its ambitious objective of a high quality, high equity education system, parties will need to systematically identify and address the barriers facing students from priority equity cohorts.

Many participants (often drawing on lived experiences) highlighted the barriers faced by students from priority equity cohorts, which prevent them from reaching their potential at school. These barries permeate several aspects of the learning environment, including the culture within the classroom. While these barriers manifest in different ways for different individuals or groups of students, they provide a starting point for improvements under the next school reform agreement.

Overcoming barriers faced by Aboriginal and Torres Strait Islander students

Aboriginal and Torres Strait Islander organisations, children and young people reflected that schools are not always culturally safe spaces. They suggested that this prevents students from being engaged with their learning, and parents from sharing information about issues at home that may be impacting on their child's wellbeing or capacity to learn.

Several participants observed that curriculum and assessment is a 'western space' that does not reflect aspects of learning valued by Aboriginal and Torres Strait Islander people, which include connections to Country, family, spirit, or ancestors. In seeking to address this, Aboriginal and Torres Strait Islander histories and cultures have been elevated to a cross-curriculum priority. However, participants highlighted the need for more widespread use of culturally responsive curriculum and pedagogies and in particular, practices such as two-way learning, which value and embrace Aboriginal and Torres Strait Islander knowledges and languages.

School leaders and teachers play a large role in establishing a schools' culture and creating a safe and inclusive environment. However, participants observed that many teachers and school leaders have a poor understanding of Indigenous knowledges, Aboriginal and Torres Strait Islander cultures, and how to include and empower their students. Several participants attributed this to a lack of training on the part of some school leaders, teachers and other school staff. Some participants highlighted that a lack of understanding can perpetuate discriminatory attitudes, such as having lower expectations of students, or attributing behaviour (due to undiagnosed disability for example) to a student being 'bad', leading to higher rates of suspensions and exclusions among Aboriginal and Torres Strait Islander students.

As with students in remote areas more generally, access to local schooling options was also raised as a barrier by participants. A lack of local options mean children are not able to live and be educated on their own Country. Where students have to leave home in order to attend school, this can contribute to feelings of isolation and poor wellbeing and reduce opportunities to acquire cultural and familial knowledges.

While better training and resources can and should play a role in tackling these barriers, several participants suggested these barriers reflect broader issues relating to Aboriginal and Torres Strait Islanders' lack of a

voice and representation in education policy and broader social narratives around Aboriginal and Torres Strait Islander people.

Overcoming barriers faced by students with disability

Participants representing students with disability and their families also provided perspectives on the barriers they experience. They reported that not all schools fully embrace inclusion and that this leads to students feeling unsupported and left out.

Some participants suggested that there is a poor understanding of the social model of disability (which frames adjustments as changes systems need to make to include people with disability, rather than changes people with disability need to make to fit into mainstream environments).

Although there has been a significant increase in the number of students recognised as requiring additional supports, students with disability and their families pointed to a lack of adequate and consistent resourcing. Several participants noted that despite teachers' best efforts, they were often not provided with the resources, time and training to create an environment that welcomes and supports students with disability and their families. Participants raised the specific example of school leaders and teachers not being well equipped and supported to recognise a student in need of support, and noted examples of students with disability progressing through school without their support needs being identified.

Even where the need for additional supports was recognised, some participants felt school systems were not up to date with contemporary practices of inclusive education. They reflected that the curriculum schools deliver to students with disability fails to foster high expectations or reflect students' aspirations, and that in some cases, students were sanctioned instead of being given the behavioural supports they needed, contributing to their disengagement from education.

Overcoming barriers faced by students in regional and remote Australia

Participants highlighted the barriers students from regional and remote areas encounter — the Independent Review into Regional, Rural and Remote Education that informed the NSRA explored these issues at length. One significant theme was that families in regional, rural and remote areas can have limited choice about where and how they educate their children.

Where local schooling options are available, subject offerings can be limited. Many participants emphasised the challenges associated with attracting and retaining high quality teachers and leaders (box 1). Others reported that schools have historically relied on new teachers to fill vacancies in rural and remote areas, but that they are not well prepared and supported to undertake these often complex roles.

Parties should embed actions to address barriers in the next school reform agreement

There is a strong case for State and Territory governments to continue to take the lead on implementing reforms to reduce barriers faced by students from priority equity cohorts — they are best placed to design initiatives that reflect local conditions and are tailored to meet their students' needs.

However, there are general features of the school learning environment that, along with high-quality teaching and leadership practices, are widely accepted as being critical for meeting the learning needs of students from priority equity cohorts. These include:

- governments making inclusion a centrepiece of education policy and integrating policies in education with those in other policy domains affecting young people
- governments ensuring that people that are affected by policies, programs and practices provide input into their design, to ensure they are relevant and effective

- teachers and leaders adapting their understanding of schooling success for each student, and being better trained to identify and respond to diverse needs
- schools supporting parents and carers to actively engage with their child's education
- schools adopting culturally responsive curriculum and pedagogies to enable all students to see their identities, cultures, and knowledges reflected in what and how they are learning.
- governments implementing innovative (including technology-based) solutions to provide access to education for families, including in regional and remote communities.

Governments can encourage more widespread adoption of these practices through various levers, ranging from enshrining these practices in policies and guidelines distributed to schools, designing and delivering effective and targeted training to improve teachers' skills and understanding, and establishing partnerships with community groups and representative bodies of students.

While it is up to each jurisdiction (and sector) to determine how best to embed these practices within their school systems, governments should incorporate specific features in the design of the next school reform agreement. This would place greater discipline on parties to help lift outcomes for students from priority equity cohorts and to hold parties to account (figure 12).

Figure 12 – Reducing inequities across students[a]

Priority	Target	Main Agreement	Bilaterals
Reducing differences in achievement across student cohorts.	Targets could mirror general population sub-outcomes, such as: Lowering (increase) the share of students from priority equity cohorts in the bottom (top) levels of performance in NAPLAN for Years 3, 5, 7 and 9.	Sets out: • relevant commitments under the National Agreement on Closing the Gap and Australia's Disability Strategy • priority equity cohorts, including any new cohorts • the educational barriers that are to be addressed • requirements for each jurisdiction to have targets in place.	Developed in partnership with the community, set out: • any other state-specific outcomes for students in each cohort • actions to address barriers to students reaching their potential and to achieve targets and outcomes • actions to implement commitments under Closing the Gap and Australia's Disability Strategy • the theory of change linking reforms to long-term outcomes • the level of the targets for students in each cohort.

a. The Commission is proposing that the next school reform agreement's NAPLAN sub-outcome align with the related measure in the Measurement Framework for Schooling in Australia, which uses proficiency standards rather than top and bottom levels (chapter 9).

One key aspect of this will be introducing new national targets (which could, for example, mirror any new general targets, such as reducing the proportion of students who do not meet basic levels of literacy and numeracy) to drive reform and provide insights into equity in outcomes across student cohorts.

Targets should be supported by jurisdiction-specific commitments in bilateral agreements, developed in consultation with those with lived experience, which identify the reforms parties will pursue to achieve agreed

outcomes and targets. Parties should also set out in their bilateral agreements how they will advance relevant commitments under the National Agreement on Closing the Gap, and Australia's Disability Strategy.

National reforms should include a greater focus on supporting student wellbeing

Many students experience poor wellbeing

Improved student wellbeing is both a desired outcome of schooling and a means to improve learning outcomes.

Schools can promote wellbeing by providing inclusive environments and supporting the social and emotional development of students so that they are equipped to cope with the various stresses of life.

Improving student wellbeing can also support students' ability to engage and learn at school. Students struggling with challenges to their wellbeing often have difficulty engaging at school. A recent study found that students who experienced feelings of depression in Year 8 scored 7 per cent worse than similar students in Year 9 NAPLAN literacy and numeracy scores. Another study found that students with persistent emotional or behavioural problems between Years 3 and 7 fell a year behind in numeracy compared with their peers.

Although many children and young people experience positive wellbeing or can cope well with the issues they face, a sizeable proportion of children and young people experience challenges to their wellbeing. In 2014 (the most recent year for which data are available), one in five young people aged 11 to 17 years reported having high levels of psychological distress, and 14 per cent of children aged 4 to 17 years had a mental, behavioural or neurodevelopmental disorder during the previous year. Poor wellbeing can be particularly pronounced among children and young people in out-of-home care, students with disability, and Aboriginal and Torres Strait Islander students.

The COVID-19 pandemic and natural disasters such as bushfires and floods, have brought concerns about student wellbeing into sharper focus.

Parties should include student wellbeing in the next school reform agreement

While a range of factors influence a young person's wellbeing, including their home environment, their experiences at school can play an important role — both positive and negative. In the case of students who have experienced trauma, for example, a failure by schools to recognise this and instead respond to disruptive behaviour with disciplinary actions (such as suspension or expulsion), can further entrench poor wellbeing.

Elevating student wellbeing as an area of national priority and co-operation in a successor agreement, along with greater transparency about wellbeing outcomes, would encourage more effective support for students.

In addition to adding wellbeing as an outcome in the next school reform agreement, governments should include specific reform actions. These reform actions need to shape day-to-day practices within schools, such as by supporting teachers to identify and respond to students' wellbeing needs, rather than simply adding to the existing stock of wellbeing programs.

There are some core wellbeing strategies that governments should support all schools to have in place. All schools need strategies that help teachers to identify where behaviour may be communication of poor wellbeing and how to respond appropriately, as well as to clearly set out the roles and responsibilities of wellbeing staff and student pathways for support, both within and beyond the school. A clearer articulation of pathways and responsibilities will help ensure teachers do not feel they need to shoulder responsibility for student wellbeing alone.

But tailoring responses to local needs and conditions is also important. For Aboriginal and Torres Strait Islander students, connection to culture, spirituality, community and ancestry can all be key protective factors in helping to manage wellbeing. To allow jurisdictions to tailor responses to local needs and conditions, most actions to support wellbeing are likely to be best pursued through bilateral initiatives (figure 13).

There are clear benefits in developing a national indicator of student wellbeing to better understand how student wellbeing is tracking and to provide insights into the efficacy of policy interventions — governments should develop a sub-outcome on student wellbeing and report against it as a matter of priority.

Figure 13 – Supporting student wellbeing

Priority	New outcome	Main Agreement	Bilaterals
Promoting student wellbeing so that students can engage and learn at school.	This could be adapted from the vision from the Australian Student Wellbeing Framework, endorsed by Education Ministers, such as: 'Students experience wellbeing, safety and positive relationships at school.' Progress to be tracked by a new sub-outcome (indicator) and reported on annually.	Sets out: • the new wellbeing outcome and sub-outcome • core content jurisdictions must address as part of their bilateral agreements: ensuring schools have wellbeing strategies in place, that clarify training and support for teachers, the role of wellbeing staff, and student pathways for support.	Set out: • actions to achieve new outcome • actions to give effect to core requirement to ensure all schools have wellbeing strategies in place.

Improved national performance reporting has a key role to play in supporting success

Along with better use of targets, improved performance reporting will be instrumental in improving transparency and accountability arrangements under a new agreement.

As part of the next school reform agreement, governments should fill reporting gaps on outcomes for Aboriginal and Torres Strait Islander students and students from regional and remote areas, making good on commitments to report outcomes for students in priority equity cohorts (including specific commitments related to reporting outcomes for Aboriginal and Torres Strait Islander students under the National Agreement on Closing the Gap). While reporting gaps for students with disability will be more difficult to progress due to a lack of available data, governments should make this a priority.

The absence of a standalone report on Australia's performance against sub-outcomes of the NSRA (which means the National Report on Schooling is the primary reporting mechanism) has diminished transparency.

Australian, State and Territory governments should commit to standalone reporting on progress against the next school reform agreement's sub-outcomes and targets. This could be achieved either through publication of a new standalone report or through augmenting the existing National Report on Schooling in Australia with a sub-section that clearly identifies the measures used for tracking performance against the Agreement. The Australian Government should table the report annually in Parliament.

Performance reporting arrangements (both as part of a future Agreement and an updated Measurement Framework for Schooling in Australia) should be updated to reflect contemporary views on the nature of student outcomes sought. This should include reporting on the new wellbeing outcome, more complete reporting on student achievement and post-school outcomes and, as new data becomes available, student engagement.

Parties should retain the provision in the next school reform agreement for an independent review. The scope of the review should consider all aspects of the agreement, including the effectiveness of state-specific reforms.

The Commission's recommendations on improved performance reporting, and the design of the next school reform agreement more broadly, are summarised in figure 14.

Figure 14 – Summary of recommendations on the design of the next school reform agreement

Retain the aim that Australian schooling provides a high quality and equitable education for all students

Set out **4 outcomes** …	… adopt a broader range of **targets** to drive activity …	… and set **new and refined sub-outcomes**
• Keep achievement, attainment and engagement • Add wellbeing (R 5.1) • Consider adding new priority equity cohorts (R 4.2)	• Keep existing national targets • Develop firmer targets on achievement (R 3.2), including target to reduce the share of students not meeting basic levels of literacy and numeracy (R 4.1)	• Refine indicators of achievement and attainment (R 9.2) • Develop new national wellbeing indicator (R 5.1)

Retain the three reform directions …

Supporting students, student learning and student achievement	Supporting teaching, school leadership and school improvement	Enhancing the national evidence base

… to be progressed through national and state-specific initiatives …

Parties should **commit to existing and new National Policy Initiatives (NPIs)**	**State-specific bilateral agreements should have more rigour**
• Complete NPIs under the former agreement (R 3.1) • Consider new NPIs on quality curriculum resources (R 6.2) and building the school leadership evidence base (R 8.1)	• Systematically set out reforms (R 4.1, 4.3, 5.1, 6.1, 7.1, 7.3, 8.1) and outline how they contribute to specific outcomes and targets, including for priority equity cohorts (R 3.2, 4.4)

… with enhanced reporting and public transparency to give the community confidence

Including more information in progress reports…	**… more accessible, complete performance reporting …**	**… and a more expansive independent review**
• Annual reports on state-specific initiatives should report against outcomes and targets (R 3.2, 4.4)	• Introduce standalone reporting (R 9.1) • Fill data gaps for priority equity cohorts (R 4.3, 9.2) • Report on new and refined indicators (R 9.3)	• To assess all aspects of agreement

Recommendations and findings

Chapter 2: What has been happening to student outcomes?

Finding 2.1
Declines in Australia's results in international testing of reading and mathematics among 15 year-old students likely overstate the deterioration of these skills among that age group.

Australia's Programme of International Student Assessment results declined over the decade to 2018 (the most recent year for which data are available).

However, changes in the school starting age in two states meant that about 12 per cent of 15-year-old students who sat the test in 2018 had a year's less schooling to develop their reading and mathematics skills, relative to 15-year-old students who sat the test in 2012.

Finding 2.2
Since 2013, NAPLAN results for reading and numeracy have been flat across all year levels, with exceptions in reading results for year 3 and year 5.

Since 2013, there have been marginal improvements in reading test results in year 3 and year 5, but no improvements in year 7 and year 9. Test results for numeracy have stagnated across all year levels since 2013.

Commission analysis tracking the same cohort from year 3 to year 9 shows that the improvements in year 3 and year 5 reading do not persist to year 7 and year 9.

Finding 2.3
Persistent differences in reading and numeracy outcomes across cohorts suggest some students face systemic barriers.

There are long-standing differences in national test results for reading and numeracy across students from different backgrounds, or who have different experiences or needs.

- Results for reading and numeracy for Aboriginal and Torres Strait Islander students, students in outer regional and remote areas, and students with parents with low educational attainment are consistently below the outcomes of the general student population.
- By year 9, these differences can be as great as the equivalent of 5 years of learning.

Finding 2.4
There has been a small increase in the level of educational attainment since 2015.

The proportion of 20 to 24 year-olds who completed year 12 or equivalent, or a Certificate III or above, increased by 2.5 percentage points to 90 per cent between 2015 and 2021.

Finding 2.5
School attendance has declined since 2015, particularly among students in middle years.

The proportion of students attending school regularly has declined, with much of this decline predating COVID-19.

Declines in attendance levels are more pronounced among students in middle years — attendance of primary students has fallen by 4 percentage points since 2015, while attendance of students in years 7-10 has fallen by 10 percentage points.

Finding 2.6
Many students experience poor social and emotional wellbeing.

There is no nationally consistent measure showing how student wellbeing has changed over time. While some jurisdictions collect data on aspects of student wellbeing, few publish the results.

Available data suggest a sizeable proportion of children and young people experience poor social and emotional wellbeing.

Chapter 3: High-level assessment of the National Policy Initiatives

Finding 3.1
To date, the National Policy Initiatives are unlikely to have affected the education outcomes of Australian students.

Some National Policy Initiatives (NPIs) have been completed but will take time to produce results. Others have been completed but have not yet led to actual reforms. The fate of two key NPIs was only resolved late in the life of the agreement.

- While the design of the unique student identifier and the online formative assessment tool has now been resolved, the agreed approaches do not appear to reflect the original ambitions for, and anticipated benefits of, these NPIs.
- The Senior Secondary Pathways Review and the National Teacher Workforce Strategy have not led to substantial national reforms.
- National data projects have progressed, but the majority are not yet complete.
- The Australian Education Research Organisation has been established but will require time to realise its potential.

Recommendation 3.1
Parties to the National School Reform Agreement should fulfil their commitments to deliver the National Policy Initiatives.

Parties to the next school reform agreement should:

- set firm deadlines to complete the unique student identifier (USI) and the online formative assessment tool
- once the USI is established, consider opportunities to realise its full potential for informing education policy by linking the USI with other data sets and permitting additional uses beyond the agreed initial baseline.

Finding 3.2
The National School Reform Agreement has gaps that undermine its effectiveness in facilitating collective, national efforts to lift student outcomes.

Shortfalls with the Agreement include:

- no outcome that captures wellbeing
- a single weak target for academic achievement
- a dearth of targeted reforms to lift outcomes for students from priority equity cohorts and for students who do not meet basic levels of literacy and numeracy
- a lack of transparent, independent and meaningful reporting on national and state reform activity which means there is limited effective accountability.

Finding 3.3
The next intergovernmental school reform agreement should be focused on achieving outcomes, sub-outcomes and targets broadly consistent with those already agreed by governments in the National School Reform Agreement (NSRA).

Many of the targets, outcomes and sub-outcomes in the NSRA remain relevant. Some modifications to improve the quality of reporting should be pursued, however this broad set of aims should continue to shape the direction of reforms in the next school reform agreement.

The next school reform agreement should be aligned with, and contain practical actions that implement commitments made under subsequent policy statements, such as the Alice Springs (Mparntwe) Education Declaration, and national commitments under the National Agreement on Closing the Gap and Australia's Disability Strategy 2021-2031.

Recommendation 3.2
Firmer targets will strengthen the focus on achieving outcomes and improve accountability to the community.

The National School Reform Agreement does not include sufficient clear, measurable targets to drive reform and hold jurisdictions to account for their performance. The Commission recommends the following actions.

- To maximise their impact, targets should be realistic yet ambitious.
- There should be targets for academic achievement for all students and for students from priority equity cohorts (taking account of existing commitments to the National Agreement on Closing the Gap targets).
- A target should be developed to reduce the proportion of students who do not meet basic levels of literacy and numeracy.
- The targets should capture progress on key academic benchmarks at regular stages in a student's education.
- An appropriate independent body, such as the Australian Curriculum, Assessment and Reporting Authority, should advise on design of the targets.
- The basis for measuring the targets should be common to all jurisdictions (and set out in the main agreement). However, jurisdictions should 'own' their target and each state and territory should settle their targets with the Australian Government, reflecting their circumstances.
- Jurisdictions should report their progress against their targets each year. Bilateral agreements should explain how jurisdictions expect to achieve their targets.

Chapter 4: Lifting outcomes for all students

Finding 4.1
Tens of thousands of students do not meet NAPLAN minimum standards in reading or numeracy each year — many students fall short year after year.

Fewer than half of the students who do not meet NAPLAN minimum standards in reading or numeracy are from the National School Reform Agreement's priority equity cohorts.

- The precise number is uncertain because there are limited data for students with disability.
- Around one third of students who do not meet NAPLAN minimum standards in their early years of schooling do not meet NAPLAN minimum standards in later school years.
- Such experiences can negatively affect students' feelings about themselves and towards learning, and their ability to fulfil their aspirations in later life.

Recommendation 4.1
Jurisdictions should commit to targets and actions to reduce the proportion of students who do not meet basic levels of literacy and numeracy.

Reducing the proportion of students who do not meet basic levels of literacy and numeracy should be a priority for the next intergovernmental school reform agreement.

Recommendation 3.2 proposes setting and reporting targets to reduce the proportion of students who do not meet basic levels of literacy and numeracy.

Parties to the next school reform agreement should set out in their bilateral agreements the actions they will take to reduce the proportion of students who do not meet basic levels of literacy and numeracy. Small-group tuition is one such intervention that is supported by evidence as improving outcomes for students falling behind that parties to the next school reform agreement could consider.

Finding 4.2
Governments are yet to achieve the equitable outcomes for students from the priority equity cohorts that they endorsed in the National School Reform Agreement (NSRA).

For the priority equity cohorts, over the life of the agreement:

- achievement — as measured by results in national literacy and numeracy testing — exhibited improvements in some areas but generally worsened (particularly in numeracy)
- school attendance — which is the NSRA's measure of engagement and only recorded for Aboriginal and Torres Strait Islander students and students from regional and remote areas — decreased
- attainment — which is only recorded annually for students from regional and remote areas — improved.

Outcomes for students with disability cannot be measured because national reporting does not report on the NSRA's outcome measures for this priority equity cohort.

Finding 4.3
Governments have failed to demonstrate how state-specific reforms are addressing the educational needs of students from the priority equity cohorts.

Bilateral agreements between the Australian Government and each state and territory — which were supposed to enable transparent reporting on measures to lift outcomes of students from priority equity cohorts — have patchy coverage, lack meaningful detail, and contain few new measures.

Finding 4.4
The priority equity cohorts in the National School Reform Agreement do not capture many students who are at high risk of experiencing educational disadvantage.

Children and young people living in out-of-home care face significant disruptions to their education and are considerably less likely than their peers to attend school and engage with education — by year 9, children in out-of-home care were four times more likely to be below the national minimum standard in reading, and six times more likely to be below the national minimum standard in numeracy, relative to the general population.

Students who speak English as an additional language or dialect often require specific support to strengthen English language skills to access the general curriculum.

Students from a refugee background generally speak English as an additional language or dialect and face the same challenges. Many have endured experiences of trauma prior to their arrival in Australia, affecting their ability to engage in learning.

Students in the youth justice system often require additional educational support to enable them to overcome the often complex barriers to engagement in education.

Recommendation 4.2
Some groups of students face significant barriers to success at school but are not recognised as priority equity cohorts. A transparent, systematic approach should be used to evaluate the case for new priority equity cohorts.

Parties to the agreement should consider the following cohorts for inclusion in the next intergovernmental school reform agreement as priority equity cohorts:

- students living in out-of-home care
- students with English as an additional language or dialect background
- students in youth detention
- refugee students.

Finding 4.5
The National Agreement on Closing the Gap and Australia's Disability Strategy 2021-2031 have direct implications for how governments seek to lift outcomes for students from priority equity cohorts under the next intergovernmental school reform agreement.

The National Agreement on Closing the Gap establishes commitments for how all government organisations should share decision making, engage with Aboriginal and Torres Strait Islander people (including students) and identify and eliminate racism within education systems.

In the context of the next school reform agreement, these commitments will influence all aspects of policy development affecting Aboriginal and Torres Strait Islander people (including setting of outcomes, design and implementation of reform activities, and transparency and accountability).

Finding 4.5

The National Agreement on Closing the Gap and Australia's Disability Strategy 2021-2031 have direct implications for how governments seek to lift outcomes for students from priority equity cohorts under the next intergovernmental school reform agreement.

Australia's Disability Strategy establishes a potential blueprint for how governments should develop policies, programs, services and systems and engage with people with disability (including students) that parties to the next school reform agreement should draw upon.

Recommendation 4.3

Parties to the next intergovernmental school reform agreement should give effect to relevant commitments under the National Agreement on Closing the Gap and Australia's Disability Strategy.

Consistent with their commitments under the National Agreement on Closing the Gap and Australia's Disability Strategy 2021-2031, as part of the next intergovernmental school reform agreement, parties should:

- commit to actions to lift outcomes and sub-outcomes for students from priority equity cohorts
- develop outcomes, reform activities, and transparency and accountability arrangements in collaboration with representatives from the priority equity cohorts
- set out actions in bilateral agreements that commit to the identification and elimination of racism, the institution of cultural safety requirements across education systems, and implementation of commitments from Australia's Disability Strategy, in particular application of a social model of disability in education systems
- prioritise data measurement of the outcomes and experiences of students with disability in education.

Finding 4.6

Students from priority equity cohorts face multiple types of barriers to access a high-quality education.

The learning environment, including the culture within the classroom, is not always well suited to improve outcomes for students from priority equity cohorts.

- Some Aboriginal and Torres Strait Islander students do not see their identities, cultures, and knowledges reflected in what they are learning.
- Teachers and leaders often have insufficient time, skills, and/or resources to support students from priority equity cohorts and their families.
- Students from priority equity cohorts can lack access to an inclusive learning setting that supports their learning needs and wellbeing.

Finding 4.7
There is a good understanding of what governments, school systems, school leaders and teachers can do to better meet the learning needs of students from priority equity cohorts.

Features of the school learning environment that are widely accepted as being critical for meeting the learning needs of student from priority equity cohorts include:

- teachers and leaders adapt their understanding of schooling success for each student and have the skills to identify and respond to their diverse needs
- schools support parents and carers to actively engage with their child's education
- schools adopt culturally responsive curriculum and pedagogies to enable all students to see their identities, cultures, and Aboriginal and Torres Strait Islander knowledges reflected in what and how they are learning
- students, families, and communities' views inform delivery of education services
- students and families from regional and remote areas have access to technological resources and other assistance to ease challenges of remote learning.

Governments can encourage more widespread adoption of these practices through a variety of levers, ranging from enshrining these features in policy and guidelines distributed to schools; designing and delivering effective and targeted training to improve teachers' skills and understanding; and establishing partnerships with communities and representative bodies of students and communicating with them regularly.

Recommendation 4.4
Parties should design the next intergovernmental school reform agreement so that it identifies and reports on their actions to lift outcomes for students from priority equity cohorts.

Parties to the next intergovernmental school reform agreement should:

- include national targets for students from each priority equity cohort so the community can assess equity of outcomes across students
- ensure state and territory bilateral agreements, developed in consultation with people with lived experience, systematically set out for students from each priority equity cohort:
  - the outcomes and relevant sub-outcomes they are seeking to achieve for students in the priority equity cohort
  - the reforms government will implement to achieve those outcomes by addressing the various barriers to accessing high quality education that students from that priority equity cohort face
  - the theory of change linking reforms to long-term outcomes and arrangements for collecting data to enable monitoring and evaluation over time
- publicly report each year on progress in implementing reforms and achieving the outcomes and targets they set.

Finding 4.8
Lack of publicly available data on school-level spending for students from priority equity cohorts limits accountability.

There is no publicly available data on school-level spending on students from priority equity cohorts. This means that policymakers, parents, groups representing students and the public have little visibility of school-level actions to lift outcomes for students in priority equity cohorts, which limits accountability.

Chapter 5: Student wellbeing

Finding 5.1
Many students experience poor wellbeing and some do not receive effective support.

- A significant proportion of children and young people experience poor social and emotional wellbeing.
  - Poor wellbeing can be particularly pronounced among students who experience challenges to engagement and inclusion at school, for example, children and young people in out-of-home care, students with disability and Aboriginal and Torres Strait Islander students.
- Poor wellbeing directly affects students' capacity to learn.
- While wellbeing is influenced by many factors outside the school gate, poor wellbeing can be exacerbated by responses from schools.
- Effective school leadership and teacher practices are essential elements for supporting student wellbeing within schools.
- Australian, State and Territory Governments have many initiatives and information resources to support student wellbeing, but schools have not consistently implemented evidenced-based approaches for all students.

Recommendation 5.1
Governments should design the next intergovernmental school reform agreement so that it includes a focus on student wellbeing.

Parties to the next school reform agreement should add improved student wellbeing as an outcome of the agreement, develop a new sub-outcome on improving students' subjective wellbeing, and commit to annual reporting.

- Governments should collect data for a composite wellbeing index but provide schools and data providers the flexibility to choose from a range of high-quality and relevant survey instruments, including those used in existing student surveys.

Bilateral agreements under the next school reform agreement should include actions intended to improve student wellbeing, and report each year on progress. At a minimum, bilateral agreements should include actions to support all schools to adopt wellbeing strategies that:

- provide support and training for teachers to identify students experiencing poor wellbeing and to respond appropriately
- articulate the role and responsibilities of wellbeing staff within the school
- clarify student pathways for support, both within and beyond the school.

Chapter 6: Supporting teacher effectiveness

Finding 6.1

Policies that improve the quality of the teacher workforce are likely to be one of the most significant ways governments can influence student outcomes. Some options warrant particular attention.

Improving teacher effectiveness can provide substantial personal, social and economic benefits.

- Improving initial teacher education (ITE) is likely to be more effective than screening for 'high-quality' candidates for ensuring people entering the profession are well equipped for teaching.
- Teaching performance assessments (TPAs), which assess the classroom readiness of graduate teachers, have only recently been introduced by jurisdictions — it is too early to decide whether TPAs should be changed to embody minimum standards.
- Better access to quality induction and mentoring is likely to accelerate skill acquisition and increase retention when teachers start in the classroom.
- Quality on-the-job learning, including from more experienced colleagues, can lead to ongoing improvement throughout teachers' careers, but it relies on teachers having sufficient time.
  - A key benefit of Highly Accomplished and Lead Teachers (HALTs), and other highly skilled teachers is their ability to share expertise with other teachers.
  - But there has been poor take up of HALT certifications and many certified teachers say they have too little time or opportunity to lead the development of others in their school.
- Governments have announced their intention to improve ITE quality, induction and mentoring and streamline HALT accreditation processes under the National Teacher Workforce Action Plan.
- Although these announced actions have the potential to address concerns about teacher effectiveness, some lack detail and firm commitments and/or may require complementary reforms to ensure their success.

Recommendation 6.1

Parties should design the next intergovernmental school reform agreement to better develop and deploy expert teachers to disseminate evidence-based teaching practices.

Each state and territory should include in their bilateral agreement mechanisms to ensure expert teachers can support colleagues to achieve better student outcomes through the dissemination of evidence-based teaching practices. Actions should:

- be developed in consultation with school leaders and teachers
- support Highly Accomplished and Lead Teachers to share their in-depth knowledge and skills with their colleagues to help them improve.

Finding 6.2
High search costs for locating quality teaching resources prevent many teachers from employing evidence-based resources in the classroom.

Many teachers have difficulties locating high quality teaching resources that meet the needs of their students, or verifying the quality of teaching resources.

- More than half of Australian teachers surveyed, who were aware of government provided instructional materials, did not think they were easy to find or that they met the learning needs of their students

Recommendation 6.2
Governments should establish a single portal for teachers and school leaders to access evidence-based instructional material. This could be a national policy initiative in the next intergovernmental school reform agreement.

The Australian, state and territory governments should work together to curate high-quality, evidence-based and government endorsed curriculum resources and make them available for teachers and school leaders from a single source.

Resources should:

- be curated by organisations with relevant curriculum expertise such as the Australian Curriculum, Assessment and Reporting Authority, the Australian Education Research Organisation and/or Education Services Australia
- be independently quality assured based on what research says is most effective
- encompass whole-school curriculum plans, whole-subject sequences, lesson plans and classroom tools
- utilise existing quality materials, including from the private sector, where possible
- be complemented with training in how to use the material.

Chapter 7: Ensuring a stable supply of teachers

Finding 7.1
Teacher shortages in regional, rural and remote areas and in key subjects, such as maths, science and English impose substantial costs on students, teachers and schools.

There are teacher shortages in regional, rural and remote areas, and in subjects such as mathematics, science, English and design and technology.

The significant disparity between the share of teachers of Aboriginal and Torres Strait Islander background (2 per cent) and students with that background (6 per cent) frustrates culturally appropriate teaching.

Factors such as growing student enrolments, changes in initial teacher education enrolment trends, and an ageing workforce may contribute to continued teacher shortages in the future.

Teacher shortages can impose substantial costs on students, teachers and schools, including because it gives rise to out-of-field teaching, and teachers without domain specific expertise tend to be less effective, particularly in upper secondary school grades.

Recommendation 7.1
Reducing out-of-field teaching should be a priority for the next intergovernmental school reform agreement.

Parties to the next school reform agreement should:

- include state-specific reforms, to be set out in their bilateral agreements and developed in consultation with teachers and school leaders:
  - to support educators teaching out-of-field.
  - to attract teachers to areas of shortage, including measures to lower switching costs for mid-career entrants contemplating teaching, particularly in high demand areas and for former teachers looking to return to the profession.
- report annually on the prevalence of out-of-field teaching in their jurisdictions.
- All jurisdictions should reintroduce a one-year qualification for secondary teaching for well-qualified individuals in subject areas of high demand.

Recommendation 7.2
All jurisdictions should participate in the development of the new national First Nations Teachers' Strategy.

The Australian Government has committed to co-design a new national First Nations Teachers' Strategy in close partnership with First Nations education organisations, to better attract and retain more Aboriginal and Torres Strait Islander teachers.

All jurisdictions should contribute to the development of the Strategy.

Consistent with commitments under The National Agreement on Closing the Gap, the Strategy should include specific measures to identify and remove racism experienced by Aboriginal and Torres Strait Islander educators in the education system.

Subject to the views of First Nations education organisations, the Strategy could identify ways to establish clear pathways for Aboriginal and Torres Strait Islander educators seeking to transition to teaching and/or leadership roles.

Finding 7.2
Teachers work long hours, and their workload has increased.

Australian teacher workload is greater than the OECD average. Australian teachers spend more time on non-teaching tasks, and less time on teaching tasks, than their international counterparts.

Teacher workload has increased over time. Many teachers cite heavy workload as a reason for wanting to leave the profession.

Finding 7.3
A more systematic and evidence-based approach to deploying the growing number of teaching assistants is required.

While teacher workload has been increasing, the number of teaching assistants and other support staff has grown.

Anecdotal evidence reveals teaching assistants are being deployed in ad hoc ways and do not always have the support or training they need to undertake the myriad of tasks they perform.

A more systematic and evidence-based approach to determining the roles and responsibilities of teaching assistants and support staff, and their appropriate use would be beneficial, including to free up teacher time.

Recommendation 7.3
Parties should design the next intergovernmental school reform agreement so that it focuses on maximising the value of teachers' and school leaders' time.

Parties to the next school reform agreement should ensure state-specific reforms in bilateral agreements to support teachers and school leaders (developed in consultation with teachers and school leaders) identify how they maximise the value of teachers' and school leaders' time, including by reducing low-value tasks.

Finding 7.4
Building on efforts to improve teacher workforce demand and supply data would enable governments to better identify and respond to workforce shortages.

- All governments recently committed to enhanced workforce data collection and nationally consistent teacher workforce projections. This will require ongoing and full participation by all Governments in the Australian Teacher Workforce Data initiative, including the provision of teacher demand data.
- To maximise the value of these commitments, a labour market model could be developed that would allow governments to better identify and predict teacher shortages and evaluate the impacts of different policies on the workforce.

Chapter 8: School leadership

Finding 8.1
Improving school leadership can boost students' learning. Workforce planning, mentoring and professional development for school leaders can help ensure a sustainable supply of effective school leaders.

School leaders are second only to teachers in improving student outcomes. Improving the effectiveness of leaders, especially principals, would generate sizeable benefits.

Long lead times for teachers to move into leadership roles, and the emergent pressures on the current cohort of school leaders, underscore the importance of effective leadership planning to ensure a sustainable pipeline of future school leaders.

School leaders would benefit from greater guidance on specific measures they can adopt in their schools to improve student outcomes.

Recommendation 8.1
Governments should improve the local evidence base on school leadership in an Australian context as a national policy initiative in the next intergovernmental school reform agreement.

Parties to the next school reform agreement should commission education bodies, such as the Australian Education Research Organisation and Australian Institute for Teaching and School Leadership, to improve the local evidence base on effective school leadership practices. This would form a research agenda involving:

- identifying the most important gaps in the school leadership evidence base
- conducting high quality studies to fill these gaps
- ensuring that the results of the studies are used to inform leadership practice, such as through professional development for current and future leaders.

Once an evidence base is available, each jurisdiction should update their bilateral agreements to identify specific reforms they will undertake to incorporate the evidence base, and publicly report on progress implementing these reforms.

Chapter 9: The National Measurement Framework

Finding 9.1
The Measurement Framework for Schooling in Australia is not appropriate for measuring progress on National School Reform Agreement outcomes.

While reliable, and largely relevant, the Measurement Framework for Schooling in Australia is not a complete means of reporting progress on National School Reform Agreement outcomes.

Finding 9.2
Performance data to help assess progress against the National School Reform Agreement outcomes and sub-outcomes is not readily accessible.

The visibility of governments' progress against the National School Reform Agreement sub-outcomes and targets is diminished by the absence of a standalone report and the reliance on the broader *National Report on Schooling in Australia* and Key Performance Measure dashboard for performance reporting.

Recommendation 9.1
Parties should introduce standalone performance reporting against the National School Reform Agreement outcomes.

Australian, State and Territory Governments should commit to standalone reporting on progress against the National School Reform Agreement sub-outcomes and targets. To achieve this, Australian, State and Territory Governments should either:

- publish a new report for the purposes of reporting on progress against the National School Reform Agreement sub-outcomes and targets, or
- augment the National Report on Schooling in Australia with a new sub-section.

At a minimum, the Australian Curriculum, Assessment and Reporting Authority should clearly identify in the Measurement Framework for Schooling in Australia and the *National Report on Schooling in Australia,* which key performance measures are sub-outcomes or targets for the National School Reform Agreement.

The report should be tabled annually in the Parliament of Australia.

Recommendation 9.2
Parties should improve the performance reporting framework of the next intergovernmental school reform agreement.

Parties to the next intergovernmental school reform agreement should improve the performance reporting framework of the next school reform agreement by:

- clearly articulating the role of the Measurement Framework for Schooling in Australia in enabling the reporting of the sub-outcomes and targets of the agreement
- developing data to enable reporting on outcomes for students with disability. This may include by exploring opportunities to use the National Disability Insurance Scheme outcomes framework data, options for data linkage, or asking students to state whether they identify as having a disability as part of NAPLAN and National Assessment Program sample assessments
- publicly reporting on each outcome by jurisdiction for priority equity cohorts (students with disability, Aboriginal and Torres Strait Islander students and students in regional and remote areas)
- adding new sub-outcomes for learning gain, post-school outcomes and the measure of student wellbeing proposed in recommendation 5.1
- updating the NAPLAN sub-outcome to use proficiency standards rather than learning bands.

Recommendation 9.3
ACARA should identify and implement improvements to the Measurement Framework for Schooling in Australia as part of its next review.

For its next review of the Measurement Framework for Schooling in Australia, the Australian Curriculum, Assessment and Reporting Authority (ACARA) should:

- develop a performance indicator framework, whereby Key Performance Measures (KPMs) are mapped to the National School Reform Agreement sub-outcomes and targets, and the goals and commitments of the Alice Springs (Mparntwe) Education Declaration
- categorise the indicators in the performance indicator framework as either student outcomes of schooling, external influences on outcomes and system performance measures
- seek and consider feedback from students, educators and communities on a draft performance indicator framework and draft recommendations for new or amended KPMs
- seek to include a new measure and data on school disciplinary absences
- publicly document which National School Reform Agreement sub-outcomes and targets are unreported in the *National Report on Schooling in Australia* and KPM Dataset
- publicly document which goals and commitments of the Mparntwe Declaration are unreported.

ACARA should work towards filling reporting gaps by exploring the use of State and Territory Government data that are comparable over time, even if it is not nationally complete or comparable across jurisdictions. Well-established State and Territory Government surveys of students, parents and carers, and teachers should be given due consideration.

1. About this review

1.1 What has this review been asked to do?

The Australian, State and Territory Governments have a long history of collaborating on education — working together to build the national institutions, systems and tools to support better student outcomes.

The National School Reform Agreement (NSRA) (2018) — a joint agreement between the Australian, State and Territory Governments — sets out the most recent focus for collaborative reform efforts. The NSRA continues the work of its predecessor by establishing a reform agenda intended to contribute to a high quality and equitable education for all students (COAG 2018, p. 34). It sets out three targets for the school system, three outcomes of reform, and a series of sub-outcomes to track progress. To realise these outcomes, the NSRA sets out eight National Policy Initiatives (NPIs), nested within three reform directions (table 1.1).

The initiatives represent actions for the Australian, State and Territory Governments to jointly undertake in order to foster improvement in schools. Actions are intended to be focused in areas where national collaboration will have the greatest impact, build on current national reform efforts, complement State and Territory leadership in each jurisdiction and support local implementation (COAG 2018, p. 5).

In addition to the eight NPIs, each State and Territory has a bilateral agreement, setting out their actions to address outcomes for all students as well as students from priority equity cohorts. The bilateral agreements take into account the specific contexts, existing reform efforts and starting points for the relevant State or Territory (COAG 2018, p. 43).

Implementation of the eight NPIs, and the actions set out in the bilateral agreements, are a condition of Commonwealth funding to States and Territories. All parties agreed to implement the NPIs over the 5 years to December 2023.

Under the NSRA, parties committed to an independent review of the NPIs, reporting by the end of 2022.[11] This review fulfils that commitment.

Consistent with the review provisions in the NSRA, the Australian Government has asked the Commission to assess:

- the effectiveness and appropriateness of the NPIs outlined in part 3 of the NSRA, recognising that national reform takes time to implement and mature, and for the effects of nationally coordinated reform efforts to materialise
- the appropriateness of the National Measurement Framework for Schooling in Australia in measuring progress towards achieving the outcomes of the NSRA.

[11] NSRA, s. 29 and 31.

Table 1.1 – A summary of the NSRA

The NSRA comprises eight initiatives nested within three reform directions to guide the school reform agenda

Part 2 — objectives, outcomes, targets and measures	**Objective**	Australian schooling provides a high quality and equitable education for all students		
	Targets	Australia considered to be a high quality and high equity schooling system by international standards by 2025 By 2031, increase the proportion of people (age 20-24) attaining Year 12 or equivalent qualification to 96 per cent By 2031, increase the proportion of Aboriginal and Torres Strait Islander people (age 20-24) attaining year 12 or equivalent qualification to 96 per cent		
	Outcomes	Academic achievement improves for all students, including priority equity cohorts	All students are engaged in their schooling	Students gain the skills they need to transition to further study and/or work and life success
	Sub-outcomes	5 sub-outcomes	1 sub-outcome	1 sub-outcome
Part 3 — reform Activity	**Reform directions**	Supporting students, student learning and student achievement	Supporting teaching, school leadership and school improvement	Enhancing the national evidence base
	National policy initiatives	Enhance the Australian Curriculum to support teacher assessment of student attainment and growth against clear descriptors	Reviewing teacher workforce needs of the future to attract and retain the best and brightest to the teaching profession and attract teachers to areas of need	Implementing a national unique student identifier to support better understanding of student progression and improve the national evidence base
		Assist teachers to monitor individual student progress and identify learning needs through an opt-in and on demand student learning assessment tools		Establish an independent national evidence institute to inform teacher practice, system improvement and policy development
		Review senior secondary pathways into work, further education and training	Strengthening the initial teacher education accreditation system	Improve national data quality, consistency and collection to improve the national evidence base and inform policy development

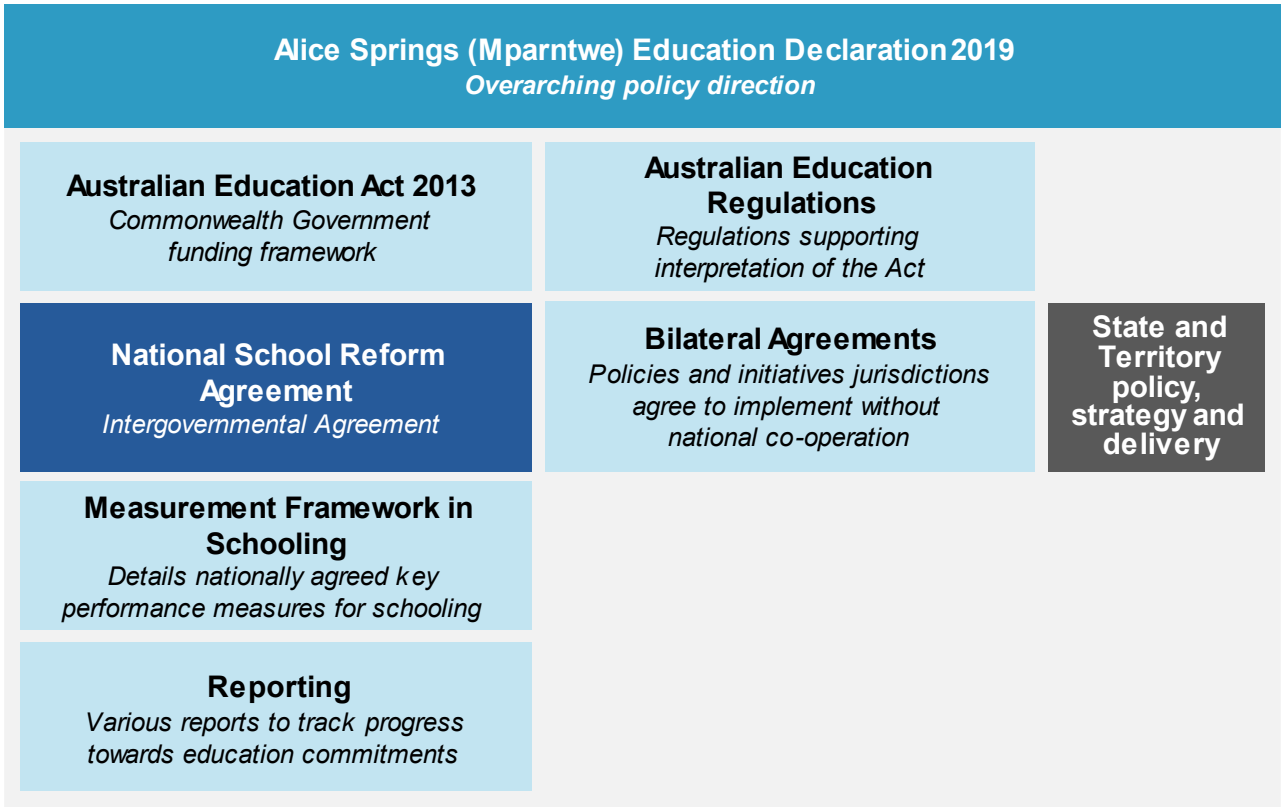
The Australian Government has also asked the Commission to make recommendations to inform the design of the next intergovernmental school reform agreement and to improve the National Measurement Framework. The Commission has taken this to include identifying future priorities for intergovernmental collaboration.[12]

Funding is outside the scope of the Commission's review.

The NSRA is only one part of the school regulatory and policy architecture (figure 1.1). While the NSRA is intended to work in harmony with the other components of the system, it is only one source of policies and reform actions that contribute to overall system outcomes. This makes it difficult to isolate the NSRA's impact on system outcomes.

Figure 1.1 – The school regulatory and policy architecture

The NSRA is just one part of a broader school regulatory and policy architecture



[12] In addition, on 7 April 2022, the (then) Australian Government Minister for Regional Education wrote to the Commission to highlight aspects of the NSRA review that are particularly relevant to regional and remote students.

1.2 How has the Commission approached this review?

In undertaking this review, the Commission has taken account of important context …

In assessing the effectiveness and appropriateness of the NPIs and identifying future priorities for intergovernmental collaboration, the Commission has had regard to the broader education context, including that:

- The NSRA will run until December 2023, and some NPIs are not yet complete. Further, education reforms can have a long maturation period, taking a number of years to influence practice and behavioural changes at the system level and affect student outcomes system-wide
- The current reforms under the NSRA do not represent all of the collaborative intergovernmental activities on education in Australia. While the NSRA is intended to work in harmony with the other components of the system, it is one of many policies and reform actions that contribute to overall system outcomes. This makes it difficult to isolate the NSRA's impact on system outcomes (chapter 2). Conversely, the concepts behind a number of the reforms are also being progressed through individual jurisdictions using their own approaches
- The education landscape has changed. COVID-19 and recent natural disasters have disrupted education systems. COVID-19 required schools, teachers, parents and students to rapidly adjust to new modes of learning — sourcing, implementing and adapting to a remote, online learning environment. While the impact of the pandemic on student outcomes is still not fully apparent, some clear policy implications have emerged. Beyond the immediate need of identifying and assisting students that may have fallen behind, COVID-19, along with a series of natural disasters, underscored the importance of school systems being able to adapt to changing contexts and needs. To be successful in this endeavour, schools and school systems will need to maintain a focus on innovation and improvement, supported by data, research and evidence
- While much can be done within education systems to lift student outcomes and make them more equitable, schools have limited capacity to address some barriers to education (such as secure housing tenure for students). That is not to say the school system cannot adopt policies and practices to support all students, regardless of the challenges they face; just that some barriers would be more effectively addressed through social or health policy measures rather than education measures. Reflecting this, the Commission has focussed on factors that can operate 'within the school gates'
- There can be a substantial gap between high-level policy discourse and classroom practice. A key challenge in lifting school performance is that policy deliberations — including as part of intergovernmental agreements — can be far removed from the daily realities of classrooms, teachers and students. A theme of this report is the need for the next intergovernmental school reform agreement to move beyond system architecture and drive real improvements on the ground. To be successful, the NSRA will need to close the distance between national policy making and classroom practice. Each should inform the other — with teachers and school leaders influencing policy, and evidence-based approaches gaining more traction in schools and classrooms. Ultimately, schools are relied upon to implement NPIs in addition to other jurisdictional policies and reforms.

… and engaged widely

This review has drawn on information from a wide range of sources, including academic research, past reviews, consultations with participants and the review team's own research. In accordance with the *Productivity Commission Act 1998 (Cth)*, the Commission has sought to maximise the transparency of this review and provide

as much opportunity as possible for interested parties to have input, within the timeframe provided for reporting to government. Box 1.1 outlines the conduct of the review.

The Commission thanks all those people and bodies who have contributed to this review. The Commission would particularly like to thank those young people who took time out of their busy learning schedules to share their experiences of school, including over the past few challenging years.

Box 1.1 – Conduct of this review

In conducting this review, the Commission:

- distributed an initial circular to potentially interested parties upon receipt of the terms of reference
- released a Call for Submissions on 9 May 2022, which expanded on the terms of reference and invited parties to lodge submissions and/or brief comments by 17 June 2022
- met with State and Territory Governments (as the managers of their respective school systems), as well as non-government school sector representatives. The Commission also engaged with students, teachers, principals, parent and community representative groups, key Commonwealth education entities such as the Australian Curriculum, Assessment and Reporting Authority, the Australian Institute for Teaching and School Leadership, Education Services Australia and the Australian Education Research Organisation, representatives for Aboriginal and Torres Strait Islander students, academics, education experts and education think-tanks.
- released an interim report on 14 September 2022 and invited further submissions
- held further meetings with interested parties, including governments, non-government school sector representatives, students, teachers, principals, parent and community groups, and education experts and entities.

In total the Commission met or held discussions with 62 parties. Some 127 submissions were received, including 53 before the interim report and 74 for the final report. Participants also made 80 brief comments on the review's website. A full list of submissions received and parties consulted is available at appendix A.

Consistent with the terms of reference, the Commission provided the final report ahead of 31 December 2022 to allow time for the review's findings to inform the development of the next national agreement.

What will be covered in this review?

In acquitting the terms of reference for this review, the Commission has assessed recent trends in student outcomes (chapter 2) as well as the effectiveness and appropriateness of the eight NPIs included in the NSRA, and identified future areas of focus, including areas where intergovernmental cooperation may need to adapt to support greater flexibility, accompanied by enhanced accountability and transparency (chapter 3).

Each suggested area of focus — lifting outcomes for all students (chapter 4), student wellbeing (chapter 5), and supporting teaching and school leadership (chapters 6, 7 and 8) — is discussed in subsequent chapters. Finally, the report considers the appropriateness of the National Measurement Framework for Schooling in Australia in measuring progress towards achieving the outcomes of the NSRA and makes recommendations for future improvements (chapter 9).

Relationship to other reviews and policy developments

The Commission is concurrently undertaking an inquiry into Australia's productivity performance, with the aim of identifying reforms to enhance future productivity and standards of living. As a critical element in the formation of Australian human capital, schools form part of that review.

The Productivity Inquiry consideration of schools is complementary to the NSRA review, taking a broader, economy wide focus on the role of schools in ensuring a productive future workforce. The 5 Year Productivity Inquiry Interim Report 5: *From learning to growth*, was released on 4 October 2022. It outlines potential ways governments can improve education outcomes to support future productivity. A final report is due to be handed to the Australian Government in February 2023.

Following on from a roundtable with Education Ministers, teachers, principals and other education experts in August 2022, a working group led by the Australian Government, along with States and Territories, unions, principals' representatives and university representatives were tasked with developing a National Teacher Workforce Action Plan.

The Acton Plan, which seeks to address teacher shortages, canvasses a number of responses, such as ways to build the respect and reputation of the profession, encourage more young people to become a teacher, better prepare teachers for the classroom, tackle workload issues, and improve data availability. Many of these same issues are also considered within the context of this review. Where possible, the Commission has tried to take account of these concurrent developments.

2. What has been happening to student outcomes?

Key points

- **Education improves the future life prospects of students.**
  - Students who benefit from a quality school education have higher incomes, experience lower levels of unemployment, and exhibit higher levels of civic engagement and trust.
- **Despite a 21 per cent increase per student in real recurrent funding for schools over the past decade, broad improvements in student outcomes have not materialised.**
  - Student outcomes, spanning academic achievement, educational attainment, engagement and wellbeing are mixed.
- **The performance of Australian school students in national and international assessments of literacy and numeracy has been largely flat over the past decade.**
  - Despite pockets of improvement, overall results have not improved in either Australia's National Assessment Program — Literacy and Numeracy (NAPLAN) or the OECD's Programme for International Student Assessment (PISA).
  - While PISA results point to falling student outcomes, some of this decline is due to changes in the student sample.
- **More students are not regularly attending school.**
  - In a trend that pre-dates COVID-19, the share of students attending school regularly has fallen, with only about 7 in 10 students attending school 90 per cent of the time.
- **More people aged 20 to 24 are completing Year 12 or attaining equivalent qualifications.**
  - The share of young adults who complete year 12, an equivalent, or a Certificate III or above, has been steadily increasing, reaching 90 per cent in 2021.
- **Persistent gaps in education outcomes for some cohorts of students point to systemic barriers.**
  - Outcomes for Aboriginal and Torres Strait Islander students, students in outer regional and remote areas, and students with parents with low educational attainment are consistently below outcomes for the broader student population.
  - The extent of the barriers faced by these students are significant, with gaps in outcomes as large as 5 years by the time students' finish year 9.
  - Gaps in outcomes, measured in years of learning, take longer to close as students progress through school.
  - Gaps cannot be measured for students with disability, despite the Agreement naming them as a priority equity cohort, as there is no consistent data tracking their educational outcomes.

The purpose of the National School Reform Agreement (NSRA) is to contribute to a high quality and equitable education system for all students (chapter 1). Delivering on the objectives of the NSRA is about more than improving NAPLAN points — it means improving the life prospects of today's students and Australia's social and economic future.

This chapter explores what has been happening to student outcomes over the past decade. It begins by considering why education outcomes matter, both to the individual and society more broadly (section 2.1). Section 2.2 then explores progress in student outcomes in four domains — academic achievement, educational attainment, engagement and wellbeing. The chapter concludes by considering the different factors that influence student outcomes (section 2.3).

2.1 Why do education outcomes matter?

Education provides wide-ranging benefits

Improving education outcomes positions young people to live fulfilling and productive lives — increasing an individual's earnings, health and capacity to participate in society.

School education is linked to improved pay and job prospects …

There is considerable evidence to suggest that completing high school improves young peoples' earning and employment prospects, driven in large part by education improving the productivity of individual workers (figure 2.1) (Deloitte Access Economics 2016; DESE 2019; Forbes, Barker and Turner 2010; Leigh 2008; PC 2022a; Wilkins et al. 2021).

The links between education and earning and employment prospects have been borne out in a number of studies.[13] A 2019 Australian study found young people who complete secondary school have, on average, annual incomes 14 per cent higher and an unemployment rate 2.2 percentage points lower than people who do not complete secondary school (DESE 2019). A similar study, using Household Income and Labour Dynamics in Australia (HILDA) data (a household based longitudinal study), found that median wages when first entering the workforce were 35 per cent higher for people who had completed high school compared to people who had not (Wilkins et al. 2021, p. 78).

Some of the earning and employment effects of education reflect individuals' pre-existing ability rather than the effect of education itself. Even so, evidence still finds earnings and labour force participation benefits from the completion of secondary school, along with vocational and higher education, after accounting for unobserved innate ability (Leigh 2008).

[13] People who perform well academically at school likely enjoy similar benefits. A study drawing on the longitudinal survey of Australian youth, which tracked a sample of over 10 000 students between the ages of 15 and 25, demonstrated that a student with higher mathematics scores, on average, will enjoy a wage premium and are more likely to be employed, after controlling for prior learning ability (Deloitte Access Economics 2016, pp. 51, 56).

Figure 2.1 – More educated workers are more likely to be in the labour force and earn more over their life course

Source: Productivity Commission (2022a, p. 4).

… and delivers broader benefits to society

The benefits of education extend beyond individuals' income and employment prospects. Recent international and Australian research suggests 'spillover effects', whereby educated individuals increase the productivity of their peers through interactions and knowledge sharing.

A cross-country analysis undertaken by the OECD found strong evidence that differences in cognitive skills (as measured by school test scores) lead to differences in economic growth between countries (Hanushek and Woessmann 2012, p. 26). In an Australian context, combining individual analysis with cross-country analysis, Deloitte Access Economics found that the benefits of increasing PISA scores for Australia exceeded the sum of benefits for individuals. This suggests there may be economic returns to education over and above the economic returns to the individual (Deloitte Access Economics 2016, p. xv).

Studies have found workers with higher educational attainment (including, but not restricted to, workers who complete secondary school) are more likely to innovate, and those innovations spur technological progress and increase productivity across the economy (Deloitte Access Economics 2016; Hanushek and Woessmann 2012; Lamb and Huo 2017).

Completing secondary education also equips people to make more informed decisions, giving rise to a range of broader benefits (OECD 2010, p. 17). Research suggests that people who complete secondary education tend to exhibit higher levels of civic engagement and trust (DESE 2019), engage more in volunteering (OECD 2010) and healthy behaviours such as increased exercise and reduced incidence of smoking (DESE 2019), and are less likely to commit a crime (Lamb and Huo 2017).

The importance of education will grow as the economy transforms

The importance of secondary school performance and completion to individuals' future career prospects will continue to grow as the nature of the skills demanded by the Australian economy evolve. Technological change and the ongoing shift to a services-based economy will continue to see routine manual skills (such

as repetitive assembly on a production line) become less important, while demand for non-routine skills (such as abstract reasoning, interpersonal communication or managing teams) increases. Indeed, the National Skills Commission estimated that 9 out of 10 new jobs created in the next five years will require skills developed through post-secondary school education (NSC 2022).

2.2 What has been happening to student outcomes?

Given the importance of secondary school performance and completion to individuals' future career prospects, it is important to consider how student outcomes are tracking.

Trends in student outcomes can be grouped under four broad categories or domains — academic achievement, educational attainment, engagement and wellbeing (figure 2.2). In policy and academic literature, academic achievement (demonstration of learning and knowledge) and educational attainment (successful completion of secondary school) are generally seen as ends in themselves, whereas student engagement (being physically and emotionally present to learn) and wellbeing are variously seen as enablers of achievement and attainment, ends in themselves, or both (Centre for Education Statistics and Evaluation 2015, p. 2; OECD 2017b, p. 1). In practice, there are complex interactions between these outcomes.

Despite governments' ongoing commitments to delivering a high quality and equitable education for all students, and a significant increase in funding for schools over the past decade, broad-based improvements in student outcomes have not materialised.[14] [15]

However, in more recent years, the absence of a significant change in outcomes has also been seen as an indicator of the resilience of the education system during a period of unprecedented disruption (chapters 1 and 3). While the impacts of COVID-19 on student outcomes, including for student wellbeing, are yet to be fully understood, predictions of drastic falls in NAPLAN results related to COVID-19 have not been borne out.

[14] NSRA s. 34. See also Goal 1 of The Education Goals for Young Australians — The Australian education system promotes excellence and equity.

[15] Caution is advised when using the analysis to make inferences about the effectiveness of NSRA, as many initiatives are in their infancy (chapter 3, appendix C), there are other factors that influence student outcomes (section 2.3) and many of the outcomes described below predate the NSRA (which was introduced in 2019).

Figure 2.2 – Domains to measure school system performance

There are four common domains of student outcomes

Academic achievement in literacy and numeracy has largely stagnated over the past decade

In Australia, academic achievement is typically measured using PISA (an international standardised test conducted every three years by the OECD for 15 year old students) and numeracy and literacy results from NAPLAN (a national assessment undertaken by year 3, 5, 7 and 9 students every year). Over the past decade or so, overall, Australian students' results have not improved in either of these assessments.

PISA results have declined, driven in part by changes in student cohorts

Australian students' average PISA results declined from 2009 to 2018 (figure 2.3) — the most recent year for which results are available. As one of the few measures that show declining (as opposed to stagnating) academic outcomes, much has been made of these results. However, when interpreting Australia's PISA results, there are three important caveats to bear in mind.[16]

- As made clear by the OECD, the decline in results from 2015 and 2018 is not statistically significant for mathematics and reading — put simply, this means there is not sufficient evidence to suggest students' ability declined over this period.
- Looking further back at results, while the decline in results between 2012 and 2018 is statistically significant for mathematics and reading, in part, it reflects changes in the composition of students sitting the test. As an example, in 2012, about 19 per cent of 15-year old students sitting the test were in Year 11; in 2018, this share dropped to only 7 per cent. That means about 12 per cent of students in the sample had an entire year less schooling than in previous samples. Adjusting for this reduces the extent of the decline by at least 25 per cent, and as high as 45 per cent (reading) and 30 per cent (mathematics) (Commission analysis).[17]
- Australia is one of a number of countries with declining PISA results. This raises a question of whether national curriculums are shifting away from the PISA assessment framework, making the PISA test more

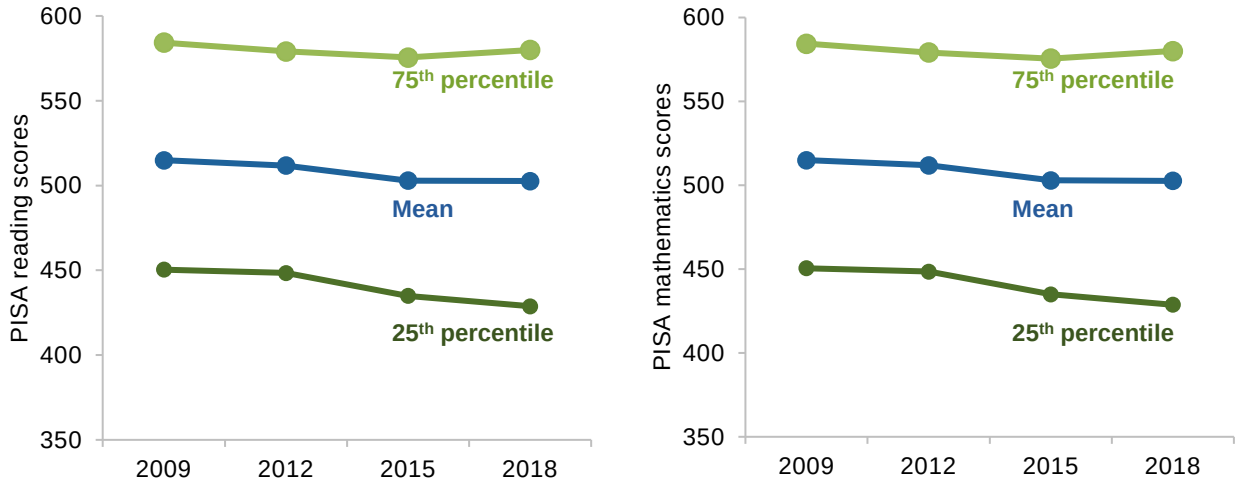
[16] These caveats affect average scores, the distribution of scores, and the share of students in the highest and lowest performance bands.

[17] Compositional changes are particularly relevant in certain States, such as Queensland and Western Australia, where there have been changes to the school starting age.

difficult for students in these countries (sometimes referred to as 'curriculum drift'). Preliminary analysis undertaken by the Commission shows that the decline in Australian students' scores since 2012 is matched by a decline in the OECD average. Relative to the OECD mean, there is no evidence of a statistically significant decline in the average scores of Australian students (after controlling for year-level and demographic characteristics of students sampled) (appendix B).

Notwithstanding the caveats set out above, PISA results remain important for comparing education outcomes across countries, as well as different groups or 'cohorts' within countries.

Figure 2.3 – Reading and mathematics PISA scores for Australian students[a,b]
2009 to 2018



a. The chart shows the mean PISA score and the scores at the 25th and 75th percentile. **b.** The change in mean scores between 2015 and 2018 was not statistically significant.

Source: Thomson et. al. (2019).

Finding 2.1
Declines in Australia's results in international testing of reading and mathematics among 15 year-old students likely overstate the deterioration of these skills among that age group.

Australia's Programme of International Student Assessment results declined over the decade to 2018 (the most recent year for which data are available).

However, changes in the school starting age in two states meant that about 12 per cent of 15-year-old students who sat the test in 2018 had a year's less schooling to develop their reading and mathematics skills, relative to 15-year-old students who sat the test in 2012.

NAPLAN results have been relatively flat

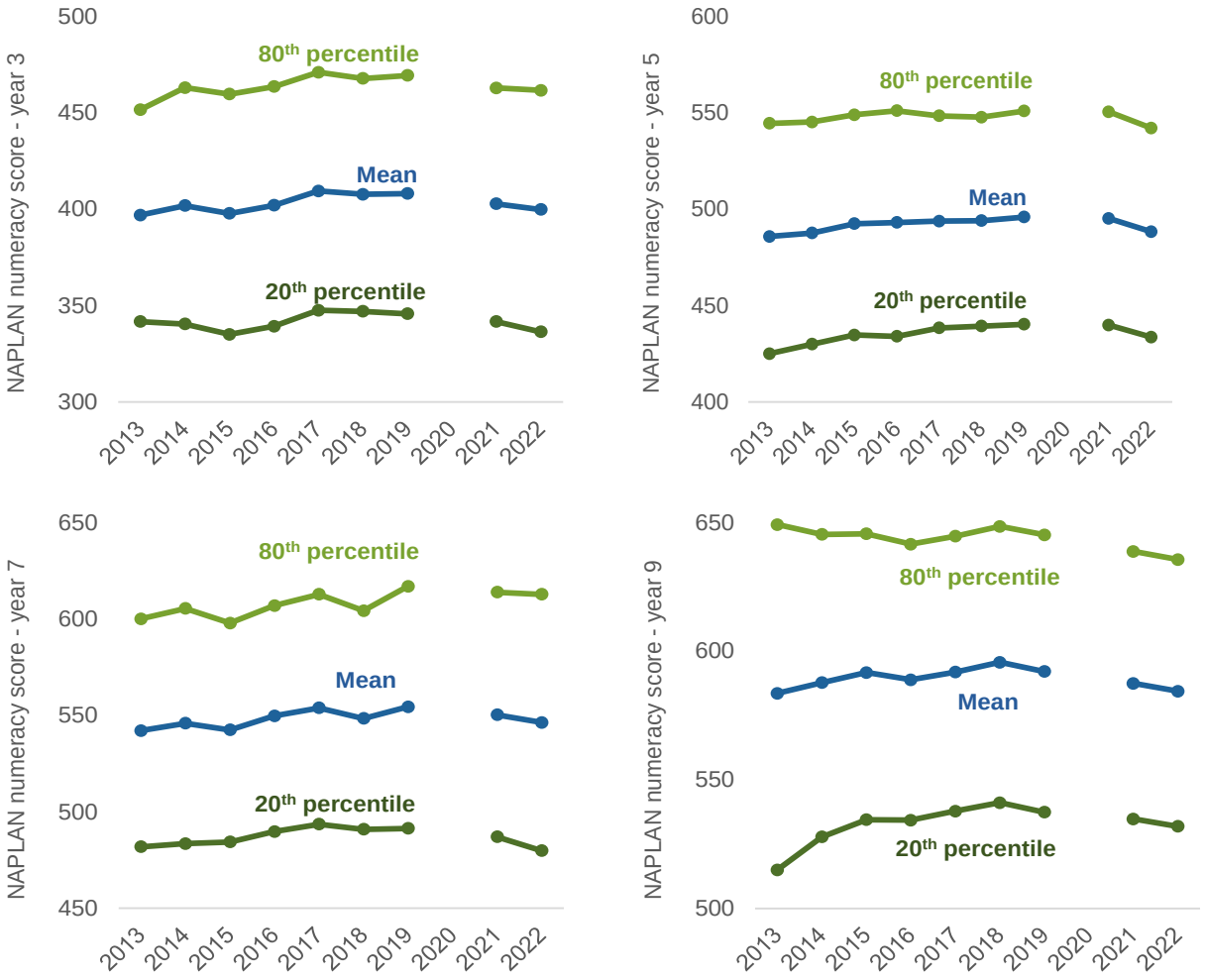
NAPLAN provides important insights into the performance of Australian students. Unlike PISA, NAPLAN tests key aspects of reading and numeracy against the Australian Curriculum and assesses all students at regular intervals in their schooling.

In contrast to the declining picture of student outcomes suggested by PISA, NAPLAN results point to generally flat results albeit with some improvements among primary school students.

Average NAPLAN numeracy scores remained steady across all year levels between 2013 and 2021 (figure 2.4). While numeracy scores decreased across all year-levels between 2021 and 2022, only the decline in year 5 scores was statistically significant.

Figure 2.4 – Numeracy NAPLAN scores since 2013, all year levels[a,b]

NAPLAN numeracy results were also stagnant until 2021, although declined over 2022



a. The chart shows the mean NAPLAN score and the scores at the 20th and 80th percentile. **b.** NAPLAN was not tested in 2020 due to the COVID-19 pandemic.

Source: ACARA (2022a).

Some pockets of improvement are evident in NAPLAN reading outcomes with a modest uptick in NAPLAN reading scores for primary aged students, mainly in year 3. However, these improvements do not seem to last, with little to no improvement in NAPLAN reading scores among year 7 and year 9 students (figure 2.5).[18]

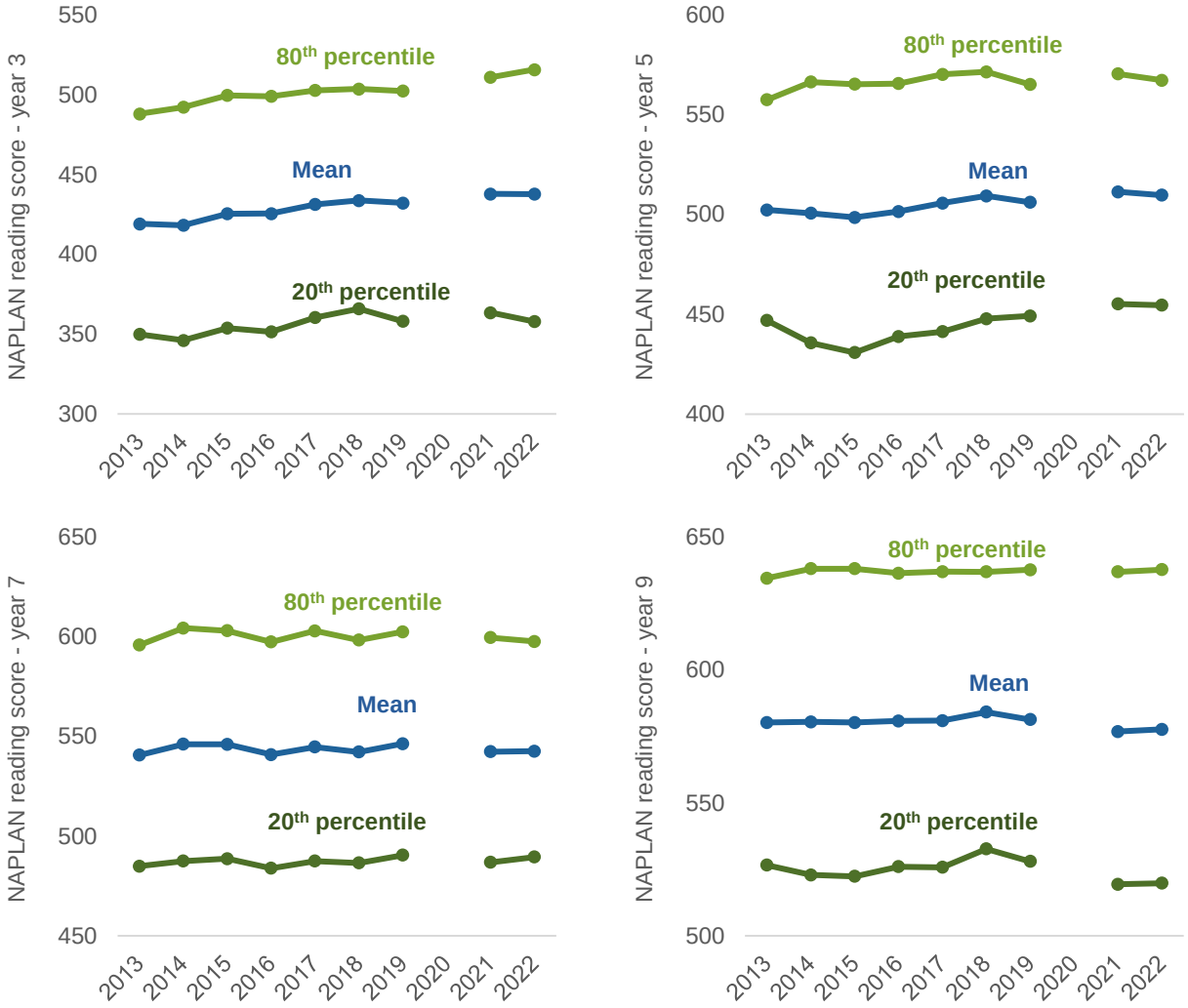
Changes in scores among the highest and lowest performing students provide additional insights into the performance of the education system that can be otherwise masked by NAPLAN averages. Figures 2.4

[18] The uptick in reading results occurred in 2015. These students would only have sat year 9 NAPLAN in 2021 — after the COVID-19 pandemic. It is possible these results have not translated into improvements in year 9 because of time lost at school due to the pandemic, although further research is required to test this hypothesis.

and 2.5 show the scores at the 20th and 80th percentile across year levels — put simply, they reveal that outcomes achieved by high- and low-performing students have changed little over the past decade.

Figure 2.5 – Reading NAPLAN scores since 2013, all year levels[a,b]

NAPLAN reading results have been improving among primary school students, but stagnant among secondary school students



a. The chart shows the mean NAPLAN score and the scores at the 20th and 80th percentile. **b.** NAPLAN was not tested in 2020 due to the COVID-19 pandemic.

Source: ACARA (2022a).

The proportions of high and low performing students have remained relatively unchanged

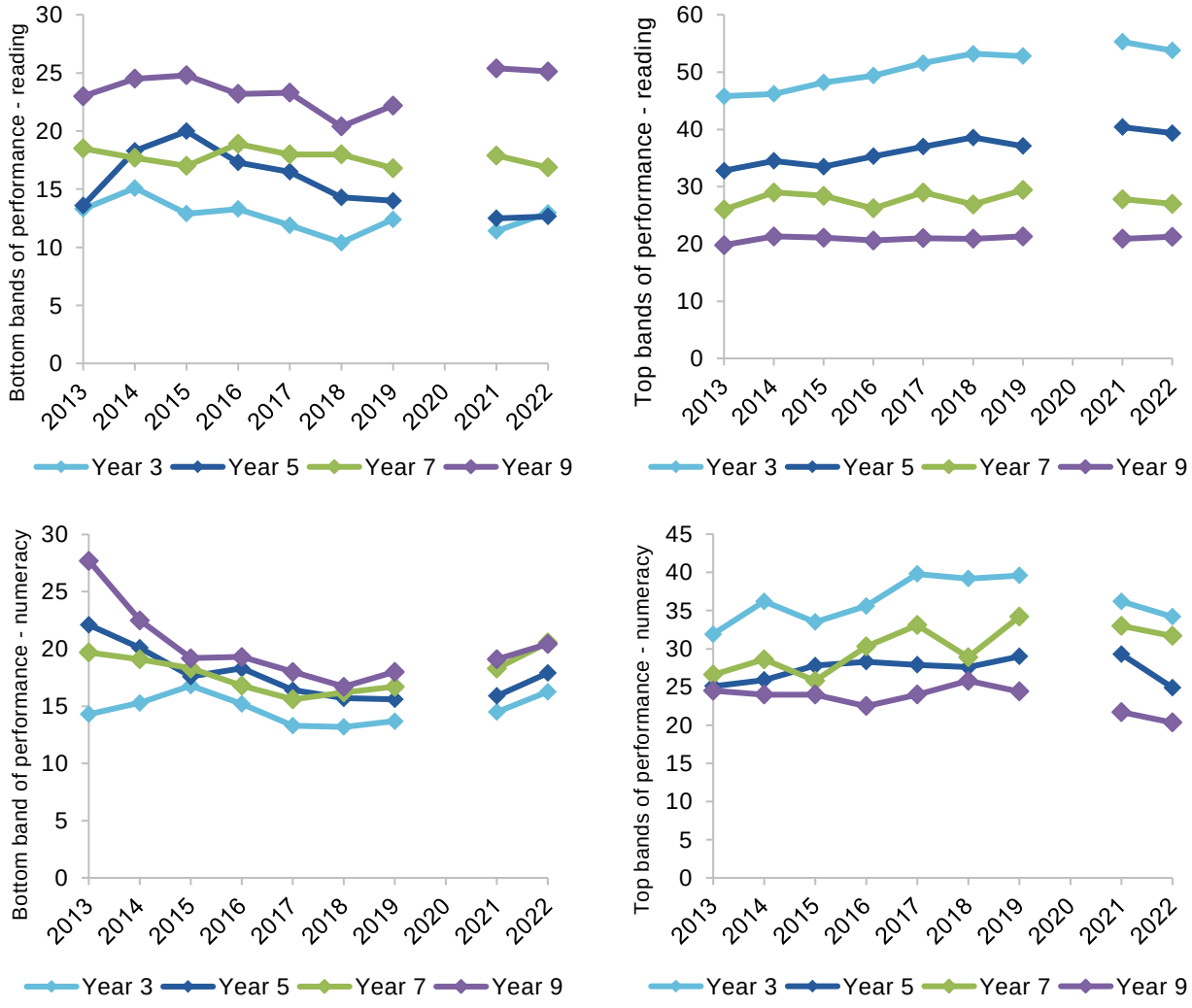
NAPLAN scale points are divided into ten bands, with each student placed into a performance band based on their test score. Students within the same performance band have demonstrated similar skills and knowledge, while a student in a higher performance band demonstrates a more advanced skillset.

The share of students in the bottom and top two performing NAPLAN bands provides insight into the proportion of high- and low-performing students nationwide.

Between 2013 to 2022, for years 3, 5 and 7, the proportion of students in the *bottom* two bands for reading remained relatively stable or declined slightly, whereas the proportion of year 9 students in the bottom bands of reading increased slightly. Consistent with some signs of improvement in NAPLAN reading scores in the early years, the proportion of students in the *top* two bands for reading rose for primary school students, but was relatively stable for those in secondary school (figure 2.6).

For numeracy, the proportion of students in the *bottom* bands of performance fell across all year levels over the early years of the 2010s, before starting to rise since about 2018. The proportion of students in the *top*-performing bands has been falling over recent years.

Figure 2.6 – Proportion of students in the top and bottom two bands of NAPLAN performance[a]



a. NAPLAN was not tested in 2020 due to the COVID-19 pandemic.

Source: ACARA (2022a).

5 to 10 per cent of students did not meet minimum NAPLAN standards in 2022

The ten performance bands allow for analysis of students that perform at or below the 'national minimum standard' for their age. The NAPLAN national minimum standard is set at the lowest band of competency someone in each year level should attain. In year 3, students below band 2 are considered to be not meeting the national minimum standard. In year 5, students below band 4 are not meeting the national minimum standard; in year 7, students below band 5 are not meeting the national minimum standard and in year 9, students below band 6 are not meeting the national minimum standards. Students below the national minimum standard have not achieved the learning outcomes expected for their year level and are at risk of being unable to progress satisfactorily at school without targeted intervention (though this does not capture all students who need support with their schooling (chapter 4)). In 2022, 4.5 per cent of year 3 students did not meet the national minimal standard in reading, increasing to 10.4 per cent for year 9 students. For numeracy, about 5 per cent of students did not reach the national minimum standard in years 3, 5 and 9, and about 8 per cent of students did not reach the minimum standard in year 7.

Many measures but largely consistent results

While there are many ways to measure academic achievement, the results over the past decade have been strikingly similar — except for isolated improvements which often dissipate in later years of schooling, outcomes have been largely flat.

Trends in NAPLAN reading and numeracy scores at the student, sector and jurisdictional levels are broadly consistent with the national trends. Between 2013 and 2022, results have not materially deviated from the national trend in the government, Catholic or Independent sector. Similarly, all States and Territories have delivered similar trends in results.

Finding 2.2
Since 2013, NAPLAN results for reading and numeracy have been flat across all year levels, with exceptions in reading results for year 3 and year 5.

Since 2013, there have been marginal improvements in reading test results in year 3 and year 5, but no improvements in year 7 and year 9. Test results for numeracy have stagnated across all year levels since 2013.

Commission analysis tracking the same cohort from year 3 to year 9 shows that the improvements in year 3 and year 5 reading do not persist to year 7 and year 9.

Some students achieve consistently lower outcomes, pointing to systemic barriers

To provide insights into the 'equity' of outcomes, national and international datasets disaggregate academic results for some cohorts of students more likely to experience educational barriers. For PISA, cohorts include students from 'provincial or remote' locations, 'Indigenous' students, and students in the 'lowest socioeconomic

quartile'. For NAPLAN the cohorts are students from 'outer regional and remote' areas, 'Aboriginal and Torres Strait Islander' students and students who have 'parents with low educational attainment'.[19]

The 'equity' cohorts identified in the PISA and NAPLAN datasets are not exhaustive. Many other students also face barriers, such as students with disability, migrant and refugee students, and students in out-of-home care (chapter 4). However, outcomes data for these cohorts are generally lacking (chapter 9).

Both the PISA and NAPLAN results show that, over the past decade or so, there have been persistent and significant gaps in the education outcomes for some students, including those identified as 'priority equity cohorts' in the NSRA.[20] Gaps in outcomes are most pronounced for students from a low socioeconomic background, followed by Aboriginal and Torres Strait Islander students:

- PISA results in 2018 show differences in outcomes of up to 3 years of schooling for low socioeconomic students and up to 2.5 years of schooling for Aboriginal and Torres Strait Islander students (figure 2.7)
- Commission analysis of 2021 NAPLAN results shows differences in outcomes of up to 5 years for students who have parents with low educational attainment and differences in outcomes of up to 3 years for Aboriginal and Torres Strait Islander students (figure 2.8).[21]

Students from priority equity cohorts were also disproportionately represented in the bottom two levels of NAPLAN performance. For example, in reading, in 2022, the likelihood of:

- remote students being in the bottom two levels of performance compared with students in metropolitan areas was 3.1 times greater in year 3 and 2 times greater in year 9
- Aboriginal and Torres Strait Islander students being in the bottom two levels of performance compared with non-Aboriginal and Torres Strait Islander students was 3.8 times greater in year 3 and 2.6 times greater in year 9
- students with parents with low educational attainment being in the bottom two levels of performance compared with students of parents with high educational attainment was 8.2 times greater in year 3 and 5.3 times greater in year 9.

It is not possible to draw insights about the academic performance of students with a disability from the PISA or NAPLAN data as neither report outcomes for this student cohort.

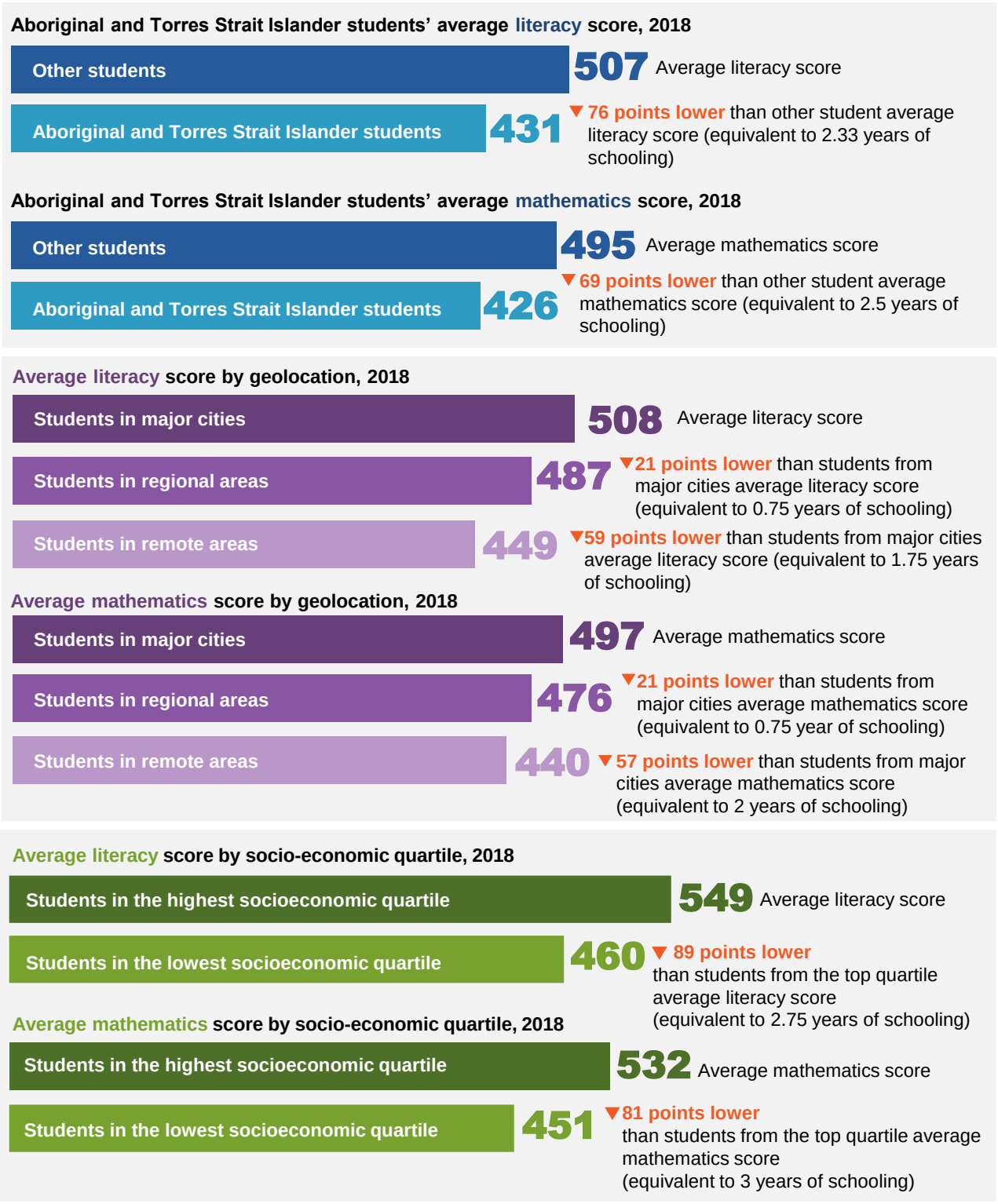
[19] For this analysis, students with parents who did not complete secondary school are assumed to represent a cohort experiencing disadvantage.

[20] The NSRA identifies four 'priority equity cohorts' — Aboriginal and Torres Strait Islander students, students living in regional, rural and remote locations, students with a disability and students from educationally disadvantaged backgrounds. Policies and outcomes for this group are discussed in greater detail in chapter 4.

[21] NAPLAN scores can be converted into a measure of how much a student has learnt in terms of years of learning. This enables analysis to consider the time it would take to bridge the gap in NAPLAN points between different students (appendix B).

Figure 2.7 – 2018 PISA results by selected equity cohorts

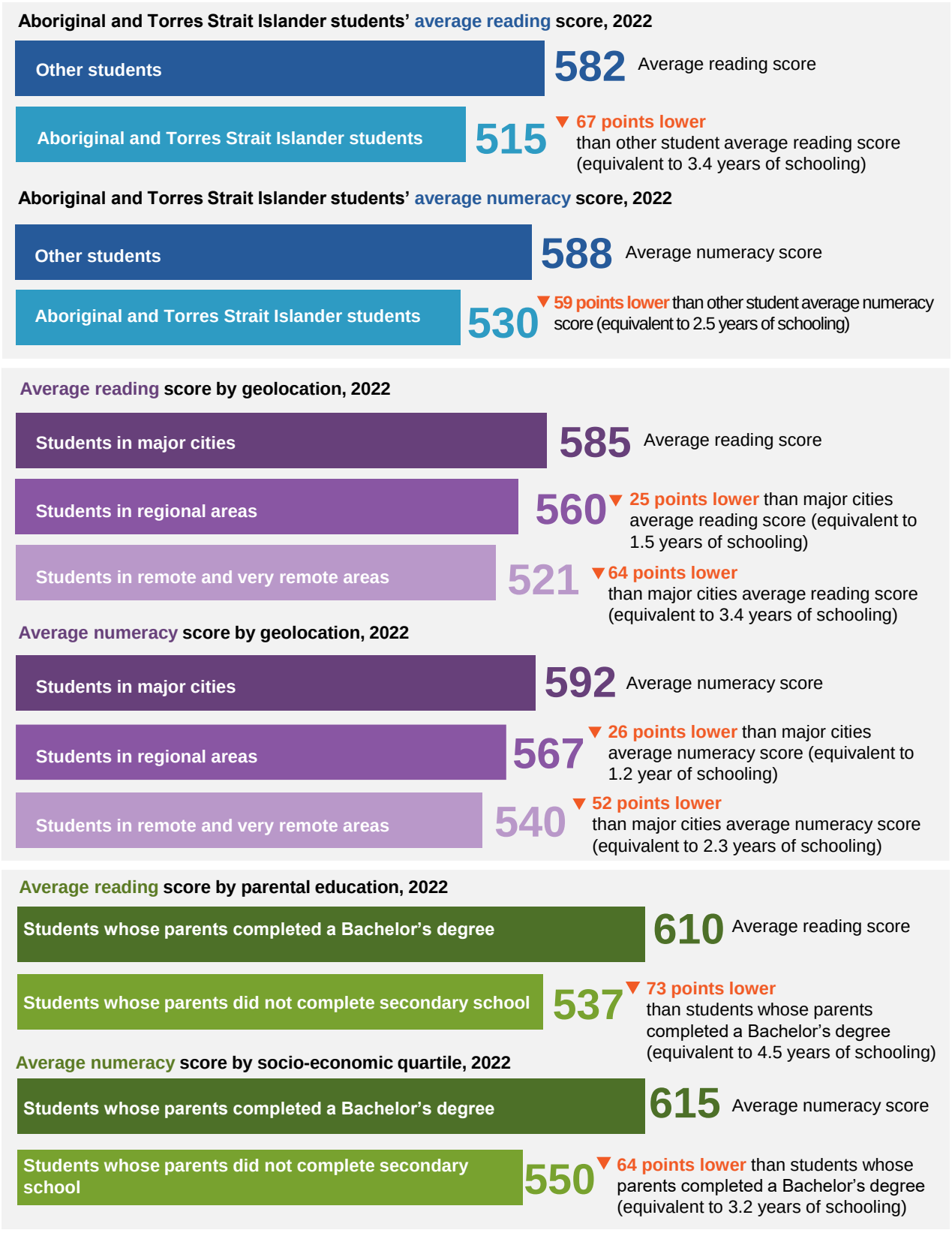
There are gaps in mean test scores for students in equity cohorts



Source: Thomson et. al. (2019).

Figure 2.8 – Year 9 NAPLAN results, by selected equity cohorts, 2022

There are gaps in mean test scores for students in equity cohorts



Source: ACARA (2022a).

Gaps in outcomes for students from priority equity cohorts emerge early and tend to widen over time

Gaps in outcomes for students from priority equity cohorts emerge early on. Data from the Australian Early Development Census (AEDC) demonstrates the challenges some students face when starting school. Among prep students in 2021, 27 per cent of Aboriginal and Torres Strait Islander students, 33 per cent of students in the lowest socioeconomic quintile, and 34 per cent of students in remote and very remote areas were identified as developmentally vulnerable on two or more domains. This compares to about 11 per cent of all students in the first year of school Australia-wide (DESE 2022a).

As learning (especially at a young age) is cumulative, a student starting school behind other students faces substantial challenges.

Rather than diminishing, gaps in outcomes (measured in equivalent years of learning) tend to take longer to close as students' progress through school (figure 2.9). Commission analysis of NAPLAN achievement for students in priority equity cohorts reveals that gaps (expressed as the time it would take for the average student in a given priority equity cohort to catch-up to a student not in the priority equity cohort) progressively increase. For example, in year 3 reading, Aboriginal and Torres Strait Islander students score, on average, 80 points fewer than non-Aboriginal and Torres Strait Islander students — a gap that would take the average year 3 student 1.3 years to close. By year 9, the gap in outcomes closes to 60 points, but this would take 3.4 years to bridge. Increasing gaps in outcomes between years 3 and 9 are also evident in numeracy, and in results for students from other priority equity cohorts, such as students in regional and remote areas, and students of parents with low educational attainment (appendix B).

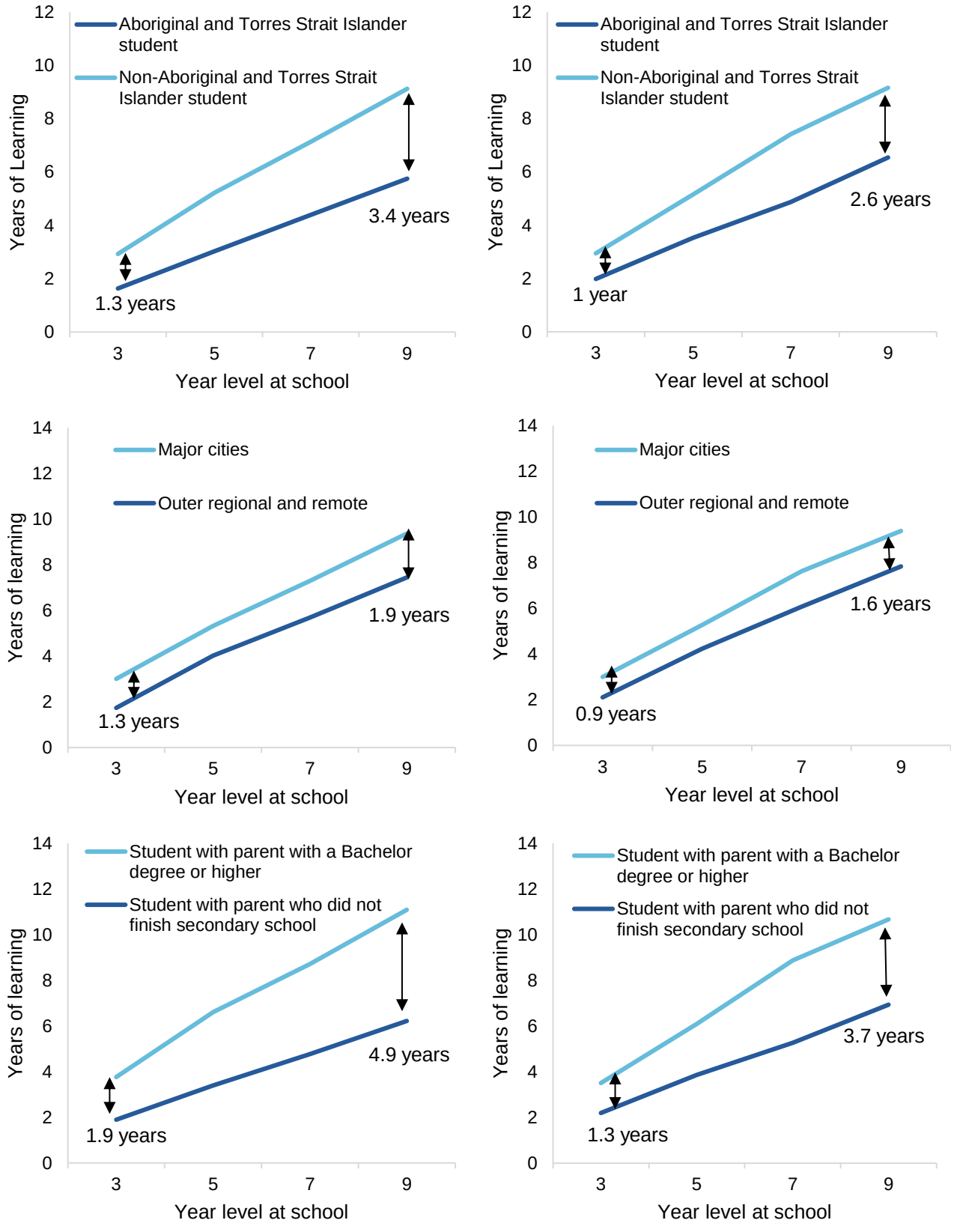
Gaps in outcomes are magnified for some students

Students in priority equity cohorts are not homogenous. Indeed, the label 'priority equity cohorts' masks significant diversity in students' learning outcomes and the nature of adjustments and supports they may require. There can be multiple factors that increase the challenges of providing high quality education for some students (figure 2.10). Where these factors intersect, the effects can be compounding.

As an example, the barriers faced by Aboriginal and Torres Strait Islander students can be compounded by remoteness: by year 9, NAPLAN reading results for an Aboriginal and Torres Strait Islander student who lives in a remote area are 13 months behind the average results for Aboriginal and Torres Strait Islander students. Similarly, by year 9, reading results for an Aboriginal and Torres Strait Islander student whose parents have low educational attainment are 9 months behind the average results of Aboriginal and Torres Strait Islander students.

Figure 2.9 – NAPLAN reading and numeracy, following the same cohort (2013 to 2021)

Gap in scores, measured by the time taken to bridge the gap, widens over time



Source: Commission estimates of de-identified student level NAPLAN data.

Figure 2.10 – Some students belong to multiple priority equity cohorts

6% of students were from an Aboriginal and Torres Strait Islander background	**7%** of students had a parent who did not complete year 12	**10%** of students were from an outer regional or remote location
Of these: • **35%** were in outer regional and remote locations • **25%** had a parent who did not complete year 12 • **16%** were from a language background other than English	Of these: • **21%** were in outer regional and remote locations • **25%** were from an Aboriginal and Torres Strait Islander background • **36%** were from a language background other than English	Of these: • **22%** were from an Aboriginal and Torres Strait Islander background • **13%** had a parent that did not complete year 12 • **15%** were from a language background other than English

Source: Commission analysis of de-identified student level NAPLAN data.

Finding 2.3

Persistent differences in reading and numeracy outcomes across cohorts suggest some students face systemic barriers.

There are long-standing differences in national test results for reading and numeracy across students from different backgrounds, or who have different experiences or needs.

- Results for reading and numeracy for Aboriginal and Torres Strait Islander students, students in outer regional and remote areas, and students with parents with low educational attainment are consistently below the outcomes of the general student population.
- By year 9, these differences can be as great as the equivalent of 5 years of learning.

The proportion of students completing school has steadily increased

An additional benchmark of educational attainment in schooling is whether a student completes secondary school or an equivalent qualification, or gains a Certificate III[22] or above by the age of 24.

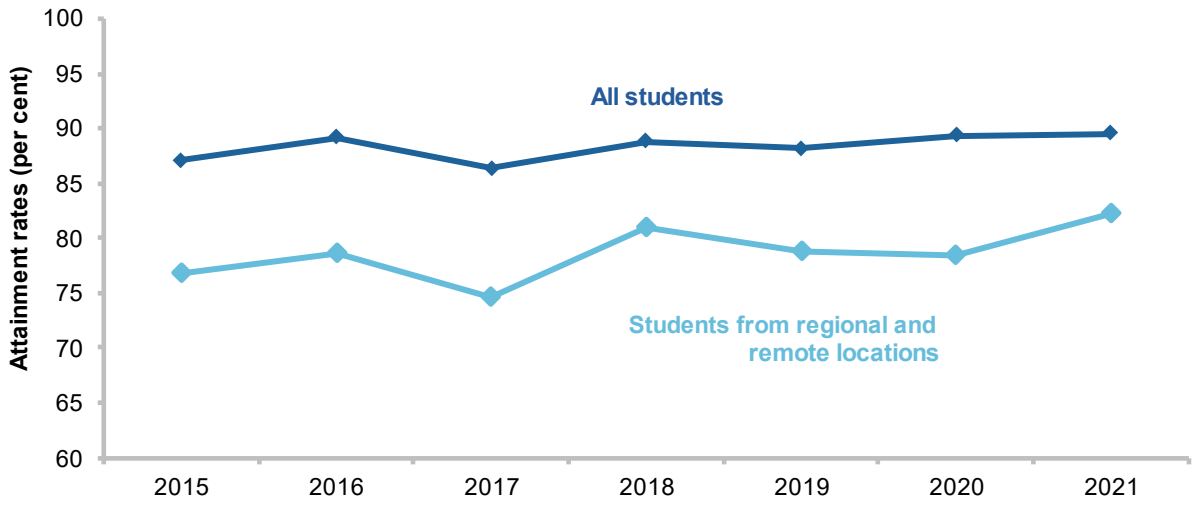
Measures of educational attainment are important as higher levels of attainment help students develop more skills, leading to higher rates of employment, higher productivity and higher lifetime earnings (section 2.1).

Between 2015 and 2021, the proportion of 20 to 24 year olds who completed year 12 or equivalent, or a Certificate III or above, increased by 2.5 percentage points to 90 per cent (figure 2.11) (PC 2022c). During this period, year 12 (or equivalent), or Certificate III or above completion rates for students in regional and remote areas increased by 5 percentage points to 82 per cent (PC 2022c).

[22] Graduates with a Certificate III will be able to apply a broad range of knowledge and skills in the workplace. Courses can take 1-2 years to complete, with some offering extended workplace learning options which can extend the time.

Figure 2.11 – Attainment rates have been rising since 2015[a]

Attainment rates, year 12 or equivalent or Certificate III and above, 2015 to 2021



a. Attainment levels are measured as the share of 20 to 24 year olds who completed year 12 or equivalent, or a Certificate III or above.

Source: Productivity Commission (2022c).

Reflecting significant gaps in the performance reporting framework, equivalent attainment data are not available for Aboriginal and Torres Strait Islander students, students with disability, or students from low socioeconomic backgrounds (chapter 9). However, similar data from the Closing the Gap information repository show that 62 per cent of 20 to 24 year old Aboriginal and Torres Strait Islanders completed year 12 (or equivalent) or Certificate III or above in 2016 (PC 2022d). And data from the Australian Institute of Health and Welfare show that, as at 2018, 68 per cent of 20 to 24 year olds with disability had completed year 12 or equivalent, compared with 85 per cent of 20 to 24 year olds without disability (AIHW 2022d).

Finding 2.4

There has been a small increase in the level of educational attainment since 2015.

The proportion of 20 to 24 year-olds who completed year 12 or equivalent, or a Certificate III or above, increased by 2.5 percentage points to 90 per cent between 2015 and 2021.

But the proportion of students attending school regularly has fallen

Increasing student engagement is a key factor in reducing gaps in educational outcomes. Given the conceptual and practical challenges with measuring engagement, reporting tends to focus on observable behaviours such as students' attendance rates (the proportion of school days students' attend school) and the attendance level (the proportion of students attending school regularly).[23]

[23] Engagement can be thought of as comprising behavioural engagement (measured by identifiable or observable behaviours at school, such as participation in school activities or classroom behaviours, and by attendance, attainment

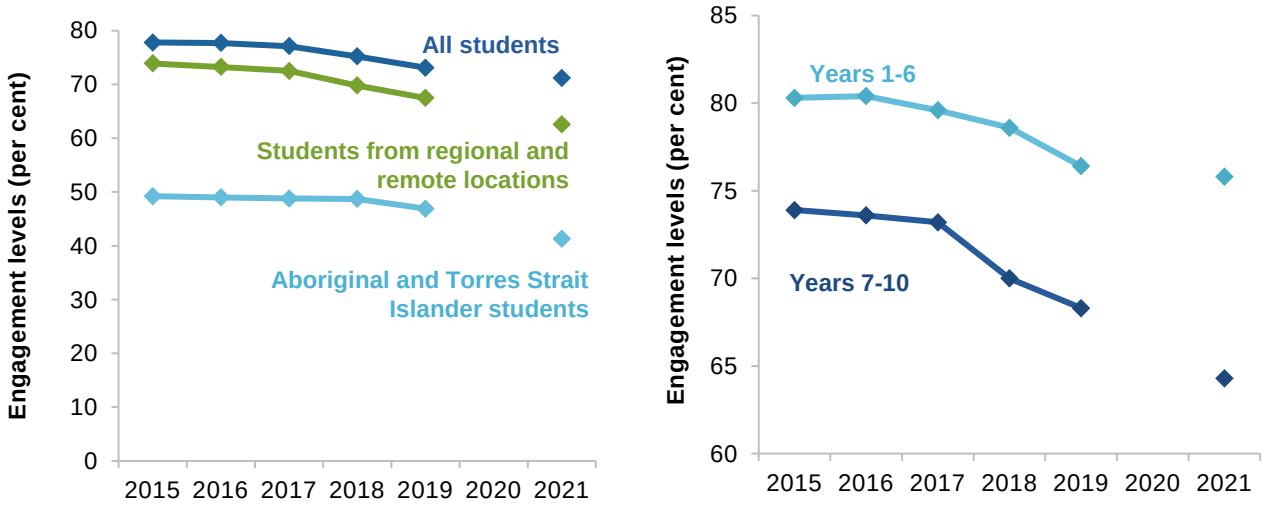
While it only reflects one aspect of student engagement (chapter 9), attendance can have enduring effects on outcomes. Attendance in the earliest years of school and in pre-school have been shown to influence early academic outcomes, with effects persisting in later years (AITSL 2019c). Early year attendance levels are also predictive of attendance in later years (AITSL 2019c).

As measured by the proportion of students attending school for at least 90 per cent of the time, student attendance has been falling. In a continuation of a pre-COVID-19 trend, students attending school for at least 90 per cent of the time decreased from 78 per cent to 71 per cent nationally between 2015 to 2021. Students in regional and remote areas (63 per cent in 2021) and Aboriginal and Torres Strait Islander students (41 per cent in 2021) had lower average attendance rates (figure 2.12).

Attendance levels of students in years 7 to 10 were 12 percentage points below attendance levels of students in primary schools in 2021, as the factors affecting attendance are more likely to affect older students (section 2.3). The recent decline in attendance levels has also been more pronounced among older students — attendance of primary students has fallen by 4 percentage points since 2015, while attendance of students in years 7 to 10 has fallen by 10 percentage points.

Figure 2.12 – Engagement levels since 2015[a,b]

Engagement levels have been steadily declining since 2015



a. Engagement levels are measured as the share of students in years 1-10 that attend school at least 90 per cent of the time.
b. School attendance data for 2020 has not been published due to inconsistencies in the data as a result of the varying health advice and schooling arrangements across the country in response to the COVID-19 pandemic.

Source: Productivity Commission (2022c).

and retention), emotional engagement (the emotional response to school or affective connections at school) and cognitive engagement (students' perceptions of intellectual challenge, effort or interest and motivation) (Fredricks, Blumenfeld and Paris 2004).

Finding 2.5
School attendance has declined since 2015, particularly among students in middle years.

The proportion of students attending school regularly has declined, with much of this decline predating COVID-19.

Declines in attendance levels are more pronounced among students in middle years — attendance of primary students has fallen by 4 percentage points since 2015, while attendance of students in years 7-10 has fallen by 10 percentage points.

Many students experience poor wellbeing

Wellbeing reflects how a person feels about themselves and their life, and is influenced by many factors. Student wellbeing is both a desired outcome of schooling as well as a precondition for improving learning outcomes. Research shows a child's wellbeing can strongly influence their ability to engage and learn at school, and poor wellbeing — especially arising from childhood trauma — can hinder academic performance (chapter 5).

Evidence suggests that a sizeable proportion of children and young people face challenges to their social and emotional wellbeing, including at school. While some jurisdictions collect data on aspects of student wellbeing, these are not always made public,[24] and nationally consistent measures of wellbeing are lacking (chapters 5 and 9). The limited data available show that as many as one in five students experience poor wellbeing:

- In 2021, results from the Australian Early Development Census show that 9.6 per cent of students in their first year of school were 'vulnerable', and 14.4 per cent were 'at risk', in the social competence domain. Further, 8.5 per cent of students were 'vulnerable', and 14.5 per cent were 'at risk', in the emotional maturity domain (DESE 2022a).
- In 2021, almost 7 per cent of all students required some form of adjustment for social-emotional support. This is up from just over 4 per cent in 2015 (ACARA 2021b).
- In 2018, 21 per cent of 15-year-old students reported that 'other students make fun of me' and 14 per cent reported that 'other students left me out of things on purpose' (Thomson et al. 2020, p. 70).

While wellbeing is cast more broadly than mental health (chapter 5), data on the prevalence of mental illness and use of mental health services and supports can provide insights into the wellbeing of Australian students:

- 14 per cent of Australian children aged 4 to 17 years had a mental illness in the previous 12 months in 2014 (the latest year for which data are available) (Lawrence et al. 2015)
- the numbers of children aged 12 to 18 years accessing Medicare Benefits Scheme subsidised mental health services increased to over 14 per cent in 2020-21, up from just under 12 per cent in 2018-19 (SCRGSP 2022b).

Stakeholders, including principals, teachers and students themselves, report that the COVID-19 pandemic and recent natural disasters have worsened wellbeing for students (chapter 5). Emerging evidence supports this, with a study finding that 61 per cent of parents and carers in August 2021 felt that the pandemic had negatively affected the mental health of their children aged between 2 and 18, and 10 per cent reported a large negative effect (Biddle, Edwards and Gray 2021, p. 6). Improved wellbeing data are needed to build a better picture of student wellbeing (chapters 5 and 9).

[24] Notably exceptions are South Australia and Tasmania, which release measures of student wellbeing.

Finding 2.6
Many students experience poor social and emotional wellbeing.

There is no nationally consistent measure showing how student wellbeing has changed over time. While some jurisdictions collect data on aspects of student wellbeing, few publish the results.

Available data suggest a sizeable proportion of children and young people experience poor social and emotional wellbeing.

2.3 What factors influence student outcomes?

The trends in student outcomes described above are driven by many factors, inside and outside the school gate, including student and school characteristics, and overall system factors (Deloitte Access Economics 2017b, p. 2; PC 2016a, p. 20).

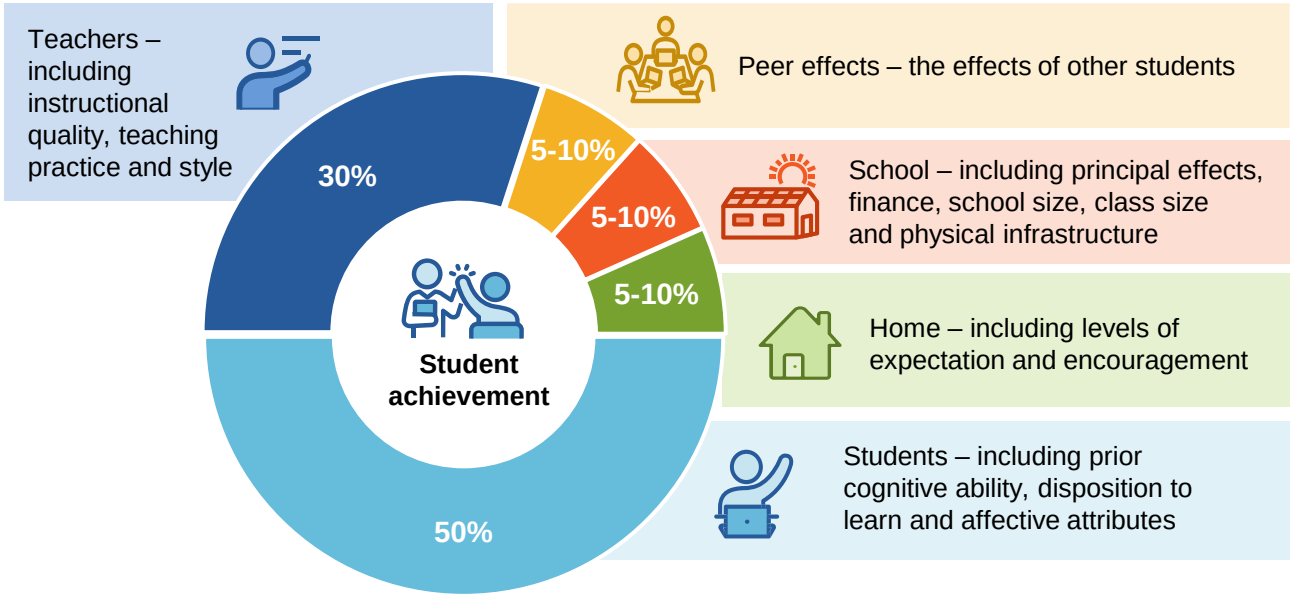
Student characteristics strongly influence achievement

In his work *Visual Learning*, Hattie (2003) estimated that a student's unique characteristics have the largest influence on achievement (figure 2.13) (attributing most of the variance in student achievement to factors such as student ability and home environment). Among the attributes identified by Hattie were a student's background (including their prior learning ability), their attitude and disposition to learning, physical influences, and preschool experiences.[25]

[25] Australian evidence shows that attending a preschool program for children aged 3 to 5 years reduced a child's likelihood of being developmentally vulnerable in three of the five developmental domains measured through the Australian Early Development Census developmental domains — physical health and wellbeing, language and cognitive skills (school based), and communication skills and general knowledge (Warren, Daraganova and O'Connor 2017, pp. 81–82). Exposure to a quality preschool program is also associated with improved performance in standardised tests in the early years of primary school (Australian Institute of Health and Welfare 2015, p. 12).

Figure 2.13 – Variance in student achievement explained by different domains of influence

Achievement is driven by a range of factors inside and outside the school gate[a]



a. These student and home level factors are affected by the child and family's wellbeing, which are influenced by the family's context and environment and broader policy settings.

Source: Productivity Commission, adapted from Hattie (2003).

But schools and teachers can make a big difference

But Hattie also underscores the important role that 'in-school' factors — such as principal and peer effects, and teaching practice and styles — can make. Together, he estimated that these factors explain around 40-45 per cent of the variance in student achievement.[26]

Commission analysis of NAPLAN data confirms schools play an important role in explaining student outcomes. It also reveals not all schools are able to deliver the same reading and numeracy outcomes for their students. NAPLAN learning progress shows the increase in students' NAPLAN points over time. Averaging the learning progress of every student in the school gives an estimate of the gain a school delivered for its students, notwithstanding that some achievement is due to students' own background and attributes. The analysis focuses on learning progress between years 3 and 5, and between years 7 and 9.[27]

Figure 2.14 shows the distribution of learning gain, comparing only schools with students with similar characteristics (those schools within the same ISCEA quintile)[28] as these could be expected to show similar levels of learning gain. The results are for the lowest ICSEA quintile — as this represents schools with lowest

[26] These findings consider factors influencing student outcomes overall, and may not be reflective of the experiences of students from specific cohorts, including those identified as priority equity cohorts under the NSRA.

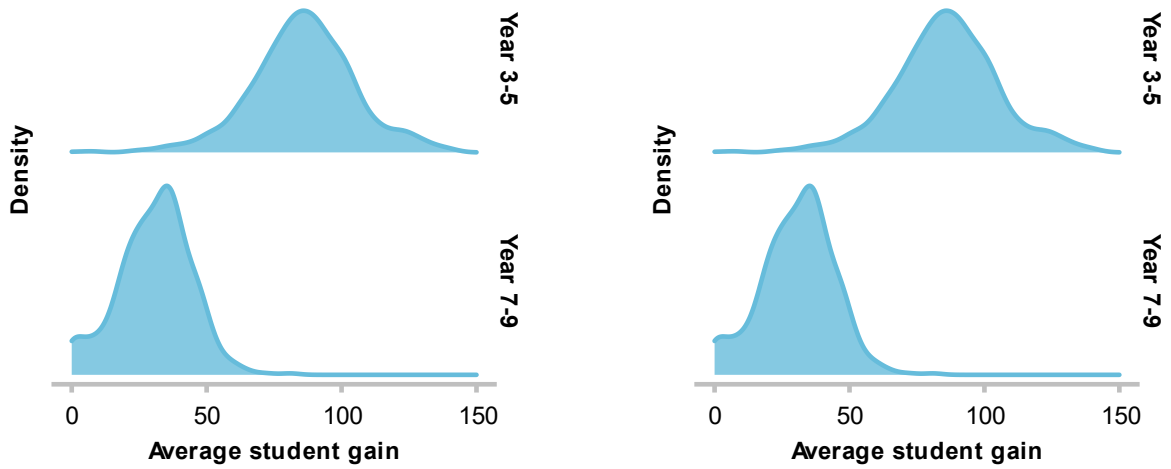
[27] Students could not be linked between year 5 and 7 unless they attended a school that offered primary and secondary school. The analysis therefore considered primary and secondary learning gain separately.

[28] ICSEA is the Index of Community Socio-Educational Advantage. ICSEA provides an indication of the socio-educational backgrounds of students by taking into account the parents' occupation, the parents' education, the location of the school and the proportion of Aboriginal and Torres Strait Islander students at the school. it has nothing to do with the staff, school facilities or teaching programs. It is developed by ACARA to allow for fair and reasonable comparisons among schools with similar students. The analysis only includes schools in the lowest ICSEA quintile, as there is a strong correlation between student achievement and ICSEA (ACARA 2014).

socio-educational advantage. The analysis reveals a wide distribution of outcomes, and was consistent across all ICSEA quintiles. Within the lowest ICSEA quintile, the higher performing primary schools (schools at the 75th percentile) added as many as 101 points in numeracy and 98 points in reading; while the lower performing primary schools (25th percentile) only added 80 points in numeracy and 75 points in reading.[29] In secondary schools, the distribution is narrower, but there is still a gap between higher- and lower-performing schools. The variation in outcomes across schools with similar student intakes suggest that differences within these schools (for example, in their organisation, leadership or teaching) may generate differences in outcomes. Some of this is still attributable to the natural variation in student outcomes due to individual characteristics (figure 2.13), however, the distribution of results underscores the importance of teacher quality (chapter 7) and leader quality (chapter 8).

Figure 2.14 – There is variation in student progress, even for schools with similar student intake

Distribution of average student learning gain for schools in lowest ICSEA quintile[a]



a. Distributions are for the average student gain (measured by increase in NAPLAN score) across all schools within the lowest ICSEA quintile. ICSEA is a measure developed by ACARA to allow for fair and reasonable comparisons among schools with similar students. (See footnote below for more information.)

Source: Commission analysis on school-level NAPLAN data.

Commission analysis confirms differences in average student outcomes between different schools, beyond what would have been explained by a student's characteristics. Its analysis of NAPLAN unit record data between 2013 and 2021 for numeracy reveals that:

- students from priority equity cohorts demonstrated, on average, less learning growth (expressed in equivalised years of learning) if they attended a school with a high concentration of students experiencing disadvantage (as

[29] For a hypothetical year 3 student performing at the average numeracy score of schools in the lowest ICSEA quintile, the difference in the learning gain at a high-performing school (101 points) and low-performing school (80 points) translates to a difference of about 6 months of learning. In reading, the difference in the learning gain at a high-performing school (98 points) and low-performing school (75 points) translates to a difference of about 8 months of learning.

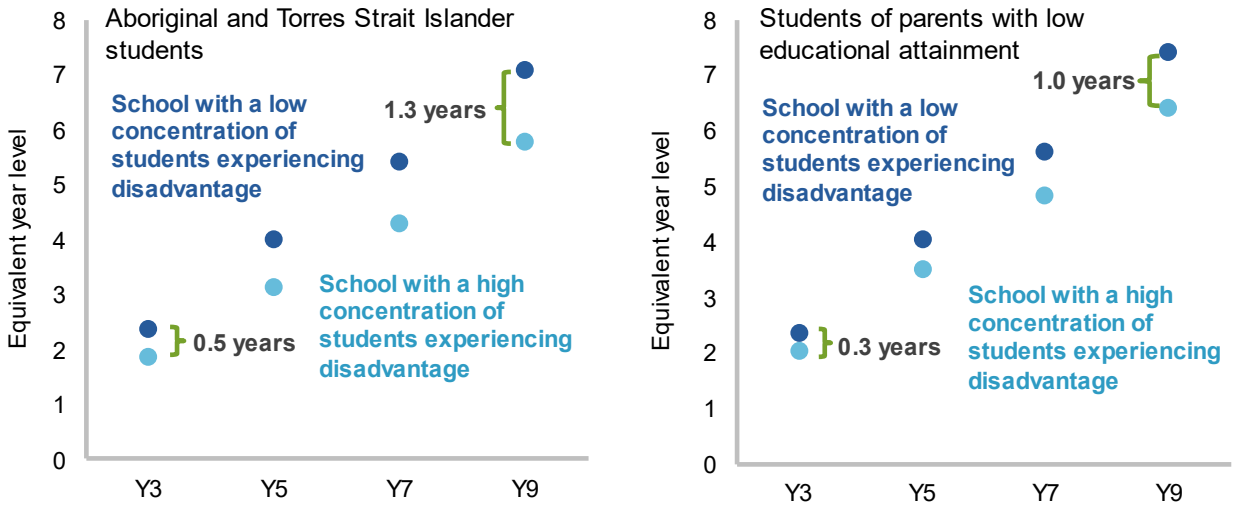
measured through indicators in the NAPLAN data), than students from priority equity cohorts attending schools with lower concentrations of disadvantage. As an example, for the domain of numeracy:[30]

  - Aboriginal and Torres Strait Islander students attending schools with relatively high concentrations of students experiencing disadvantage were about 0.5 years of learning behind other Aboriginal and Torres Strait Islander students in year 3. This gap grew to 1.3 years by year 9
  - Students of parents with low educational attainment attending schools with relatively high concentrations of students experiencing disadvantage were about 0.5 years behind other students of parents with low educational attainment in year 3. This gap grew to 1 year by year 9.

- students performing below the NAPLAN minimum standard for numeracy in year 3 who attended a school with relatively high concentrations of students experiencing educational disadvantage were 1.6 times less likely to transition to being at or above the minimum standard in year 5 than if they were at a school with lower concentrations, while those in year 7 were 1.5 times less likely to transition to being at or above the minimum standard in year 9.

These findings are important given that there is evidence that most schools with high concentrations of disadvantage increased in their concentration from 2011 to 2017 (Paul Ramsay Foundation, sub. DR109, p. 3).

Figure 2.15 – Aboriginal and Torres Strait Islander students and students of parents with low educational attainment learning growth[a]

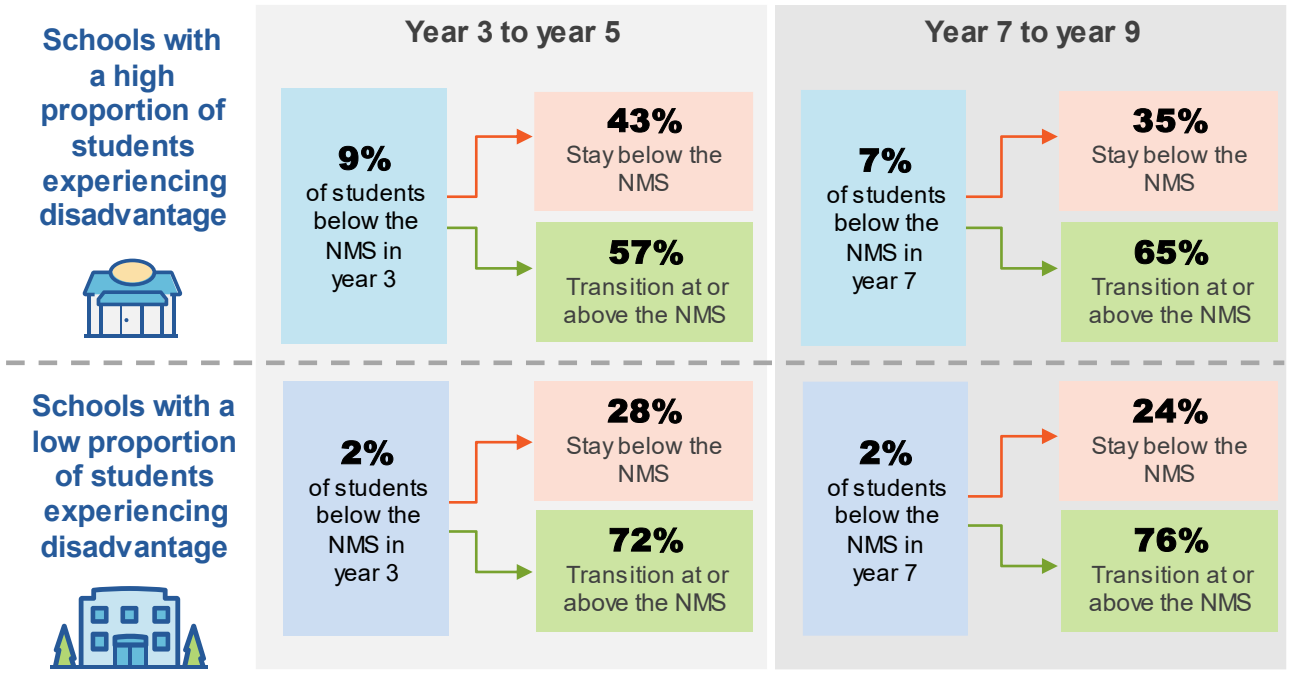


a. The analysis aggregated the number of students with a parent with an educational attainment of year 11 completion or less, and the number of Aboriginal and Torres Strait Islander students (as measured through indicators in the NAPLAN data) at every school. The 25 per cent of schools with the highest proportion of these students were taken to be school with a high concentration of students experiencing disadvantage.

Source: Commission estimates, based on NAPLAN de-identified student-level data.

[30] Results shown are for numeracy only, but the relationship is consistent for reading results.

Figure 2.16 – Likelihood of transitioning out of the minimum standard, comparing schools with a low and high concentration of students experiencing disadvantage[a,b]



a. The analysis aggregated the number of students with a parent with an educational attainment of year 11 completion or less, and the number of Aboriginal and Torres Strait Islander students (as measured through indicators in the NAPLAN data) at every school. The 25 per cent of schools with the highest proportion of these students were taken to be schools with a high concentration of students experiencing disadvantage. **b.** Analysis draws only on students for which data is able to be linked between years 3 and 5; and years 7 to 9. As data is not linked when a student changes school, data is not available for years 5 to 7, unless the student attends a prep-12 school.

Source: Commission estimates, based on NAPLAN de-identified student-level data.

The evidence above suggests that concentrations of disadvantaged students in a school affects outcomes of these cohorts. Part of this reflects peer effects, but it also partly stems from having less experienced teachers in such schools, as well as greater staff shortages and experiencing more difficulties with classroom management:

- Evidence supports the notion that students benefit from being in a class with high achieving students (McVicar, Moscion and Ryan, 2018). Students in schools with a high proportion of students experiencing disadvantage also tend to be in more disruptive classrooms and have worse disciplinary climates, which can have a negative effect on learning (Liu, et. al. 2015). For example, PISA 2018 demonstrates that, in schools where 30 per cent or more of students come from a socioeconomically disadvantaged background, an average of 35 per cent of students report that teachers wait a long time for students to quiet down, compared to 26 per cent of students in all other schools.
- Teachers and school leaders are strong influences on student outcome, with Australian research suggesting that disadvantaged schools typically have less experienced teachers, and often struggle with staff shortages (McKenzie et al. 2014, pp. 24, 46, Angus, Onley and Ainley, 2007, p. 80, OECD, 2016).

Many of the same factors that influence achievement also influence student attendance

As with student achievement, individual, family (including socioeconomic and cultural factors) and school related factors all play a role in student attendance (AITSL 2019, p. 12).

When considering the factors that influence attendance (or its inverse — absences) a distinction is often made between so called 'authorised' absences (those accepted by the school such as illness or participating in cultural events) and 'unauthorised' absences (where the reason is not accepted by the school or not provided to it, such as truancy).

Unauthorised absences reflect a much broader array of factors and behaviours (Hancock, 2018). They can be further categorised as being student-driven (school refusal) or parent-driven (withdrawal) factors related to logistics, personal circumstances, or attitude.

Some individual factors, such as mental health, are specific to, or become more pronounced in adolescence, while some 'pull' factors (such as needing to work, or care for a relative) are more likely to affect older students. Accordingly there is a marked drop-off in attendance levels beginning in year 8 (figure 2.12).

3. High-level assessment

Key points

Four years after the National School Reform Agreement (NSRA) was signed, progress on the National Policy Initiatives (NPIs) has been mixed.

- Some National Policy Initiatives (NPIs) have been completed but will take time to produce results. Others have been completed but have not yet led to actual reforms.
- The fate of two key NPIs — the unique student identifier (USI) and online formative assessment initiative (OFAI) — was only resolved late in the life of the agreement, and the agreed approaches do not appear to reflect the original ambitions for, and anticipated benefits of, these initiatives.

Parties should fulfil their commitments to deliver the NPIs.

Parties to the next intergovernmental school reform agreement should:

- set firm deadlines to complete the USI and OFAI
- once the USI is established, consider opportunities to realise its full potential for informing education policy by linking it with other data sets and permitting additional uses beyond the agreed initial baseline.

The NSRA has gaps that undermine its effectiveness in facilitating collective, national efforts to lift student outcomes.

Specific shortfalls include:

- no outcome that captures wellbeing
- a single weak target for academic achievement
- a dearth of targeted reforms to lift outcomes for students from priority equity cohorts and for students who do not meet basic levels of literacy and numeracy
- a lack of transparent, independent and meaningful reporting on national and state reform activity, which means there is limited effective accountability.

The next school reform agreement should focus on supporting effective teaching and school leadership, lifting students' academic outcomes, and promoting students' wellbeing.

- With the exception of wellbeing, these priorities would continue the commitments made under the current NSRA.

Firmer targets would strengthen the focus on achieving outcomes and improve accountability.

- Targets would help drive reform, and hold each jurisdiction to account for their performance, by drawing attention to key measures for which government are willing to be held to account.
- Measurable targets would align with community expectations for transparency and improved performance.

It has been four years since the Commonwealth, states and territories signed the National School Reform Agreement (NSRA). During this time, the COVID-19 pandemic and a series of natural disasters have disrupted the lives of students, their families, teachers, school leaders, and government officials. Given these events, it is important not to rush to judgement about the effectiveness of the National Policy Initiatives (NPIs) and state and territory reforms. The Commission acknowledges the challenges that different parties have faced in implementing these initiatives. However, it is equally important to be candid about what is clearly not working.

This chapter provides a high-level assessment of the effectiveness and appropriateness of the NPIs in the NSRA, as required by the terms of reference. It identifies impediments to the NPIs' success in achieving the long-term outcomes of the NSRA (that is, lifting student achievement, educational attainment, engagement, and equity) and makes recommendations on how to address them.

This chapter also identifies the implications that lessons from implementing the NSRA and new emerging priorities have for the design of the next intergovernmental school reform agreement, including its outcomes, targets and accountability mechanisms.

Appendix C contains more information on the Commission's assessment framework and assessments of individual NPIs.

3.1 How have the national reforms fared?

The National Policy Initiatives focus on 'key enablers'

The NPIs concentrate reform effort on 'key enablers that drive improvements in educational outcomes.'[31] In simple terms, this means providing teachers, school leaders and policymakers with resources to make well-informed interventions (for example, evidence from research on how to create the best possible learning environment).

The outputs associated with different NPIs include:

- **national tools** to gauge and share information on student progress (the online formative assessment initiative (OFAI) and the unique student identifier (USI))
- **national reviews** to identify and realise opportunities for national collaboration on teacher workforce needs and senior secondary pathways into work, further education, and training[32]
- **national accreditation standards** to promote consistent quality in graduate teaching (strengthening initial teacher education (ITE) accreditation)
- **a new national institution** to generate and communicate evidence-based advice on best practice to teachers, schools, and policymakers
- **national data projects** to improve national data quality, consistency, and collection (figure 3.1).

The ideas behind some of these outputs predate the NSRA. For example, the Australian, state and territory governments first agreed to establish a USI in 2009 (MCEETYA 2009, pp. 18–19), with some work undertaken before the NSRA commenced (PC 2016b, p. 128).

[31] NSRA, s. 43(c).

[32] Hereafter referred to as the senior secondary pathways review.

Figure 3.1 – Progress implementing National Policy Initiatives[a]

Expected outputs and implementation status (as reported by Education Council), and issues identified by the Commission

NPI	Expected outputs	Complete?	Issues
 Online Formative Assessment Initiative	New learning progressions and formative assessment capability aligned to the Australian Curriculum and nationally available online on-demand formative assessment resources, from 2022.		Progress has been slow. Some jurisdictions have pressed ahead with their own tools, which will now be the basis of a less ambitious national bank of assessments.
 Senior secondary pathways review	Education Council to have implemented, or be progressing, agreed recommendations by the end of the Agreement.		The senior secondary pathways review is complete, but it has not given rise to substantial national reforms.
 Teacher workforce review	Education Council tohave implemented a national teacher workforce strategy to respond to workforce needs.		It is not clear how jurisdictions will employ the outputs of the review. The new National Teacher Workforce Action Plan may help respond to workforce needs.
 Initial Teacher Education (ITE) accreditation	National quality assurance activities to have commenced from January 2019, with states and territories ensuringthat accredited ITE programs requirefinal-year performance assessment before graduation.		Teaching Performance Assessments have only recently been implemented and are only one aspect of ITE. Governments should monitor their quality.
 Unique Student Identifier (USI)	Schools and systems to progressively work to create a national USI for each student from 2021.		Progress towards the unique student identifier has been slow. Ministers have agreed on a model to roll out a USI nationally and a baseline use.
 Evidence institute	The national evidence institute to commence operations from 2020, and develop and implement a national research and evidence plan.		AERO has been established as planned. It will take time for AERO to raise awareness of its work and see its advice translate into classroom practice.
 Improving national data quality	Education Council to agree equity and proficiency standards and consider opportunities to enhance the national evidence base through a numberof data projects over the life of the Agreement.		Proficiency standards have been developed. Some projects (such as measures of student learning gain) are complete, while others are well underway.

a. In 2020, the Education Council reported Teacher Futures: A National Teacher Workforce Strategy and National Initiatives to Support Teaching and School Leadership satisfied the final milestone for reviewing teacher workforce needs.

Sources: Education Council (2021); DESE (2021a, 2021b, 2021c, 2021d, 2021e, 2021f, 2021g).

Progress on initiatives has been slow and many focus on enablers rather than achieving outcomes

Progress on some of the initiatives that would make the most difference has been disappointing.

The OFAI and USI are important tools but progress has been slower than expected

Both the OFAI and USI have the potential to provide much needed tools to better understand student progress.

The OFAI could enable teachers to better assess a student's knowledge, skills and understanding, identify next steps in learning, and track progress over time. Given the significant variation in student achievement in any given year level — spanning, on average, as much as 4 years of learning in numeracy within individual schools and about 6 years across all schools — the OFAI would help teachers tailor their teaching to a student's level of knowledge and understanding.[33] But as progress has flagged, some jurisdictions have pressed ahead with local (albeit typically less comprehensive) solutions.

The USI could unlock insights on students' progress, the factors that influence the paths they take, and the outcomes they achieve. It could allow individual students' academic results and other outcomes to be linked over time, providing researchers with rich insights into the effects of various interventions on student outcomes as well as the impacts of circumstances outside the school gates. Already more than 13 years in the making, differences about data use have hindered progress.[34]

The potential of the USI to enhance the national evidence base was emphasised by review participants. The New South Wales Department of Education (sub. 12, p. 13) observed that ' … the USI has the potential to provide a new, unique and rich data source to inform policy in a way which was never possible before', while The Smith Family (sub. 29, p. 7) and AERO (sub. 6, p. 16) both highlighted the potential for the USI to significantly improve the data resources available to education researchers. This was also underscored by the Australian Government's Gonski 2.0 report, which argued that 'without the USI … numerous existing data sets are disconnected and analysis of these can only provide limited insight' (Gonski et al. 2018, p. 102).

Two case studies — the UK's National Pupil Database and The Smith Family's *Learning for Life* dataset — provide insight into how a USI could help provide evidence on the factors that determine student outcomes (box 3.1).

[33] For example, based on 2021 data for NAPLAN numeracy, a year 7 student performing at the bottom 10th percentile in a school will on average perform lower than the mean year 5 student. And a year 7 student performing at the top 10th percentile in a school will on average perform greater than the mean year 9 student. A larger spread was found in reading scores within individual schools across all year levels (for example, up to 6 years on average for year 5 students). The variation in NAPLAN results across the whole school system was greater than the average variation found within a school.

[34] Governments committed to introducing a national USI as far back as 2009 (MCEETYA 2009, p. 19). In contrast, a USI has been in place in VET since 2015 and will begin to operate in the Higher Education sector in 2023.

Box 3.1 – Examples of the benefits of a USI to the education evidence base

The UK's National Pupil Database (NPD)

The NPD is a longitudinal administrative dataset curated by the UK government's Department for Education. It combines data from several different sources ('modules') and includes information such as student demographics, academic outcomes (based on national standardised assessments) and attendance (Jay, Grath-Lone and Gilbert 2019, pp. 3–6). These data can also be linked to higher education data (Jay, Grath-Lone and Gilbert 2019, p. 3).

Data are linked across modules and over time using the Pupil Matching Reference, a unique identifier for all students in UK government schools (Jay, Grath-Lone and Gilbert 2019, p. 3).

The NPD is a key asset for education researchers. It allows them to track students' progress over time, assess the effectiveness of interventions employed in schools and explore the drivers of student outcomes (Jay, Grath-Lone and Gilbert 2019, p. 7; PC 2016b, p. 132). This level of analysis would not be possible without the capacity to link datasets via a unique identifier.

The NPD has enabled many high-quality evaluations to be conducted in the UK, by making it easier and cheaper for researchers to measure the effects of interventions. Research commissioned by the Education Endowment Foundation, the UK's national evidence institute, typically uses NPD outcomes data to measure the effects of interventions (PC 2016b, p. 132). The benefits of high-quality education trials and evaluations are discussed in chapter 6.

The Smith Family's* Learning for Life *dataset

The Smith Family's Learning for Life program aims to support students from families with low socioeconomic-status to achieve better educational outcomes. Each student in the program has a unique identifier, which enables their short- and long-term outcomes to be tracked over time (The Smith Family 2016, p. 7). Short-term outcomes measured include reading age, engagement and behaviour, while data on long-term outcomes include school completion rates and rates of post school employment, education and training (The Smith Family 2016, p. 25).

The Smith Family uses this data to gain insight into the impact of their programs by comparing outcomes of students in Learning for Life with the broader student population. The dataset has also enabled other research, such as a study into the relationship between school attendance and academic achievement over long time horizons (The Smith Family 2018).

The national evidence institute and initial teacher education standards are complete but need time to yield results

The Australian Education Research Organisation (AERO) was created to help build the national education evidence base and was identified by many participants as one of the NSRA's key achievements.[35]

[35] For example: Grattan Institute (sub. 5, p. 14); NRSB (sub. 22, p. 1), DoE NSW (sub. 12, p. 12); The Smith Family (sub. 29, p. 5); NCEC (sub. 24, p. 7).

AERO's success will depend on its capacity to undertake or commission relevant research and see its advice eventually shape policy and practice. Having only commenced in 2021, it will take time for AERO to raise awareness of its work and see it successfully translate into classroom practice. Social Ventures Australia (sub. DR118, p. 4), noted that 'one of the critical factors to success of similar [evidence institutes] overseas is that they establish high levels of trust with educators', including through ensuring that their outputs meet the needs of teachers.

There are opportunities for AERO to support reforms under the next school reform agreement, including building a better understanding of the practical steps school leaders can take to lift outcomes in their schools (chapter 8).

The introduction of Teaching Performance Assessments was intended to strengthen the ITE accreditation system. As of September 2021, all accredited ITE programs require their students to undergo a final year Teaching Performance Assessment (DESE 2022c). Given that ITE providers have only just implemented TPAs, and TPAs focus on new entrants to the profession, it will be some time before this initiative influences teacher workforce quality (chapter 6).

National review projects have not generated reforms

Though reviews of senior secondary pathways and the national teacher workforce have been completed, governments are yet to indicate what if any reforms will follow them.

The national teacher workforce review was intended to provide the resources required by school systems and ITE providers to identify and plan for future workforce needs. According to the Education Council, the 'narrative' on National Initiatives to Support Teaching and School Leadership and the workforce strategy Teaching Futures: A National Teacher Workforce Strategy for Australia together fulfil governments' commitments to review teacher workforce needs (Education Council 2021, p. 6). The former identifies principles 'to guide Education Ministers in commissioning work', while the latter 'highlights opportunities for potential future efforts' (AITSL 2021b, p. 38; Education Council 2020b, p. 1). These documents did not ultimately catalyse action on the teacher workforce, and appear to have been superseded by a new initiative — the National Teacher Workforce Action Plan, agreed in December 2022 (EMM 2022c).

The senior secondary pathways review raised few potential areas for further national collaborations. In 2020, the Education Council agreed in principle to all 20 recommendations from the review. It concurrently announced plans to focus on a subset of recommendations — relating to literacy, numeracy and digital literacy, developing a sample Learner Profile, and agreeing on a common language for skills and capabilities — noting a significant amount of work being progressed across the education and skills sectors, and within states and territories, that will support the response to the review recommendations (Education Council 2020a, p. 1). However, the Victorian Government (sub. 31, p. 10) commented that its involvement with the NPI 'has been largely superseded' by its own senior secondary reform efforts. And, in the case of student learner profiles, one of the more substantial proposals, New South Wales has moved ahead unilaterally out of concern that the nationally coordinated work has not been progressing quickly enough (NSW DoE sub. 12, p. 13).

Ideally, parties would agree on and publicly announce which of the remaining review recommendations will involve further national cooperation to implement. They should put in place clear responsibilities for further evaluation and, where appropriate, implementation, tracking of progress and assessing impacts on student outcomes.

Two out of five national data projects have been completed

NSRA parties intended for the NPI on national data quality to improve the measurement of student outcomes. The NPI had two components – a range of national data projects and the development of proficiency standards to form part of the National Measurement Framework for Schooling.

Of the five data projects, which cover eight agreed areas in which parties would further the national evidence base, two have been completed — measures of student learning gain and improved socio-educational advantage data (DESE 2021b; Department of Education, pers. comm. 16 December). The remaining three — the post-school destinations project, the student wellbeing project and the school readiness project — are well underway (Department of Education, pers. comm. 16 December). Chapter 5 discusses how governments can use the Student Wellbeing Data Project to develop a sub-outcome for the next school reform agreement.

The Australian Curriculum, Assessment and Reporting Authority (ACARA) has developed a proposal on National Assessment Program – Literacy and Numeracy (NAPLAN) Proficiency Standards. Reporting will commence once education Ministers have approved the design (ACARA sub. 45, p. 4). Ideally proficiency standards would be adopted for the NAPLAN sub-outcome of the next school reform agreement after they are rolled out (chapter 9).

Where to with the NPIs?

On 15 December 2022, Education Ministers announced that they had made progress on the two substantive NPIs that remain incomplete — the USI and OFAI. They agreed on a model to roll out the USI nationally to all school students. Ministers also endorsed a path forward on the OFAI, which will involve jurisdictions working together to leverage and align existing resources from New South Wales, Victoria, and Queensland to establish a national bank of assessments that jurisdictions can use on an opt-in basis (EMM 2022b).

These announcements are promising but further action would help realise the potential benefits of these two tools. While a lack of detail makes it difficult to determine, the agreed models for progressing the USI and OFAI do not appear to reflect the original ambitions for, and anticipated benefits of, these NPIs. For example, many of the potential benefits ascribed to the USI by previous reviews and participants to this review (such as facilitating research to inform policy development) rely on the USI being integrated with other data sets. It is not clear the baseline use proposed for the USI will provide these benefits. Similarly, it was envisaged that the OFAI would provide time-poor teachers with a tool ‘to efficiently and effectively identify where students are in their learning, make informed decisions about what to do next, and monitor student learning to continually drive progress over time’ (EMM 2022a, p. 1) — a pooled assessment bank appears to fall short of this ambition.

Governments should set firm deadlines to complete these important projects. Once established, governments should consider opportunities to realise the full potential of the USI for informing education policy by linking the USI with other data sets and permitting additional uses beyond the agreed initial baseline. A national bank of high-quality curriculum resources (recommendation 6.2) would provide some of the other functions originally envisaged as part of the OFAI.

Education Ministers also agreed the National Teacher Workforce Action Plan, which aims to address teacher workforce shortages. The Action Plan effectively supersedes the review of national teacher workforce needs NPI, with one of its five key priority areas being ‘[b]etter understanding future teacher workforce needs [to] improve the information available for teacher workforce planning’ (EMM 2022c, p. 27).

The Commission has outlined steps governments can take to progress or leverage each of the individual NPIs (figure 2.3).

Figure 3.2 – Summary assessment of NPI effectiveness and appropriateness[a]

Implementation issues and next steps

Policy initiatives	Issues	Next steps
 Online Formative Assessment Initiative	• Slow progress towards agreeing the design • Some jurisdictions pressed ahead with their own tools	• Set firm deadlines to complete the initiative (Recommendation 3.1) • Augment the initiative with a national bank of high-quality curriculum resources (Recommendation 6.2)
 Unique Student Identifier	• Slow progress towards agreeing the design and uses	• Set firm deadlines to complete the initiative, and once implemented, consider opportunities to realise its full potential for informing education policy by linking it with other data sets and permitting uses beyond the agreed initial baseline (Recommendation 3.1)
 Senior secondary pathways review	• Uncertainty regarding how jurisdictions plan to progress recommendations from review and remain accountable • Limited state and territory buy-in to the national coordinated response to the review	• Agree on and publicly announce which of the recommendations will involve further national cooperation to implement • Put in place clear responsibilities for further evaluation and where appropriate implementation, tracking of progress and assessing impacts on student outcomes
 Teacher workforce review	• The review resulted in the *National Teacher Workforce Strategy for Australia*, but there is no clear plan on how jurisdictions will implement the strategy to plan for future workforce needs	• A labour market model could be developed to better identify and predict teacher shortages and evaluate the impacts of different policies on the workforce (Finding 7.4)
 Initial teacher education accreditation	• The quality and consistency of Teaching Performance Assessments implementation may be mixed	• Teaching performance assessments have only recently been introduced by jurisdictions, and it is too early to decide whether they should be changed to embody minimum standards (Finding 6.1)
 Improving national data quality	• No issues	• Develop a new sub-outcome on wellbeing based on the Student Wellbeing Data Project (Recommendation 5.1) • Use Proficiency Standards for the NAPLAN sub-outcome (Recommendation 9.2)
 Evidence institute	• Barriers to generating evidence, such as lack of access to schools and data to conduct research • Barriers to user uptake, such as lack of awareness	• AERO could play a role in curating high quality curriculum resources (Recommendation 6.2) and enhance the evidence base on school leadership (Recommendation 8.1)

a. Appendix C has more information on the Commission's assessment framework and assessments of individual NPIs.

Initiatives are unlikely to have affected student outcomes

The measure of success of any reform is its effect on outcomes. Reflecting their early stages of development, the NPIs are unlikely to have done much to advance agreed NSRA outcomes. Educational attainment rates (both for Australia students overall and for Aboriginal and Torres Strait Islander students) are below the 2031 agreed targets, average outcomes in national literacy and numeracy testing have improved little, and differences in outcomes across students remain (figure 3.3).

Figure 3.3 – Performance against targets and sub-outcomes in the National School Reform Agreement, 2018- 2022[a]

Targets in the National School Reform Agreement are yet to be achieved

Attainment below 2031 targets, including for Aboriginal and Torres Strait Islander students

There is no new data to assess whether Australia is a high quality and high equity schooling system by international standards

Few of the National School Reform Agreement sub-outcomes have been achieved

Achievement outcomes between 2018 and 2022:

National reading and numeracy testing of years 3,5,7,9 generally worsened (sub-outcomes 1 and 3)

	Numeracy results declined for most cohorts								***Reading results were mixed***							
	Lower % in bottom levels of performance				Increase % in top levels of performance				Lower % in bottom levels of performance				Increase % in top levels of performance			
	Y3	Y5	Y7	Y9	Y3	Y5	Y7	Y9	Y3	Y5	Y7	Y9	Y3	Y5	Y7	Y9
All students	↑	↑	↑	↑	↓	↓	↑	↓	↑	↓	↓	↑	↑	↑	↑	↑
Aboriginal and Torres Strait Islander students	↑	↑	↑	↑	↓	↓	↑	↓	↑	↓	↓	↑	↑	↑	↑	↑
Students in remote locations	↑	↑	↑	↑	↓	↓	↓	↓	↑	↓	↓	↑	↑	↓	↓	↓

Attainment increased marginally

% young people completing Year 12 or equivalent or gaining AQF Certificate III+ (sub-outcomes 5, 7) increased slightly between 2018 and 2021 (for all students and students from regional or remote locations)

Engagement deteriorated

% students in Years 1-10 attending school 90% or more of the time (sub-outcome 6) decreased (for all students, Aboriginal and Torres Strait Islander students, and students from regional or remote locations)

However, there are data gaps in a range of areas…

No outcomes data for students with disability

No definition of 'educational disadvantage'

Census data on attainment for Aboriginal and Torres Strait Islander students are only available infrequently

No new data since 2018 to assess achievement sub outcomes relating to international performance (sub outcomes 4 and 5) or the target on international standing

Any future shift in reporting from National Minimum Standards to Proficiency Standards may cause a break in the time series

a. NAPLAN tests for literacy skills other than reading.

Finding 3.1
To date, the National Policy Initiatives are unlikely to have affected the education outcomes of Australian students.

Some National Policy Initiatives (NPIs) have been completed but will take time to produce results. Others have been completed but have not yet led to actual reforms. The fate of two key NPIs was only resolved late in the life of the agreement.

- While the design of the unique student identifier and the online formative assessment tool has now been resolved, the agreed approaches do not appear to reflect the original ambitions for, and anticipated benefits of, these NPIs.
- The Senior Secondary Pathways Review and the National Teacher Workforce Strategy have not led to substantial national reforms.
- National data projects have progressed, but the majority are not yet complete.
- The Australian Education Research Organisation has been established but will require time to realise its potential.

Recommendation 3.1
Parties to the National School Reform Agreement should fulfil their commitments to deliver the National Policy Initiatives.

Parties to the next school reform agreement should:

- set firm deadlines to complete the unique student identifier (USI) and the online formative assessment tool
- once the USI is established, consider opportunities to realise its full potential for informing education policy by linking the USI with other data sets and permitting additional uses beyond the agreed initial baseline.

What are the lessons from the NSRA for the next school reform agreement?

The Australian Government asked the Commission to make recommendations to inform the design of the next school reform agreement. The Commission has identified three broad areas that could be improved in a future agreement to help lift student outcomes.

The Agreement's outcomes and targets were incomplete

The existing outcomes in the NSRA (achievement, engagement and attainment) do not capture student wellbeing. Since the NSRA was signed, all governments have acknowledged, through the Alice Springs (Mparntwe) Education Declaration, the importance of student wellbeing (COAG 2019, p. 2), which is a desired outcome in itself as well as a means of supporting student learning. Participants have also raised with the Commission the importance of teacher wellbeing (chapter 7).

The NSRA's targets are incomplete and too vague to drive reforms. The NSRA has only one, vague target for academic achievement, namely that 'Australia [is] considered to be a high quality and high equity

schooling system by international standards by 2025'.[36] This target is carried over from a previous agreement, which assessed schooling quality and equity based on Australia's performance relative to the Organisation for Economic Co-operation and Development (OECD) average in the Programme for International Student Assessment (PISA) of 15-year-olds. As such, it omits performance in the critical early years of schooling, does not capture absolute improvements over time, and is not assessable for the period the NSRA has operated (the most recent PISA data relates to 2018).

The second and third targets focus on the proportion of students attaining Year 12 (or equivalent) or Certificate III — the second target for all students, the third target for Aboriginal and Torres Strait Islander students.[37] Unlike the first target, these two targets provide quantitative benchmarks.

Reform activity has at times lacked focus and flexibility

The nexus between the NSRA's targets, outcomes and sub-outcomes and the NPIs is often tenuous, and national and bilateral reform initiatives do not work together to systematically address key priorities.

The NSRA was heavily focused on NPIs, usually pursued through a single, centralised approach. While this can be an effective, and in some cases necessary, way to advance reform, it requires a sustained commitment by all parties and does not allow them to adapt initiatives to their needs. When agreeing a single national approach takes time, some (particularly larger) jurisdictions, with more capacity, can forge ahead with their own reforms. Arguably some of the NPIs that adopted this approach could have left matters to state reforms in bilateral agreements (such as student pathways) or could have been better executed by embedding greater flexibility in the design and implementation process (for example, the OFAI).

The bilateral agreement initiatives, which set out jurisdiction-specific reforms, are patchy, lack additionality (they often catalogue existing measures), and give little sense of what they are trying to achieve.[38] Some persistent, common issues faced by all jurisdictions were largely left unaddressed. For example, parties' commitments to supporting the achievement of students from priority equity cohorts, and equitable access to high quality education generally, are stated throughout the NSRA, but not all jurisdictions' agreements contain initiatives to lift outcomes for all priority equity cohorts.

Reporting and transparency arrangements have not had bite

Public reporting and transparency arrangements (national performance reporting on outcomes[39] and progress updates on national and state reforms) are intended to give 'the community confidence that outcomes are being achieved and reforms to improve the quality and equity of Australia's schooling systems are being

[36] NSRA, s. 36.

[37] NSRA, s. 36.

[38] Section 49 of NSRA notes bilateral agreements 'recognise that constitutional responsibility for school education rests with each State or Territory' and 'take into account the specific contexts, existing reform efforts and starting points for the relevant State or Territory' and are meant to 'set out existing and/or new reforms to lift outcomes for priority equity cohorts including Aboriginal and Torres Strait Islander students, students living in regional, rural and remote locations, students with a disability and students from educationally disadvantaged backgrounds, as agreed by Parties'.

[39] Under the NSRA parties agreed to 'continuing public accountability on progress towards meeting targets through existing COAG performance reporting arrangements'. The National Measurement Framework for Schooling in Australia, including the schedule of key performance measures, provides the basis for Australian Education Ministers to report to the community on the performance of schooling (ACARA 2020a). This includes monitoring progress towards achieving the outcomes of the National School Reform Agreement (Department of Education 2019a).

implemented by all Parties' (figure 3.4).[40] However, the NSRA's arrangements have lacked bite, failed to impose strong discipline to progress agreed reforms, and not operated effectively as a cohesive whole.

Figure 3.4 – Reporting and transparency mechanisms

National School Reform Agreement

Mechanism	Bilateral Agreements	National Policy Initiatives
Performance reporting arrangements	• Progress towards meeting targets (and outcomes)	
Annual report on implementation	• Report against milestones (bilateral agreement)	• Report against milestones (schedule B) • Using template (schedule D)
End of term review	• No explicit requirement in Agreement	• Publication of independent review on effectiveness

Although performance reporting against the NSRA sub-outcomes provides a health check of the school system, progress in sub-outcomes for priority equity cohorts is mostly reported for Australia, rather than at the jurisdiction level. As such, it is not clear whether individual jurisdictions' reform efforts have been effective in some areas. In these cases, shared accountability can amount to no accountability.

Gaps in reporting further limit transparency. For example, the national Measurement Framework for Schooling in Australia does not reflect commitments to report on outcomes for priority equity cohorts. Despite some information being available, the Measurement Framework and associated National Report on Schooling in Australia[41] do not include many of the agreed disaggregations for Aboriginal and Torres Strait Islander students and students living in regional, rural, and remote locations (chapter 9). Accountability for outcomes for students with disability is particularly poor because of a lack of data (figure 3.3).

Annual progress updates for the NPIs and bilateral agreements are another key accountability mechanism in the NSRA, and also appear lacking. Performance is self-assessed and updates provide scant information on how outputs are contributing to intended outcomes, leaving stakeholders with little sense of what results are being achieved.

Finally, results are reported in different products, and there is no stand-alone source where the public can gain a 'clear read' of progress against the NSRA outcomes (chapter 9).

[40] NSRA, s. 51.

[41] The National Report on Schooling in Australia covers schooling contextual data, school funding data, schooling policies and priorities, and a discussion of Key Performance Measure results.

Finding 3.2
The National School Reform Agreement has gaps that undermine its effectiveness in facilitating collective, national efforts to lift student outcomes.

Shortfalls with the Agreement include:

- no outcome that captures wellbeing
- a single weak target for academic achievement
- a dearth of targeted reforms to lift outcomes for students from priority equity cohorts and for students who do not meet basic levels of literacy and numeracy
- a lack of transparent, independent and meaningful reporting on national and state reform activity which means there is limited effective accountability.

3.2 What issues should be the focus of the next school reform agreement?

Parties should focus the next school reform agreement on directly lifting student outcomes ...

Governments rightly identified in the NSRA — and many other declarations and policy statements in recent decades — that Australian schooling should provide high quality and equitable education. This national goal is in the interests of all jurisdictions and in line with community expectations. The NSRA objective should be retained for the next school reform agreement.

Australia is yet to realise high quality and equitable education for all students and, as noted above, little progress has been made in the four years of the NSRA. While the existing suite of initiatives might eventually support better student outcomes, parties to the next school reform agreement will inherit the significant task of turning things around.

... by addressing barriers common to all jurisdictions

There are no hard-and-fast rules for determining areas of national collaboration

Some participants in this review, including the states and territories, were keen for the Commission to outline general principles for determining the focus of intergovernmental agreements and to help inform the design of the next school reform agreement.

The Commission has reviewed a number of Commonwealth-state/territory agreements in recent years,[42] each with its own distinct features, as well as some common themes. In the course of this study, the Commission heard a range of perspectives, on the general question of Commonwealth-state/territory cooperation and the role of intergovernmental agreements. Two key themes emerged from this body of work.

First, there are no hard-and-fast rules for determining areas of national collaboration. While there are general principles that can inform the types of reforms that lend themselves to national collaboration, they are

[42] For example, the National Housing and Homelessness Agreement in 2022 and the Skills and Workforce Development Agreement in 2021.

necessarily broad and adaptable. These principles are not intended to be mechanical in their application. Inevitably, the priorities on which jurisdictions seek to coordinate action will be influenced to some extent by alignment of views and community expectations.

As such, the extent or scope of national collaboration will vary depending on the policy context and the preferences of parties. Models of national collaboration range from a minimalist approach through to a more expansive approach (box 3.2). The minimalist approach focuses mainly on issues of coordination and efficiency, with cooperation (and intergovernmental agreement content) limited to areas where, for example, there is a clear need for co-ordination (such as where Commonwealth and state constitutional responsibilities overlap) or where economies of scale can be leveraged via collective action.

Box 3.2 – Why tackle some issues nationally?

Consistent with the principle of subsidiarity, where states and territories are primarily responsible for an area of service delivery, the national interest will be served through state-based efforts. But even under a minimalist view of agreement-making, some issues will require a degree of coordination.

In many cases, working together is more efficient or effective than working alone. Potential benefits include:

- reducing unnecessary duplication of effort in policy development or infrastructure, both between jurisdictions and across sectors (such as with national data and research infrastructure)
- reducing unnecessary burdens through the harmonisation of regulations and standards, for example for students moving between jurisdictions (through a single national curriculum and assessment program), for providers working across different jurisdictions (through national ITE standards) and for teachers moving between jurisdictions or sectors (through transferable qualifications and teacher registration)
- enhancing the value of information resources (such as education evidence)
- helping to coordinate efforts in areas of shared responsibility, such as by adopting a holistic approach to the teacher 'life cycle' from ITE through to induction and ongoing professional development
- providing an avenue for sharing of best practice and technology
- addressing spillovers (where the actions of one government can impact on other jurisdictions), for example where one state or territory invests in a (mobile) teacher workforce, which other jurisdictions then to seek to attract
- enhancing transparency and accountability, for example by enabling comparability of outcomes across jurisdictions, sectors and schools (as in the case of the National Measurement Framework).

A broader remit for cooperation might arise in areas where there is a strong shared ambition, such that outcomes are seen as a significant national priority. In such cases, jurisdictions might have broader motivations for cooperation and agreement, such as to reflect the role that education plays in national productivity and employment outcomes. It also encompasses improving equity. For example, national minimum standards of achievement or content knowledge (set out in the Australian Curriculum) help ensure that all Australian students have broadly equivalent education opportunities irrespective of where they live.

A more expansive approach sees a broader role for cooperation and agreement content, where individual state and territory actions (and performance) contribute to a defined national goal. In such cases, cooperation via an agreement can galvanise joint jurisdictional effort and bind parties to actions which go beyond those required for co-ordination.

Aspects of the NSRA are consistent with a minimalist view: focusing on areas of co-ordination and economies of scale, such as the creation of AERO and establishment of the USI. On the other hand, much of the stated ambition of the NSRA reflects a more expansive view.

Second, irrespective of the scope of collaboration, there needs to be a strong alignment between the Commonwealth and the states and territories on the underlying need for intergovernmental reforms (regardless of whether the Commonwealth offers financial incentives for their completion). This is particularly the case where states and territories play the dominant role in the direct delivery of services (or the regulation of an activity). In such cases, the subsidiarity principle (assigning responsibility at the level of government closest to the community of service recipients) has weight.

Parties should focus on effective teaching and school leadership, equity and student wellbeing

In consultations, some parties to the NSRA supported the minimalist approach that national collaboration should target efficiency gains (for example, by reducing duplication), while others saw collaboration as an opportunity for parties to come together to galvanise their efforts.

In assessing these different perspectives on the next school reform agreement, the Commission has been guided by what parties have already identified as their national priorities and goals — ensuring effective teaching and school leadership, reducing differences in outcomes across students, and supporting student wellbeing.

The Commission considers that these issues lend themselves to being areas of focus in the next school reform agreement for two reasons.

- *There is broad consensus that these are significant issues that can and must be addressed:* These are common and persistent issues that governments will need to address to ensure that Australian schooling provides high quality and equitable schooling to all students. Problems related to teacher shortages, inequalities in schooling outcomes, and poor student wellbeing predate the NSRA. However, reforms under the agreement have done little to alter the trajectory of outcomes or assuage concerns expressed by students and their families, the teaching profession, and education experts. Community interest in these problems has intensified in recent years amid concerns about teacher burnout and student wellbeing during the COVID 19 pandemic.[43]
- *All governments have agreed that addressing these issues is a priority and recognised the merits of national collaboration*: Since signing the NSRA, all Australian governments have reaffirmed this through national policies to support teachers,[44] and improve wellbeing[45] in schooling through statements such as the Mparntwe Education Declaration. In addition, all governments have now formalised commitments to

[43] In August 2022, the Education Ministers announced a Draft National Action Plan on Teacher Shortages in recognition that 'teacher shortage is a key issue for all States, Territories and sectors.' In doing so, they particularly commended the commitment, dedication and professional resilience teachers have shown through the pandemic.

[44] Under the Mparntwe Declaration, Australian governments have committed to working with the education community to attract, develop, support and retain high-quality teachers, educators and leaders in Australia's education system (COAG 2019, p. 11).

[45] Education Ministers endorsed the Australian School Wellbeing Framework in October 2018 (Education Council 2018). The Mparntwe Declaration includes the goal that schooling ensures individuals 'have a sense of self-worth, self-awareness and personal identity that enables them to manage their emotional, mental, cultural, spiritual and physical wellbeing' (COAG 2019, p. 6).

reducing inequities and to inclusive education[46] through the National Agreement on Closing the Gap[47] and Australia's Disability Strategy 2021–2031.[48]

Given their importance for ensuring that students can access a high quality (and equitable) education, focus on these issues is also consistent with the vision expressed in the Mparntwe Declaration of an 'education system that encourages and supports every student to be the very best they can be, no matter where they live' (COAG 2019, p. 2).

While parties, through their existing statements and commitments, have already effectively answered the question of whether these issues should be the focus of the next school reform agreement, there is a secondary question of how parties come together to address these issues. This could be through a centralised approach or through bilateral actions. Indeed, these two approaches are not mutually exclusive. Despite its focus on NPIs, the NSRA envisioned the two approaches operating in tandem to advance national reform directions.

Accountability mechanisms need to be adapted to reflect a greater role for state-specific actions

Addressing the future reform priorities outlined above will require greater flexibility than the 'one in, all in' approach to NPIs under the NSRA. In many cases, jurisdictional differences will demand more tailored responses, and bilateral agreement initiatives will need to do more of the heavy lifting than they have in the past.

However, parties will need to address existing weakness with the accountability mechanisms in the NSRA, including those governing bilateral actions.

Parties should clarify ambitions through firm targets for academic achievement …

A successor agreement should include new targets for academic achievement for all students, and students from priority equity cohorts (chapter 4), with clear benchmarks and timelines.[49] The new targets would help drive reform, and hold each jurisdiction to account for their performance. Experience in Australia and overseas highlights the value of well-designed targets in a range of policy contexts (box 3.3).

[46] Under the Mparntwe Education Declaration, Australian governments commit to: 'ensuring that the education community works to provide equality of opportunity and educational outcomes for all students at risk of educational disadvantage'; 'empowering Aboriginal and Torres Strait Islander students to reach their potential'; and 'ensuring the education community works to 'close the gap' for young Aboriginal and Torres Strait Islander peoples' (COAG 2019, pp. 16–17).

[47] In addition to commitment to transforming government (including in education), the National Agreement on Closing the Gap includes the outcome that Aboriginal and Torres Strait Islander students achieve their full learning potential (Coalition of Aboriginal and Torres Strait Islander Peak Organisations and All Australian Governments 2020, p. 26). The NSRA was amended in 2020 to reflect the following Closing the Gap target: 'By 2031, increase the proportion of Aboriginal and Torres Strait Islander people (age 20-24) attaining year 12 or equivalent qualification to 96 per cent'.

[48] The Strategy includes the outcome that 'People with disability achieve their full potential through education and learning', and its policy priorities include the following: 'Build capability in the delivery of inclusive education to improve educational outcomes for school students with disability' (DSS 2021a, pp. 22–23).

[49] The targets would augment existing commitments to the National Agreement on Closing the Gap target on lifting education attainment.

Box 3.3 – Targets can be an effective tool for enhancing accountability

Policy targets are formal commitments by governments to achieve improvements in outcomes against a specific benchmark and by a specific time. For example, the NSRA includes the target to, 'by 2031, increase the proportion of people (age 20-24) attaining Year 12 or equivalent qualification to 96 per cent' (Schedule F). Targets therefore contrast with general performance measures or indicators (or 'sub-outcomes' in the NSRA parlance) that are directional only (for example, lower, increase) and open ended.

The added precision and status of policy targets (compared with general performance measures) can promote accountability by drawing attention to key measures for which governments are willing to be held to account and by making success or failure against those measures more transparent and verifiable.

Targets have been used in Australia in a range of policy contexts, including other intergovernmental agreements for education and Indigenous outcomes (Nous Group 2014, p. 8), as well as overseas.

Experience with targets suggest targets can be valuable when designed effectively. A survey by Nous Group (2014, p. 22) found that departmental staff in Australian, state and territory agencies generally considered targets and benchmarks to be more effective in driving reforms committed to in intergovernmental agreements compared to other levers such as reward payments. In relation to the National Indigenous Reform Agreement, the predecessor to the National Agreement on Closing the Gap which enshrined targets for life expectancy, educational attainment and employments, Nous Group (2014, p. 24) noted that:

> Jurisdictional representatives were consistently positive when interviewed about the effort being made by governments to achieve the high-level 'Closing the Gap' targets … Several indicated that the outcomes focus was highly motivating, even though the goals were ambitious and only incremental progress was likely.

In the UK, targets appear to have been effective in improving hospital wait times in England. Davies, Atkins and Sodhi (2021, pp. 22–23) noted that England introduced a maximum wait target of 18 months for elective procedures in 2001, with performance against these targets published and used as a basis for star ratings, rewards and sanctions. Subsequently, wait times were reduced to a much greater extent than in Scotland, Wales and Northern Island, which had less emphasis on targets and public accountability.

To be effective, policymakers need to carefully design targets with an eye to various trade-offs. For example, in setting the level of targets, governments need to balance ambition and achievability. If set too low, targets are less likely to incentivise additional action beyond business as usual, but if too high, they can be de-motivating (Nous Group 2014, p. 29). While targets need to direct focus towards the most significant priorities, they cannot be so narrow as to lead policymakers to ignore important problems outside their scope or give rise to perverse incentives or gaming (Davies, Atkins and Sodhi 2021, pp. 26–27).

Such risks can be minimised in the development and design of targets and highlight the importance of expert technical advice.

The new targets would be in line with community expectations around transparency and improved performance. The community should expect to see an improvement in student outcomes over the course of the next five years — funding will remain at all-time highs, current initiatives will have had time to mature, and a new generation of reforms will be underway.

To maximise their impact, targets should be few in number. The NSRA's sub outcomes (which reflect agreed goals) provide a starting point — an independent body (for example, the Australian Curriculum, Assessment and Reporting Authority (ACARA)) could provide advice on how to convert these into a tight set of meaningful targets.

The basis for measuring the targets should be common to all jurisdictions (and set out in the main agreement). However, jurisdictions should 'own' their target and each state and territory should negotiate a realistic but ambitious target with the Commonwealth, reflecting their circumstances.

… and specify basic content, process, and reporting requirements for bilateral agreements

Rather than being a stocktake of existing measures, bilateral agreements will need to be more of a focal point for jurisdictions to advance reform initiatives.

In addition to (and to support) the new targets, parties should ensure jurisdictions develop, document and report on bilateral reform actions in a more systematic and meaningful way than under the NSRA. Greater flexibility in implementation will need to be balanced by enhanced accountability and public transparency mechanisms such as basic content, process and reporting requirements for reforms in bilateral agreements (chapters 4 and 5).

Figure 3.5 illustrates what the next school reform agreement might look like (incorporating recommendations on detailed aspects on target setting, a new outcome on student wellbeing, performance measures and other aspects of reporting and transparency arrangements canvassed in subsequent chapters of this report).

Finding 3.3

The next intergovernmental school reform agreement should be focused on achieving outcomes, sub-outcomes and targets broadly consistent with those already agreed by governments in the National School Reform Agreement (NSRA).

Many of the targets, outcomes and sub-outcomes in the NSRA remain relevant. Some modifications to improve the quality of reporting should be pursued, however this broad set of aims should continue to shape the direction of reforms in the next school reform agreement.

The next school reform agreement should be aligned with, and contain practical actions that implement commitments made under subsequent policy statements, such as the Alice Springs (Mparntwe) Education Declaration, and national commitments under the National Agreement on Closing the Gap and Australia's Disability Strategy 2021–2031.

Recommendation 3.2
Firmer targets will strengthen the focus on achieving outcomes and improve accountability to the community.

The National School Reform Agreement does not include sufficient clear, measurable targets to drive reform and hold jurisdictions to account for their performance. The Commission recommends the following actions.

- To maximise their impact, targets should be realistic yet ambitious.
- There should be targets for academic achievement for all students and for students from priority equity cohorts (taking account of existing commitments to the National Agreement on Closing the Gap targets).
- A target should be developed to reduce the proportion of students who do not meet basic levels of literacy and numeracy.
- The targets should capture progress on key academic benchmarks at regular stages in a student's education.
- An appropriate independent body, such as the Australian Curriculum, Assessment and Reporting Authority, should advise on design of the targets.
- The basis for measuring the targets should be common to all jurisdictions (and set out in the main agreement). However, jurisdictions should 'own' their target and each state and territory should settle their targets with the Australian Government, reflecting their circumstances.
- Jurisdictions should report their progress against their targets each year. Bilateral agreements should explain how jurisdictions expect to achieve their targets.

Figure 3.5 – Summary of recommendations on the design of the next school reform agreement

Retain the aim that Australian schooling provides a high quality and equitable education for all students

Set out **4 outcomes** …	… adopt a broader range of **targets** to drive activity …	… and set **new and refined sub-outcomes**
• Keep achievement, attainment and engagement • Add wellbeing (R 5.1) • Consider adding new priority equity cohorts (R 4.2)	• Keep existing national targets • Develop firmer targets on achievement (R 3.2), including target to reduce the share of students not meeting basic levels of literacy and numeracy (R 4.1)	• Refine indicators of achievement and attainment (R 9.2) • Develop new national wellbeing indicator (R 5.1)

Retain the three reform directions …

Supporting students, student learning and student achievement	Supporting teaching, school leadership and school improvement	Enhancing the national evidence base

… to be progressed through national and state-specific initiatives …

Parties should **commit to existing and new National Policy Initiatives (NPIs)**	**State-specific bilateral agreements should have more rigour**
• Complete NPIs under the former agreement (R 3.1) • Consider new NPIs on quality curriculum resources (R 6.2) and building the school leadership evidence base (R 8.1)	• Systematically set out reforms (R 4.1, 4.3, 5.1, 6.1, 7.1, 7.3, 8.1) and outline how they contribute to specific outcomes and targets, including for priority equity cohorts (R 3.2, 4.4)

… with **enhanced reporting and public transparency** to give the community confidence

Including more information in progress reports…	**… more accessible, complete performance reporting …**	**…** and a **more expansive independent review**
• Annual reports on state-specific initiatives should report against outcomes and targets (R 3.2, 4.4)	• Introduce standalone reporting (R 9.1) • Fill data gaps for priority equity cohorts (R 4.3, 9.2) • Report on new and refined indicators (R 9.3)	• To assess all aspects of agreement

4. Lifting outcomes for all students

Key points

- **Governments have committed to a high equity schooling system.**
  - This has two dimensions:
    - equity in levels of achievement — all students are supported to achieve basic literacy and numeracy skills essential for success in life
    - equity in outcomes across student cohorts — educational outcomes associated with students' culture, disability, remoteness, or other characteristics are reduced or eliminated.
  - Governments have not been successful in addressing either dimension of equity under the National School Reform Agreement (NSRA).

- **In 2021, between 5 and 9 per cent of students fell short of meeting national minimum standards in reading or numeracy. A significant minority of these students do not 'catch up' in later years.**
  - Many students who do not meet minimum standards belong to what the NSRA recognises as 'priority equity cohorts'. While most (85 per cent) students from these cohorts meet the NAPLAN minimum standard, students from these cohorts are three times more likely to fall short.
  - NAPLAN minimum standards appear low by international standards, with many more students likely requiring additional support with their schooling.

- **Students from priority equity cohorts face multiple barriers in accessing a high-quality education.**
  - learning settings are not always inclusive and responsive to their learning and wellbeing needs
  - teachers and leaders often have insufficient time, skills, and/or resources to provide support
  - some Aboriginal and Torres Strait Islander students do not see their identities, cultures, and knowledges reflected in what they are learning.

- **Lifting outcomes for students who are not meeting basic levels of literacy and numeracy and for students from priority equity cohorts should be a focus of the next intergovernmental school reform agreement. All parties should commit to actions and firm targets for lifting outcomes for both groups of students, including:**
  - outlining how they will assist these students to achieve basic levels of literacy and numeracy
  - implementing relevant commitments under the National Agreement on Closing the Gap and Australia's Disability Strategy
  - publicly reporting each year on progress in implementing reforms and achieving the targets they set.

- **Parties to the next school reform agreement should consider whether new priority equity cohorts, such as students in out-of-home care, should be added to the next school reform agreement.**

4.1 What is equity in schooling?

Equity in schooling has different dimensions

'High equity' in education is one of the National School Reform Agreement's (NSRA) overarching objectives. This goal has been enshrined in the past four *Declarations on Educational Goals for Young Australians* issued by State, Territory and Commonwealth Education Ministers (COAG 2008a, 2019; MCEETYA 1989, 1999).

Equity in outcomes *across* student cohorts

While the NSRA does not define 'equity', the Melbourne Declaration (and its successor, the Mparntwe Declaration) define equity at length. Definitions reflect that school systems should strive to eliminate discrimination of all kinds and to ensure differences in educational outcomes associated with students' culture, disability, remoteness, or socioeconomic status are reduced or eliminated (COAG 2008a, pp. 7, 15, 2019, pp. 5, 17). Differences in educational outcomes can arise because conventional school learning environments (which are shaped by the curriculum, teaching practices, school leadership, and the learning setting[50]) do not meet these students' needs. Eliminating differences in learning outcomes due to students' background or differing need can be thought of as promoting equity *across* students.[51]

In the NSRA, parties recognised the importance of supporting the achievement of students who are from what they termed 'priority equity cohorts', namely Aboriginal and Torres Strait Islander students, students living in regional, rural and remote locations, students with a disability and 'students from educationally disadvantaged backgrounds'.[52]

The label 'priority equity cohort' does not mean that these students are homogenous in their learning needs. Indeed, there is significant diversity across and within the priority equity cohorts in what is required to respond to their educational experiences, needs and ambitions. Nor does being from a priority equity cohort necessarily mean students have low levels of educational achievement. Each year, many students from priority equity cohorts excel academically at school.

Rather, being in a priority equity cohort denotes that, at the population level, students from these groups have historically experienced lower outcomes than the general population (at all levels of achievement) and the reasons for this often stem from systemic barriers embedded in education systems (and society generally) that impede them from achieving their full potential.

Equity in proficient levels of achievement

A second aspect of equity — supporting all students to achieve basic literacy and numeracy skills essential for success in life — is reflected in both the Mparntwe Declaration and the NSRA. The former lists as one of its goals that 'All young Australians become … successful lifelong learners … [who] have the essential skills

[50] The learning setting refers to the physical environment in which learning takes place.

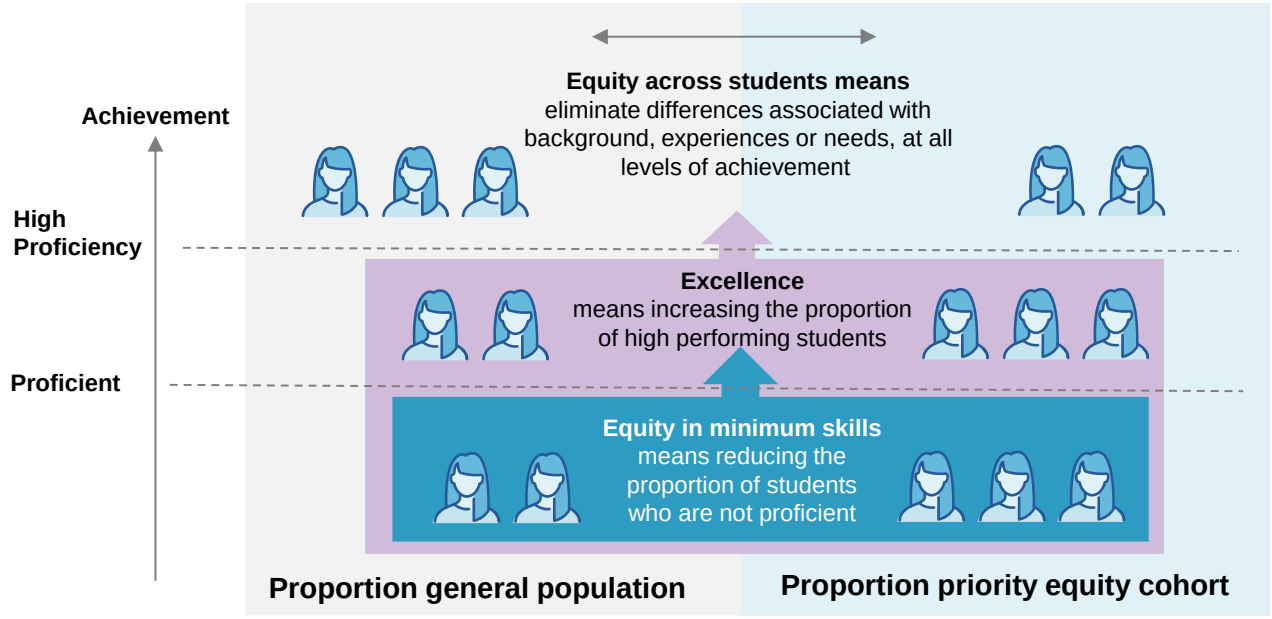
[51] This chapter considers equity of outcomes for specific achievement outcomes set out in the NSRA, such as NAPLAN results. NAPLAN is only one tool to measure educational achievement. Some commentators have noted that NAPLAN results might not recognise the learning strengths of some students, such as students with English as an additional language or who are not familiar with Western 'cultural norms' (including Aboriginal and Torres Strait Islander children) (Freeman 2013). Chapter 9 makes recommendations for improving outcome measures used in national reporting.

[52] There is no definition for 'educationally disadvantaged background' in the NSRA and there is no agreed definition in the literature. Therefore, this chapter focuses on the first three priority equity cohorts (Aboriginal and Torres Strait Islander students, students living in regional, rural and remote locations and students with a disability). Elsewhere in this report, students from educationally disadvantaged backgrounds has been taken to mean students with parents with low levels of educational attainment, as this is reported in NAPLAN datasets.

in literacy and numeracy as the foundation for learning' while the latter has as one of its sub-outcomes reducing the proportion of students in 'the bottom two bands' (or lowest levels of achievement) for the National Assessment Program — Literacy and Numeracy (NAPLAN).

Figure 4.1 illustrates how these two concepts of equity — along with excellence — can be understood in the context of a NSRA sub-outcome relating to reducing the proportion of students at the lowest levels of achievement and increasing the proportion of students in the top levels.[53]

Figure 4.1 – Conceptualisation of equity and excellence in student achievement



This chapter employs these definitions of equity as they appear to reflect what parties to the NSRA meant by equity, and provide a tangible basis for assessing the effectiveness of policies in achieving equity and for making recommendations to improve equity.

Equity, in its different forms, is an enduring challenge for schooling systems across Australia

Progress against outcome measures and feedback from participants in this review demonstrate that equity remains a key challenge across Australia. Many participants highlighted the need for intergovernmental collaboration to improve the equity of the school system. Participants also pointed to the need for increased transparency about how resources are deployed, and better tracking and reporting of outcomes.[54] Some

[53] As discussed in chapter 9, there are different ways to specify the proficiency standards that define the bottom and top ends of performance and governments may choose to adjust these over time.

[54] Queensland Advocacy for Inclusion, sub. 1; Australian Learning Lecture, sub. 2; Grattan Institute, sub. 5; Australian Parents Council, sub. 8; Molly Paterson, Jaai Parasnis, Michelle Rendall, sub. 9; Dr. John Halsey, sub. 10; The Australian Association of Special Education, NSW chapter, sub. 20; Speech Pathology Australia, sub. 11; Teachers' Work In Schools Research Group, sub. 16; Australian Association of Special Education, sub. 20; Professor Pasi Sahlberg and Trevor Cobbold, sub. 21; Centre for Educational Measurement and Assessment, sub. 28; The Smith Family, sub. 29; Learning Creates Australia, sub. 35; Australian Education Union, sub. 36; Australian Council of TESOL, sub. 37; Australian Primary Principals Association, sub. 48; Australian Council of State School Organisations, sub. 51.

participants raised concerns about insufficient funding for schools to address barriers faced by students from priority equity cohorts, but this is outside the scope of this review.

The remainder of this chapter considers the extent to which Australia is achieving a high equity school system (based on the two different concepts of equity mentioned above) and the role the next intergovernmental school reform agreement could play in promoting greater equity.

- Section 4.2 examines the extent to which schooling is ensuring all students are learning the basics in literacy and numeracy, and the potential for the next school reform agreement to reduce the proportion of students who do not meet basic levels of literacy and numeracy.
- Section 4.3 examines the extent to which governments have achieved the improved outcomes for students from priority equity cohorts they set for themselves, and realised commitments to enhance reporting and transparency. It also highlights potential new priority equity cohorts for the next agreement.
- Section 4.4 examines the role of the next school reform agreement in lifting outcomes for students from priority equity cohorts. It outlines the particular commitments governments have made to students in priority equity cohorts since the NSRA was agreed (such as those under the National Agreement on Closing the Gap and the Australian Disability Strategy). It then examines specific areas where students from priority equity cohorts encounter barriers to education, the features of school systems that are critical for overcoming these barriers, and what governments can do to promote these features. The chapter concludes by considering how state bilateral agreements and public reporting under the next school reform agreement could give effect to government commitments and improved educational outcomes for students in priority equity cohorts.

4.2 Are all students reaching basic levels of literacy and numeracy?

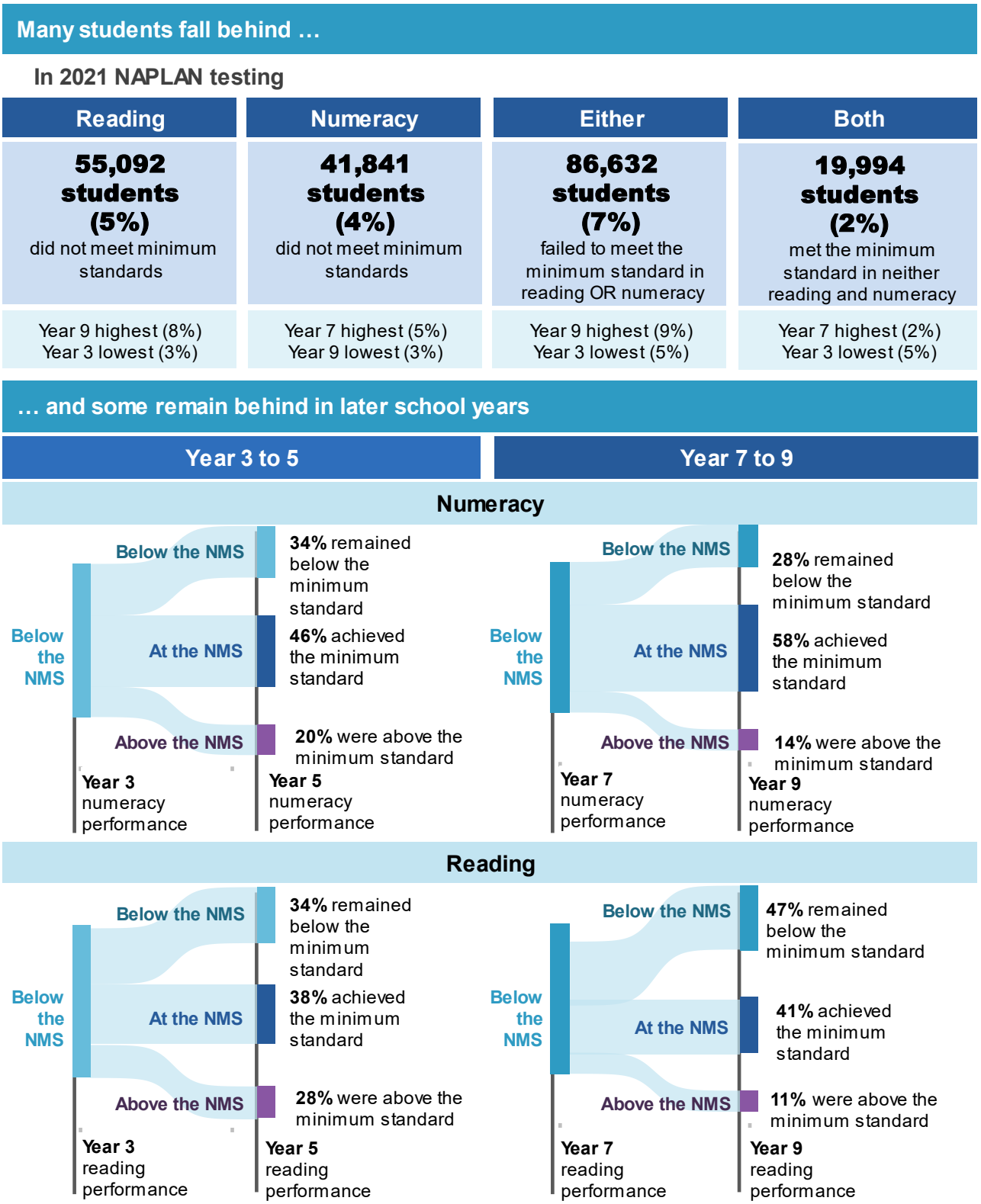
Tens of thousands of students do not meet minimum standards each year — many have this experience year after year

The NSRA confirms the principle that Australia's school systems should strive for all students to be equipped with the basic levels of literacy and numeracy necessary for future life success. But in 2021, between 5 and 9 per cent of Australian students did not meet national minimum standards in at least one of reading or numeracy. Around one-third of the students who do not meet NAPLAN minimum numeracy standards in year 3 do not meet NAPLAN minimum standards in year 5. Similar patterns are evident in reading, and between years 7 and 9 (figure 4.2).

However, a review of NAPLAN queried whether the NAPLAN minimum standard is set too low (McGaw, Louden and Wyatt-Smith 2020), and hence the proportion of students that require additional support exceeds those falling below NAPLAN minimum standards. This is borne out in results from international tests (such as Programme for International Student Assessment (PISA), Trends in international mathematics and science study (TIMSS) or Progress in International Reading Literacy Study (PIRLS), which show the share of students in the bottom bands of performance was between 9 and 20 percent at the most recent testing date.

This is consistent with the observation by Australian Curriculum, Assessment and Reporting Authority (ACARA), that even students who are at the minimum standard (i.e. students in the second bottom performance band) may still require additional assistance to enable them to achieve their potential. Around 17 percent (year 3 and 5) and 24 percent of students (year 9) fall in the bottom two performance bands in at least one of the NAPLAN reading or numeracy domains.

Figure 4.2 – Share of students not meeting minimum standards in NAPLAN



a. The bottom figure shows students who were below the national minimum standard in year 3 and whether they remained below, were at or were above the national minimum standard in year 5. The same analysis was done for students between year 7 and year 9.

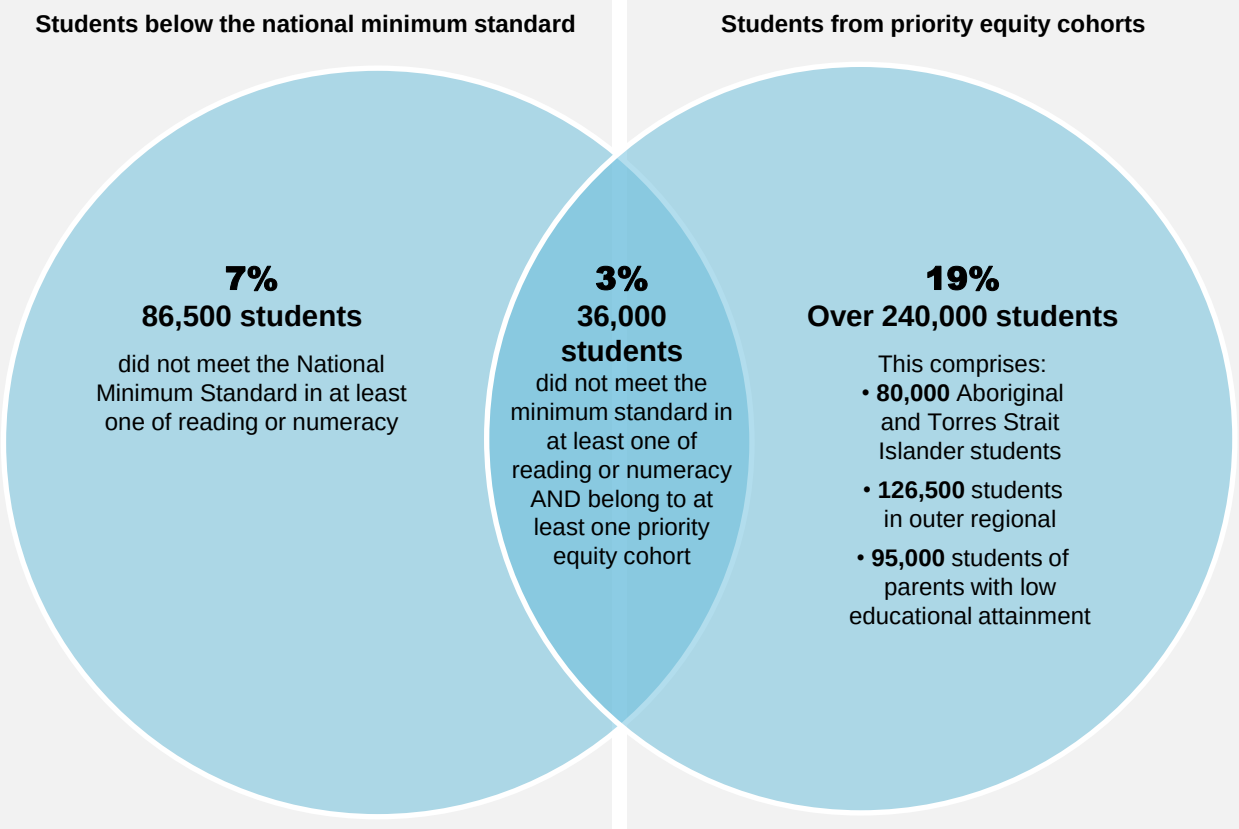
Source: Commission estimates based on de-identified student level NAPLAN data.

Fewer than half of these students are in a priority equity cohort

Commission analysis reveals that students from priority equity cohorts are three-times more likely to be represented among students who have fallen behind national minimum standards (see section 4.4). However, more than half of underperforming students are not from one of these cohorts (at least, not the priority equity cohorts identified in the NAPLAN data) (figure 4.3).[55] Indeed, the majority (85 per cent) of students who identify as being from a priority equity cohort, achieve at or above national minimum standards.

As such, the underlying causes of students falling behind cannot be wholly attributed to the barriers uniquely or disproportionately affecting students from priority equity cohorts.

Figure 4.3 – The overlap between students below the national minimum standard and students from equity cohorts, years 3, 5, 7 and 9, 2021[a]



a. Students with disability are identified as a priority equity cohort in the NSRA but NAPLAN performance data is not published for students with disability.

Source: Commission estimates based on de-identified student level NAPLAN data.

[55] Students with disability are identified as a priority equity cohort in the NSRA, but NAPLAN performance data is not published for students with disability. As a consequence the Commission was unable to include these students in its analysis.

Finding 4.1
Tens of thousands of students do not meet NAPLAN minimum standards in reading or numeracy each year — many students fall short year after year.

Fewer than half of the students who do not meet NAPLAN minimum standards in reading or numeracy are from the National School Reform Agreement's priority equity cohorts.

- The precise number is uncertain because there are limited data for students with disability.
- Around one third of students who do not meet NAPLAN minimum standards in their early years of schooling do not meet NAPLAN minimum standards in later school years.
- Such experiences can negatively affect students' feelings about themselves and towards learning, and their ability to fulfil their aspirations in later life.

Support for students who are not meeting basic levels of literacy and numeracy

When students are not meeting basic levels of literacy and numeracy year after year, the experience can negatively affect their feelings about themselves and towards learning, and put them at risk of not progressing satisfactorily at school and facing additional challenges fulfilling their aspirations in later life. As the Australian Council for Educational Research (ACER) observed:

> [These students] … tend to start each school year behind most of their age group and are poorly equipped for the material they are about to be taught. Most struggle, and this is reflected in their poor performance on the year level curriculum. Many receive low grades year after year, reinforcing the message that they are not succeeding at school – or worse, that they are inherently poor learners (Masters 2016, p. 1).

When students do not progress through school it can also have flow on effects for their families, communities and broader society (chapter 2). Interventions that help address the specific learning needs of these students benefit both the individual and society.

Targeted measures complement general policies in reducing the proportion of students that are not meeting basic levels of literacy and numeracy

There are a range of policies that parties to the next school reform agreement could adopt to, directly or indirectly, reduce the proportion of students who are not meeting basic levels of literacy and numeracy, including:

- general policies designed to increase student achievement at all levels (such as policies to support teacher and school leader effectiveness)
- policies designed to reduce barriers to learning that affect specific and relatively well-defined student cohorts (such as policies supporting culturally inclusive practices)
- policies to ensure students have the material means to learn (such as textbooks)
- policies that have the express purpose of assisting students who are not meeting basic levels of literacy and numeracy to catch up, regardless of their background.

The last type of policy (targeted support) can play an important role where the other types of policies are unlikely to adequately address the causes behind a student falling behind. For example, a student might

have fallen behind because of personal circumstances that caused them to experience frequent or extended absences from school, which disrupted their learning.

Targeted support for students who have fallen behind can provide additional or bespoke learning resources to the student, their parents, carers, or teachers. They may involve interventions inside or outside the classroom. Examples of targeted supports include:

- programs that provide students with additional, dedicated tuition (such as after school home-work clubs, small group tutoring, or one on one intensive tutoring)
- government guidance on strategies for working with students and families when students fall behind (such as ways of differentiating the curriculum to the students' abilities, while still ensuring high expectations, and information and advice on when specific intensive interventions are more likely to work)[56]
- mentoring or support programs that recognise and positively reinforce students' learning aspirations and achievements or uncover aspects of personal wellbeing that may impact why a student may be falling behind.

Views differ on the role of targeted and intensive support as a national policy initiative

During this review, the Commission asked whether offering intensive, targeted support to students who are not meeting basic levels of literacy and numeracy (such as small group tuition) could form the basis of a national policy initiative in the next school reform agreement. This query reflected support for such programs in the literature and among experts[57] (box 4.1).

Box 4.1 – Evidence supporting efficacy of small group tuition

Small group tuition involves a teacher, trained teaching assistant or tutor working with a small group of students together in a group (either during school hours or after hours). This allows the teaching to be better tailored to the specific needs of the students and gives them additional focussed attention, with more opportunities for interaction and feedback.

Two high-performing nations (Finland and Singapore) use tutoring, which has proven to be successful in many contexts. In Finland, for example, the program assigns a specialist teacher (who has undergone additional training on working with struggling students) to each school (McKinsey and Company 2007). The specialist teacher works closely with teachers to identify students who need extra help. Multi-professional care groups meet periodically to discuss individual students (OECD 2016).[58]

In Australia, the Grattan Institute has recommended that governments embed high-quality, catch-up learning support in every school (Hunter and Sonnemann 2022). The Evidence for Learning 'teaching and learning toolkit' presents a meta analysis of all studies pertaining to small-group tuition and identifies 'moderate' evidence that small-group tuition improves learning outcomes in reading by up to 4 months,

[56] See for example CESE (2020c), or The Education Hub (2018).

[57] AERO, sub. DR113; Grattan Institute, sub. 5.

[58] The care group typically consists of the school principal, the special education teacher, the school nurse, the school psychologist, a social worker, teachers and parents (OECD, 2016).

Box 4.1 – Evidence supporting efficacy of small group tuition

and mathematics outcomes by up to 3 months. The toolkit also identifies that low achieving students particularly benefit from small group tuition.

The Smith Family has run a successful program targeted at students from low socioeconomic backgrounds, which took place at home with involvement from parents (rather than at school) (The Smith Family 2021). By the end of the Smith Family's catchup learning pilot, seven in 10 students achieved higher than expected progress in literacy, and just under half of all students achieved higher than expected progress in numeracy.

Several participants supported including intensive, targeted support for students who have fallen behind in the next school reform agreement.[59] The Australian Education Research Organisation (AERO) argued such initiatives would help address an area of universal and ongoing need.

> AERO notes that this reform would respond to the persistent challenge that most Australian students who are identified as achieving below the national minimum standard are not being effectively supported to achieve above the standard over the course of their subsequent schooling (AERO, sub. DR113)

Some participants agreed with the aim but doubted whether a national initiative would be the best approach. They argued a single national approach would be too inflexible to cater to individual learning needs of students from different backgrounds, contexts, experiences and aspirations[60] and stressed the importance of policy and delivery flexibility.

Some participants questioned whether widescale use of intensive support programs (such as small-group tutoring programs) would be feasible given their relatively high costs and challenges sourcing skilled tutors.[61]

The above concerns are not compelling reasons for ruling out initiatives that offer intensive targeted support as part of reforms under the next school reform agreement.

While national policy initiatives can be designed in a way that provides flexibility, targeted support for students who have fallen behind could equally be included as a series of bilateral initiatives under the next school reform agreement. And concerns that workforce constraints would compromise the roll out of intensive support programs have not been evident for either the New South Wales or Victorian governments in rolling out their COVID-19 catchup tutoring programs. Indeed, the New South Wales Government is now exploring ways to embed small group tuition into ongoing practice in schools (New South Wales Department of Education, sub. DR115), and the Victorian government has announced they will continue their Tutor Learning Initiative for 2023.[62]

[59] Professor Brian J. Caldwell, sub, DR62; Flinders University, sub. DR69; QATESOL, sub. DR85; ACT Principal's Association, sub. DR89; the Smith Family, sub. DR112; AERO, sub. DR 113; The Stronger Smarter Institute, sub. DR114, NSW Department of Education, sub. DR115.

[60] Association of Independent Schools of South Australia, sub. DR61, Flinders University, sub. DR69; AAAE, sub. DR104.

[61] University of Newcastle Teachers and Teaching Research Centre, sub, DR84; Dr. Jennifer Buckingham, DR91; TESOL, sub. DR124.

[62] Andrews (2022).

Governments should commit to specific targets and actions

Ensuring all students achieve basic literacy and numeracy skills is a fundamental purpose of schooling. As the Mparntwe Declaration notes:

> To achieve excellence, and for our system to be equitable, every student must develop strong literacy and numeracy skills in their earliest years of schooling, and go on to develop broad and deep knowledge across a range of curriculum areas. (Mparntwe Declaration, p. 2)

Parties to the next school reform agreement should set out in their bilateral agreements the steps they will take to reduce the proportion of students who do not meet basic literacy and numeracy levels. These steps could include:

- general policies to increase student achievement at all levels (such as policies to support teacher and school leader effectiveness)
- policies to reduce barriers to learning that affect students from priority equity cohorts (such as policies supporting culturally inclusive practices)
- policies that have the express purpose of assisting students who are not meeting basic levels of literacy and numeracy, regardless of their background, experience or needs.

While it is up to parties to determine the right policy mix in their jurisdictions, given their commitments to ensure all students receive a quality education, they should consider intensive targeted support measures, particularly where other approaches appear to be failing.

Bilateral initiatives should be complemented by targets for reducing the proportion of students who do not achieve basic levels of literacy and numeracy. This would give the issue greater prominence, signal parties' strong commitment to equitable education for all students, and promote greater accountability for achieving outcomes.

There are various practical issues parties will need to work through in setting targets (such as recognising jurisdictions will start in different positions) (chapter 3). Reflecting this, targets should be based on a common measure — which could be adapted from one of the existing NSRA sub-outcomes or an agreed level of achievement — but each jurisdiction could negotiate the quantum of their target with the Commonwealth.

Recommendation 4.1
Jurisdictions should commit to targets and actions to reduce the proportion of students who do not meet basic levels of literacy and numeracy.

Reducing the proportion of students who do not meet basic levels of literacy and numeracy should be a priority for the next intergovernmental school reform agreement.

Recommendation 3.2 proposes setting and reporting targets to reduce the proportion of students who do not meet basic levels of literacy and numeracy.

Parties to the next school reform agreement should set out in their bilateral agreements the actions they will take to reduce the proportion of students who do not meet basic levels of literacy and numeracy. Small-group tuition is one such intervention that is supported by evidence as improving outcomes for students falling behind that parties to the next school reform agreement could consider.

4.3 Have governments addressed the learning needs of students from priority equity cohorts?

The agreed outcomes for students in priority equity cohorts have not been achieved

Parties' commitments to supporting the achievement of priority equity cohorts, and equitable access to high quality education generally, run throughout the NSRA. Under the NSRA, parties agreed to the outcomes that 'academic achievement improves for all students, including priority equity cohorts', and that 'all students are engaged in their schooling'. The NSRA targets include 'increas[ing] the proportion of Aboriginal and Torres Strait Islander people (age 20-24) attaining year 12 or equivalent qualification to 96 per cent' by 2031, and that 'Australia [is] considered to be a high quality and high equity schooling system by international standards by 2025'.[63]

So far, parties have failed to demonstrate that they are achieving the sub-outcomes for students from the priority equity cohorts that they committed to. For many sub-outcomes, across the domains of achievement, attainment and engagement, performance reporting via the *National Report on Schooling* does not include disaggregated results for students by priority equity cohort. And there is no national reporting of these results for students with disability due to a lack of data (chapter 9).

Where sub--outcomes are disaggregated for students by priority equity cohorts, most have not improved since 2018 (consistent with the sub--outcomes for all students) (appendix E).[64]

- The proportion of students in the bottom two bands of NAPLAN numeracy has risen for students in all priority equity cohorts across all year levels since 2018. The proportion of students in the bottom two

[63] NSRA, s. 35 (a). In December 2020, Education Ministers updated the NSRA targets to reflect the adoption of the updated national target for school education endorsed by State and Territory First Ministers through the National Agreement on Closing the Gap.
[64] For this analysis, students from educationally disadvantaged backgrounds are assumed to be students whose parents have a highest educational attainment of year 11 or lower. This is a measure of educational disadvantage reported on in the NAPLAN dataset.

bands of NAPLAN reading has been a little more mixed, with decreases in all priority equity cohorts in years 5 and 7, but increases in years 3 and 9.
- The proportion of students in the top two bands for numeracy have decreased across all year levels and cohorts except for year 7 Aboriginal and Torres Strait Islander students. Progress in increasing the proportion of students in the top two bands of performance of reading has been a little more promising, particularly for year 3 students and for Aboriginal and Torres Strait Islander students in years 5, 7, and 9.
- Engagement has fallen for students in those cohorts for which data are collected (consistent with engagement outcomes for all students). (Sub-outcomes measured by PISA have not been assessed as PISA has not been tested since the NSRA was introduced.)
- Attainment has risen, albeit marginally, for students in regional and remote areas (from 81 per cent to 82 per cent).

Finding 4.2
Governments are yet to achieve the equitable outcomes for students from the priority equity cohorts that they endorsed in the National School Reform Agreement (NSRA).

For the priority equity cohorts, over the life of the agreement:

- achievement — as measured by results in national literacy and numeracy testing — exhibited improvements in some areas but generally worsened (particularly in numeracy)
- school attendance — which is the NSRA's measure of engagement and only recorded for Aboriginal and Torres Strait Islander students and students from regional and remote areas — decreased
- attainment — which is only recorded annually for students from regional and remote areas — improved.

Outcomes for students with disability cannot be measured because national reporting does not report on the NSRA's outcome measures for this priority equity cohort.

The bilateral agreements have not been comprehensive

Under the NSRA, bilateral agreements are the agreed vehicle for setting out reforms to support students in priority equity cohorts. In particular, agreements were intended to set out:

> existing and/or new reforms to lift outcomes for priority equity cohorts including Aboriginal and Torres Strait Islander students, students living in regional, rural and remote locations, students with a disability and students from educationally disadvantaged backgrounds, as agreed by Parties (NSRA, s. 49)

This arrangement recognises that constitutional responsibility for school education rests with each State or Territory, each of which have their own regulatory frameworks, policies and priorities intended to maximise local students' educational outcomes. It also allows reforms to take into account the circumstances of each State or Territory.

However, many of the bilateral agreements fail to meet minimum expectations for addressing outcomes for students in priority equity cohorts. In particular:

- **Many bilateral agreements fail to address each of the equity cohorts mentioned in the NSRA.** The bilateral agreements are not consistent in committing to specific actions for each of the priority equity cohorts or identifying how to best respond to their needs, aspirations and experiences. These omissions mean there is no visibility, and therefore public transparency as to whether each jurisdiction is committing resources and actions

towards supporting students experiencing educational barriers.[65] For example, bilateral agreements for Queensland and the ACT do not detail reform action for students with disability, the bilateral agreement for Victoria does not outline actions for students in regional areas, while the bilateral agreement for South Australia does not provide actions for students with disability or students in regional and remote areas.

- **Many of the proposed measures are not 'additional'.** Desktop analysis and feedback from participants suggest that many of the actions and reforms in bilateral agreements linked to raising outcomes for students in equity cohorts were already underway before the NSRA was signed. Although the agreement expressly permits States and Territories to include existing reforms in bilateral agreements, that bilateral agreements include very few, if any, examples of additional reforms seems antithetical to the purpose of the agreement.
- **All bilateral agreements lack detail.** The bilateral agreements commit to broad actions, without setting out the logical connection between the action and its intended outcomes. This lack of detail limits the extent to which parties could be held accountable for undertaking their committed actions. For example, New South Wales and Tasmania simply commit to 'Meet the needs of students at risk of educational disadvantage (including students with disability, Aboriginal students, students with low English proficiency and students in rural and regional areas) through evidence-based pedagogy, quality teaching and leadership and innovation', but do not identify the pedagogy or quality teaching practices they will adopt to meet the needs of students.[66]
- **Outcomes are not measured for students with disability** — one of the priority equity cohorts. As outcomes data for students with disability are not collected, it is not possible to know whether reforms are effective. Chapter 9 discusses the lack of data for students with disability in greater detail.

Further, annual reports on the implementation of bilateral agreements lack detail on the extent to which initiatives are achieving their intended outcomes.

Under the NSRA, parties agreed that each State or Territory would report annually to the Commonwealth outlining progress towards implementing state-specific reform initiatives against agreed milestones. Along with other measures, the reports contribute to the broader function of giving 'the community confidence that outcomes are being achieved and reforms to improve the quality and equity of Australia's schooling system are being implemented by all Parties'.[67]

However, under current reporting arrangements, there is no clear line of sight regarding how state-specific reforms in bilateral agreements are contributing to improved outcomes at the local level for students in priority equity cohorts, and thereby contributing to shared national goals to lift outcomes.

[65] This does not necessarily mean nothing is being done to support students from these cohorts. Consultations with participants suggested that parties often do not report their full suite of reform activity in their bilateral agreements and there are a range of activities they undertake that support students from priority equity cohorts.

[66] Western Australia states that 'teachers make evidence-based decisions about the level of adjustment being provided for each student with disability, and the broad category of disability, to achieving quality teaching for all students', but do not identify how they will help teachers make evidence based decisions. The ACT state they will 'implement the Cultural Integrity Continuum and Toolkit' and Victoria will 'introduce a Professional Practice Leader to support Koorie students' literacy and numeracy', but neither identify how the toolkit or Practice Leader will contribute to improved outcomes.

[67] NSRA, s. 51. The reports also inform the assessment of whether the State or Territory has complied with the conditions for Commonwealth conditional of funding under the Act (that is, the State or Territory is party to national and bilateral agreements on school education reform and complies with them).

Finding 4.3
Governments have failed to demonstrate how state-specific reforms are addressing the educational needs of students from the priority equity cohorts.

Bilateral agreements between the Australian Government and each state and territory — which were supposed to enable transparent reporting on measures to lift outcomes of students from priority equity cohorts — have patchy coverage, lack meaningful detail, and contain few new measures.

NSRA priority equity cohorts do not capture all cohorts experiencing educational disadvantage

The NSRA strives to lift outcomes for students from 'priority equity cohorts', recognising students from these groups (at all levels of achievement) are often unable to reach their full potential because school systems are not always well-suited to their learning needs.

Several participants highlighted there are other student cohorts that face systemic educational barriers. Participants mentioned students in out-of-home care, students who are learning English as an additional language or dialect, refugee students, and students in youth detention as examples of student cohorts who face additional educational barriers.

Students in out-of-home care

Children and young people living in out-of-home care can face particular barriers in education, which can be compounded by experiences of the trauma of child abuse and neglect (Knight and Rossi 2018) and experience poorer academic outcomes and wellbeing. As at 30 June 2021, there were around 46 200 children in out-of-home care across Australia.

Children and young people living in out-of-home care are considerably less likely than their peers to attend school and engage with education (Anglicare Victoria 2014; Townsend et al. 2020). They tend to move between care settings, and therefore learning-settings, which can disrupt their education (Knight and Rossi 2018). One study found that children and young people living in out-of-home care aged 12 to 17 years had attended, on average, 3.7 schools (Townsend et al. 2020, p. 4).

Children and young people living in out-of-home care are considerably less likely than their peers to achieve the national benchmarks for reading and numeracy (Anglicare Victoria 2014; Townsend et al. 2020). By year 9, children in out-of-home care were four times more likely to be below the national minimum standard in reading, and six times more likely to be below the national minimum standard in numeracy, relative to the general population (Townsend et al. 2020, p. 71).

Children and young people in out-of-home care typically require more intensive support from teachers and schools to avoid falling through the cracks of the education system — 20 per cent of children in a large scale longitudinal study of children and young people living in out-of-home care reported they 'rarely or never' or only 'sometimes' understood the work in class (Townsend et al. 2020, p. 118). Teachers and school leaders who do not recognise these challenges, can miss key opportunities to retain school engagement and may even exacerbate poor wellbeing (chapter 5).

During consultations, some young people in out-of-home care highlighted the stigma they face:

> Telling friends that I was in care, it's setting you up to being picked on, those moments made me feel like I couldn't tell anyone and that I had to distance myself and that made me get picked on more. This made me not want to participate in class.

Children and young people in out-of-home care noted that the issue was worse for students who lived in residential care (as opposed to foster or kinship care):

> I dropped out in grade 11 when I moved from foster care to resi. I was told resi was one step from juvie so I thought I must have been a horrible kid.

The barriers faced by children and young people in care at school is the subject of an inquiry by the Victorian Commission for Children and Young People.

Since the NSRA was signed, governments, under the Mparntwe Declaration, have identified learners in out-of-home care as being at higher risk of educational disadvantage and recognised these learners could benefit from targeted policy interventions (section 4.4).

There was also support in submissions to this review for including students in out-of-home care as a priority equity cohort in the next school reform agreement.[68]

> Life Without Barriers supports the Interim Report's statement that the priority equity cohorts in the NSRA do not capture all cohorts of students experiencing educational disadvantage and strongly recommends that children and young people in out-of-home care (OOHC) are included as a new priority equity cohort in the next iteration of the NSRA. Life Without Barriers, sub. DR60.

Student who are learning English as an additional language or dialect and refugees

Students who are learning English as an additional language or dialect (EAL/D) at school often require support. This includes support to build English language skills to access the general curriculum[69], as well as high levels of social, emotional and cultural support, as their social and cultural expectations can vary greatly (ACARA 2014). The Commission has heard that proficiency in English is a vital building block for sustained success at school.

> English language proficiency is crucial to EAL/D learning outcomes in school. EAL/D learners' academic achievement, engagement and skill acquisition … is contingent on the acquisition and development of the spoken English that is necessary for social interaction and is the foundation on which academic literacy skills are built. (ACTA, sub. 37)

Refugee students, who often do not speak English as a first language and/or have had disrupted education and little or no literacy in their first language, face additional challenges and barriers — both in understanding the curriculum and in adapting to Australia's cultural and social norms. Many refugees have endured trauma before their arrival in Australia; and some have been forcibly dislocated from their homes, families, friends and culture. These experiences will directly affect students' general learning and their learning of English in Australian classrooms (ACARA 2014). There is evidence that it can take between seven to twelve years for

[68] SA Commissioner for Children and Young People, sub. DR54, Save the Children and 54 Reasons, sub. 64; ACTPA, sub. DR89; AEU, sub. DR101; Australian Council of TESOL Associations, sub. DR124

[69] It has been estimated over 600,000 EAL/D learners need English language support in government and Catholic schools throughout Australia (Australian Council of TESOL Associations 2021).

refugee students to develop the level of English needed to achieve academic parity with their English-speaking peers (Collier, 1989).

Analysis by the NOUS group shows that students with low English proficiency performed, on average, 1.5 performance bands below other students, while refugee students performed 0.75 performance bands below other students. Recently arrived refugee students with low English proficiency were, on average, almost 3 performance bands below other students (Nous Group 2011, p. 73).

However, it is not only students from overseas who may require additional support to improve English language proficiency — some Aboriginal and Torres Strait Islander children also speak English as an additional language (section 4.4).

As with learners in out-of-home care, the Mparntwe Declaration identifies refugee (and migrants) as being at higher risk of educational disadvantage.

Students in the youth justice system

Participants to the review noted that students in youth detention also required additional support from the school system. In 2020-21, a total of 9352 young people were supervised by the youth justice system at some time during the year (AIHW 2022).

Children under youth justice supervision are an especially disadvantaged group (AIHW 2022), with an over-representation of already vulnerable students. Research indicates that young people in the youth justice system have often experienced:

- high rates of child maltreatment and neglect, including time spent in out-of-home care
- drug and alcohol abuse, causing them to disengage with day-to-day tasks such as engaging with school
- parental substance abuse, compromising the child's ability to have a stable and safe environment
- parental incarceration, which impacts a child's emotional, behavioural, and psychological development
- homelessness or unstable accommodation.

Reflecting their histories of trauma and complex needs, young people in the youth justice system often experience poor school engagement, attendance and performance. Positive relationships between educators and young people are central to empowering young people within the youth justice system to reach their potential.

Finding 4.4
The priority equity cohorts in the National School Reform Agreement do not capture many students who are at high risk of experiencing educational disadvantage.

Children and young people living in out-of-home care face significant disruptions to their education and are considerably less likely than their peers to attend school and engage with education — by year 9, children in out-of-home care were four times more likely to be below the national minimum standard in reading, and six times more likely to be below the national minimum standard in numeracy, relative to the general population.

Students who speak English as an additional language or dialect often require specific support to strengthen English language skills to access the general curriculum.

Students from a refugee background generally speak English as an additional language or dialect and face the same challenges. Many have endured experiences of trauma prior to their arrival in Australia, affecting their ability to engage in learning.

Students in the youth justice system often require additional educational support to enable them to overcome the often complex barriers to engagement in education.

Implications for the next school reform agreement

While student centred approaches are key for improving outcomes for students from priority equity cohorts, examining educational barriers through a 'cohort lens' can provide a focal point for targeted government actions to address systemic barriers.

As illustrated above, many students face significant challenges obtaining a quality education that do not arise from the remoteness of where they live, having a disability or being an Aboriginal and Torres Strait Islander person.[70] And, in some cases, governments have made specific commitments to support these students. As such, there are reasonable grounds for asking whether these or other cohorts should be identified as priority equity cohorts in the next school reform agreement.

Including new priority cohorts in the next school reform agreement would have implications for government and school resources. New priority cohorts would, at the very least, require dedicating additional resources to collecting data for performance reporting (in some cases the data may not yet exist), and would likely require resources for new reforms.

Parties to the next school reform agreement would need a basis for identifying which cohorts might be appropriate to add as new priority cohorts. While technical analysis can inform such decisions, they will ultimately be value judgments reflecting the preference and priorities of governments, practical considerations (such as data availability) and whether parties can reach consensus. The NSRA provides little guidance in this regard. For example, it does not articulate how parties identified the original priority equity cohorts.

To give full, fair and equal treatment to different cohorts (and to be seen to do so), government should develop a systematic approach to evaluating and prioritising new cohorts for inclusion in the next school

[70] They do not capture the compounding effects that different barriers can have on individuals who are a part of more than one cohort.

reform agreement and apply these to cohorts commonly cited as at risk of educational disadvantage, particularly those mentioned in the Mparntwe Declaration.

Recommendation 4.2
Some groups of students face significant barriers to success at school but are not recognised as priority equity cohorts. A transparent, systematic approach should be used to evaluate the case for new priority equity cohorts.

Parties to the agreement should consider the following cohorts for inclusion in the next intergovernmental school reform agreement as priority equity cohorts:

- students living in out-of-home care
- students with English as an additional language or dialect background
- students in youth detention
- refugee students.

4.4 How could the next school reform agreement lift outcomes for priority equity cohorts?

Parties to the next school reform agreement could promote high equity (and high quality) education for students from priority equity cohorts in several ways. One is to implement general policy measures that aim to lift the quality of education provided to all students through the diffusion of knowledge on best practice approaches to teaching and learning.

However, there is significant diversity in the experiences, needs and ambitions of students, both across and within cohorts, reflecting differences in their life experiences, the education outcomes they value, their learning and wellbeing outcomes, and the nature of the adjustments and supports they may require. As such, general measures designed to apply to all students may be ineffective in meeting the more specific needs of some students.

Other options involve adopting person-centred approaches, with interventions tailored to the circumstances and experiences of each student. Different tailored policies can complement each other and general policies, by addressing different types of educational barriers.

The rest of this section identifies steps parties to the next school reform agreement should take to support students who at higher risk of educational disadvantage because of their social or cultural background (including but not limited to those students who are from the priority equity cohorts identified in the NSRA). These include ensuring:

- the next school reform agreement reflects new policies and commitments affecting people at higher risk of educational disadvantage
- reforms tackle the specific barriers faced by students from priority equity cohorts
- bilateral agreements and associated reporting provide transparency for actions and accountability for outcomes (and are underpinned by targets).

The next school reform agreement should align with recent commitments affecting people at higher risk of educational disadvantage

Since agreeing to the NSRA, all governments have made further national commitments to support young people who are at higher risk of experiencing educational disadvantage, including commitments under the *2019 Alice Springs (Mparntwe) Education Declaration*, the *National Agreement on Closing the Gap*, and *Australia's Disability Strategy*.

Some of these commitments — particularly those relating to the 'Priority Reforms' of the National Agreement on Closing the Gap — will have direct and immediate impacts on how governments and their agencies develop and implement reforms under the next school reform agreement. These agreements represent a fundamental change to the way schools respond to the needs of these students.

The Mparntwe Declaration renews commitments to equity and transparency of outcomes

Under the 2019 Mparntwe Declaration, all governments recommitted to:

- ensuring the education community works to provide equality of opportunity and educational outcomes for all students at risk of educational disadvantage
- empowering Aboriginal and Torres Strait Islander students to reach their potential and to ensuring the education community works to 'close the gap' for young Aboriginal and Torres Strait Islander peoples.

Parties recognised the benefits of targeted support for learners who are at risk of educational disadvantage, including students not identified as 'priority equity' cohorts in the NSRA such as migrants and refugees, learners in out of home care and homeless young people.

> Targeted support can help learners such as those from low socioeconomic backgrounds, those from regional, rural and remote areas, migrants and refugees, learners in out of home care, homeless young people, and children with disability to reach their potential. This means tailoring to the needs of individuals across a system that prioritises equity of opportunity and that supports achievement (COAG 2019, p. 17).

Under the Mparntwe Declaration governments also committed to strengthening accountability and transparency and acknowledged that good data enables governments to 'develop a substantive evidence base on what works' and 'ensure equity of access to education'.

These commitments further emphasise the need to address concerns about gaps in reporting and transparency under the NSRA (findings 3.2 and 4.2 and recommendation 3.2). The section below considers how governments could lift learning outcomes for priority equity cohorts and promote greater accountability via more systematic documentation of proposed reforms and outcomes in bilateral agreements and associated reporting.

Closing the Gap embeds obligations regarding how policies affecting Aboriginal and Torres Strait Islander people are developed and implemented …

In July 2020, all Australian governments and the Coalition of Aboriginal and Torres Strait Islander Peak Organisations agreed the National Agreement on Closing the Gap (Closing the Gap) to overcome the entrenched inequality faced by Aboriginal and Torres Strait Islander people.

Parties to Closing the Gap have identified four Priority Reform areas that aim to change the way governments work with Aboriginal and Torres Strait Islander people. These include:

1. strengthening and establishing formal partnerships and shared decision making
2. building the Aboriginal and Torres Strait Islander community controlled sector
3. transforming government organisations so they are more inclusive of, and deliver better outcomes for, Aboriginal and Torres Strait Islander people
4. improving and sharing access to data and information to enable Aboriginal and Torres Strait Islander people to make informed decisions.

The four priority reforms apply to all governments, their organisations and institutions — including those with responsibilities relating to education policy, research and service delivery.

… including how governments develop and implement education reforms under the next school reform agreement

While actions outlined in states' bilateral agreements to support Aboriginal and Torres Strait Islander students will help advance commitments under the National Agreement on Closing the Gap, there are a range of other actions governments could advance to further their commitments under the Priority Reform areas through the next school reform agreement. Reflecting the transformative nature of the Agreement, these actions (canvassed in each of the relevant chapters) span all aspects of the school reform agenda, from teacher and leadership training through to performance reporting (summarised in figure 4.4).

Figure 4.4 – Opportunities for the next school reform agreement to advance commitments under Closing the Gap

Priority Reform One - Formal partnerships and shared decision making includes commitments to:

- Building and strengthening government structures that empower Aboriginal and Torres Strait Islander people to share decision making with governments

Governments have an opportunity to advance Priority Reform One through:

- Developing outcomes, reform activities, and transparency and accountability arrangements in collaboration with Aboriginal and Torres Strait Islander people (ch4)
- Updating the Measurement Framework for Schooling in Australia in consultation with Aboriginal and Torres Strait Islander students, educators and communities (chp 9)

Priority Reform Three - Transforming government organisations includes commitments to:

- Identify and address racism
- Embed and practice meaningful cultural safety
- Deliver services in partnership
- Improve accountability through transparent funding allocations
- Support Aboriginal and Torres Strait Islander cultures by valuing and reflecting them in curriculum and school communities
- Improve engagement with Aboriginal and Torres Strait Islander people

Governments have an opportunity to advance Priority Reform Three through:

- Removing racism experienced by Aboriginal and Torres Strait Islander educators in the education system (chp 7)
- Embedding cultural safety training for teachers to develop classroom practices and behaviours that remove discrimination and create safe spaces for students (chp 6)
- Setting out actions that commit to the identification and elimination of racism and the institution of cultural safety requirements across education systems (chp 4)
- Establishing ways to ensure Aboriginal and Torres Strait Islander people have visibility of school-level spending on actions to support Aboriginal and Torres Strait Islander students (chp 4)
- Implementing reforms to address the various barriers to accessing high quality education that Aboriginal and Torres Strait Islander students face, including:
  - adopting culturally responsive curriculum and pedagogies to enable all students to see their identities, cultures, and Aboriginal and Torres Strait Islander knowledges reflected in what and how they are learning
  - supporting parents and carers to actively engage with their child's education (ch4)

Priority Reform Four - Shared Access to Data and Information at a regional Level includes commitments to:

- Share available disaggregated, location-specific data
- Establish partnerships to improve collection, access, management and use
- Make data more transparent
- Build capacity of Aboriginal and Torres Strait Islander people and organisations to collect use and interpret school data

Governments have an opportunity to advance Priority Reform Four through:

- Ensuring Aboriginal and Torres Strait Islander people have access to data to make informed decisions about their wellbeing (chp 5) and understand schooling outcomes for their community (chp 9)

Australia's disability strategy establishes a blueprint for supporting students with disability

Australia's Disability Strategy 2021–2031 (the Strategy) sets out a national framework for continuing to improve the lives of people with disability over the next ten years. The purpose of the strategy is to:

- provide national leadership towards greater inclusion of people with disability
- guide activity across all areas of public policy to be inclusive and responsive to people with disability
- drive mainstream services and systems to improve outcomes for people with disability
- engage, inform and involve the whole community in achieving a more inclusive society.

The strategy is based on the social model of disability, which recognises societal attitudes, practices and structures 'can be disabling and act as barriers preventing people from fulfilling their potential and exercising their rights as equal members of the community'.[71]

Ensuring 'people with disability achieve their full potential through education and learning' is one of seven outcomes and is underpinned by four policy priorities — spanning early childhood education; school education; pathways to further education; and lifelong learning. The school focussed policy priority seeks to build capability in the delivery of inclusive education to improve educational outcomes for school students with disability.[72]

The strategy includes several elements that are relevant to the development and implementation of the next school reform agreement, including:

- guiding principles that governments have agreed to use when developing policies, programs, services and systems
- an engagement plan that outlines the ways people with disability will be engaged over the life of the Strategy to inform its implementation, monitoring, reporting, and the future direction of policy
- an outcomes framework that will track the changes in outcomes that are happening over time for people with disability and help drive action by ensuring visibility of whether outcomes are improving. This includes measuring the contribution that key areas, such as education, are making
- the National Disability Research Partnership, which is responsible for building the evidence base and promoting the use of evidence-informed policy and practice (focusing on disability and mainstream services including education).

The guiding principles and engagement plan establish a potential blueprint for how governments should develop policies, programs, services and systems and engage with people with disability (including students) that parties to the next school reform agreement could draw upon. The latter two elements may present opportunities for further collaboration across education and other policy portfolios.

The finding of the Disability Royal Commission (which will investigate and report on experiences and conditions in all settings, including schools) and the subsequent government response may have further implications for government policy and the next school reform agreement. The Royal Commission will deliver a final report to the Australian Government by 29 September 2023.

[71] The social model of disability is an alternative to 'the medical model of disability' which conceives disability as an impairment, for which the onus is on the individual to make adjustments for the community.

[72] The strategy will be rolled out in stages, supported by targeted actions plans. While school education is not among the initial list of focus areas, new Targeted Action Plans will be commissioned.

Finding 4.5

The National Agreement on Closing the Gap and Australia's Disability Strategy 2021–2031 have direct implications for how governments seek to lift outcomes for students from priority equity cohorts under the next intergovernmental school reform agreement.

The National Agreement on Closing the Gap establishes commitments for how all government organisations should share decision making, engage with Aboriginal and Torres Strait Islander people (including students) and identify and eliminate racism within education systems.

In the context of the next school reform agreement, these commitments will influence all aspects of policy development affecting Aboriginal and Torres Strait Islander people (including setting of outcomes, design and implementation of reform activities, and transparency and accountability).

Australia's Disability Strategy establishes a potential blueprint for how governments should develop policies, programs, services and systems and engage with people with disability (including students) that parties to the next school reform agreement should draw upon.

Recommendation 4.3

Parties to the next intergovernmental school reform agreement should give effect to relevant commitments under the National Agreement on Closing the Gap and Australia's Disability Strategy.

Consistent with their commitments under the National Agreement on Closing the Gap and Australia's Disability Strategy 2021–2031, as part of the next intergovernmental school reform agreement, parties should:

- commit to actions to lift outcomes and sub-outcomes for students from priority equity cohorts
- develop outcomes, reform activities, and transparency and accountability arrangements in collaboration with representatives from the priority equity cohorts
- set out actions in bilateral agreements that commit to the identification and elimination of racism, the institution of cultural safety requirements across education systems, and implementation of commitments from Australia's Disability Strategy, in particular application of a social model of disability in education systems
- prioritise data measurement of the outcomes and experiences of students with disability in education.

Reforms under the next school reform agreement should tackle barriers faced by students from priority equity cohorts

To achieve its ambitious objective of a high quality, high equity education system, schools need to identify and address the multiple types of barriers facing students from priority equity cohorts. Academic research, supported by advice from people consulted as part of this review, provides insight into both the barriers students face and the best ways schools can overcome them.

Students from priority equity cohorts face multiple barriers which prevent them from reaching their potential

Many participants highlighted the barriers faced by students from priority equity cohorts, which prevent them from reaching their potential at school. These barries permeate several aspects of the learning environment

(including the culture within the classroom). While these barriers manifest in different ways for different individuals or groups of students, they provide a starting point for improvements under the next school reform agreement.

Aboriginal and Torres Strait Islander students, families, and communities

Aboriginal and Torres Strait Islander organisations, children and young people reflected that schooling environments often do not provide culturally safe spaces for Aboriginal and Torres Strait Islander students, families, and teachers and that this prevents students from feeling safe at school and engaged with their learning.

Several participants observed the curriculum and assessment is a 'western space' that does not reflect aspects of learning valued by Aboriginal and Torres Strait Islander people, such as connections to country, family, spirit, or ancestors. Participants identified that conventional topics of learning and metrics of schooling success (such as those articulated in the NSRA) do not adequately reflect the aspirations of Aboriginal and Torres Strait Islander students.[73] As one participant observed:

> While [how the community sees success for students] might still include students attending school and achieving in literacy and numeracy, it may also include a range of other success factors that matter to the local community. (Stronger Smarter Institute)

Case studies across a number of schools demonstrate improvement in academic results for Aboriginal and Torres Strait Islander students where Aboriginal perspectives and values are embedded in the curriculum (Munns, O'Rourke and Bodkin-Andrews 2013).

Participants also reported that some Aboriginal and Torres Strait Islander students do not speak English as a first language.[74] As the curriculum is delivered in English, this makes it more challenging for students to progress at school. According to the most recent national data, about 8 per cent of Aboriginal and Torres Strait Islander children aged 0 to 14 speak an Aboriginal or Torres Strait Islander language at home (ABS, 2021).

School leaders and teachers play a large role in establishing a school's culture and creating a safe and inclusive environment. However, participants observed that many teachers and school leaders have a poor understanding of Indigenous knowledges, Aboriginal and Torres Strait Islander cultures, and how to include and empower their students (the Stronger Smarter Institute, sub. DR114). The importance of teachers understanding and respecting Aboriginal and Torres Strait Islander culture for improving students' outcomes has been highlighted in studies (Bodkin-Andrews and Carlson 2014) and meta-analysis (Lloyd et al. 2015). Several participants attributed the current gaps in understanding to a lack of training by some school leaders, teachers and other school staff, with the Australian Institute for Teaching and School Leadership (2022b) noting the importance of all teachers participating in cultural responsiveness training.

Some participants highlighted that a lack of understanding can perpetuate discriminatory attitudes Aboriginal and Torres Strait Islander students. For example, some participants remarked that school leaders and teachers can attribute misbehaviour to a student being 'bad' and in some cases this results in students (particularly those who may have an undiagnosed disability and/or a history of severe trauma) being suspended or expelled from the classroom or school. Data on school exclusions reveal that Aboriginal and Torres Strait Islander students are more likely to be subject to exclusionary practices. Sullivan et. al. (2020)

[73] Aurora Education Foundation, sub. DR68.

[74] The Stronger Smarter Institute, sub. DR114; Australian Council of TESOL Associations, sub. DR124.

report that Aboriginal and Torres Strait Islander students were overrepresented in school exclusions, making up one quarter of exclusions in some jurisdictions.[75]

Consistent with Sarra et al. (2018), participants also suggested that some school leaders and teachers can hold low expectations of Aboriginal and Torres Strait Islander students, limiting their capacity to reach their potential. Research reveals that teacher's expectations of Aboriginal and Torres Strait Islander children completing secondary education decline as students progress through their schooling (Peacock et al. 2020). The Indigenous Education Consultative Meeting reflected on the negative effects of equating Indigeneity with educational disadvantage.

> [The] labelling of Aboriginal and Torres Strait Islander students and families as disadvantaged continues to play into a culture of deficit discourse and low expectations that stymie Aboriginal and Torres Strait Islander students' ability to thrive in their education … While Aboriginal and Torres Strait Islander students and communities face a range of complex and compounding circumstances that impact their educational engagement and outcomes, they are not inherently disadvantaged by being Indigenous. (Indigenous Education Consultative Meeting, sub. 52)

More broadly, participants said that schools do not do enough to engage with Aboriginal and Torres Strait Islander families, causing some to feel alienated and disengaged from their child's school. Evidence supports the notion that engaging families, especially parents, in the learning of their children is an important way to support better learning outcomes (Emerson et al. 2012), including for Aboriginal and Torres Strait Islander children (Higgins and Morley (2014)). One participant reflected that sometimes parents' first interactions occurred when they were called to the school 'when something had gone wrong.' As a result, parents were reluctant to share information about issues at home that may be impacting on their child's wellbeing or capacity to learn.

Finally, participants identified barriers related to the learning setting. As with students in remote areas more generally, access to primary schooling within a reasonable distance can be particularly limited for Aboriginal and Torres Strait Islander students in remote communities. A lack of options mean children are not able to live and be educated on their own Country, missing out on important teaching and learning of cultural and familial knowledges.[76] As O'Brien and Fogarty (2020, p. 55) note:

> There are 78 remote or very remote communities in the NT without any secondary pathway. For families in these locations, securing a boarding place for a child relatively close to home is far from straightforward.

Several participants suggested that the educational barriers faced by Aboriginal and Torres Strait Islanders students reflect broader issues relating to lack of a voice and representation in education policy (discussed in more detail below).[77]

Students with disability

Participants representing students with disability and their families also provided perspectives on the barriers they experience. They reflected that not all schools fully embrace inclusion and that this leads to students

[75] In one jurisdiction, Aboriginal and Torres Strait Islander students made up 6.5 per cent of all expulsions, despite only making up only 2 per cent of student enrolments. In a second jurisdiction, Aboriginal and Torres Strait Islander students accounted for about one quarter of all fixed-term and permanent exclusions, despite making up just over 10 per cent of all enrolments. And in a third jurisdiction, Aboriginal and Torres Strait Islander students made up approximately 25 per cent of short and long suspensions despite representing just 8 per cent of all student enrolments.

[76] National Indigenous Australians Agency, sub. DR103.

[77] The Stronger Smarter Institute, sub. DR114; Aurora Education Foundation, sub. DR68; Reconciliation Australia, sub. DR122.

feeling unsupported, stressed and left out.[78] Cologon (2019) summarises a number of studies that find students with disability are more likely to be socially isolated and at higher risk of being bullied.

Some participants reported that there is a poor understanding of the social model of disability (which frames adjustments as changes systems need to make to include people with disability, rather than changes people with disability need to make to fit into mainstream environments). Studies similarly find that 'current efforts towards inclusion are impeded by a lack of understanding of inclusive education' (Cologon 2019, p. 3).

Participants to this review also highlighted that some schools would not offer support unless a child had a medical diagnosis.

Notwithstanding a significant increase in the number of students recognised as requiring additional supports under the Nationally Consistent Collection of Data for students with disability, students with disability and their families pointed to a lack of adequate and consistent resourcing for students with disability.[79]

Several participants noted that, despite teachers' best efforts, they were often not provided with the resources, time and training to create an environment that welcomes and supports students with disability and their families. Data from the Organisation for Economic Co-operation and Development (OECD) reveals that less than half of Australian teachers felt prepared to teach in mixed-ability settings following formal teacher education or training (OECD 2019b).

Participants raised the specific example of school leaders and teachers not being well equipped and supported to recognise disability, and noted examples of students with disability progressing through school without their disability being identified. As AITSL observed, 'teachers are neither qualified nor expected to diagnose disability', they are however in a position 'to recognise a student who is not learning as expected, and to discuss their observations with school leaders and the student's family' (AITSL 2020a). Participants remarked that where disability goes undiagnosed, students are not provided with the right support or adjustments and/or punished for their behaviours. One young person reflected on the consequences of a student's disability not being 'visible':

> There is a complete lack of awareness around disability at school and what this looks like for different students. Many disabilities are invisible. Unless you have a specific diagnosis, advocates and supports, you can be prejudiced in the way you are treated (young person consulted by the review).

Even where disabilities were recognised, some participants felt school systems were not up to date with contemporary practices of inclusive education. This can result in students not participating in learning activities with the rest of the class, being removed from class for particular lessons, or teachers being less engaged with the student (Cologon 2019). In a study of students with disability, nearly half (48.9 per cent) disagreed that they received adequate support for their education (CYDA 2019).

Poor inclusive practices can also lead to some students being sanctioned instead of receiving the behavioural supports they need, contributing to poor wellbeing and their disengagement from education (SA Commissioner and Children for Young People, sub. DR54) (Sackville, Galbally and Mason 2021). The impact on engagement of school exclusions was highlighted in a 2018 survey conducted by Children and Young People with a Disability Australia. The survey of students with disability and their parents found that 14 per cent of participants had been suspended from school, almost one in five did not attend school full time, and one in ten had been refused enrolment (CYDA 2019).[80]

[78] Square Peg Round Whole, sub. DR121; Centre for Inclusive Education, sub. DR99.

[79] National Children's Commissioner, sub. DR106; Australian Association of Special Education, NSW Chapter, sub. DR107.

[80] Recognising that some disabilities go undiagnosed these could be underestimates of actual levels of exclusion.

Devising appropriate adaptations of educational curricula 'for a range of students in a range of age groups with a range of capacities and abilities', was identified by the Human Rights Commission as one of the largest areas of difficulty for education providers and their students. Consistent with this, participants identified barriers related to what is taught at school and how schools measure success, with some remarking that the curriculum schools deliver to students with disability fails to foster high expectations or reflect students' aspirations. Results from a 2018 survey reveal that of the young people with disability and their families and caregivers surveyed, almost one-third disagreed that teachers and support staff had high expectations of the student and their learning (CYDA 2019). A student with disability consulted by the Review spoke of being discouraged from pursuing a particular post-school pathway because of their disability:

> I wanted to do law, my teachers told me that I couldn't do it and they kept putting me down for my disability and the school ended up choosing my subjects for me because they wouldn't let me do the subjects that I wanted to. They weren't listening to what subjects I wanted to do.

While ACARA (2022b) noted that 'adjustments are provided to students with disability to support access to the tests and encourage maximum participation', some participants noted many students with disability do not participate in the national literacy and numeracy tests because of a lack of accessibility. Data from Queensland show that in 2015, 94 per cent of all students participated in NAPLAN, but that participation rates were much lower for students who required substantial support (58 per cent) and students who required extensive support (23 per cent) (Deloitte Access Economics 2017a, p. 67).[81]

Students in regional and remote Australia

Participants highlighted the barriers students from regional and remote areas encounter — the Independent Review into Regional, Rural and Remote Education that informed the NSRA explored these issues at length. One significant theme was that families in regional, rural and remote areas can have limited choice about where and how they educate their children.

Where local offerings are available, subject offerings can be limited. Many participants emphasised the challenges associated with attracting and keeping high quality teachers with relevant expertise. For example, in remote locations, about 26 per cent of class groups were taught by an out-of-field teacher compared to 14 per cent in metropolitan locations in 2013 (Weldon 2016, p. 1). Others reflected that schools have historically relied on new teachers to fill vacancies in rural and remote areas, but that they are not well prepared and supported to undertake these often complex roles. Data from the OECD confirms that 'novice' teachers are overrepresented in rural schools (OECD 2019b).

Difficulties accessing education that meets student learning needs in remote areas can be particularly acute for Aboriginal and Torres Strait Islander children with disability. Participants noted that access to learning supports and reasonable adjustments in remote schools is limited, meaning children with disability need to move 'off country', away from their family, community and culture to attend schools in places with available supports. This can contribute to feelings of isolation and poor wellbeing (chapter 5).

[81] Students requiring substantial and extensive report are two of the four categories used in the Nationally Consistent Collection of Data for students with disability.

Finding 4.6
Students from priority equity cohorts face multiple types of barriers to access a high-quality education.

The learning environment, including the culture within the classroom, is not always well suited to improve outcomes for students from priority equity cohorts.

- Some Aboriginal and Torres Strait Islander students do not see their identities, cultures, and knowledges reflected in what they are learning.
- Teachers and leaders often have insufficient time, skills, and/or resources to support students from priority equity cohorts and their families.
- Students from priority equity cohorts can lack access to an inclusive learning setting that supports their learning needs and wellbeing.

There are proven approaches to help overcome barriers to education faced by students from priority equity cohorts

Schools and education systems that successfully engage and support students with diverse needs share some common features (many of which were highlighted by participants). How these features translate into practice will differ for students within and across cohorts.

High-quality teaching (chapters 6 and 7) and leadership practices (chapter 8) are important for improving the outcomes for students from priority equity cohorts as for the broader student body. However, specific features designed to overcome the barriers faced by students from priority equity cohorts can enhance general practices.

These features, set out below, are intended to work together to overcome identified barriers and include:

- teachers and leaders adapting their understanding of schooling success for each student, and being better trained to identify and respond to diverse needs
- governments making inclusion a centrepiece of education policy and integrating policies in education with those in other policy domains affecting young people
- schools supporting parents and carers to actively engage with their child's education
- schools adopting culturally responsive curriculum and pedagogies to enable all students to see their identities, cultures, and knowledges reflected in what and how they are learning
- policies, programs and practices are informed by the people they are intended to support
- governments implementing innovative (including technology-based) solutions to provide access to education for families, including in regional and remote communities.

Teachers and leaders adapting their understanding of schooling success for each student, and being better trained to identify and respond to diverse needs

Where teachers, families, and students have a shared understanding of schooling success, students are more likely to receive the support that they need. This means schools and teachers need to understand what students and their families hope to achieve from their education, and take into account their expectations and teach to those aspirations.

Participants suggested these issues could be addressed through better engagement and communication with students, their families, and their communities; and responsiveness to the issues that arise.[82]

[82] Indigenous Education Consultative Meeting, sub. 52; ARACY, sub. 38.

In general, governments can promote these behaviours through the policies and guidance they issue to teachers and leaders.

Governments making inclusion a centrepiece of education policy and integrating policies in education with those in other policy domains affecting young people

Inclusive education involves adapting the environment and teaching to ensure full participation of all children and young people. But this relies on teachers and school leaders recognising different learning styles and environments. As one participant in the National Youth Disability summit observed:

> One thing that schools can do to help, to like be educated, is understanding what different learning environments can look like, so then they know how to best be accommodat[ing]. So, for some people paying attention and concentration might look like fidgeting, drawing or listening to some music. Some students learn in ways that are not typically taught and therefore teachers assume the kids are disengaged. (Children and Young People with Disability Australia (CYDA) 2020).

Inclusive cultures and practices are particularly important for students with a disability (as recognised by Policy Priority Two of Australia's Disability Strategy (above)).

Governments have a role to play by providing ongoing support and training for teachers and leaders in adopting inclusive practices. Teachers need to be provided with the tools, training and supports to create an inclusive environment. More effective and targeted training could position teachers (and school leaders) to better identify and support the needs of students with a disability. Governments can also streamline processes for school leaders in accessing allied health to help teachers identify and support students with disability.

Schools supporting parents and carers to engage with their child's education

Parents, carers and other family members have a significant influence on a student's success at school (Emerson et al. 2012). While particularly important in the early years of a child's learning development, parent and carer engagement remains important throughout a child's schooling.

Establishing strong relationships with parents and responding to parental concerns in a meaningful way can optimise support for students' educational efforts and aspirations (Sarra et al. 2018). Parents and carers bring with them a range of skills, knowledge and wisdom, many of which are specific to cultural groups. This expertise is valuable in helping to build culturally inclusive schools.

The influence of school leaders in building relationships, school culture and developing shared meaning and values is key in engaging with parents, families and communities (chapter 8). School leaders help shape school culture, including the 'degree to which a school embraces and celebrates racial, ethnic, linguistic, or cultural diversity' (Halsey 2018b, pp. 39–40).

Governments can improve cultural awareness training for teachers and leaders to improve the skills and understanding of their workforce, as well as enshrining family and community engagement in their policy guidelines.

Schools adopting culturally responsive curriculum and pedagogies to enable all students to see their identities, cultures, and knowledges reflected in what and how they are learning

Culturally responsive pedagogies, which value and embrace all languages and perspectives, and a culturally responsive curriculum help students from all backgrounds feel safe, and increases inclusion, engagement and enriches the learning of all students (Turner, Wilson and Wilks 2017).

Participants underscored the importance of culturally responsive pedagogies (which value and embrace Aboriginal and Torres Strait Islander languages and ways of learning) and a culturally responsive curriculum (which integrates Aboriginal knowledge, culture and history) in creating a sense of belonging and inclusion

for Aboriginal and Torres Strait Islander students.[83] During a consultation, an Aboriginal young person highlighted the importance of 'two way' learning (box 4.2):

> A good education means getting everyone in the school to learn about Aboriginal culture, for non-Aboriginal people to learn about Aboriginal culture because we all live on Aboriginal land.

Culturally responsive pedagogy can also encompass bilingual education to ensure that students from culturally and linguistically diverse backgrounds are able to engage fully in learning.

Adopting a culturally responsive curriculum and pedagogy can improve a student's perception of their schooling, their ability to achieve, and subsequently, their actual academic outcomes (Krakouer 2015; Morrison et al. 2019). Studies also suggest that when quality bilingual or culturally appropriate instructional approaches (which support students speaking English as a second language) are adopted, family and community support for schooling and student engagement may increase (House of Representatives Standing Committee on Indigenous Affairs 2017; Silburn et al. 2011).

School systems across Australia widely acknowledge the need to implement culturally responsive pedagogy and curriculum through their strategies and policies to support Aboriginal and Torres Strait Islander students. The National Teacher Workforce Action Plan (released in December 2022) included a number of actions, one of which (action 16) is intended to ensure all teachers have the materials and support to teach Aboriginal and Torres Strait Islander students in culturally safe ways (EMM 2022d).

The review has heard that a quality curriculum should be strengths-based, and be inclusive of priority equity cohorts (including Aboriginal and Torres Strait Islander students).[84] Further embedding culturally responsive pedagogy and curriculum through consistently engaging with the various Indigenous Education Consultation bodies across each jurisdiction, delivering training to improve teachers' cultural competency and providing learning materials to assist teachers to deliver a culturally responsive curriculum are all actions jurisdictions should continue to take.[85]

More effective and targeted training would better position teachers (and school leaders) to create culturally inclusive environments for all students, including for Aboriginal and Torres Strait Islander students. As the Indigenous Education Consultative Meeting (IECM) observed:

> We recognise the importance of quality teaching; including the ability to see Aboriginal and Torres Strait Islander students as whole people and support their learning needs in a culturally responsive manner, based on high expectations approaches free from deficit discourse. This requires ongoing support of teachers as professionals to continually develop their capability in Indigenous education, both through improved Initial Teacher Education (ITE) and access to (and expectation of completing) effective and culturally appropriate ongoing professional development. (sub. 52, p. 3)

[83] Indigenous Education Consultative Meeting, sub. 52.

[84] The Stronger Smarter Institute, sub. DR114.

[85] Indigenous Education Consultative Meeting, sub. 52; The Stronger Smarter Institute, sub. DR114.

Box 4.2 — Two way learning in west Arnhem Land

Two way learning is an approach that combines education in Aboriginal and Torres Strait Islander culture and language with traditional Western learning. It aims to ensure that Aboriginal and Torres Strait Islander students are connected to their culture and Country while also equipping them with the capacity to succeed outside their community.

An example of where two way learning is being applied is in two school campuses in west Arnhem Land, a remote region of the Northern Territory. The campuses serve the remote communities of Mayumi and Mamadawerre, and are both part of the Nawarddeken Academy, an independent school that delivers education for Aboriginal children.

Students at these campuses receive their education on their communities' Country, and do traditional activities on field trips, such as learning about bush foods and local animals. These activities are complemented by education based on the mainstream curriculum.

The Academy has indicated that attendance at the campuses is well above the Northern Territory's average for remote schools, which suggests that two way learning has the potential to increase engagement for Aboriginal students.

Source: Vivian (2022).

Policies, programs and practices are informed by the people they are intended to support

Designing policy and practice in collaboration with the people they are intended to support allows for a deeper understanding of the issues students face and will help inform appropriate policy responses.

Ultimately, drawing on lived experience will enhance the relevance and quality of the reform. This also empowers affected people and helps them engage with their schooling. Participants to the review highlighted the importance of authentic engagement with affected parties in education policy development.[86]

The need for consultation and shared decision-making with Aboriginal and Torres Strait Islander people and students with disability in relation to the design of educational outcomes, and how they shape reform, is underscored by the Key Priority Reforms of the 2020 Closing the Gap, and Australia's Disability Strategy.

Further, the Mparntwe Declaration states that students require a voice and influence over their own learning, a view supported by participants to this review.[87]

Governments need to establish partnerships with students, community groups and representative bodies of students from priority equity cohorts, enabling them to engage with them as required. This way, changes to policy and practice will always be informed by the people they are intended to support. Engagement with relevant groups should start early, and be undertaken frequently, 'to enable strong partnerships and improved education outcomes' (IECM sub. 52, p. 8).

[86] National Indigenous Australians Agency, sub. DR103; Paul Ramsay Foundation, sub, DR109; The Stronger Smarter Institute, sub. DR114; IECM, sub. DR125; Square Peg Round Whole, sub. DR121.

[87] SA Commissioner for Children and Young People, sub. DR54; Life without barriers, sub. DR60; Save the Children and 54 reasons; sub. DR64; Australian Child Rights Taskforce, sub. DR71.

Governments implementing innovative (including technology-based) solutions to provide access to education for families, including in regional and remote communities

School systems should ensure families have access to schooling that caters to their child's needs. Improving the availability, accessibility and affordability of ICT for students and schools in regional and remote areas will help address this, including by allowing students to stay at home, or physically attend school (Halsey 2018a).

ICT provides students with greater access to teachers and subjects; likewise participants identified that better ICT will allow students to remain on Country, while engaging in remote schooling. Innovative solutions, such as distance education (schooling predominantly online with limited face to face time), clustering (a means to group schools services to improve access to education and education services) and establishing boarding schools that are smaller, regional based and closer to home are all innovative solutions to improve choice and access for families (Halsey 2018a).

Governments can facilitate this by designing, resourcing and delivering educational programs aligned with the principles suggested above, noting that many jurisdictions already offer distance education for secondary school students.

Finding 4.7
There is a good understanding of what governments, school systems, school leaders and teachers can do to better meet the learning needs of students from priority equity cohorts.

Features of the school learning environment that are widely accepted as being critical for meeting the learning needs of student from priority equity cohorts include:

- teachers and leaders adapt their understanding of schooling success for each student and have the skills to identify and respond to their diverse needs
- schools support parents and carers to actively engage with their child's education
- schools adopt culturally responsive curriculum and pedagogies to enable all students to see their identities, cultures, and Aboriginal and Torres Strait Islander knowledges reflected in what and how they are learning
- students, families, and communities' views inform delivery of education services
- students and families from regional and remote areas have access to technological resources and other assistance to ease challenges of remote learning.

Governments can encourage more widespread adoption of these practices through a variety of levers, ranging from enshrining these features in policy and guidelines distributed to schools; designing and delivering effective and targeted training to improve teachers' skills and understanding; and establishing partnerships with communities and representative bodies of students and communicating with them regularly.

The next school reform agreement should provide transparency for actions and accountability for outcomes

Addressing many of the barriers facing students in priority equity cohorts will require local responses as the relevant laws, policies and regulations governing school education (such as teacher training, assessment, and accreditation) reside with the States or Territories. Further, in many cases, States and Territories already have reforms underway and any additional reforms in this area will need to be integrated with existing efforts.

While this underscores the importance of flexibility and subsidiarity, the public accountability and transparency arrangements under the NSRA have limitations that governments will need to address in the next school reform agreement to ensure public confidence that jurisdictions are on track to meet agreed outcomes, sub-outcomes and targets. As outlined in chapter 3, there is a range of measures governments could take to enhance accountability under the next school reform agreement, including:

- setting out the agreed outcomes they are seeking to achieve for students in each of the priority cohorts (including short and longer-term outcomes) along with agreed targets. Targets for priority equity cohorts could, for example, mirror any new general targets, such as reducing the proportion of students who do not meet basic levels of literacy and numeracy, to ensure equity across students
- developing bilateral agreements in consultation with those with lived experience that identify any additional specific improvements in outcomes that have been developed in partnership with priority equity cohorts in their jurisdictions
- describing the reform initiatives they will pursue to achieve agreed outcomes or targets (and, where relevant, how these are aligned with commitments and obligations in other agreements, such as Closing the Gap or Australia's Disability Strategy)
- clearly articulating the theory of change (that is, the logic behind how the reforms will overcome barriers and achieve the outcome, such as adoption of inclusive teaching practices)
- enhancing arrangements for collecting data to enable monitoring and evaluation over time
- reporting regularly on bilateral agreements to include specific details (such as progress against nominated targets)
- identifying how the perspectives of affected parties were incorporated into all of the above (to ensure they reflect the unique barriers, priorities, aspirations and lived experiences of students from particular student cohorts and involved participants through the reform process).

This approach would give greater prominence to actions taken to support outcomes for students in priority equity cohorts in the next school reform agreement, and help identify best practice approaches. At a minimum, the bilateral agreements should cover the existing priority equity cohorts identified in the current NSRA. Consistent with current arrangements, these could include new actions or existing actions (to recognise existing reform efforts). However, the list of actions should be a comprehensive account of major state-based actions directed at improving outcomes for the relevant student cohorts to provide a clearer picture of the overall effort toward providing high equity schooling for specific students through tailored policy measures and interconnections between policies.

Parties to the next school reform agreement should also set out and implement actions and reforms aligned with achieving the goals set in national commitments affecting students from priority equity cohorts, including Closing the Gap and Australia's Disability Strategy.

Recommendation 4.4
Parties should design the next intergovernmental school reform agreement so that it identifies and reports on their actions to lift outcomes for students from priority equity cohorts.

Parties to the next intergovernmental school reform agreement should:

- include national targets for students from each priority equity cohort so the community can assess equity of outcomes across students
- ensure state and territory bilateral agreements, developed in consultation with people with lived experience, systematically set out for students from each priority equity cohort:
  - the outcomes and relevant sub-outcomes they are seeking to achieve for students in the priority equity cohort
  - the reforms government will implement to achieve those outcomes by addressing the various barriers to accessing high quality education that students from that priority equity cohort face
  - the theory of change linking reforms to long-term outcomes and arrangements for collecting data to enable monitoring and evaluation over time
- publicly report each year on progress in implementing reforms and achieving the outcomes and targets they set.

Other matters relating to transparency, accountability and inclusiveness

Participants have highlighted several other matters relating to transparency, accountability and inclusiveness as they relate to students from priority equity cohorts.

Lack of public data on school-level spending undermines accountability

All governments have made commitments to transparently reporting data relating to students from priority equity cohorts. Under the NSRA, all parties agreed to 'work together to improve the quality and timeliness of the data that supports the achievement of the outcomes (including lifting outcomes for students from priority equity cohorts). Under the Mparntwe Declaration, governments similarly recognised that 'good quality data and information is important for educators and their students, parents and families, the community and governments' and committed to reporting that 'focuses on improving performance and student growth and outcomes for all students; provides parents with information on their child's performance, progress and outcomes; is locally, nationally, and internationally relevant; and 'is accessible, timely, consistent and comparable' (COAG 2019, p. 19).

Parties have also committed to ensure that data on policies targeted towards Aboriginal and Torres Strait Islander people are able to be shared with Aboriginal and Torres Strait Islander organisations and communities under the National Agreement on Closing the Gap (Coalition of Aboriginal and Torres Strait Islander Peak Organisations and All Australian Governments 2020, pp. 13–14). Participants highlighted the

importance of data access for Aboriginal and Torres Strait Islander people, both in leveraging their expertise and in overcoming a deficit discourse:

> displacing [deficit] discourses does not simply require a shift in semantics but a broader shift in power structures in the design of education policy and the inclusion of Indigenous communities in the creation, interpretation and use of education data. (Aurora Education Foundation, sub. DR68, p. 3)

However, feedback from participants suggests that governments have fallen short of such ambitions. In particular, several highlighted that data that enables an understanding of whether and how schools are spending funds for students in priority cohorts is not available.[88]

- The National School Resourcing Board (NSRB) (sub. 22) argued that a lack of publicly-available data on school spending reduces the ability of researchers, policymakers and the general public to understand what interventions are being employed in schools (including interventions aimed at improving outcomes for students from priority equity cohorts) and their effectiveness. They recommended that bilateral agreements under the next school agreement include requirements for jurisdictions to make detailed school-level financial data for government schools publicly-available for research and analysis (NSRB sub. 22, p. 7).
- The IECM (sub. 52, p. 5) argued that the lack of data on how jurisdictions allocate funds to schools, and how schools spend money, reduces accountability for actions to improve outcomes for Aboriginal and Torres Strait Islander students. They called for jurisdictions to provide data on how funding is allocated to schools by jurisdictions and 'how that funding is used to progress improved outcomes at a school level' (IECM sub. 52, p. 6).
- The Australian Council of State School Organisations (sub. 51, p. 6) also noted the general lack of transparency around funding for priority cohorts, and argued that this reduces accountability.

The Commission's investigations corroborate that there is no publicly available data on school-level spending on students from priority equity cohorts. For example, MySchool data includes income, capital expenditure and deductions for schools (ACARA 2022c); however, these are not granular enough to offer insight into actions to lift outcomes for students from priority cohorts.

Finding 4.8
Lack of publicly available data on school-level spending for students from priority equity cohorts limits accountability.

There is no publicly available data on school-level spending on students from priority equity cohorts. This means that policymakers, parents, groups representing students and the public have little visibility of school-level actions to lift outcomes for students in priority equity cohorts, which limits accountability.

The onus is on jurisdictions to explain why providing this data is not feasible

Given their commitments to publicly reporting good-quality data on students and schools, and the potential benefits to policy design, the onus is on governments to explain why they do not make more school-level expenditure data available on actions intended to lift outcomes for priority cohorts.

[88] According to the School Resourcing Standard, schools receive extra per-student funding for students in priority categories such as students with disability, Aboriginal and Torres Strait Islander students and students in regional areas, in recognition of the additional costs schools face in supporting these students to reach their educational potential (Department of Education 2022).

The costs and feasibility of states and territories providing school-level spending data will depend on what information states and territories already collect and, where they do not, whether there is a cost-effective and fit-for-purpose way to obtain that data.

The Commonwealth collects detailed income and expenditure data from non-government schools through its Financial Questionnaire, which is administered to ensure transparency around spending by schools and school authorities (ANAO 2017, p. 35). The NSRB (sub. 22, pp. 6–7) proposed that states could develop similar instruments to collect and report on data from their public schools. However, it is not clear that Financial Questionnaire data would specifically capture actions being taken to lift outcomes for students in priority equity cohorts. The spending items in the survey include wages of school leaders, teachers and teachers' aides, the costs of services such as transport, and spending on teacher training (Department of Education 2022, pp. 12–20). These would be unlikely to help policymakers or participant groups identify specific practices or programs to help Aboriginal and Torres Strait Islander students, students with disability or other priority cohorts.

One way forward would be for parties to appoint an independent body to undertake an assessment that would engage with researchers and representatives of priority equity cohorts to understand the information that is desired, undertake a stocktake of information that states hold, and identify key gaps. Based on the outcomes of this assessment, parties could consider options for providing access to existing data and the feasibility of a targeted survey to fill information gaps.

Further embedding the views of students from priority equity cohorts

The Commission has heard evidence from numerous sources about the importance of embedding the views of students, communities and families in the policies, programs and practices that affect those students.[89]

> The current National School Reform Agreement contains no mechanisms for governments to recognise and benefit from this expertise and lived experience, or to be accountable to students for actions taken under the agreement or for the agreement's success in achieving its goals. This is a significant gap that fundamentally undermines the agreement's effectiveness. It should be addressed both for students generally, and specifically for students in priority equity cohorts, who are the least likely and yet the most important to be heard and taken seriously given the marginalisation and disadvantage they face in the current school system. Save the Children and 54 Reasons, sub. DR64.

Such practice is consistent with national commitments already made under the National Agreement on Closing the Gap and the Australian Disability Strategy. The Commission agrees that drawing on the expertise and lived experiences of families and students in priority equity cohorts will strengthen education policy.

Collaboration with affected parties for the next school reform agreement represents a start to embedding the views of students from priority equity cohorts …

The obligations on parties to the agreement proposed in recommendation 4.3 (in particular, in relation to engaging with, and collaboratively developing policies, practices and programs with the students they are intended to support) goes some way to embedding views of students from priority equity cohorts. Strengthening transparency regarding how state-based reforms in bilateral agreements will lift outcomes for

[89] Independent Education Union of Australia, sub. DR78; Life Without Barriers, sub. DR60; QATESOL, sub. DR85; NIAA, sub. DR103; AAAE, sub. DR104; Paul Ramsay Foundation; sub. DR109; The Stronger Smarter Institute, sub. DR114; Reconciliation Australia, sub. DR122, ACTA, sub. DR124; IECM, sub. DR125.

priority equity cohorts (while meeting government commitments, such as those relating to engagement and shared decision-making under Closing the Gap) are also meaningful steps towards addressing this concern.

… but more can, and should, be done at the system-level by governments

Implicit in the National Agreement on Closing the Gap and the Australian Disability Strategy is that the views of Aboriginal and Torres Strait Islander students and students with disability should be present in all levels of government decision-making.

Participants to the review noted the importance of having a formal mechanism through which the views of affected parties 'on the ground' (i.e. people who are most intimately aware of the aspirations, needs and challenges of students from priority equity cohorts) are heard and reflected in the design of government policy.

The Commission understands that some progress is already being made on this front. For example, in their submission, IECM noted that they are developing a National Aboriginal and Torres Strait Islander Education Council (NATSIEC). IECM went on to note that NATSIEC is intended to provide an independent, community-controlled, national Indigenous education peak body and will include Indigenous Education Consultative Bodies — the South Australian Aboriginal Education and Training Consultative Council (SAAETCC), NSW Aboriginal Education Consultative Group (NSW AECG) and the Victorian Aboriginal Education Association Incorporated (VAEAI) will be founding members (IECM, sub. DR125).

Governments should be responsible for consulting regularly and consistently through these formal networks, as well as more informal and/or local networks, to ensure a diversity of guidance, insight and advice feeds into policy development.

5. Student wellbeing

Key points

Positive student wellbeing is, in itself, a desired outcome of schooling as well as a means to achieve improved learning outcomes.

- Schools can promote wellbeing by providing inclusive environments and supporting the social and emotional development of students so that they are equipped to cope with the various stresses of life.
- Improving student wellbeing can also support students' ability to engage and learn at school.
- However, a sizeable proportion of children and young people experience challenges to their wellbeing.
- The COVID-19 pandemic and natural disasters have brought student wellbeing into sharper focus.

School wellbeing policies and programs often fail to provide teachers and students with the supports they need. Specific issues include:

- overlapping policies and programs, and schools choosing programs that lack a strong evidence base
- lack of teacher training to identify poor student wellbeing, deliver the social and emotional learning curriculum, and understand the social and emotional development of their students
- uneven support and information for students, parents and teachers across schools
- some schools not having clear wellbeing policies in place, resulting in incoherent pathways for support within schools and blurred responsibilities among school staff.

Supporting wellbeing involves embedding evidence-based school strategies, leadership culture and teaching practices, not just one-off wellbeing programs. Raising student wellbeing to a priority area for the next intergovernmental agreement on schools could assist by:

- promoting a consistent, evidence-based national focus and action on wellbeing across governments, portfolios and school sectors
- increasing the transparency of the outcomes achieved across Australia and encouraging a greater focus on the effectiveness of the broad range of existing efforts by governments and schools.

Parties to the next intergovernmental agreement on schools should explicitly address student wellbeing. Actions should include:

- adding improved student wellbeing as an outcome of the agreement
- developing annual reporting for a new sub-outcome on subjective wellbeing
- committing to reform actions to improve wellbeing in bilateral agreements, including a core requirement to support the implementation of wellbeing strategies in all schools.

The preamble to the National School Reform Agreement (NSRA) acknowledges that the 'wellbeing of all students is fundamental to successful education outcomes'.[90] Yet, wellbeing is largely missing from the outcomes and sub-outcomes of the NSRA.

There is growing recognition that school policy needs to focus on student wellbeing. This chapter outlines some of the reasons why this focus is warranted (section 5.1), areas where current approaches are failing to provide students, teachers and schools with the support they need to improve student wellbeing (section 5.2) and how the next intergovernmental agreement on schooling could contribute to improved student wellbeing (section 5.3).

5.1 Why focus on student wellbeing?

Wellbeing influences engagement and learning

Wellbeing is about how a person feels about themselves and their life. According to Huppert (2009, p. 137), wellbeing is 'the combination of feeling good and functioning effectively'. It is related to the concept of mental health, which is 'a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community' (WHO 2022). Save the Children (sub. 23, p. 2) observed that people tend to have higher wellbeing when they have a strong sense of optimism, confidence, awareness of own emotions, positive relationships with others, and the ability to work through difficulties and resolve conflict.

There are many influences on a child's wellbeing at the personal, family, school and community levels (figure 5.1). A child's personal circumstance, the immediate environment in which they live (such as supportive peer and parental relationships) and their school environment contribute to positive wellbeing. The Australian Research Alliance for Children and Youth (sub. 38, p. 8) noted that a child's wellbeing is a function of whether they are able to thrive, meaning to be loved, valued, and safe; to be physically and mentally healthy; to be learning; to be participating; to have a positive sense of identity and culture; and to have material basics. For Aboriginal and Torres Strait Islander students, connection to culture, spirituality, community and ancestry can be key protective factors for wellbeing (Zubrick et al. 2010).

For children and young people, their experiences and relationships at school are often major influences on their wellbeing. For example, at school they have opportunities to develop skills (such as resilience, emotional maturity, and ability to resolve conflicts) and social networks that support their wellbeing. The Australian Education Research Organisation (AERO, sub. DR113) noted that learning itself can enhance wellbeing — better language and cognitive skills at school entry are associated with lower levels of sadness and worry later in Year 6 (Gregory et al. 2021).

Conversely, students may have experiences at school that adversely affect their wellbeing and sense of safety (such as bullying or social or classroom exclusion) (National Children's Commissioner, sub. DR106). Many children and young people are well-equipped to manage the challenges they face but difficult experiences at school can have a compounding effect for children who are struggling.

The effects also run in the other direction; poor wellbeing can negatively affect students' ability to learn, and social interactions at school. Participants in this review recognised wellbeing as important for both engaging students and raising academic outcomes (CCCH, sub. 14; Save the Children, sub. 23; NCEC, sub. DR87).

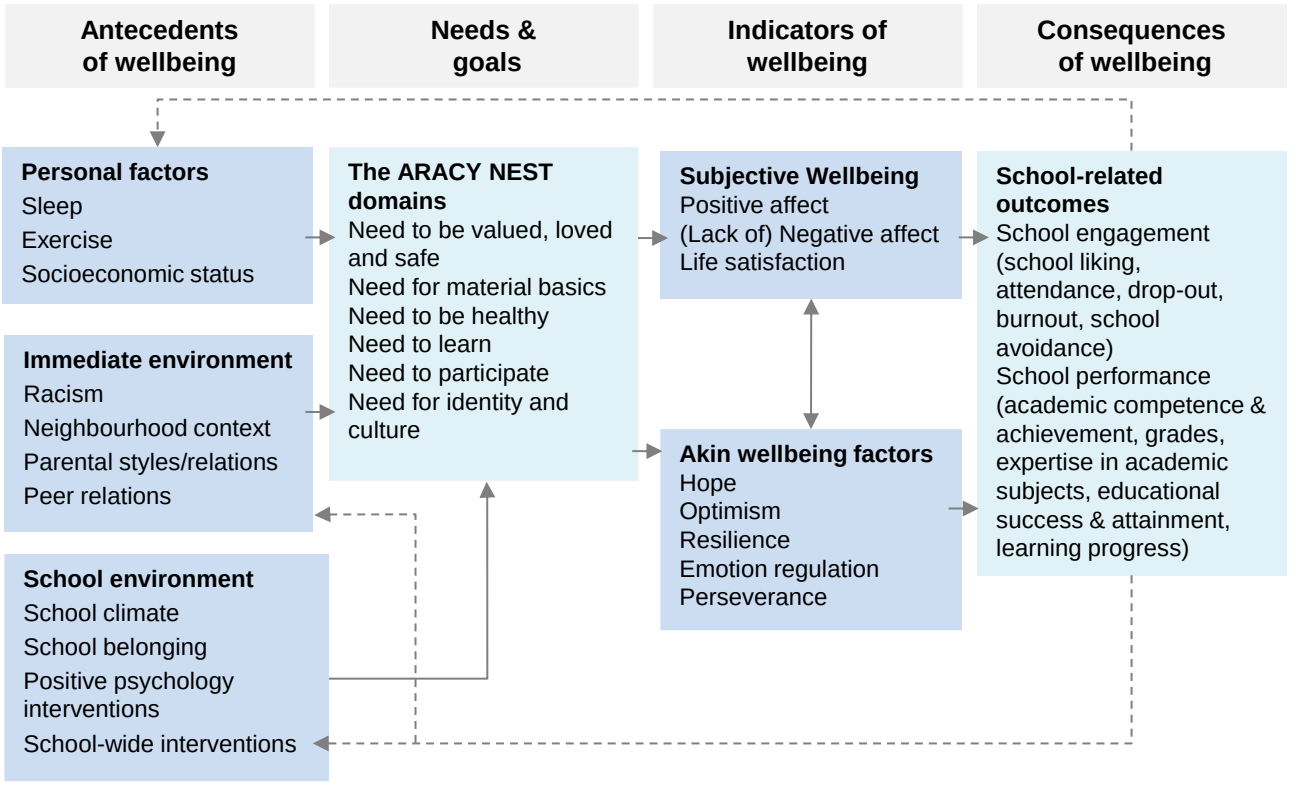
The relationship between wellbeing and student outcomes has been borne out in a number of studies, which found that students struggling with challenges to their wellbeing often have difficulty engaging at school,

[90] NSRA, s. 9.

while students with high social and emotional wellbeing tend to have higher levels of academic achievement and attainment (table 5.1). A recent study lends weight to the evidence that the relationship is causal; Cárdenas et al. (2022, p. 3) used machine learning to show that subjective wellbeing affects scores in National Assessment Program – Literacy and Numeracy (NAPLAN) 7 to 8 months later, after controlling for 40 different individual, family, and school factors.

The relationship between wellbeing and academic achievement was also underscored in consultations with young people. One young person, for example, stated that 'a safe and comfortable environment makes it easiest to achieve goals, and the absence of such in certain circumstances does the opposite'. The South Australian Commissioner for Children and Young People (sub. DR54, p. 12) noted that children and young people have consistently told her that they are 'more likely to engage in school and schoolwork when they feel safe and supported, and that they want schools to balance wellbeing and academic achievement'.

Figure 5.1 – Student wellbeing, as a process



Source: based on Cárdenas et al. (2021).

Recognition of the importance of student wellbeing is growing

A sizeable proportion of students experience wellbeing challenges

Although many children and young people experience positive wellbeing or can cope well with the challenges they face, evidence (including from national surveys of children and young people) suggests that a sizeable proportion of Australian school students experience challenges to their wellbeing and mental health (figure 5.2). This is more pronounced for some student cohorts.

Around 14 per cent of school-aged children and young people experienced a mental, behavioural or neurodevelopmental disorder in 2014, and the prevalence was higher in boys (16 per cent) than girls (12 per cent), due mainly to their higher prevalence of attention deficit hyperactivity disorder (ADHD) (Lawrence et

al. 2015, p. 25). However, the prevalence of depression was higher in girls than boys, and was as high as 20 per cent for girls aged 16 to 17 years old (compared to 3 per cent for all girls aged 4 to 17 years) (Lawrence et al. 2015, p. 97).

Table 5.1 – Australian studies linking wellbeing to learning and engagement

Study	Domain	Finding
Cárdenas et al. (2022)	Achievement	Reducing self-reported depression in Year 8 by one standard deviation would increase Year 9 NAPLAN numeracy and reading scores by 7 per cent. Improving an average student's wellbeing by one standard deviation would increase their numeracy score by 5 per cent.
Goodsell et al. (2017)	Achievement	Students with mental illness scored lower than students without mental illness in all NAPLAN test domains (grammar, reading, spelling, writing and numeracy) and all NAPLAN year levels (Years 3, 5, 7 and 9).
Lawrence et al. (2015)	Achievement	School performance across all year levels in Maths, English, Art and Sports and Science subjects, was 'markedly poorer' for students with mental illness.
Mundy et al. (2017)	Achievement	For Year 3 students, boys with conduct problems, peer problems or overall emotional and behavioural difficulties scored lower on NAPLAN for reading. Emotional symptoms and overall emotional and behavioural difficulties were correlated with lower numeracy scores in boys. Girls with peer problems scored lower in numeracy.
The Centre for Adolescent Health (2018)	Achievement	Over the four years from Year 3 to Year 7, students with persistent emotional or behaviour problems fell, on average, a year behind their peers in numeracy, and students with persistently low subjective wellbeing fell eight months behind.
Zubrick et al. (2006)	Achievement	For Aboriginal children in Western Australia, clinically significant emotional or behavioural difficulties was a risk factor for low academic performance.
Mitchell et al. (2021)	Attainment	Young people under 18 who were hospitalised due to mental illness during 2005–2018 had an approximately three times higher risk of not completing high school compared with peers.
Noble and Wyatt (2008)	Attainment	Students with high levels of wellbeing are more likely to complete Year 12.
Goodsell et al. (2017)	Engagement	Students aged 11 to 17 years with mental illness were less likely to have a good level of school connectedness and less likely to have a good level of learning engagement than students without mental illness.
Lawrence et al. (2019)	Engagement	Students with mental illness had 42 per cent more days absent from school per year in Years 1-6, increasing to 118 per cent more in Years 7 to 10 and 115 per cent more in Years 11 and 12.
The Centre for Adolescent Health (2018)	Engagement	Persistent low wellbeing, emotional problems or behaviour problems in Years 3 to 5 increased the odds of disengagement in Year 7.
Zubrick et al. (2006)	Engagement	For Aboriginal children in Western Australia, clinically significant emotional or behavioural difficulties (based on teacher survey responses) was a risk factor for poor school attendance.

Figure 5.2 – National data on student wellbeing and mental ill-health

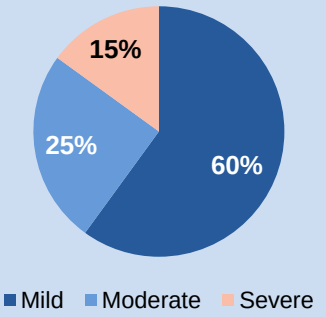
1 in 5 young people aged 11-17 had high or very high levels of **psychological distress** in 2014 (Lawrence et al 2015)

7% of students received learning adjustments for **social-emotional disability** in 2021 (ACARA 2022g)

14% of children aged 4-17 years had a **mental, behavioural or neurodevelopmental disorder** in the previous year in 2014

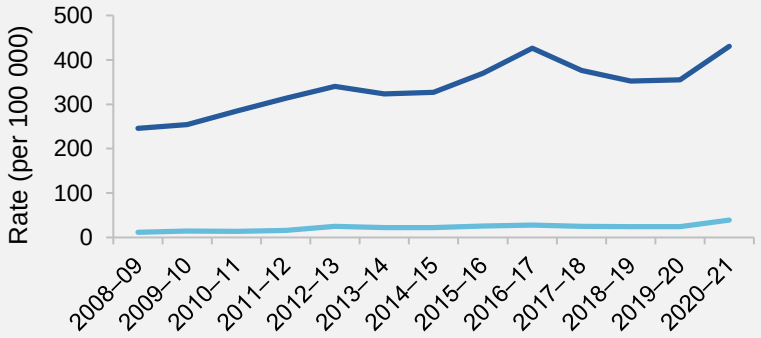
The **severity** of illness on overall functioning was mild for most children and young people

(Lawrence et al 2015)



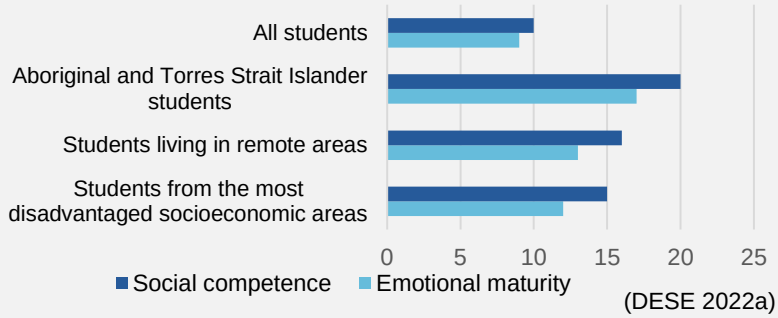
6 in 10 LGBTIQ+ secondary students who participated in a 2019 online survey reporting feeling unsafe or uncomfortable at secondary school due to their sexuality or gender identity (Hill et al. 2021)

The rates of hospitalisations for intentional self-harm for children and young people up to 19 years old increased between 2008-09 and 2020-21:



(AIHW 2022b)

Percentage of developmentally vulnerable children based on assessments by teachers of students in their first year of school in 2021:



(DESE 2022a)

The 2018 PISA results indicated that for 15-year-old students in Australia:

Belonging at school was below the OECD average

1 in 4 felt like an outsider or out of place in school

Exposure to bullying was worse than the OECD average

21% were made fun of

Self-efficacy was similar to the OECD average

93% agreed with the statement 'I usually manage one way or another'

… these difficulties were more common for students from the most disadvantaged socioeconomic background and remote locations, and for Aboriginal and Torres Strait Islander students (Thomson et al. 2020).

Sources: Lawrence et al. (2015, pp. 9, 30); ACARA (2022g); Hill et al. (2021, p. 15); Thomson et al. (2020, pp. 25, 118); AIHW (2022b); DESE (2022a, pp. 18, 31, 35, 42).

Poor wellbeing can be particularly pronounced among students who experience challenges to engagement and inclusion at school, for example, children and young people in out-of-home care, students with disability, and Aboriginal and Torres Strait Islander students (NMHC, sub. 26, p. 3).

- A study of children in New South Wales demonstrated that greater levels of contact with the child protection system (including out-of-home care) before the age of 10 is associated with increased risk of mental health difficulties in middle childhood (O'Hare et al. 2021). One young person consulted by Life Without Barriers (sub. DR60, p. 2) described his experience at school: 'Bullies. People can be mean to you to try and fit in. Some kids will fight you for being in [out-of-home] care.'
- Children with disability are more likely to have anxiety or childhood depression (Raising Children Network 2021). For example, the prevalence of mental ill-health in children with intellectual disability has been attributed to a range of factors, including developmental (e.g. communication difficulties), biological (e.g. physical health conditions), psychological (e.g. self-worth and coping skills), social (e.g. problems with family functioning, social exclusion, socioeconomic disadvantage) and cultural factors (e.g. cultural and linguistic factors) (Bloomfield 2019).
- The Western Australian Aboriginal Child Health Survey found that 22 per cent of Aboriginal children were living in families that had experienced at least 7 major life stress events in the preceding 12 months, and that this was the strongest predictor of clinically significant emotional and behavioural difficulties in Aboriginal children (Zubrick et al. 2005, pp. 135–138). Where two or fewer stressful events had occurred, 15 per cent of Aboriginal children aged 4 to 11 years were at high risk of emotional or behavioural difficulties, increasing to 42 per cent for children in families experiencing at least 7 major life stress events (Zubrick et al. 2005, p. 135).

Policies and practices within the school gate can promote wellbeing or inadvertently make things worse

There are many measures that schools can take that have a positive impact on student wellbeing, such as providing inclusive environments and equipping students with social and emotional learning (section 5.2).

Indeed, the nexus of trust between teacher and student was identified by young people as being important to their wellbeing and engagement at school. In some cases, students identified this as a 'make-or-break' consideration to their engagement and continued schooling.

> Good teachers make all the difference for young people who have complex or difficult situations and needs. (young person consulted by the Review)

However, poor wellbeing can be exacerbated by what happens in schools, including how teachers and school staff respond to students experiencing challenges to their wellbeing.

There are many causes of poor wellbeing. While trauma from exposure to extreme stressors in childhood is only one cause of poor student wellbeing, it is relevant for schooling because it can cause developmental delays, which affect children's cognition, memory, and capacity to pay attention (Downey 2007; NCTSN 2003, p. 7; Tobin 2016).[91]

Possible indicators of complex trauma in children include disruptive, defiant or aggressive behaviours; hyperactivity and impulsivity; anxiety; withdrawal and low self-esteem (CESE 2020b; Perfect et al. 2016). Poor wellbeing can be exacerbated where teachers and school leaders do not recognise these behaviours

[91] Children and young people with experiences of child abuse and students with refugee and asylum seeker backgrounds are more likely to have faced significant trauma (van der Kolk 2007; NCTSN 2003; QATESOL sub. DR85).

as indicators of trauma, including where they instead respond to disruptive behaviour with disciplinary actions (which can culminate in suspension or expulsion) (Downey 2007).[92]

The role of a teacher in identifying behaviour as a communication of poor wellbeing or distress, and reacting appropriately, was raised by young people consulted in this review, as a protective factor in students persisting with schooling. This also came through in the consultations undertaken by Life Without Barriers (sub. DR60, p. 2):

> I would like the teachers to be more understanding of kids mental health and have teachers be more understanding of the underlying issues that make kids act out.

Teachers can be supported to provide trauma-informed practice, which is an approach where 'education systems, schools and school staff understand, recognise and respond effectively to the impact of trauma on students' (CESE 2020b, p. 4) (section 5.3).

COVID-19 and natural disasters have brought the issue into sharper focus

In recent years, the effects of the COVID-19 pandemic and natural disasters (such as bushfires and floods) on students' learning and home environments have brought the importance of supporting student wellbeing into sharper focus.[93]

> Australian students have experienced significant population-wide adversity arising from the COVID-19 pandemic. This has put significant pressure on student wellbeing and engagement, which for many compounded existing pressures arising from direct exposure to major disasters such as the 2019-20 bushfires, complex disadvantage arising from intergenerational poverty and socio-economic exclusion, and other challenges. (Save the Children, sub. 23, p. 3)

The long-term effects of the pandemic are not yet understood. However, evidence is emerging that the COVID-19 pandemic and associated lockdowns have negatively affected the lives of many children and young people, and resulted in an increase in mental ill-health (box 5.1). Several participants held this view.[94]

> A lot more time today is spent on student wellbeing issues than even five years ago. There are increased mental health challenges of students post-COVID lockdown, manifesting in poor social skills, behaviour management issues, disengagement from learning and school refusal. (APTA, sub. 50)

Schools may need to provide additional or more effective support to students as a result of the pandemic, especially if its negative effects on wellbeing persist.

[92] Exclusions can disproportionately affect students with disability and Aboriginal and Torres Strait Islander students. This is discussed in chapter 4.

[93] ACCSO, sub. 51; AHISA, sub. 4; AITSL sub. 27; Beyond Blue, sub. DR88; NCEC sub. 7; Pivot Professional Learning, sub. 33.

[94] AEU, sub. DR101; ESA, sub. DR79; ISA, sub. 44; Orygen, sub. DR74; Queensland Government, sub. 53.

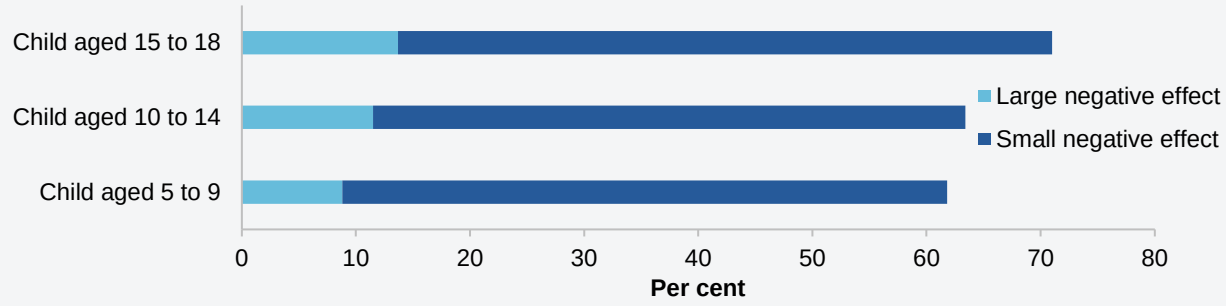
Box 5.1 – The effects of the COVID-19 pandemic on student wellbeing

Data from some state and territory governments suggest that the pandemic negatively affected student wellbeing. Students in South Australia and Tasmania generally reported lower levels of happiness and life satisfaction, and higher levels of sadness during pandemic years compared with earlier years (SA DfE 2022b, p. 11; Tasmanian DECYP 2022; Tasmanian DoE 2021, pp. 13–14).

Mission Australia's Youth Survey, distributed to secondary schools across Australia each year, found that by 2021, one in two young people aged 15 to 19 years old reported that the COVID-19 pandemic affected their mental health (Filia et al. 2022, p. 7). However, the data should be interpreted with caution as the survey is not designed to be nationally representative (for example, young people in Queensland made up almost a quarter of the sample in 2021).

Biddle, Edwards and Gray (2021, p. 6) found that 61 per cent of parents and carers in August 2021 felt that the pandemic had negatively affected the mental health of their children aged between 2 and 18, and 10 per cent reported a large negative effect. The chart below (adapted from Biddle, Edwards and Gray 2021, p. 8) shows these data broken down by age band (for children aged 5 to 18):

Proportion of parents/carers reporting a negative effect of the COVID-19 pandemic on their children's mental health by age bracket, August 2021



According to a Headspace (2020b, p. 2) survey of young people using their services, 74 per cent of respondents reported that their mental health worsened after the outbreak of COVID-19, and 77 per cent reported a negative effect on their work, study, or financial situation.

Save the Children (2022, pp. 13, 24, 37, 36) analysed data from a nationally representative online survey undertaken in November 2021 and other sources. They reported that the COVID-19 pandemic has been a source of uncertainty and instability, and put families under pressure (including by worsening the financial situation of 42 per cent of low income families). Analysis included that:

- over half the parents surveyed reported that the COVID-19 pandemic has resulted in their children feeling angry or frustrated (61 per cent) or lonely (55 per cent). These percentages increased to 74 per cent and 67 per cent for families where any member had a disability
- 63 per cent of Aboriginal and Torres Strait Islander families reported that COVID-19 has resulted in their children feeling hopeless (this percentage was 37 per cent for all children).

Teacher wellbeing is also a growing concern

Several participants raised concerns about teacher wellbeing or called for teachers' or school leaders' wellbeing to be addressed by governments.[95] Participants highlighted that poor student wellbeing and difficult student behaviour has flow-on effects for teachers, in terms of their own wellbeing and effectiveness in the classroom.[96] To the extent poor teacher or school leader wellbeing affects student wellbeing, as some participants suggested,[97] this creates a reinforcing cycle.

Survey data suggest student wellbeing and student behaviour are major sources of stress for educators. In 2018, 24 per cent of Australian lower secondary teachers reported experiencing a lot of stress in their work — 25 per cent of teachers surveyed reported modifying lessons for students with special needs as a source of stress and 28 per cent reported maintaining classroom discipline as a source of stress (Thomson and Hillman 2020, pp. 25, 28). Another study found that 74 per cent of teachers in 2021 reported that inadequate support for struggling students with complex needs was a major issue affecting their time to prepare for effective teaching (Hunter, Sonnemann and Joiner 2022, p. 16). For school leaders, the mental health issues of students was in the top four main sources of stress in 2019 and 2020 (See et al. 2022, p. 38).

The implications for teacher wellbeing are likely to be greater where teachers face other pressures (workloads) or lack the training or support to respond.

> High workloads, difficult student behaviour, excessive administration work, and all the other pressure we face every day, severely impact teacher physical and mental wellness. (brief comment C39)

Support for teachers is discussed in more detail in chapter 7, including a proposal that the next agreement advance reforms to maximise the value of teachers' and school leaders' time, including by reducing low-value tasks (recommendation 7.3) and a proposal by Education Ministers to develop data on teacher wellbeing.

The wellbeing of children and young people is a multifaceted and significant issue. Before considering the role that the next intergovernmental school agreement could play in supporting student wellbeing, it is useful to understand the broad range of efforts governments are already taking in this complex space.

5.2 How are governments supporting wellbeing in schools?

Governments have various policies to support student wellbeing

The Australian, State and Territory Governments have policies and programs aimed at supporting the wellbeing of children and young people at school. These span:

- **curricula** (for example, the Australian Curriculum requires schools to include social and emotional learning from school entry to Year 10 across topics of personal, social and community health) (ACARA 2022f)
- universal wellbeing promotion programs that provide **social and emotional learning**

[95] Brief comments C7, C9, C14, C17, C25, C26, C29, C36, C40, C46, C56, C59, C60, C61, C63; APTA, sub. 50; ISA sub. DR105; NCEC, sub. DR87.
[96] Brief comments C5, C27, C39.
[97] Paul Cahalan, sub. DR57; IEUA, sub. DR78; brief comment C16.

- **mental health early intervention** (for example, SAFEMinds provides training to educators to identify early signs of mental health concerns, implement school-based interventions and refer to other support services) (Headspace 2020a)
- **support for individual students** (for example, counselling and mental health assessments provided in schools)
- **online information and resources for educators, students and parents** (for example, the Australian Government Department of Education funds the Student Wellbeing Hub (ESA 2022)
- **professional development** (for example, the free online modules in Be You, funded by the Australian Government Department of Health (Beyond Blue 2022))
- **regulation** (for example, the Disability Standards for Education 2005 require schools to provide reasonable adjustments for students with disability — including social-emotional disability — to enable them to participate in education on the same basis as other students) (DESE 2020)
- the Office of the **eSafety Commissioner** (2022), which works to reduce cyberbullying and improve children's safety online.

Funding of mental health promotion, early intervention and primary care in schools is substantial. As part of a stocktake to inform the development of the National Mental Health and Suicide Prevention Agreement, Australian, State and Territory Government education portfolios reported $461 million in funding for mental health and suicide prevention programs in 2019-20 (PC 2021a). Of this, State and Territory Governments collectively spent $388 million in education portfolios, and this was the second-largest source of mental health and suicide prevention programs for most State and Territory Governments (approximately 5 to 8 per cent of total reported spend) after health portfolio spending (PC 2021a).

Wellbeing programs, mental health supports and programs that build the capacity of teachers form a necessary part of a broader policy landscape for supporting student wellbeing, including government strategies and frameworks.

All education Ministers have committed to the Australian Student Wellbeing Framework (Education Council 2018). Its vision is that:

> Australian schools are learning communities that promote student wellbeing, safety and positive relationships so that students can reach their full potential. (Education Council 2018, p. 2)

The five key elements of the Framework are leadership, inclusion, student voice, partnerships and support. The Framework also includes guiding principles and effective practices to build and maintain 'safety, positive relationships and wellbeing' and 'a positive and inclusive learning environment' (Education Council 2018, p. 3).

Strategic plans and documents of Education Departments in each State and Territory include outcomes, priorities or goals relating to student wellbeing.[98] Some of the documents describe how the goals will be achieved. For example, South Australia's plan includes a focus on implementing and evaluating trauma-informed practice (SA DfE 2021a, p. 9). The policies and practices that support the delivery of these goals for public schools are often set out in State and Territory Government wellbeing frameworks.[99] The

[98] Specifically, the NSW Department of Education's Strategic Plan 2018-2022, Victorian Department of Education and Training's Strategic Plan 2021-25, Queensland Department of Education's Strategic Plan 2021–25, WA Department of Education's Strategic Outline, the SA Department for Education Strategic Plan Towards 2028, Tasmanian Department of Education Strategic Plan 2022-2024, ACT Government's Future of Education strategy and the NT Government's Education Engagement Strategy 2022-2031.

[99] Such as the NSW Wellbeing Framework for Schools, the Queensland Student Learning and Wellbeing Framework, South Australia's Wellbeing for Learning and Life Framework and Tasmania's Child and Student Wellbeing Strategy (NSW DEC 2015; Queensland Department of Education 2018; SA DfE 2021b; Tasmanian DoE 2018).

Australian Government has also developed a *National Children's Mental Health and Wellbeing Strategy*, which provides a framework for improving children's wellbeing within and beyond schools (NMHC 2021).

Governments also have policies and programs that can indirectly support wellbeing, such as initiatives focused on increasing student engagement. For example, the Australian Government's Engaged Classrooms package provides $3.5 million for resources for educators to effectively manage classrooms and to create safe and supportive learning environments (DESE 2022b). State and Territory Governments fund programs to support students who have disengaged or are at risk of disengaging from schooling.

Non-government school associations also have policies in place to support student wellbeing and engagement. For example, independent schools seek to support the cultural wellbeing of Aboriginal and Torres Strait Islander students from remote communities in boarding schools, which 'can involve significant liaison with families and the provision of extensive supports in schools to assist in transition and homesickness' (ISA, sub. DR105). And the Catholic education sector uses a specific student wellbeing framework based on the national framework (NCEC, sub. DR87).

Improvements are needed in some key areas

Although governments have many programs to improve student wellbeing, some schools lack a clear plan, the guidance and capacity to implement it, and transparency about the outcomes being achieved.

Some teachers and students lack access to the support they need

Several recent reviews have highlighted the ways that governments and schools could better support the wellbeing of children and young people at school.

The Productivity Commission's 2020 national inquiry into mental health identified several weaknesses in current approaches to improving student wellbeing. These included that:

- the large number of overlapping wellbeing policies and programs for schools (not all of which were evidenced-based) created a challenging and crowded space for principals and wellbeing leaders to navigate
- not all teachers had the skills or training they needed to deliver across the breadth of the social and emotional learning curriculum or to understand the social and emotional development of children in their classrooms
- teachers felt overloaded with the expectation that they solve and manage students' social and emotional issues in partnership with families
- supports and information for students, parents and teachers were uneven across schools, and there was variation in the quality of learning adjustments for children with social-emotional disability
- some schools did not have clear wellbeing policies in place, resulting in incoherent pathways for support within schools and blurred responsibilities among various school staff (PC 2020a).

In relation to students with disability (including social-emotional disability), the review of the Disability Standards for Education 2005 found that some educators were unaware of their obligations to students with disability or did not know how to implement the standards effectively (DESE 2020). This finding was underscored by the Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability (2021a).

State-based reviews have come to similar conclusions. The Royal Commission into Victoria's Mental Health System (the Victorian Royal Commission) found that the implementation of mental health promotion programs in schools was 'patchy, limited by resource constraints, competing demands and inadequate teacher training' and that the range of mental health and wellbeing frameworks and initiatives caused 'some

confusion for schools and an inconsistent application of efforts across Victoria' (2021, p. 100). In a submission to the Victorian Royal Commission, Prevention United (2019, p. 17) raised concerns about the evidence base underpinning wellbeing programs:

> A few programs have been subject to multiple randomised controlled trials (RCTs), others have been evaluated through one or two RCTs, while many have been less well evaluated. Not all schools are giving preference to programs that are evidence-based. Furthermore, high quality implementation (i.e. program fidelity) and close monitoring of change are crucial but once again there appears to be wide variation in how well schools implement and monitor these programs.

An audit of the WA Department of Education's School Psychology Service (SPS) found that the SPS was highly valued by students but that there was a need for improved service planning, equity of access, information provision to school leaders, clarification about scope of service, and information to monitor effectiveness (Office of the Auditor General Western Australia 2022).

Governments are responding to these concerns but there is more to do

There has been partial progress on some initiatives …

Governments have taken steps to address some of the recommendations from the Commission's *Mental Health* inquiry, the *National Children's Mental Health and Wellbeing Strategy* and the Victorian Royal Commission.

The *Mental Health* inquiry recommended using the new national education evidence institute to develop the evidence base on social and emotional wellbeing (PC 2020a, p. 9).[100] AERO (sub. 6, p. 3) is investigating wellbeing as one of its seven priority research areas. And parties to the *National Mental Health and Suicide Prevention Agreement* have also agreed to work together with Education Ministers to identify and share best practice examples of mental health supports and suicide prevention across all education settings to encourage implementation of evidence-based approaches across jurisdictions (schedule A, s. 2a).

The *Mental Health* inquiry and Victorian Royal Commission both made recommendations that governments develop resources to guide and support schools' choices towards high-quality wellbeing programs, both for students and the capacity building of educators.

- The *Mental Health* inquiry recommended that governments develop guidelines for the accreditation of professional development courses and social and emotional learning programs offered to schools by external providers, and that state and territory governments would use the guidelines to accredit both types of programs (PC 2020a). The Australian Government (2022a, p. 108) announced funding for national guidelines for the accreditation of mental health and wellbeing programs in its 2022-23 Budget.
- The Victorian Royal Commission (2021, p. 104) recommended a digital platform for schools to navigate evidence-informed programs and initiatives that have been 'validated against a set of criteria'. In response, the Victorian Government (sub. 31, p. 7) announced the Schools Mental Health Fund and Menu initiative, 'underpinned by an evidence-based menu of programs and initiatives across three tiers of intervention to enable schools to select programs, staff and resources'.

To improve supports for vulnerable students at risk of disengaging from school, the *National Children's Mental Health and Wellbeing Strategy* recommended governments establish and implement trauma-informed procedures for responding to students disengaging from education. And the *Mental Health* inquiry recommended governments review their outreach programs. Consistent with these

[100] AERO had not yet been created when the final report of the *Mental Health* inquiry was published in November 2020.

recommendations, the NSW Department of Education (2021a) undertook a review of current processes and approaches to its student re-engagement services in 2021.

… but little progress on others

To better prepare pre-service teachers, the *Mental Health* inquiry recommended that initial teacher education (ITE) programs must include social and emotional learning (actions 5.3 and 5.4) (PC 2020a). This is appropriate given that the capabilities of teachers under the Australian Professional Standards for Teachers include knowing how to support students' wellbeing and safety (AITSL 2022a).

More broadly, the *Mental Health* inquiry proposed adding wellbeing as an outcome to the next intergovernmental school reform agreement (PC 2020a, p. 7). Connected to this were proposals from both the *National Children's Mental Health and Wellbeing Strategy* and the *Mental Health* inquiry to:

- develop a national minimum dataset on student wellbeing
- require schools to have a wellbeing plan or strategy in place
- provide funding for quality improvement activities identified in school wellbeing plans and require regular progress reporting against plans (NMHC 2021; PC 2020a).

Given their relevance to a successor NSRA, these proposed actions are discussed in detail in the next section (section 5.3).

Finding 5.1
Many students experience poor wellbeing and some do not receive effective support.

- A significant proportion of children and young people experience poor social and emotional wellbeing.
  - Poor wellbeing can be particularly pronounced among students who experience challenges to engagement and inclusion at school, for example, children and young people in out-of-home care, students with disability and Aboriginal and Torres Strait Islander students.
- Poor wellbeing directly affects students' capacity to learn.
- While wellbeing is influenced by many factors outside the school gate, poor wellbeing can be exacerbated by responses from schools.
- Effective school leadership and teacher practices are essential elements for supporting student wellbeing within schools.
- Australian, State and Territory Governments have many initiatives and information resources to support student wellbeing, but schools have not consistently implemented evidenced-based approaches for all students.

The National School Reform Agreement also contributes to the overall effort

Most national and state-based initiatives and programs relating to student wellbeing operate outside of the NSRA.[101] The only National Policy Initiative (NPI) in the NSRA that refers to wellbeing is the national data

[101] Section 48 of the NSRA states that some national initiatives pre-dating the NSRA (including work to combat bullying and cyberbullying) are not NPIs for the purposes of section 22 of the Act (that is, Commonwealth funding to States and Territories is not conditional on implementation of those initiatives).

projects NPI, under which parties agreed to consider opportunities to enhance measurement of wellbeing as one of several projects (appendix C). This data project, the Student Wellbeing Data Project, was ongoing as at 6 December 2022 (box 5.2).

Box 5.2 – The Student Wellbeing Data Project

Education Ministers endorsed the Student Wellbeing Data Project in June 2020 and the project is being led by the ACT Education Directorate. The objective of the project is to support the development of a national approach to understanding and measuring student wellbeing (AITSL 2022g).

The main output of the project is a report, which has three components:

- a framework for measuring student wellbeing, based on a review of the wellbeing concepts that predict schooling outcomes
- a review of the quality and relevance of existing survey instruments that align with the framework
- an assessment of the extent to which each department for education collects data that align or diverge from the proposed framework (Cárdenas et al. 2021).

This report determined that subjective wellbeing (based on measures of positive affect, negative affect and life satisfaction) was the most relevant concept of wellbeing in a schooling context. Positive affect includes feelings such as happiness and peace, and negative affect includes feelings such as worry, sadness and loneliness.

The report identified ten high-quality and relevant survey instruments for measuring components of subjective wellbeing. An additional 42 instruments were found to be either relevant or high-quality but would benefit from ongoing validation.

The report noted that:

- six States and Territories run student surveys in public schools that include wellbeing, but not necessarily subjective wellbeing
- four States and Territories collect data from public schools on at least one element of subjective wellbeing (positive affect, negative affect or life satisfaction) using a high-quality survey instrument. A fifth jurisdiction collects relevant data but the instrument should be used with caution
- no jurisdiction collects data from public schools on all three elements of subjective wellbeing using high-quality survey instruments (Cárdenas et al. 2021).

The findings of the project are yet to be considered by Education Ministers, as at 6 December 2022. An interjurisdictional working group is being formed in December 2022 to prepare advice for Ministers that considers the changing context since the main report for the project was prepared (ACT Education Directorate, pers. comm., 6 December 2022). Changes include the considerations of wellbeing for the NSRA, increasing interest in child wellbeing data from other portfolios (including in relation to an action under the *National Strategy to Prevent and Respond to Child Sexual Abuse 2021–2030*), and new work being done in some jurisdictions on surveys that include wellbeing (ACT Education Directorate, pers. comm., 6 December 2022). Education Ministers are likely to consider the advice of the working group in the first quarter of 2023 (ACT Education Directorate, pers. comm., 6 December 2022).

Several jurisdictions (Western Australia, Victoria, Tasmania and Queensland) list reform initiatives relating to student wellbeing in their bilateral agreements.[102] These include initiatives relating to the professional development of teachers[103], student and teacher support services[104], and the provision of resources for parents, families and teachers.[105] It is difficult to discern whether the absence of student wellbeing initiatives in bilateral agreements reflects actual policy gaps, or jurisdictions electing not to list relevant initiatives. In some cases, jurisdictions identified initiatives relating to wellbeing that fall outside of the bilateral agreement in the introduction to the agreement as context.[106]

Given its centrality, both as a desirable outcome in its own right and as a means of improving learning outcomes, governments should make better use of the next schools agreement to improve student wellbeing. This will need to be done flexibly, recognising that States and Territories already have initiatives underway and that responses may need to be tailored to local contexts.

5.3 How could the next intergovernmental agreement support wellbeing?

The next intergovernmental agreement on schools should explicitly address student wellbeing.

Wellbeing should be included as an outcome of the agreement

One of the purposes of an intergovernmental agreement on schools (such as the NSRA) is to articulate a set of agreed, core outcomes that will enhance school education. This focuses government national reform efforts on the things that matter. These outcomes tend to be enduring and often outlast the life of specific agreements or reforms.[107] For example, promoting high levels of student attainment and proficiency in literacy and numeracy (achievement) have been mainstays in the past three education agreements. However, there is now clear evidence that poor wellbeing obstructs academic engagement and achievement, and therefore, the core objective of the agreement: high-quality and high-equity education.

The inclusion of student wellbeing as an outcome of the next intergovernmental agreement (alongside student achievement, attainment and engagement) would reflect the growing sense that students should be equipped to cope with the various stresses of life in the course of their schooling. This is an important end in itself, and is consistent with government policy commitments such as the Alice Springs (Mparntwe) Education Declaration. It

[102] The bilateral agreements between the Commonwealth and each State or Territory contain initiatives for government and non-government school sectors related to the Agreement's reform directions (NSRA s. 49(a)).
[103] For example, Western Australia has a program to deliver 'professional learning to promote improved student health, well-being and engagement in schooling'.
[104] For example, Queensland has a program to support student wellbeing in regional and remote areas.
[105] For example, Western Australia's action to publish guides and fact sheets for schools and their communities to reduce bullying and violence.
[106] New South Wales noted that it is 'committed to improving the educational outcomes and wellbeing of Aboriginal students' and that it has 'enacted new measures of, and support for, student wellbeing, including through the Tell Them From Me survey'. The Northern Territory noted the complexity of school education is compounded by the multidimensional needs of many of its children and that it has invested in a significant cross agency reform agenda, including $1.1 billion to improve housing in remote communities over 10 years from 2017-18.
[107] Under the NSRA, parties recognised that achieving the outcomes of this NSRA would require sustained reform effort for the life of the NSRA (s. 12).

would also reflect the evidence laid out in this chapter that wellbeing allows students to achieve better academic results and engage more at school, and therefore contributes to other important outcomes.

Many participants supported making wellbeing a policy focus or outcome in the next agreement.[108]

> Wellbeing, engagement and learning are the three pillars of a quality education … [and] are inseparably interrelated. Each is a crucial outcome of schooling in its own right, and a necessary enabler for the others (Save the Children, sub. 23, p. 1).

Existing policy statements provide a starting point for articulating the new outcome. One option is to adopt an outcome consistent with the vision agreed by Education Ministers under the Australian Student Wellbeing Framework, such as 'Students experience wellbeing, safety and positive relationships at school'. Another option for the wording of the outcome is to use the Mparntwe Declaration goal that all young people become 'Confident and creative individuals who … have a sense of self-worth, self-awareness and personal identity that enables them to manage their emotional, mental, cultural, spiritual and physical wellbeing'. Extensive consultation shaped the Mparntwe Declaration (COAG 2019).

Elevating wellbeing to an outcome of the NSRA would confirm that supporting wellbeing is part of the core business of schools. However, simply including student wellbeing as an outcome of the next intergovernmental agreement will not lift student outcomes. The new NSRA outcome would need to be reflected in other aspects of the agreement, including its public transparency and accountability arrangements and its reform commitments. This would enable the agreement to be a focal point for national efforts to lift student outcomes and encourage more effective and targeted policies and programs.

A new national indicator of wellbeing to track performance and focus efforts

The NSRA sets out 'sub-outcomes' (indicators) to track progress against its outcomes over time (chapter 9). These sub-outcomes are essentially a general health check on Australian school systems. If parties were to include student wellbeing as an outcome of the next agreement, including a sub-outcome for wellbeing to augment the existing sub-outcomes would be a logical additional step.

Many participants in this review were supportive of governments developing a new wellbeing indicator.[109] The Centre for Community Child Health (sub. 14, p. 6) argued that, in addition to providing a key accountability mechanism for the education system, a national wellbeing measure would have wider benefits, such as enhancing school policy and supports and affirming the role that schools have in supporting wellbeing. Beyond Blue (sub. 25, pp. 1–2) observed that:

> Embedding children and young people's wellbeing in key accountability mechanisms across the education system will contribute to ensuring that student wellbeing is a sustained priority over the long term. … Having nationally consistent wellbeing outcome measures will enable the education

[108] AISSA, sub. DR61; AITSL, sub. 27, p. 19; APPA, sub. DR110; APC, sub. 8, p. 1; ARACY, sub. 38, p. 1; Beyond Blue, sub. DR88; CCCH, sub. 14, p. 4; CYDA, brief comment C71; ESA, sub. DR79; P&C Federation (NSW), sub. 18, p. 13; ISA, sub. DR105; NCEC sub. 7, p. 7; NMHC, sub. 26, p. 6; Orygen, sub. 13, p. 5; QNMU, sub. 30, p. 2; SA CCYP; sub. DR54.

[109] AITSL, sub. 27, p. 20; ARACY, sub. 38, p. 8; Australian Child Rights Taskforce, sub. 40, p. 7; Beyond Blue, sub. DR88; CCCH, sub. 14, p. 6; CEMA, sub. 28, p. 12; Centre for Inclusive Education, sub. DR99; CSPA, sub. 24, p. 7; NCEC, sub. 7 p. 8; NMHC, p. 7, sub. 26; Orygen, sub. 13, p. 5; Pivot Professional Learning, sub. 33, p. 8; Save the Children, sub. 23, p. 5; AEU, sub. DR101.

and mental health sectors to better support the mental health and wellbeing of children and young people in a strategic way and enable more effective early intervention.

There is a strong in-principle case for developing a national wellbeing indicator, especially if governments elect to include wellbeing as an outcome of the next intergovernmental agreement. Including an indicator in the reporting arrangements of the agreement would be essential to achieve its stated purpose, which is to 'give the community confidence that outcomes are being achieved and reforms to improve the quality and equity of Australia's schooling system are being implemented by all Parties' (NSRA, s. 51).

In developing a sub-outcome, there are three main questions to consider. What should the indicator measure, what data should be used and how should the data be reported? Participants had suggestions or raised concerns about each of these matters, which are discussed below in turn.

What to measure for national performance reporting

In terms of defining the sub-outcome, the Victorian Government (sub. 31, p. 11) stated that it may be premature to develop an indicator because measurements of student wellbeing are still being developed. However, the recent government collaboration on the Student Wellbeing Data Project (box 5.2) demonstrates that work in this area has come a long way. Its proposal that subjective wellbeing is the most relevant concept of wellbeing aligns with recent actions taken by the OECD. The OECD added subjective wellbeing to PISA for the first time in 2018, following the development of its own student wellbeing framework (OECD 2019c). AERO (sub. DR113) is also working to determine the most relevant components of wellbeing that schools should measure, which should provide further evidence about the suitability of measuring subjective wellbeing compared to other approaches.

Other concepts of wellbeing have value but the Commission agrees with the National Catholic Education Commission (NCEC, sub. DR87) that the sub-outcome should be based on a 'core' set of data. Schools have good reason to want information on dimensions of wellbeing, such as student belonging, peer relations and resilience, but not all aspects of wellbeing in figure 5.1 are needed for national performance reporting.

One sub-outcome on subjective wellbeing would be preferable for concise national reporting, rather than separate measures of positive affect, negative affect and life satisfaction. Fortunately, Cárdenas et al. (2022) and the OECD (2019c) described how components of subjective wellbeing can be combined into a single composite wellbeing index.

What data to collect

There are four options for developing the dataset needed to report on a new wellbeing indicator, each with their own costs and benefits. These are summarised in table 5.2.

Option 1 in table 5.2 is that State and Territory Governments agree to report individually on the data from their existing surveys of students. This would improve transparency but is likely to be of limited value for a sub-outcome. Other NSRA sub-outcomes use nationally consistent datasets that include students from all jurisdictions and all school sectors (chapter 9). While five jurisdictions already collect relevant data (box 5.2), those surveys only cover public schools and the Commission has only identified publicly available reporting on this data by Tasmania and South Australia (box 5.1). Governments may be reluctant to report their performance alongside other governments when these data are not comparable.

The ideal but ambitious approach is to develop a new national minimum dataset (option 4 in table 5.2), consistent with the recommendation by the *Mental Health* inquiry and the *National Children's Mental Health and Wellbeing Strategy*. A national minimum dataset has the benefits of being both complete and nationally consistent, which enables high-quality analysis and comparisons at all levels (student, school, sector,

jurisdiction and over time). Some participants suggested adding questions to NAPLAN for this purpose (ACARA, sub. DR120, Greg Ashman, sub. DR67).

Table 5.2 – Some options for developing a national indicator on student wellbeing

Status quo	Options for developing a national indicator on student wellbeing			
Data not available for reporting on a national indicator. Two jurisdictions report their data.	1 – make existing data publicly available at jurisdiction level **Data would not be complete or comparable across jurisdictions.**	2 – enable schools to opt-in to report nationally using existing data on subjective wellbeing, based on a list of high-quality survey instruments.[b] **Data would not be complete or comparable across jurisdictions.**	3 – require all schools to collect data on at least one component of subjective wellbeing, with flexibility about which survey instruments they use from a list of high-quality options.[b,c] **Data would be complete but not comparable across jurisdictions.**	4 – require all schools to collect data on all three elements of subjective wellbeing for a national minimum dataset, using the same survey instruments.[b,c] **Data would be complete and comparable across jurisdictions.**

a. This summary is based on the analysis of the Student Wellbeing Data Project but surveys could have changed since.
b. The Student Wellbeing Data Project concluded that subjective wellbeing (based on measures of positive affect, negative affect and life satisfaction) was the most relevant construct of wellbeing for a schooling context (box 5.2).
c. Data could be collected from all schools or from a nationally representative sample of students.

Source: Commission analysis, partly based on Cárdenas et al. (2021).

However, some policymakers and school administrators already have access to information on student wellbeing to inform system and school-level decision-making, which limits the value of a new collection. In addition to the surveys developed for use in some government schools[110], some schools measure wellbeing though surveys and tools developed by non-government providers.[111] It would be costly to either align existing surveys with the survey instruments agreed for the national minimum dataset or to duplicate data collection for similar purposes.

Some participants noted the practical challenges in shifting towards a nationally complete and consistent data collection. The NSW Department of Education (sub. 12, p. 24) cautioned that the existence of multiple different surveys 'presents a significant challenge for the development of a single national measure'. How

[110] State and Territory Government surveys of their public school students are often focused on student engagement but some include questions on student wellbeing, such as the Tell Them From Me survey run in New South Wales (NSW DoE, sub. 12, p. 24) and the Australian School Climate and School Identification Measurement Tool used in the ACT (ANU 2022). The Victorian Government (sub. 31, p. 11) noted its definitions and measures of wellbeing are embedded in the Framework for Improving Student Outcomes, the Attitudes to School Survey, the Victorian Student Health and Wellbeing Survey, the Victorian Child Health and Wellbeing Survey, and the Victorian Child and Adolescent Monitoring System.

[111] Three such tools were described by participants to this review: Ei Pulse by the Australian Research Alliance for Children and Youth (sub. 38, p. 2), the Wellbeing for Learning survey tool by Pivot Professional Learning (sub. 33, p. 5) and ACER's Social-Emotional Wellbeing Survey, which was described by AHISA (sub. DR94).

would governments decide which of their existing survey instruments would be the winner among the others? The NCEC (sub. DR87) highlighted that this would require extensive consultation.

Further, a national minimum dataset that overlaps with other existing surveys is inconsistent with the principle that data should be collected once and used for multiple purposes. Several participants emphasised the importance or minimising or avoiding additional burden on schools for data collection and reporting.[112]

These concerns could be addressed by a more pragmatic approach to data development (options 2 and 3 in table 5.2). Given the extent of existing data on wellbeing already collected, governments should develop a new national wellbeing dataset that provides flexibility to use existing data collections that are high quality and relevant.

- Option 2 is opt-in: governments would agree a list of survey instruments for subjective wellbeing and encourage, but not require, survey data that align to any of these instruments to be collated into a new indicator.
- Under option 3, governments would agree a list of survey instruments for subjective wellbeing and require data providers to select from this list to collect data on the three elements of subjective wellbeing (positive affect, negative affect and life satisfaction).

The dataset for sub-outcome reporting should be of high quality. The survey instruments used should be valid and reliable (including for use in Australia). The NCEC (sub. DR87) and Association of Independent Schools of South Australia (sub. DR61) raised this point generally and Aurora Education Foundation (sub. DR68) cautioned about a potential lack of universality in measurement for Aboriginal and Torres Strait Islander students.

The ten high-quality and relevant survey instruments identified by the Student Wellbeing Data Project are a sensible starting point for the list. For example, one of the 11 papers cited by the project on the quality of the 'Personal Wellbeing Index-School Children' measure found it to be valid for Aboriginal and Torres Strait Islander young people and non-Indigenous young people (Tomyn, Fuller Tyszkiewicz and Norrish 2014). Concerns about the universality of the survey instruments under consideration would be overcome by seeking the input of Aboriginal and Torres Strait Islander people, which would also be consistent with government commitments under the National Agreement on Closing the Gap (s. 19).

Under this approach, an organisation such as the AIHW could collect and collate the data into a composite subjective wellbeing index for reporting on the sub-outcome. Selecting the AIHW to create the metadata and to manage the dataset securely as data custodian would engender trust about the safe management and appropriate use of the data. The AIHW holds more than 150 datasets, which it manages 'with respect for its sensitivity, and with privacy and confidentiality assured through legislation, accountability practices and procedures' (AIHW 2022a, 2022c). Their legislation prevents data from being used for purposes outside of what data providers have permitted (AIHW 2022a).

Independent Schools Australia (sub. DR105) was concerned that for independent schools with no centralised system for wellbeing data, the costs of new national reporting requirements would fall on schools themselves. However, the reporting burden is unlikely to fall on individual schools. For existing state and territory government surveys of public schools, departments for education would be the data provider to the AIHW and for schools that use licensed products, the owners of these tools could submit the data on the behalf of schools.

[112] NSW Department of Education, sub. 12, p. 24; Beyond Blue, sub. 25, p. 2; AHISA, sub. DR94; ESA, sub. DR79; ACTPA, sub. DR89.

A recent announcement by the Australian Government could provide another source of data for the dataset — the 2022-23 Budget announced funding to develop a free voluntary mental health check tool to assist schools in identifying students with declining mental health (Australian Government 2022b).

A flexible approach to collating data is being tested. Following on from the work of the Student Wellbeing Data Project, a joint project is being planned between South Australia, the ACT and Tasmania in conjunction with the University of South Australia, which intends to create an asset from similar datasets held by those jurisdictions, namely demographic, wellbeing, and school outcomes data into a sharable data base where collective methodology of analyses can be applied (ACT Education Directorate, pers. comm., 22 November 2022).

How would the data be reported?

The Commission is proposing that governments require a complete dataset (option 3), rather than an optional collection (option 2) because it would be consistent with a national commitment to improving wellbeing outcomes under the next agreement. An opt-in approach may not result in sufficient data for annual timeseries reporting, which would act as a baseline for assessing performance during the next agreement. Despite some costs, schools that are not currently surveying their students about their wellbeing would benefit from having access to this information for implementing an effective whole-of-school approach to supporting wellbeing.

A complete dataset would enable reporting on whether each jurisdiction has seen improvements to student wellbeing over time, which would be useful for performance reporting on a national agreement. However, a significant limitation of a flexible approach is that it may not be possible to compare State and Territory level performance or the magnitude of changes quantitatively because the data are not consistent across jurisdictions.

A complete dataset that also identified students from priority equity cohorts would support the commitment under the NSRA to report disaggregated outcomes by cohorts where available (s. 38). This should be prioritised in a way to give effect to commitments under Priority Reform Four of the National Agreement on Closing the Gap for governments to collect, handle and report data at sufficient levels of disaggregation to empower local Aboriginal and Torres Strait Islander communities to access, use and interpret data for local decision-making (s. 71c).

While participants expressed concerns about how a new dataset might be used, these risks can be managed.

- The NCEC (sub. DR87) was concerned that new reporting would make wellbeing the sole responsibility of the education system. The wellbeing sub-outcome would not be the only indicator that has many social determinants beyond schooling — the proportion of young people aged 20 to 24 with Year 12 or a post-school qualification also does. Results are explained in context in the *National Report on Schooling in Australia* (chapter 9).
- The NSW Department of Education (sub. 12, p. 24) expressed a concern that the data could be used to produce league tables (similar to concerns raised in some quarters about the use of NAPLAN data). However, a wellbeing measure need not be reported at the school level, so concerns about league tables of this kind would not be relevant.

While the data providers are likely to be conservative about what data they allow to be reported publicly, they may permit other additional uses of the data that provide significant value to the community. For example:

- school leaders could be provided with their school-level data
- academics could be granted secure access to the data for research and evaluation activities
- student wellbeing data at the regional level could assist health departments with planning mental health service provision.

Actions to improve wellbeing in the next agreement

A national commitment to action with local solutions

Governments should commit to improving student wellbeing as a priority in the next agreement.

Given that State and Territory Governments are responsible for most of the policies and programs affecting student wellbeing, and these programs need to be tailored to local needs, State and Territory Governments should determine in their bilateral agreements how their commitment in the agreement to student wellbeing will be achieved.

To ensure accountability, each jurisdiction's bilateral agreement should set out the outcomes that their wellbeing initiatives are seeking to achieve and governments should report each year on progress in achieving those outcomes. Jurisdiction-level outcomes reporting for this purpose may use the subjective wellbeing dataset proposed above or other existing datasets on more specific aspects of wellbeing.

Wellbeing improvements require a focus on school practices and leadership, not just one-off wellbeing programs

Many of the foundations of government policy to support student wellbeing are in place or available, including policy frameworks, along with evidenced-based programs, professional learning and information resources (section 5.2). On some topics there are extensive options, which can make it challenging for schools to decide how best to improve student wellbeing given their schools' specific needs.

The Commission considers that there is a gap between government policy and its implementation in some schools. For example, the IECM (sub. 52) noted that AITSL has developed resources for teachers that would improve the cultural safety of classrooms if they were taken up (for example, AITSL 2022b). While it is still early days for some initiatives (such as those that make it easier for educators to identify and select the best initiatives for their students' needs), there is little evidence of the impact of government interventions on student wellbeing.

Young people who participated in this review described the sorts of changes they would like to see in their schools, for example, learning how to navigate their own personal growth, individuality, and big transitions (for example, from primary to high school):

> So much more happens inside the school gates than just the academic learning, and no one teaches you how to deal with all the stuff that happens there, let alone life after school. (young person, Child Wise Youth Advisory Board)

Another young person argued that schools should support their mental health:

> Particularly during COVID-19, education can be quite taxing on mental health, and it is often schools that students will reach out to for support, which is why awareness, and a strong support system is essential in schools.

A greater focus on wellbeing outcomes and individual schools in the next agreement is likely to help governments make more of the difference that students are seeking. The focus should be on improving the implementation of current policies. More frameworks, guidance and information resources are unlikely to have much effect if educators are stressed and have competing priorities. Similarly, simply adding to the existing stock of wellbeing programs may fail to embed good practice into classrooms and schools on an ongoing basis.

Research shows that school-based interventions can be effective but that there is 'no silver bullet' program that all schools should adopt (box 5.3). Planning a whole-of-school approach is complex — evidence

supports a combination of universal and targeted supports, and to build the capacity of teachers. This aligns with the recommendation by the Centre for Inclusive Education (sub. DR99) for multi-tiered systems of support 'that encompass universal prevention for all students, targeted interventions to improve the social, emotional, and behavioural skills of at-risk students who need additional support, and individualised intensive supports for students experiencing ongoing mental health and learning difficulties'.

Box 5.3 – Evidence supporting school-based interventions

The meta-analysis by Durlak et al. (2011) found that universal school-based interventions improve both social and emotional skills and school performance.

A rapid review of the evidence by Pearce et al. (2019) found that school-based prevention, early intervention and individual student interventions are effective in improving student behaviour and wellbeing (though they produce relatively small improvements).

A systematic review by Dix et al. (2020) revealed the types of programs that are relatively more effective at improving wellbeing and schooling outcomes in the Australian context. The review found that:

- interventions delivered by a school teacher with appropriate professional development and resources for students were more effective than those delivered by external professionals
- student belonging and engagement programs were more effective at lifting academic achievement
- social-emotional skills programs were more effective for promoting student wellbeing.

To reduce the gap between government policies and their implementation in schools, governments should use the next school reform agreement to encourage a culture in schools that promotes, and is responsive to, student wellbeing. And school culture is largely set by school leaders. Indeed, regular monitoring and reviewing a school's capacity to address safety and wellbeing is one of the roles of a school leader (Education Council 2018, p. 5).

The Mental Health inquiry noted that many schools may already have wellbeing policies and management structures in place to achieve strong wellbeing outcomes but that this is not the case everywhere. The inquiry made a recommendation to improve accountability for leadership and planning at the school level as well as government support for school-level improvements (box 5.4). The Commission still considers this approach a worthwhile way to focus on wellbeing outcomes and create greater transparency between schools and governments about what is actually occurring at the school-level.

The next school reform agreement should establish the implementation of school wellbeing strategies as core content that jurisdictions must address as part of their bilateral agreements.

Governments should require school leaders to use school wellbeing strategies that define the roles and responsibilities of wellbeing staff and articulate the support pathways for students within and beyond the school. For example, wellbeing staff in some schools may be responsible for coordinating a whole of school approach.

School wellbeing strategies should also equip teachers, through training and supports, to identify behaviours that communicate poor wellbeing and to respond appropriately. One aspect of this could relate to trauma-informed practice in schools, which have been found to improve student academic achievement and behaviour and staff confidence (Berger 2019).

Box 5.4 – Mental health inquiry recommendation for school wellbeing strategies

Action 5.6 of the *Mental Health* inquiry included that 'all schools should report to regulators on their dedicated strategies, including leadership and accountability structures, to deliver wellbeing outcomes for students and teachers'. The report described the sorts of actions that schools should be required to address:

- implementing whole-of-school wellbeing programs, including identifying the most suitable programs for the school community, developing the skill sets of teachers who would be delivering the programs, monitoring outcomes and supporting school staff to incorporate wellbeing practices in their day-to-day work
- appointing a first point of contact for teachers concerned about students' mental health and wellbeing, and supporting students in accessing services, both within and outside of the school
- evaluating the work of the school wellbeing team, which can include a school psychologist, counsellor, social worker, school nurse, chaplain, community elder or Aboriginal health worker, peer workers and others. This should include clear definitions of the roles and responsibilities of wellbeing staff and pathways for student referrals within the school
- establishing the needs of the school community, in terms of additional programs or staff members required, and securing funding for implementation
- ensuring plans to support students with mental illness are implemented, and there is appropriate consultation with their family and mental healthcare providers
- developing and maintaining referral pathways to local community services, including community mental health services, parenting programs and support services for young carers
- using a range of sources, including the data collected as part of the national minimum dataset, to monitor and evaluate progress in student wellbeing, and the effects of any specific interventions.

Some schools are likely to need support to implement these strategies, and action 5.6 also proposed that State and Territory Government departments of education should 'develop policies to support schools that identify gaps in their wellbeing strategies and supports, as well as schools where wellbeing measures do not improve over time. This should include dedicated funding through a flexible funding pool.'

State and Territory Governments have not provided a formal response to this recommendation.

Source: Productivity Commission (2020a, pp. 237–239).

Professional development that better prepares teachers to understand the needs of their students could alleviate the stressors on teachers over time. And having school leaders that cultivate trauma-informed practices within the school would mitigate potentially punitive responses to poor wellbeing that has gone unrecognised.

School wellbeing strategies that have these features would reflect the spectrum of ways that students can be supported, which extend far beyond the teacher and the classroom. Providing teachers with clarity about how they can seek help for their students beyond the classroom could avoid situations where teachers feel pressured to have all the answers or to take on tasks beyond their role. Orygen (sub. DR74) stated that teachers should feel confident in the accessibility of strong referral pathways into support options for students who require intensive health and psychosocial support. If schools are unable to identify adequate services beyond the school, this may expose broader issues that governments need to address.

These strategies also provide an opportunity for school leaders to identify ways to support teacher wellbeing.

A broader discussion on the importance of effective school leadership is in chapter 8.

Participants suggested other areas for action

Participants highlighted a broad range of options for further action across the NSRA's three reform directions (supporting students; supporting teaching, school leadership and school improvement; and enhancing the national evidence base) (NSRA, s. 42).

While States and Territories would likely play the central role in reforms to lift student wellbeing, there may be some areas that lend themselves to cooperative efforts or Commonwealth-only action. Some participants supported NPIs on student wellbeing or considered it a policy area ripe for national collaboration.[113]

Supporting students

Schools and school sectors are best placed to choose the specific programs they need but governments could use the NSRA to progress recommendations made by recent reviews that seek to guide schools towards evidenced-based choices and make navigating the options easier. Box 5.5 provides some examples suggested by participants of specific wellbeing initiatives and areas of greater focus.

Box 5.5 – Examples of the broad range of ways to improve wellbeing

Participants to the review described the types of initiatives and actions they considered would improve wellbeing outcomes, including specific initiatives and areas of greater focus.

- Save the Children and 54 reasons (sub. DR64) described Journey of Hope (a group-based intervention for students who have experienced trauma associated with floods and bushfire) and Hands on Learning (which combines practical activities and social emotional learning to improve the sense of belonging for at-risk students).
- Orygen (sub. DR74) noted two relevant resource and training packages for educators to improve trauma-informed practice: Making Space for Learning and SMART (Strategies for Managing Abuse Related Trauma).
- ARACY (sub. DR95) suggested its Common Approach training program for upskilling adults who work with young people in having best practice wellbeing conversations.
- To improve student engagement, the Australian Primary Principals Association (sub. DR110) suggested that schools could prioritise the involvement of children in community activities, such as sporting teams, art, drama, music and school productions.
- The School Library Coalition (sub. DR72) suggested greater resourcing of school libraries, which can be safe spaces for young people, including by promoting bibliotherapeutic practices and reading for pleasure.

Beyond Blue (sub. DR88) recommended replacing the fragmented and complex array of wellbeing initiatives in schools with an 'amplified' Be You program. While it may not be feasible or beneficial to integrate all wellbeing initiatives (across levels of government, school sectors and non-government providers), the Australian Government could seek to pursue greater coordination between its programs and other supports.

Given that the Australian Government has a significant role in developing policies and funding programs aimed at improving wellbeing in schools (section 5.2), there may be benefit in it articulating how it will contribute to reforms

[113] Save the Children, sub. 23, p. 4; NMHC, sub. 26, p. 6; CCCH, sub. 14 pp. 5-6.

efforts in a manner that recognises and is complementary to state-based initiatives. The Australian Government could provide visibility of its measures to improve wellbeing for school-aged children, which would assist governments to coordinate their efforts and avoid duplication. For example, the October 2022-23 Budget included $203.7 million for a Student Wellbeing Boost to enable the provision of additional wellbeing supports for students to help address the effects of the COVID-19 pandemic (Australian Government 2022b).

Several participants recommended greater recognition of Aboriginal and Torres Strait Islander students' connection to culture to support their wellbeing, including through culturally safe and flexible learning programs, learning in language and Aboriginal-led initiatives (IECM, sub. 52; NIAA, sub. DR103; National Children's Commissioner, sub. DR106; Paul Ramsey Foundation, sub. DR109). For example, the Stronger Smarter Institute (sub. DR114) stated that responses should be holistic, culturally responsive, tailored, strengths-based and based on strong community relationships. This would be consistent with government commitments to embed meaningful cultural safety and to support Aboriginal and Torres Strait Islander cultures in government institutions (such as government schools) as part of Priority Reform Three of the National Agreement on Closing the Gap.[114]

Chapter 4 describes in more detail how governments can use the NSRA to better support the wellbeing, engagement and learning outcomes of the priority equity cohorts identified in the agreement.

Support for children with mental ill-health or complex needs

Several participants called for more mental health professionals and services in schools or more funding for schools to hire more wellbeing staff and leaders.[115] One participant called for more counsellors trained in trauma-informed practice (brief comment C17), another noted that the case load of home liaison officers for students who are disengaged is 'massive' (brief comment C66). A young person consulted by the review pointed to delays in accessing mental health services as a barrier to better student wellbeing:

> One of the significant issues in my school … is the long wait times for psychologist appointments, ranging from a few weeks to months, meaning that students struggling with their wellbeing are not getting the support they need from schools. This issue might be avoided if the psychologist spent more time in school rather than only three days a week.

It was not always clear whether calls from participants for more mental health staff aimed to improve the *learning outcomes* for children who are experiencing poor wellbeing or if they were sought for the purpose of *treating mental ill-health*. The primary purpose of school psychologists, for example, is to assist schools to address barriers to learning, including mental health issues and learning difficulties (APS 2016). However, the high demand for direct services (assessment and treatment) for the most vulnerable students can limit the availability of school psychologists to contribute to more preventative interventions at the whole school level (APS 2016).

Some participants acknowledged the role of the health system in improving wellbeing, at the school and policy level.

- One participant called for more funding of mental and psychosocial services in the community (brief comment C66). And there was a stated need for greater access to specialised services and coordination and cooperation with them (ISA, sub. DR105; Australian Child Rights Taskforce, sub. DR71), including improvements to referral pathways from schools to services (Orygen sub. 13, p. 4; QNMU, sub. 30, p. 3) and the development of care coordinators for children with complex needs (CCCH, sub. 14, p. 5).
- To facilitate access to mental health and community services, the National Children's Commissioner (sub. DR106) recommended that governments pilot the integration or co-location of these services in

[114] Sections 59(b) and 59(e).

[115] Paul Calahan, sub. DR57; David Curtis, sub. DR73; National Children's Commissioner, sub. DR106; QNMU, sub. 30; Beyond Blue, sub. DR88, AEU, sub. DR101.

schools for students and their families. She called for 'cross systems design' (between education and health) so that schools could be a hub for a local community. APPA (sub. DR110) stated that reform should extend beyond schools, and that the fragmented policy approach should be replaced with a coherent joined up system of services for families in need.

Given that poverty contributes to poor wellbeing, the Australian Education Union (sub. DR101) called for a whole of government plan and wraparound model of support to reduce poverty and housing insecurity. On a smaller scale, participants suggested that children in lower socioeconomic areas could be supported with breakfast and lunch programs and homework clubs for safety (National Children's Commissioner, sub. DR106; SA CCYP, sub. DR54). Halsey (sub. DR69) stated that schools should 'embrace outside the school fence contexts and issues'.

However, the Australian Capital Territory Principal's Association (sub. DR89) urged that 'schools just cannot keep taking greater responsibilities on'. The Australian Education Union (sub. DR101) stated that school leaders were frustrated with the high threshold set by community-based services before they respond to requests for support for individual students, and that educators can struggle when they 'find themselves undertaking mental health crisis work and de-facto social work with no training or support'. Independent Schools Australia (sub. DR105) described different roles for the health and education systems:

> Traditionally, the mental health and wellbeing of students was left to the mental health care system, which plays a role in managing mental health once it has progressed to crisis level, rather than prevention and early intervention. It is now recognised schools are ideal places to promote and protect wellbeing and support students with poor mental health if staff have access to the right skills and the capacity and time to act. (ISA, sub. DR105)

And the NSW Secondary Principals Council (sub. DR92) stated that students' wellbeing needs should be addressed by governments strategically and holistically:

> Ongoing failure to provide adequate health and wellbeing supports will result in a continued decline in life and educational outcomes for students in disadvantaged cohorts. Whilst some of these supports are appropriately located within the school gates, such as counsellors/school psychologists and student support officers, there is a clear need to ensure that similar supports are also available within the school community.

Several participants called for greater collaboration across portfolios.[116] Orygen (sub. DR74) described the benefits of a wellbeing framework for schools that incorporates external support options:

> … it allows school leaders and teachers to focus their efforts on education – including the delivery of universal wellbeing programs; and it also ensures they are not required to provide mental health support that far exceeds the scope of their role. Orygen notes that the success of such a framework is dependent upon adequate resourcing and availability of external support options – teachers cannot refer students to professional health and psychosocial supports that do not exist.

The National Mental Health and Suicide Prevention Agreement foreshadows cross portfolio collaboration, stating that Health Ministers will work together with Education Ministers to consider approaches to improve school aged children's social and emotional wellbeing to inform the next school reform agreement (schedule A, s. 2b). Recognising the intersecting and shared responsibilities, Orygen (sub. DR74) suggested governments integrate their responses to improving wellbeing across the agreements, including cooperation

[116] QNMU, sub. 30 p. 3; APC, sub. 8, p. 1; NMHC, sub. 26, p. 6; ARACY, sub. 38, p. 1; Australian Child Rights Taskforce, sub. 40, p. 6, IECM, sub. 52, AHISA, sub. DR94.

across departments to ensure any wellbeing NPI in the next agreement was comprehensive and evidenced-based.

The Commission agrees that Education and Health Ministers need to work together, not just to inform the design of a new agreement but to support ongoing implementation. Governments could use the NSRA to design governance arrangements for cross-portfolio collaboration.

Supporting teachers

There was significant support for providing teachers with training, time and resources to teach social and emotional learning, identify signs of poor wellbeing, support students with mental ill-health, and for multidisciplinary collaboration.[117] Several participants called for strategies to build and strengthen partnerships and engagement between educators and families (NCEC sub. 7, p. 7; CSPA, sub. 24, p. 4; ACSSO, sub. 51; ARACY, sub. DR95).

Beyond Blue (sub. DR88) considered that there was room to improve the wellbeing curriculum in initial teacher education (ITE) programs. ITE and Teacher Performance Assessments (TPAs) undertaken in the final year of ITE courses were seen as ways to improve teacher skills in relation to wellbeing and trauma-informed practice (QATESOL, sub. DR85).

For example, AITSL (pers. comm. 15 July 2022) described two options for implementing actions 5.3 and 5.4 from the *Mental Health* inquiry, which related to ITE. Governments could request AITSL prepare a model outline of a unit on wellbeing for ITE providers to use (and for accreditation panels to use as a resource when they audit ITE providers).[118] Alternatively, or in addition, knowledge expected of graduate teachers in relation to student wellbeing based on the Australian Professional Standards for Teachers could be demonstrated via TPAs.

Chapter 6 discusses options to improve teacher effectiveness more broadly. ITE is only one aspect of training across a teacher's career and TPAs have only recently been introduced by jurisdictions. For early career teachers, better access to quality induction and mentoring may accelerate skill acquisition, including in relation to student wellbeing. Governments have announced their intention to improve ITE quality and induction and mentoring under the National Teacher Workforce Action Plan (finding 6.1).

The Commission is also proposing that governments support teacher effectiveness by establishing a single portal for teachers and school leaders to access evidence-based instructional material (recommendation 6.2). This could curate high-quality, evidence-based resources on teaching the social and emotional learning curriculum and teaching students with social-emotional disability.

Enhancing the evidence-base

Governments continue to announce and pursue new initiatives to support student wellbeing. For example, the Australian Government Minister for Education announced in October 2022 new resources developed to support Year 6 students with the stress associated with the transition to high school (Clare 2022). Some initiatives, such as the Victorian Government's Schools Mental Health Fund and Menu are in the early days of implementation.

Given ongoing developments, governments may wish to focus on evaluating existing programs as part of the next schooling agreement and sharing lessons learnt as implementation progresses. Participants suggested

[117] Beyond Blue, sub. 25, p. 3; Orygen, sub. 13, p. 4; ACSSO, sub. 51; ISA, sub. DR105; National Children's Commissioner, sub. DR106; AAAE, sub. DR104.

[118] For example, see the Sample Initial Teacher Education Program Outlines: Reading Instruction (AITSL 2020d).

improving the evidence base through common evaluations and expediting the translation of evidence into practice (CCCH, sub. 14, p. 5; AERO, sub. DR113).

Recommendation 5.1
Governments should design the next intergovernmental school reform agreement so that it includes a focus on student wellbeing.

Parties to the next school reform agreement should add improved student wellbeing as an outcome of the agreement, develop a new sub-outcome on improving students' subjective wellbeing, and commit to annual reporting.

- Governments should collect data for a composite wellbeing index but provide schools and data providers the flexibility to choose from a range of high-quality and relevant survey instruments, including those used in existing student surveys.

Bilateral agreements under the next school reform agreement should include actions intended to improve student wellbeing, and report each year on progress. At a minimum, bilateral agreements should include actions to support all schools to adopt wellbeing strategies that:

- provide support and training for teachers to identify students experiencing poor wellbeing and to respond appropriately
- articulate the role and responsibilities of wellbeing staff within the school
- clarify student pathways for support, both within and beyond the school.

6. Supporting teacher effectiveness

Key points

Teachers act as mentors, experts and role models for future generations.

- An effective teacher — a teacher with the right personal qualities using sound teaching practices — can lift student outcomes more than any other in-school factor. Improving teacher effectiveness provides substantial benefits for students and society more broadly.
- Teacher effectiveness and teacher shortages are interconnected. Policies that target teacher shortages will likely affect teacher effectiveness, and vice versa.

There are many ways to enhance the effectiveness of new and established teachers. Governments are developing initiatives in areas such as Initial Teacher Education (ITE), induction and mentoring for early career teachers, and professional development.

- The quality of ITE candidates matters, but screening candidates using test scores (for example, by ATAR) is unlikely to improve teacher effectiveness. Improving the quality of ITE would be more effective.
- Early career induction and mentoring is essential for new teachers but access, quality and delivery is uneven. Better access to quality induction and mentoring is likely to accelerate skill acquisition and increase retention when teachers start in the classroom.
- Quality on-the-job learning, including from more experienced colleagues, can lead to ongoing improvement throughout teachers' careers, but it relies on teachers having sufficient time.

Highly effective teachers can promote the diffusion of best practice teaching across the workforce.

- But progress in developing a recognised cohort of highly effective teachers has been slow, prompting governments to announce the expansion of the Highly Accomplished and Lead Teachers program.
- The potential benefits of this approach will not be fully realised unless highly effective teachers have the opportunity, time and resources to share their in-depth knowledge and skills with their colleagues to help them improve. Each state and territory should report in their bilateral agreement their actions to support expert teachers to disseminate evidence-based teaching practices.

Many teachers are creating lesson materials from scratch and using online sources that are accessible but difficult to quality-assure.

- Governments should develop an accessible, trusted national portal for high-quality curriculum resources for school leaders and teachers. A national curriculum bank would cut teacher workload and support quality teaching. This could form the basis of a national policy initiative under the next intergovernmental agreement.

Teachers are the most important in-school factor driving student achievement, attainment, engagement and wellbeing (AERO, sub. 6, pp. 4–5; AITSL, sub. 27, p. 6; Victorian Government, sub. 31, p. 6). Consequently, all jurisdictions have implemented reforms to enhance the effectiveness of teachers.

Many of these policies have focused on the individual teacher — be it attracting and retaining individuals with characteristics associated with high quality; requiring teachers to undergo professional development; or providing guidance on classroom practice. But many other factors influence teacher effectiveness. Extrinsic factors, such as teacher shortages, which result in out-of-field teaching, can reduce the ability of teachers to lift student outcomes.

The National School Reform Agreement (NSRA) recognised the importance of supporting teacher effectiveness through the reform direction 'supporting teaching, school leadership and school improvement'. This included a national policy initiative to strengthen the Initial Teacher Education (ITE) accreditation system, which ensured that all accredited ITE programs require their students to undergo a Teaching Performance Assessment (TPA) (chapter 3).

Recent government efforts have also focused on ITE. The Quality Initial Teacher Education Review (QITE Review) was completed in 2022 (DoE 2022d).[119] Many of the actions under the National Teacher Workforce Action Plan (NTWAP) agreed by Ministers in December 2022 will also have implications for teacher effectiveness. This includes commitments to strengthening ITE, supporting induction and mentoring, and improved access to professional development (EMM 2022d, pp. 5–6).

This chapter discusses how the next intergovernmental agreement on schools provides an opportunity to complement commitments under the NTWAP with a focus on promoting disseminating best practice and helping teachers access evidence-based instructional material.

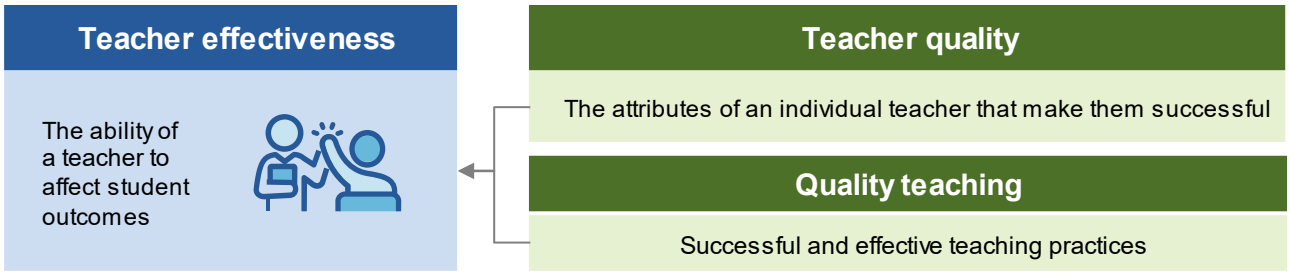
Section 6.1 highlights the important role teachers play in society. Section 6.2 discusses policies that can support teachers' effectiveness across their career including preparing teacher graduates during ITE, helping graduates adjust to the classroom, and fostering and drawing on teacher expertise to improve teaching practices. The chapter concludes by exploring the information gaps that remain at the classroom-level. Teacher shortages are discussed in chapter 7.

6.1 Teacher effectiveness — what is it, what drives it and why does it matter?

Put simply, 'teacher effectiveness' refers to the ability of a teacher to affect student outcomes including achievement, engagement, attainment or wellbeing (figure 6.1). Effectiveness can be measured in the additional learning gains that students achieve from being taught by a certain teacher. Teacher effectiveness is a combination of both 'teacher quality' and 'quality teaching'. Teacher quality refers to the attributes of an individual teacher that makes them successful, while quality teaching refers to effective teaching practices (Belsito 2016, p. 28).

[119] The Teacher Education Expert Panel is considering the findings of the QITE Review and will recommend ways to broadly ensure graduating teachers are better prepared for the classroom (EMM 2022d, p. 5).

Figure 6.1 – Teacher effectiveness is a combination of teacher quality and quality teaching



Sources: Adapted from Belsito (2016, pp. 28–35); Naylor and Sayed (2014, pp. 3–4).

Teacher effectiveness is the most important in-school factor driving students' outcomes

Student outcomes are driven by a range of factors both inside and outside the school, with teachers representing the most important in-school factor (AERO, sub. 6, pp. 4–5; AITSL, sub. 27, p. 6; Victorian Government, sub. 31, p. 6). Evidence suggests that teachers account for between 30 to 40 per cent of the variation in student learning gain (Hattie 2003, p. 2; Ingvarson and Rowe 2008, p. 8) — no other in-school factor has a greater effect on student achievement (Hanushek 2011, p. 467).

Teacher effectiveness is affected by a range of factors

The factors that drive teacher effectiveness vary and can affect either 'quality teaching' and/or 'teacher quality' (figure 6.2).

Understanding the different drivers is important for policy development. For example, the Australian Education Research Organisation (AERO) (sub. 6, p. 5) noted that high-performing school systems, such as Singapore, South Korea and Finland, target both teacher quality and quality teaching in their recruitment and system strategies.

The factors that affect teacher effectiveness fall into three categories — professional development, the school environment and government policy (Naylor and Sayed 2014, pp. 9–20).

- Professional development captures effective pre-service education and ongoing development that improves teacher effectiveness.
- The school environment captures school-level factors that can affect teacher classroom practices.
- Government policy captures how teacher effectiveness can be influenced by policy levers.

Evidence on which driver has the greatest effect on teacher effectiveness is contested. For example, measurable teacher characteristics such as experience, qualifications and test scores can sometimes explain little of the variation in student achievement (Burgess 2016, pp. 31–33; Rivkin, Hanushek and Kain 2005, p. 420).

Figure 6.2 – Drivers affecting teacher quality, quality teaching, or both

Category	Drivers	Effect
Professional development	**Initial teacher education** – preparing teachers for teaching can improve teacher effectiveness.	Quality teaching
	Personal attributes – evidence is mixed on what personal qualities enhance teaching. While each teacher is unique, some studies suggest that successful personal qualities could include motivation, organisation and tolerance, or a teacher's ability to be warm, social and enthusiastic towards students.	Teacher quality
	Teacher professional development – evidence is mixed on whether professional development affects student achievement and depends on what kind of training is on offer, its quality, intensity, duration and context.	Teacher quality
School environment	**Teacher instructional and preparation time** – instructional time and time to prepare for lessons have been shown to be important for teacher effectiveness.	Quality teaching
	School-based management and community involvement – community involvement in schooling can positively affect teacher effectiveness. School leadership practices (such as hiring and deploying teachers) can similarly influence teacher effectiveness.	Teacher quality and quality teaching
	Classroom pedagogy and the national curriculum – can help improve teaching practices when teachers have time to implement changes.	Quality teaching
	Teacher workload and resources – increased teacher workloads can reduce the quality of teaching, particularly where additional workload diverts teachers from high-value tasks.	Quality teaching
Government policy	**Teacher qualifications** – evidence suggests teacher qualifications are not a great predictor of student achievement. More broadly, there is a trade-off between setting teacher qualifications at a high enough level to ensure reasonable teacher quality, and teacher supply issues.	Teacher quality
	Teacher salaries – on balance, evidence suggests that teacher salaries can improve teaching quality by making teachers more motivated. However, the evidence is mixed on the magnitude of this effect and it can be context-specific, making it difficult to generalise.	Quality teaching
	Teacher recruitment – recruiting the right people to become teachers and ensuring the workforce is sufficiently diverse.	Teacher quality
	Teacher accountability – monitoring and evaluating teachers can reduce absenteeism and ensure teachers are correctly applying their knowledge in the classroom.	Quality teaching
	Teacher shortages – shortages can impact teacher effectiveness through teaching out-of-field or higher workloads.	Teacher quality and quality teaching

Sources: Adapted from Belsito (2016, pp. 28–32); Fahey (2022, p. 26,36); Hunter and Sonnemann (2022, p. 7); Naylor and Sayed (2014, pp. 9–19); Santiago (2002, pp. 20–21).

There is significant variation in teacher effectiveness

Reflecting the wide variety of factors that influence teacher effectiveness and the sheer number of teachers, there is a wide variation between the student learning gains attributed to an effective teacher and to a less effective teacher (Leigh 2010, p. 487; Rivkin, Hanushek and Kain 2005, p. 419) (box 6.1).

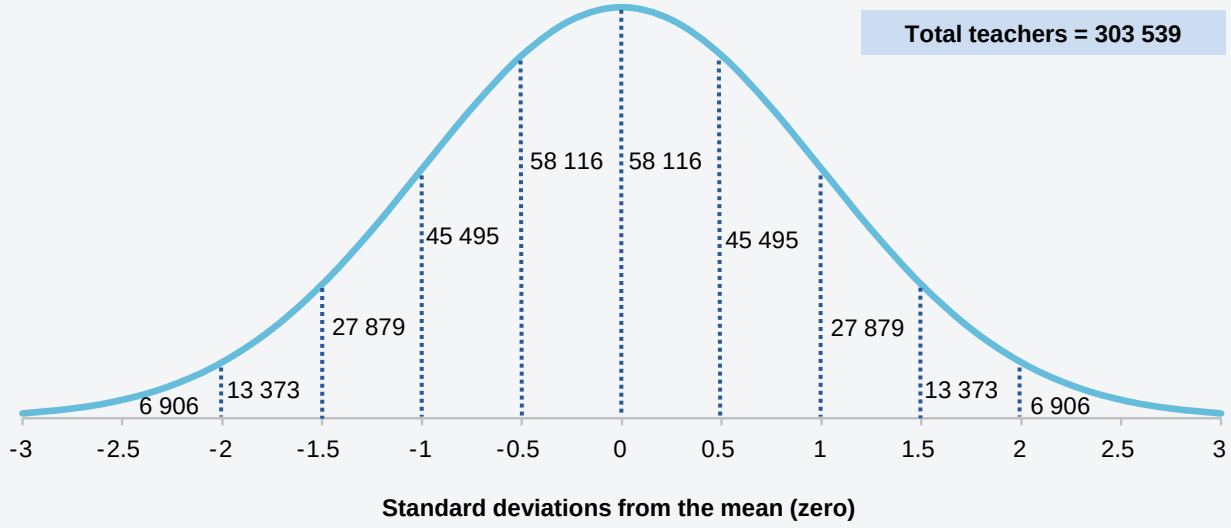
Box 6.1 Estimating teacher effectiveness in Australia

Teacher effectiveness can be measured as the additional learning gains that students achieve from having a certain teacher.[120]

In academic studies, teacher effectiveness is often compared with 'standard deviations' from the mean, where the mean learning gain attributed to a teacher is standardised to zero (appendix D). The figure below shows a stylised example for the Australian teacher workforce; plotted as a normal distribution of teacher effectiveness. For example, there were about 300 000 teaching staff in 2021 – about 50 000 of those teachers would be one standard deviation or more above the average teacher effectiveness.

Number of teachers, distributed by 'assumed' teacher effectiveness[a]

Normal distribution of teacher effectiveness, mean standardised to zero



a. Teachers are assumed to be distributed across a normal distribution according to their ability to affect student outcomes, with the mean teacher effectiveness standardised to zero.

Source: ACARA (2022).

Given its importance and variability, efforts to improve teacher effectiveness can provide significant benefits for students (AERO, sub. 6, pp. 11–12; Victorian Government, sub. 31, p. 11). International evidence suggests that moving a teacher at the 25th percentile to one at the 75th percentile of performers — no small feat — can increase learning gain by 3.7 and 3.8 months for an average student in primary school mathematics and reading in a given year (Grissom, Egalite and Lindsay 2021, p. 40).

[120] These studies can be subject to selection bias from two factors (Rivkin, Hanushek and Kain 2005, p. 424). First, families will generally choose the neighbourhood and schools their children attend. Second, principals and administrators will allocate students to classrooms. Without accurate information about how these decisions are made, estimations of student achievement could be biased. Even so, the breadth of evidence about teacher effectiveness is large and robust; and these factors do not change the underlying point that teachers are the most important in-school factor.

Similarly, an Australian study, which examined years 3 to 7 students, found that moving teachers from the 25th to the 75th percentile could:

- increase learning gains by about one term of school for an average student in a given year
- close the average learning gap experienced by Aboriginal and Torres Strait Islander students in five years (Leigh 2010, p. 485).

The economic benefits of improving teacher effectiveness can be large

While it is generally recognised that teachers are the most important in-school factor driving student outcomes, the economic value that a teacher provides to society beyond student achievement is less understood. The Australian Institute for Teacher and School Leadership (AITSL) pointed to the importance of understanding and valuing the contribution of educators: '… [the] public reputation of the teaching profession must be increased so that the societal contribution of educators is valued and understood…' (sub. 27, p. 13). Most policy assessments of teacher effectiveness only examine how inputs might affect student achievement, but not the economic value of improving teacher effectiveness (Hanushek 2011, p. 466).

Improved student outcomes can provide substantial personal, economic and social benefits (PC 2012a, p. 39).[121] A study conducted by Hanushek (2011) estimated the marginal private economic benefit to students of improving teacher effectiveness. The study focused on how improved educational outcomes from a teacher could increase a student's net present value of lifetime earnings.

The Commission replicated Hanushek's (2011) analysis for Australia using ABS income data (figure 6.3).

The Commission found that a highly effective teacher who is one standard deviation above the average teacher, instructing a classroom of 15 students, could increase the average *lifetime earnings* of the classroom by about $530 000 in a given year; or about $35 000 per student (appendix D). This means that each year a student has a teacher one standard deviation above the average, their average lifetime earnings could increase by $35 000.

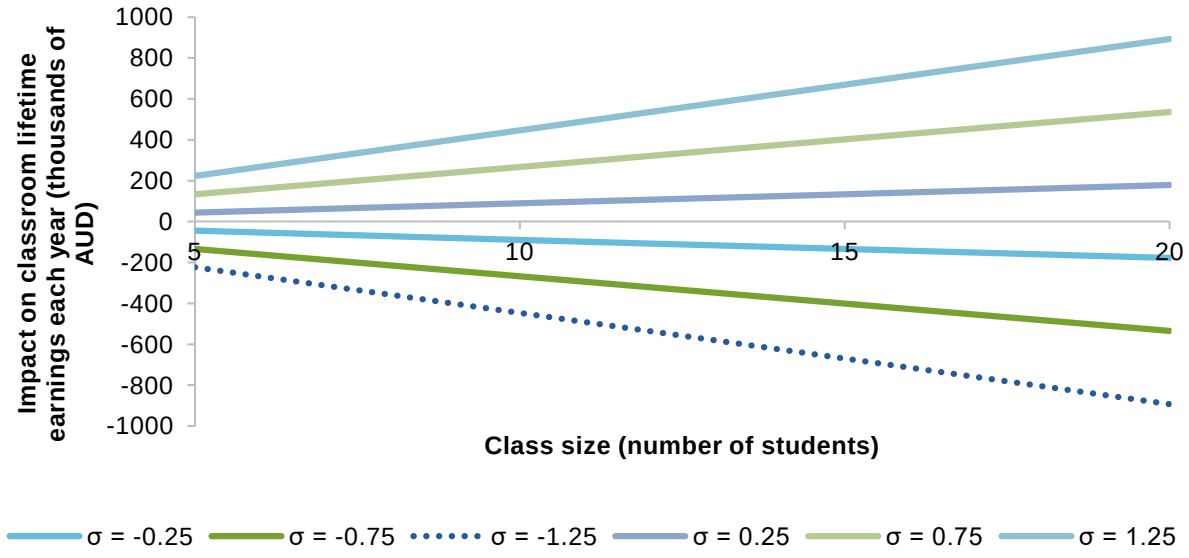
The classroom lifetime earnings effect increases with both class size[122] and teacher effectiveness (σ). Similar results are obtained for principals: although the net learning gain per student — and therefore the increase in lifetime earnings — is lower, effective principals benefit more students at once (chapter 8).

While an effective teacher can improve student lifetime earnings compared with the average, having a less effective teacher can reduce student lifetime earnings compared with the average. Further, the effects on student lifetime earnings are cumulative: students that have an effective teacher one year followed by an equally less effective teacher the next year will experience no net gains (Hanushek 2011, p. 473).

[121] More effective teachers can mean a higher educated society, which can provide positive externalities to the economy (Hanushek 2011, pp. 472–473; Heckman and Masterov 2007, p. 35). Education also plays an integral role in human capital formation, and improving future labour productivity and economic growth (Belsito 2016, pp. 28–29) (chapter 2).
[122] The study assumes a linear relationship with class size and classroom lifetime earnings. However, if class sizes got very large you would expect teacher effectiveness to decline at a certain point, and the effect on per student lifetime earnings to become smaller. This analysis does not consider the costs of improving teacher effectiveness.

Figure 6.3 – The economic value of improved teacher effectiveness can be large, and scales in class size[a]

Marginal private economic value of teacher effectiveness each year, by class size



a. Teacher effectiveness (σ) is measured as standard deviations above (positive) and below (negative) the mean. Marginal private annual economic value is given by $\boldsymbol{MEV = \delta * \sigma_T * (1 - \theta) * \phi * n * Y}$, where the teacher fixed effect is $\boldsymbol{\delta}$; standard deviation of teacher effectiveness $\boldsymbol{\sigma_T = 0.2}$; prior learning depreciation $\boldsymbol{\theta = 0.3}$; skills premium $\boldsymbol{\phi = 0.13}$; class size $\boldsymbol{n}$ – variable; lifetime earnings $\boldsymbol{Y = \$1.96\ million}$.

Sources: Commission estimates based on ABS (Personal Income in Australia, December 2021, table 4) and Hanushek (2011).

6.2 Supporting teacher effectiveness across a teacher's career

Options for supporting teacher effectiveness vary across the course of a teacher's career (figure 6.4).

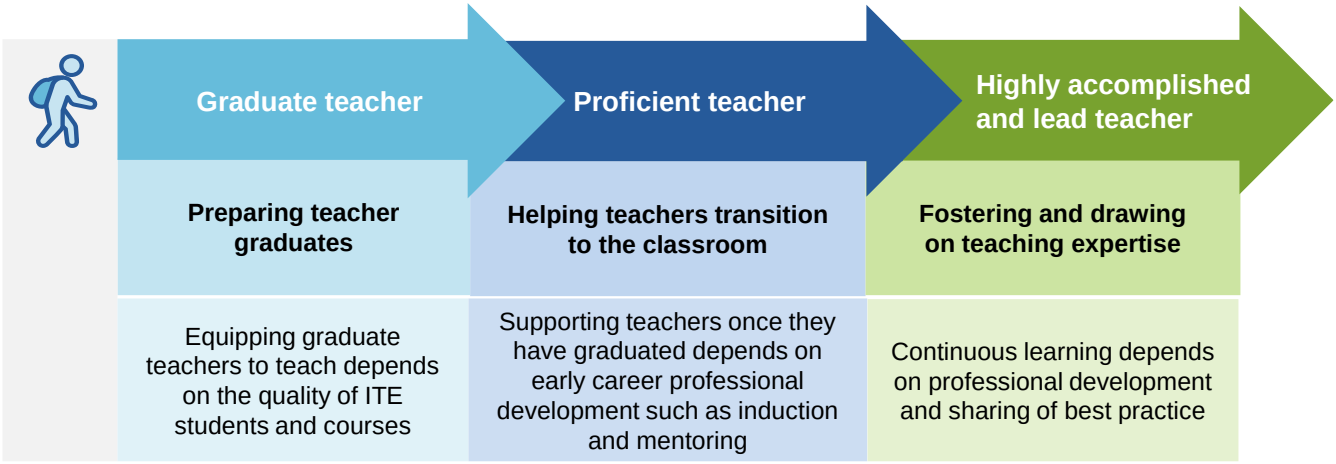
A teacher's career can progress through four key stages. These career stages reflect how their role and capabilities develop over time (Richter et al. 2011, p. 117).

- ***Graduate teachers*** who have completed an accredited ITE qualification.
- ***Proficient teachers*** who typically have two years of experience working in classrooms.
- ***Highly accomplished teachers*** who are highly effective and skilled classroom practitioners.
- ***Lead teachers*** who are skilled in mentoring teachers and pre-service teachers (AITSL 2016, 2022d).[123]

Preparing graduate teachers to teach depends on the quality of ITE candidates and courses, while induction and mentoring can help them to succeed in the classroom once they have graduated. Fostering and drawing on teaching expertise once teachers are proficient depends on continuous professional development and sharing best practice.

[123] Highly accomplished and lead teachers are typically considered together.

Figure 6.4 – Supporting teacher effectiveness depends on their career stage



Sources: Adapted from AITSL (2016, 2022d) and Richter et al. (2011, pp. 117–118).

Preparing prospective teachers

ITE ensures that graduate teachers are set up for success in their careers and is an ongoing source of policy focus. In what has been described as '101 damnations', there have been 101 government inquiries of one sort or another into Australian teacher education from 1979 to 2008 (Louden 2008); excluding recent reviews in 2015 and 2021.

Despite this ongoing focus, some contend that the multitude of inquiries have had surprisingly little impact, and policy debates continue on two fronts — are we selecting the 'right' people into ITE, and do ITE programs teach the skills necessary for graduate students to be classroom ready (Paul 2021a, p. 5).

Is the quality of ITE candidates a concern?

Some participants have expressed concerns that the quality of ITE entrants has fallen over recent years. AERO (sub. 6, p. 12) noted that the number of students aged 20 and under with an Australian Tertiary Admission Rank (ATAR) of 80 or more choosing teaching declined by a third between 2006 and 2019. And the Grattan Institute (sub. 5, p. 9) observed that teaching has become less attractive for high achievers from regional and low socioeconomic areas.

Prompted by these concerns, discussions have focused on how to attract 'the best and brightest' to teaching, and in particular, how to attract school-leavers with high ATARs (Grattan Institute, sub. 5, p. 15; AERO, sub. 6, p. 12; AEU sub. DR101, p. 15).

However, lower ATARs do not necessarily mean the quality of ITE candidates has fallen. Evidence suggests that test scores are not a strong predictor of teacher effectiveness (Fahey 2022, p. 30; Hanushek 2011, p. 468).[124] As one Australian study that explored the links between ATARs and ITE performance concluded, while entry ATAR is moderately correlated with academic success, '[t]here is no clear relationship between entry ATAR and ratings of performance on placement by associate teachers' and 'other significant factors like personal motivation, maturation, and the effects of study, make academic achievement in secondary school of varying reliability as a predictor' (Wright 2015, p. 11).

[124] One participant noted that the focus on ATARs may be misleading more generally: '[o]ur school system is geared to ATAR outcomes even if these are not sufficient indicators of a young person's potential to excel in further learning or work' (Learning Creates Australia, sub. 35, p. 2).

Outside of lower ATARs, there is little to suggest the quality of ITE candidates has fallen. Survey evidence suggested that 87 per cent of ITE graduate employers were satisfied with graduates' performance in 2017 (AITSL 2019a).

Not only are test scores not a strong predictor of teacher effectiveness, requiring minimum ATARs for prospective teachers can give rise to unintended consequences, resulting in potentially effective teachers being excluded from ITE courses; with flow on effects for teacher shortages (chapter 7).[125] This could be particularly problematic if entry requirements close off options for high-quality candidates from diverse backgrounds, such as Aboriginal and Torres Strait Islander students.

Finally, ATARs are becoming less relevant as a screening tool given the changing characteristics of the student body entering tertiary study. Fewer than one in five students entered ITE on the basis of their ATAR in 2016 (Goss and Sonnemann 2019, p. 14). The common entry points into ITE are through an undergraduate degree — either via a student's ATAR or by transferring across from another university course — or a postgraduate degree, which typically does not require an ATAR (Goss and Sonnemann 2019, p. 12).

A second, and closely related concern, goes to whether ITE students are well suited to teaching, with some participants pointing to falling ITE completion rates as evidence of a mismatch.

There is a case for seeking to ensure that students entering ITE have the aptitude to complete their studies and to succeed as a teacher (PC 2021b, p. 2). Finding out later that a person is ill-suited to teaching can be costly:

> [t]his can lead to four potential failings — they withdraw during their studies, fail courses, do not get a job in an occupation that uses their skills, or they get such a job, but are not proficient at it. None of these are desirable outcomes — they waste resources, create student debts and fiscal costs for the Australian Government, and at their worst, could lead to someone notionally qualified as a teacher, but without the full skill set or sufficient interest in their career. (PC 2021b, pp. 2–3)

However, falling completion rates are not unique to ITE, or solely attributable to poor quality or ill-suited candidates. The overwhelming majority of variation in university student attrition rates reflects unexplained individual factors that are not recorded in the data (PC 2017b, p. 22).[126] Of the observable characteristics, research suggests that age and part-time attendance are among the strongest predictors of student attrition (PC 2017b, p. 20). ATAR deciles, for example, only explain about 2 to 4 per cent of the variation in student attrition from university courses (PC 2017b, p. 21).

Australia already has selective processes for screening ITE candidates

While there can be gains from using high-quality screening tools, it is likely that further improvements will only result in marginal improvements in the quality of ITE candidates. Evidence suggests that Australia is already selective about who becomes a teacher. As Fahey observed:

> [w]hile it's true there remain a relatively high number of low- and no-ATAR entrants to ITE degrees (as there has been since higher education statistics were first collected), there's no evidence that Australian teachers are at a relatively low academic standard (in terms of relative standing with other Australian adults) … [c]ompared to other OECD countries, Australian teachers are sourced from a relatively high proportion of the adult population in terms of their literacy and numeracy capabilities. (2022, p. 30)

[125] For example, while the aim of more stringent requirements may be to improve teacher effectiveness, this may lead to less people coming into the teacher pipeline, potentially exacerbating teacher shortages.

[126] For example, these factors could include the motivation of a student, their financial security and personal or health-related factors (PC 2017b, p. 22).

In response to a recommendation from the Teacher Education Ministerial Advisory Group (TEMAG), higher education providers introduced more sophisticated measures to ensure ITE students possess the required academic skills and personal characteristics to become a successful teacher[127] — this included assessments of non-academic skills, such as personal statements, and interviews (Paul 2021a, p. 25). This is in addition to specific academic entry requirements that apply in some jurisdictions, such as Queensland, New South Wales and Victoria (Paul 2021a, p. 25).

In addition to entry requirements, as of 2016, the Accreditation of Initial Teacher Education Programs in Australia: Standards and Procedures (ITE Standards) require ITE students to have passed the Literacy and Numeracy Test for Initial Teacher Education (LANTITE) before graduation. The LANTITE aims to ensure ITE students achieve literacy and numeracy scores equivalent to the top 30 per cent of the Australian adult population (Paul 2021a, p. 51). Currently, some ITE providers require candidates to sit the LANTITE as part of their course entry requirements, while others conduct the LANTITE during the ITE program.

In December 2022, Education Ministers announced that all ITE students would undergo an initial assessment of their literacy and numeracy skills (through the LANTITE) in their first year to ensure they can receive targeted support if needed (EMM 2022d, p. 17). Combining earlier requirements with targeted support ameliorates some of the risk that entry requirements close off options for high-quality candidates from diverse backgrounds (Paul 2021a, p. 63), and so is preferred to strict ATAR thresholds.

This approach could be implemented in conjunction with ITE courses that encourage students to undertake their first practicum as early as possible, to help students better understand their aptitude for teaching (Paul 2021a, p. 61).[128]

Is the quality of ITE courses a concern?

Some evidence suggests that it is the quality of the ITE course, rather than the quality of the ITE candidate, that has the larger impact on teacher effectiveness (Fahey 2022, p. 37). Governments can devote time and funding to attracting the 'best and brightest' into ITE, but they might achieve better results by improving the quality of ITE for all prospective teachers. High-quality ITE systems are important for ensuring teacher graduates are equipped with the skills and teaching practices they need to succeed in the classroom. Better delivery of ITE could also improve teacher retention (AEU, sub. 36, p. 39).

ITE programs must pass the ITE Standards. One of the accreditation requirements is to map where in the program the Graduate Teacher Standards are taught, practised and assessed. This enables ITE providers to prepare pre-service teachers to meet the needs of all students, including those from priority equity cohorts (AITSL, sub. DR93, p. 11). These capabilities extend to, but are not limited to, students with disabilities and diverse linguistic cultural and socioeconomic backgrounds (AITSL, sub. DR93, p. 11). There is also a specific focus on understanding the impact of culture, cultural identity, and linguistic background of Aboriginal and Torres Strait Islander students (AITSL, sub. DR93, p. 11).

[127] The ITE Standards also require ITE providers to apply selection criteria for all entrants into ITE, assessing both academic and non-academic skills (Paul 2021a, p. 25).

[128] The Commission noted in its examination of the higher education system:'[a]n efficient system should also assist those students … to exit swiftly, mitigating the costs associated with university fees, forgone earnings … and delayed options to acquire skills through other, more suitable forms of education and training' (PC 2019b, p. 47). Further, other options can include allocating funding for ITE short courses so students can explore the prospect of teaching without committing to a full degree (Paul 2021a, p. 62).

Notwithstanding common ITE Standards, there are still concerns about variation in the quality of ITE courses. Most recently, the QITE Review recommended that the ITE Standards be amended to ensure ITE graduates are taught sufficient evidence-based practices, with particular attention to:

- teaching reading, including phonemic awareness and phonics as an essential element of the teaching of reading in the early years
- classroom management
- cultural responsiveness
- supporting diverse learners and students with disability
- working with families/carers (2021a, p. 48).

Review participants also underscored improving ITE to better equip teaching graduates with the skills and practices they need to teach students from a priority equity cohort.[129] Participants representing the needs of students with disability and Aboriginal and Torres Strait Islander students observed:

> [w]ith increasing numbers of students with disability attending their local school it is time to review the content of 'inclusion' units of study in Initial Teacher Training programs and of Post- Graduate Special Education/and or Inclusion programs to ensure that pre-service and specialist teachers are receiving adequate training in special education teaching practices that will lead to positive student outcomes. (AASE NSW, sub. 20, p. 5)[130]

> [IECM] recognise the importance of quality teaching; including the ability to see Aboriginal and Torres Strait Islander students as whole people and support their learning needs in a culturally responsive manner, based on high expectations approaches free from deficit discourse. This requires ongoing support of teachers as professionals to continually develop their capability in Indigenous education, both through improved Initial Teacher Education (ITE) and access to (and expectation of completing) effective and culturally appropriate ongoing professional development. (IECM, sub. 52, p. 3)

AITSL has also noted:

> [i]n several tertiary institutions, Aboriginal and Torres Strait Islander Studies is not a mandatory area of study in ITE programs. In institutions that do offer Aboriginal and Torres Strait Islander Studies, the base requirement is limited across the whole ITE program and does not adequately meet the students' needs. (2020b, p. 28)

As highlighted in the NTWAP, the Teacher Education Expert Panel is considering the findings of the QITE Review and will recommend ways to broadly ensure graduating teachers are better prepared for the classroom (EMM 2022d, p. 14). Areas of focus will include improving the quality of professional experience placements in teaching (box 6.2) and strengthening ITE programs to deliver classroom ready teachers, 'with particular attention to teaching reading, literacy and numeracy, classroom management, cultural responsiveness, teaching students with diverse needs and working with families/carers' (EMM 2022d, p. 14).

[129] AASE NSW, sub. 20, p. 5; IECM, sub. 52, p. 3; InSpEd, sub. DR98, p. 2; QATESOL, sub. DR85, p. 8.

[130] The Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability found that 'educators do not always understand disability or know how to support students with disability' (Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability 2021b, p. 2).

Box 6.2 – Professional experience placements can help prepare pre-service teachers

Pre-service teachers gain experience in classrooms during Initial Teacher Education (ITE) placements or practicums. This allows pre-service teachers to teach under the supervision of a mentor teacher, practise what they are learning in their courses, and test their compatibility with the profession (PC 2012a, p. 129).

Research has found that practicums can have a significant effect on quality teaching.[131] However, the conditions under which they are undertaken are important: the timing, length and support during practicums can have mitigating effects (Fahey 2022, p. 32; PC 2012a, pp. 133–134).

There are concerns about the consistency of access to practicums. Many pre-service teachers report a lack of opportunities to practise teaching in Australia, particularly in a greater range of school settings (Fahey 2022, p. 33). InSpEd noted 'the lack of practicum experience attached to some courses' in special and inclusive education (sub. DR98, p. 4).

Access to practicums can be dependent on the coordination between universities, who organise ITE courses, and schools, who host practicums.[132] In recent years, formal university-school partnerships have been utilised to strengthen the links between universities and schools, with most jurisdictions promoting partnerships between schools and providers (Paul 2021a, p. 64; PC 2012a, p. 135).[133]

Finally, ITE is only one aspect of training across a teacher's career (figure 6.4), and only targets a small component of the workforce. This leads to a time lag: it will take many years for improvements to ITE to improve teacher effectiveness among the whole teacher workforce. There is also a limit to how much can be covered in ITE (APPA, sub. DR110, p. 5). Induction and mentoring, and professional development (with particular attention to fostering school-university partnerships) to improve the quality of teaching across the whole workforce provide additional opportunities to ensure teachers are classroom ready.[134]

Are there grounds for revisiting new requirements for Teaching Performance Assessments?

One option raised to improve the quality of ITE was to create minimum standards for Teaching Performance Assessments (TPAs) (AITSL, sub. 27, p. 12; CIS, sub. 43, p. 45; Paul 2022, p. 60).

TPAs help improve the classroom readiness of pre-service teachers by assessing core teacher capabilities and are administered by ITE providers to their students in their final year of study. TPAs are approved by the teacher regulatory authorities (TRAs) in each state and territory, and so can vary across ITE providers and states and territories. There is also an Expert Advisory Group (EAG) that advises ITE providers and TRAs on TPA design, but the authority to approve or reject TPAs ultimately lies with the TRAs. As of 2021, all ITE programs have now implemented a TPA endorsed by the EAG (AITSL, sub. DR93, p. 10).

[131] One international study found that first-year teachers who taught with a highly-effective mentor teacher in math were just as effective as third-year teachers with an average mentor (Goldhaber, Krieg and Theobald 2020, p. 11).
[132] Issues can include few clear incentives for schools to host practicums due to perceptions of increased workload and uncertainty around their capability to host ITE placements (Fahey 2022, p. 33).
[133] Such partnerships can have the further benefit of strengthening ITE course content and delivery through feedback loops between classroom teachers and higher education providers (Paul 2021a, p. 66). However, the Commission previously noted such partnerships can be costly, which needs to be considered (PC 2012a, p. 136).
[134] AAMT, sub. DR80, p. 1; APPA, sub. DR110, p. 5; C4IE, sub. DR99, p. 8; NCEC sub. DR87, p. 4.

In the Interim Report, the Commission asked for feedback on whether TPAs should meet a national minimum standard, and whether TPAs ensure pre-service teachers are classroom ready and able to respond to the needs of students from priority equity cohorts.

Some review participants believed a minimum standard was required because the quality and consistency of TPA implementation is mixed (AITSL, sub DR93, p. 10; AEU sub. DR101, p. 15). This was based on the premise that there was 'no requirement for periodic re-endorsement, no conditions for continuing approval and critically, no evidence that all TPAs meet a minimum common standard' (AITSL, sub. 27, p. 11).[135] The QITE Review also recommended*:*

> … strengthening the TPAs by setting up a board with authority to approve TPAs and undertake national standard-setting, moderation and comparability. Higher education providers should only be allowed three attempts at a TPA. The two most widely used TPAs should be funded to support their efforts. (2021a, p. iv)

In contrast, other participants believed a minimum standard was not required because TPAs had already been moderated and endorsed by the EAG (AAAE, sub. DR104, p. 12), and that simply tweaking TPAs is unlikely to have a large impact on teacher effectiveness and teacher preparedness (Halsey sub. DR69, pp. 2–3; QATESOL, sub. DR85, p. 8). Further, the Teachers and Teaching Resource Centre, University of Newcastle noted that:

> Teaching Performance Assessment (TPA) arrangements are relatively new in Australia and yet to be adequately tested. We caution against adopting a single national TPA until institutions/consortia and independent assessors have gathered rigorous evidence of their reliability and validity. (sub. DR84, p. 8)

In response to queries as to whether TPAs ensure teachers are well suited to respond to the needs of students from priority equity cohorts, participants noted that only so much can be tested in a TPA which is only one part of ITE (AITSL, sub. DR93, p. 10; APPA, sub. DR110, p. 5), and that other areas of an ITE program, such as course content,[136] should test a student's ability to respond to diverse needs (AAAE, sub. DR104, p. 12).

On balance, the Commission considers that, while ITE providers and states and territories adopt different approaches to TPAs, there are moderation processes and it is too early for clear evidence to emerge of significant problems. Governments could review the program in three years to determine whether TPAs are improving the classroom readiness of pre-service teachers, and whether there is significant variation in their quality.

[135] The NTWAP (EMM 2022d, p. 14) included an action for the Teacher Education Expert Panel to review, among other things, 'strengthening the link between performance and funding of ITE including looking at quality measures such as teaching performance assessments'.

[136] According to the ITE Standards.

Helping new teachers succeed in the classroom

As widely recognised by participants in this review, once teachers graduate and enter the classroom, induction and mentoring is key, particularly during the first three to five years of their career.[137] Access to these supports can improve teaching quality and help new teachers to stay in the workforce.

- Pre-service teachers who undertake induction processes typically have higher levels of satisfaction, commitment, and perform better in certain aspects of teaching (such as keeping students on task and successfully managing a classroom) (PC 2012a, pp. 130–131).[138]
- Providing effective support for teachers in their first few years of teaching has the potential to increase retention rates (Paul 2021a, p. 77). This is when teachers leaving the profession is of particular concern (chapter 7) (AITSL 2021b, p. 20).

The supports provided to new teachers varies but can include:

- mentoring from an experienced teacher, including to provide observation, reflection and feedback on practice
- opportunities to observe classes
- broad-based and tailored (such as subject specialisation) professional development
- learning from colleagues sharing their in-depth knowledge and skills
- wellbeing supports, such as through contact with leadership or colleagues (AITSL 2016, p. 8; Paul 2021a, p. 79; PC 2012a, p. 129).

In some cases, these induction and mentoring opportunities are facilitated by a reduced workload (PC 2012a, p. 129).

There are concerns about consistency of access, quality and comprehensiveness

However, as noted by the QITE Review, and echoed by participants in this review, 'there is no standardised or formal national approach to the delivery of induction or mentoring' (Paul 2021a, p. 77). As a result, there can be significant variation in the support graduate teachers are offered across schools and jurisdictions (Paul 2021a, p. 77; PC 2012a, p. 129). This variation plays out in two main ways.

The first relates to inconsistency of access to induction and mentoring programs (AEU, sub. DR101, p. 15; CRESI, sub. DR63, p. 2). Australia has relatively high use of mentoring for teachers by OECD standards (Fahey 2022, p. 32). Nonetheless, a survey suggests that more than one-third of early career teachers did not receive induction training and mentoring (AITSL 2021a, p. 149). This can be especially true for teachers employed on a short- or part-time basis, who may be ineligible for early career support (AAAE, sub. DR104, p. 12).

The second relates to inconsistency in the quality of induction and mentoring programs (ACTPA, sub. 89, p. 5; IEUA, sub. DR78, p. 6; P&C Federation NSW, sub. DR97, pp. 4–5). For example, the ACTPA commented that 'the quality of induction and mentoring of teachers seems to be heavily dependent on 'luck'' (sub. DR89,

[137] AAMT, sub. DR80, p. 1; AEU, sub. DR101, p. 15; AITSL, sub. DR93, p. 13; Beyond Blue, sub. DR88, p. 6; NCEC, sub. DR87, p. 8; P&C Federation NSW, sub. DR97, p. 4-5; Teachers and Teaching Resource Centre, University of Newcastle, sub. DR84, pp. 6.

[138] However, the Commission also noted that the relationship between induction programs and teacher effectiveness was less clear in an Australian context, recommending more research to better understand what forms of induction are most cost-effective (PC 2012a, pp. 131, 136).

p. 5). The QITE Review similarly found the quality of induction varies considerably across jurisdictions and sectors (2021a, pp. 77–79).

More broadly, some participants argued that induction and mentoring programs (for all new teachers) were not sufficiently comprehensive, particularly in supporting teachers to respond to the diverse needs of students from priority equity cohorts (AASE NSW, sub. DR107, p. 3; Beyond Blue, sub. DR88, p. 6; ACTA, sub. DR124, p. 55). For instance, in regard to improving the quality of teaching for students with disability, AASE NSW (sub. DR107, p. 3) noted '[m]entoring opportunities should be formalised as an essential component of professional development for teachers and teacher aides'. And participants to AITSL's *Indigenous cultural competency in the Australian teaching workforce project* emphasised the importance of induction processes where:

> [s]taff learn more than just the history of the local community. Staff must also learn about the history of the school and how understanding this history – in its interrelationship with the current context – can better shape the school's collaboration with community. (AITSL 2022b, p. 16)

While some variation in induction and mentoring processes is expected, due to different local circumstances and availability of resources (AITSL 2016, p. 3), arguably the variation in the supports graduate teachers are offered, along with lack of coverage of some key issues, can undermine teacher effectiveness and retention.

Proposed solutions vary …

While initiatives such as nationally agreed guidelines for teacher induction, have sought to improve consistency, there are no equivalent guidelines or standards for mentoring (AITSL, sub. DR93, pp. 13–14).[139] Some suggestions for improving induction and mentoring policies for early career teachers build on the guidelines and standards approach. These suggestions include:

- revising the national induction guidelines with the provision of more support materials (AITSL, sub. DR93, p. 14)
- developing a national induction plan for early career teachers that maps out a clear set of agreed principles and strategies to deliver quality induction for early career teachers regardless of employment status (CRESI, sub. DR63, p. 2; Teachers and Teaching Resource Centre, University of Newcastle, sub. DR84, p. 45)
- the development of national guidelines for mentors that could be used by jurisdictions and schools to support early career teachers (Paul 2021a, p. 86)
- developing national mentoring standards that provide a guide to a nationally consistent understanding of the skills and knowledge required of supervising teachers to conduct structured high-quality placements for pre-service and early career teachers (AITSL, sub. DR93, p. 14)
- formalised training of teacher-mentors (AHISA, sub. DR94, p. 12).

[139] 'These Guidelines provide advice on what induction is, why it matters, the conditions for good induction, the focus for induction, the strategies that are most effective, and the roles played by various agencies and individuals in managing and delivering induction programs' (AITSL 2016, p. 3).

… but could be progressed by individual jurisdictions and sectors under the National Teacher Workforce Action Plan

The Commission agrees that there is a case for improving the consistency of access and quality of induction and mentoring. However, in weighing up the relative merits of collaborative action under a new intergovernmental agreement, the Commission recognises:

- induction processes, along with professional development more broadly, are primarily the responsibility of employers (Paul 2021, p. 77)
- targeted rather than universal approaches to induction and mentoring may be more beneficial recognising that some new teachers will adapt more quickly to teaching, and thus, find induction less useful (PC 2012a, p. 132)
- the NTWAP has proposed the development of national guidelines to support early career teachers and new school leaders including for mentoring and induction.

On balance, the Commission considers that efforts to improve the quality of induction and mentoring programs should be advanced through the NTWAP. However, participants highlighted the importance of both early career and experienced teachers having sufficient time to participate in induction and mentoring programs.[140] Teacher workload was identified by the QITE Review as a constraint to high-quality induction and mentoring practices (Paul 2021a, p. 81). This underscores the importance of freeing up teacher time (recommendation 7.3).

Fostering and drawing on teaching expertise

Teachers need a greater level of knowledge and skill over their working life than can be covered in ITE, induction and mentoring. For example, teachers often need to:

- stay up-to-date with developments in knowledge and pedagogical approaches[141]
- develop specific skills that complement their current skill set
- take on new functions or roles
- understand and implement new policies (PC 2012a, p. 154).

More structured training, through professional development and learning, along with the dissemination of best practice, can help augment on-the-job experience in developing this knowledge and skill.

Professional development varies in type and quality

Professional development can take on many forms — from structured courses delivered through professional associations or system administrators, through to more informal approaches such as participation in groups to diffuse best practice and skills (PC 2012a, p. 155).

Some review participants raised the importance of improving access to, and the quality of professional development[142]; particularly as a means of better equipping teachers to respond to the diverse needs of students from priority equity cohorts.[143]

[140] AAAE, sub. DR104, p. 12; AEU, sub. DR101, p 15–16; P&C Federation NSW, sub. DR97, pp. 4–5.

[141] This could be particularly important for teaching students from priority equity cohorts.

[142] AITSL, sub. DR93, p. 15; APTA, sub. DR102, p. 3; Collins, sub. DR82, p. 2; Teachers and Teaching Resource Centre, University of Newcastle, sub. DR84, pp. 4–6.

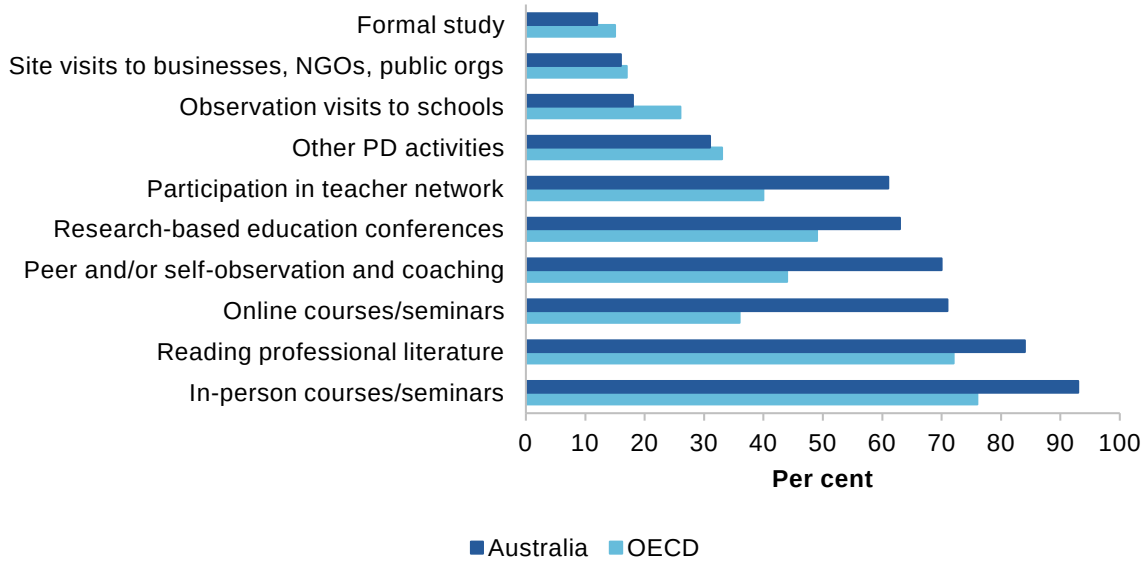
[143] AAMT, sub. DR80, pp. 1–27; AASE NSW, sub. DR107, p. 2; IECM, sub. DR125, p. 6; Stronger Smarter Institute, sub. DR104, p. 3.

Australian teachers participate in relatively more professional development …

Australian teachers have reasonable access to professional development opportunities. The Australian Teacher Workforce Data (ATWD) initiative reveals that, of surveyed teachers in New South Wales, Northern Territory and South Australia, 94 per cent of secondary teachers and 95 per cent of primary teachers had received some professional learning in 2018 (AITSL 2021a, p. 84).[144] Australian teachers were also more likely than their international peers to attend professional development (figure 6.5) and participate in a high number of professional development activities (5.15) compared with the OECD average (4.04) in 2018 (Fahey 2022, p. 28).

Figure 6.5 – Australian teachers participate in a high level of professional development

Average percentage of lower secondary teachers who participated in the following professional development (PD) activities in the 12 months prior to the survey



Source: TALIS (2018), adapted from Fahey (2022, p. 29).

… but there is scope to improve its quality …

Gauging the quality of the professional development Australian teachers undertake is more difficult. Survey evidence provides one insight into quality. By and large, Australian teachers appear relatively satisfied with their training. For example, the Teaching and Learning International Survey (TALIS) 2018 data showed that of surveyed teachers who received professional development 92 per cent reported that it had a positive impact on their teaching practice — 10 percentage points higher than the average of OECD countries and economies participating in TALIS (82 per cent) (OECD 2019b, p. 4).[145]

However, studies that consider the link between professional development and teacher effectiveness suggest there is wide variation in their quality (Fahey 2022, p. 29). Some research has demonstrated that

[144] This might reflect that professional development is usually linked to teacher registration in Australia (PC 2012, p. 155). 'The minimum number of professional learning hours required to maintain full registration is 20 hours per year or 100 hours over five years, in most states and territories' (AITSL 2021a, p. 84).

[145] This was echoed in the ATWD, with 82 per cent of classroom teachers surveyed in New South Wales, Northern Territory and South Australia agreeing that their professional learning activities were aligned to the needs and priorities of their educational setting (AITSL 2021a, p. 86).

professional development can have a relatively large effect on student outcomes, while other research has found little or no effect (PC 2012a, p. 156). As Fahey observes:

> … the quality, rather than quantity, of professional development can have a marked difference. Participation in online seminars and courses is negatively related to student outcomes. However, there is some evidence that participating in development such as conferences where researchers and teachers interact on educational issues is positively related to student achievement (at least in mathematics). Using professional development to increase knowledge of the curriculum appears to be positively related to student outcomes. (Fahey 2022, p. 24)

Options for improving the effectiveness of professional development opportunities for Australian teachers include:

- better matching training content to the development needs of teachers, such as by using teachers' performance appraisals to outline and then action their development needs (PC 2012a, pp. 157–158)
- improving the delivery of professional development so that it is more likely to lead to gains in teacher knowledge and practice (PC 2012a, pp. 157–158)
- supporting school leaders. School leaders need to be able to assess where professional development is best targeted within their schools, as they can be responsible for the implementation and facilitation of professional development (chapter 8) (Fahey 2022, p. 29; PC 2012a, p. 160).

… and to improve its focus

There is also scope for more targeted professional development, such as to support teachers to respond to diverse needs in the classroom. For example, Australian teachers expressed a relatively high need for training in teaching students with special needs, such as disability (OECD 2019b, p. 4). This is consistent with international evidence that shows teachers want more development targeted at teaching students with special needs and in multicultural/multilingual settings (OECD 2019b, p. 4).

Participants suggested professional development could also be better targeted to ensure teachers are equipped with the skills to meet the needs of Aboriginal and Torres Strait Islander students, including to create culturally safe environments (IECM, sub. DR125, p. 6; Stronger Smarter Institute, sub. DR114, p. 5). For example, AITSL's *Building a culturally responsive Australian teaching workforce* report noted there was a lack of access to high quality, contemporary Aboriginal and Torres Strait Islander professional learning (2022b, p. 20).

However, as recognised by AITSL (2022b, pp. 9–13), the uptake of cultural responsiveness training and practices can be constrained by personal factors. These can include:

- fear of failure — teachers can sometimes have a fear of offending, which acts as a barrier to changing teaching practices
- building relationships beyond the school gate with students and their families so that teachers can better understand their needs
- critical self-reflection — AITSL (2022b, p. 10) noted 'building cultural responsiveness involves more than re-learning history to unlearn biases … teachers [need to] reflect on who they are and on their preconceptions of Aboriginal and Torres Strait Islander cultures, all the while having the capacity to actively listen.'

Improving the cultural responsiveness of the teaching workforce should occur at each stage of a teacher's career (figure 6.4). As noted in recommendation 4.3, the Commission considers that all jurisdictions should set out actions in their bilateral agreements that commit to the institution of cultural safety requirements. Further, the NTWAP (2022d, p. 6) included an initiative to '[i]mprove access to high-quality First Nations' cultural responsiveness resources to ensure teachers are better prepared to teach First Nations peoples in culturally safe ways.'

Peer-to-peer sharing of expertise can also enhance teacher effectiveness

While emphasis is often placed on more formalised programs, teachers sharing expertise with others has also been identified as an effective form of learning and professional development (Grattan Institute, sub. 5, p. 9; Hattie 2003, pp. 1–2; Ingvarson and Rowe 2008, p. 8).

Highly accomplished teachers can disseminate best practice …

Peer-to-peer professional learning can be a means of diffusing best practice. But this requires building, recognising and effectively deploying teaching expertise to further enhance teacher effectiveness across the workforce (AERO sub. 6, pp. 11–12; AITSL, sub. 27, pp. 18–19).

Overseas, the use of Master Teachers that lead and coordinate professional learning has been observed as integral in high-performing school systems, such as Singapore and Shanghai (AERO, sub. 6, p. 11). In these systems, Master Teachers are intended to be the pedagogical leaders in their subjects, working across a network of schools in their region to identify teacher needs, coordinate training, and connect schools with research.

Unlike Master Teachers, who have no classroom load, Instructional Specialists split their time between classroom teaching and instructional leadership, working in their own schools to support and guide other teachers in specific subjects (Goss and Sonnemann 2020, p. 11). This role can allow effective teachers to remain in the classroom, while still sharing their subject-specific knowledge within their school. Opportunities to learn from subject specialists have been identified as being of particular help for out-of-field teachers.

In Australia, the Australian Professional Standards for Teachers recognise Highly Accomplished and Lead Teachers (HALTs), identified as ‘expert teachers and reflective practitioners who lead and support colleagues towards better outcomes for learners’ (AITSL 2019b). States and territories also have their own formal roles (box 6.3).

Box 6.3 – There are a range of approaches for identifying effective teachers

In Australia, there are a range of formal approaches to building, identifying and deploying highly effective teachers. For example:

- Victorian Government schools have Learning Specialist roles, which are 5-year positions aimed at highly effective teachers who want to remain in the classroom
- Western Australia has Level 3 Classroom Teacher roles, which aim to reward exemplary teachers, with a focus on collaboration and sharing best practice
- South Australia has Advanced Skills Teachers, but will phase this role out from 2023
- the Northern Territory pays allowances to teachers who obtain the Highly Accomplished and Lead Teachers accreditation
- Sydney Catholic schools have Instructional Specialists, whose role includes spreading best practice, and Master Teachers, who support best practice across multiple schools.

Source: NSW DoE (2022b, p. 12).

… but the uptake of formalised teacher networks has been minimal

However, the benefits of sharing expertise with other teachers that HALTs, and other highly skilled teachers, can provide have not been fully realised (Goss and Sonnemann 2020, p. 13).[146]

In the case of HALTs[147], benefits appear to have been constrained by:

- lack of mentoring, training or feedback on how to best share expertise with other teachers (Goss and Sonnemann 2020, pp. 23–24)
- poor role definition of how HALTs fit in with other leadership roles (C4IE, sub. DR99 p. 9; Willis et al. 2022, p. 37)
- limited instructional opportunities due to constrained teacher time (Goss and Sonnemann 2020, p. 20; Willis et al. 2022, p. 35)
- limited uptake of instructional leader advice by teachers who receive it (Goss and Sonnemann 2020, p. 15), and a lack of confidence by teachers that those in higher teaching positions are 'among the best' (Goss and Sonnemann 2020, p. 20)
- lack of consistency of advice given by teachers in instructional positions (Goss and Sonnemann 2020, p. 16), and not enough focus on specialised pedagogical content knowledge (Goss and Sonnemann 2020, p. 19).

Further, there has been poor uptake of HALT certifications, potentially reflecting the intensive application process (ACARA, sub. 45, p. 5; Goss and Sonnemann 2020, p. 33; NCEC, sub. DR87, pp. 8–9). The Centre for Inclusive Education (sub. DR99, p. 10) noted:

> … [the] application process is rewarding but onerous. HALTs report that deeply reflecting on their work is rewarding, as it is through this process that they recognise their impact with students and are encouraged to share ideas with others. However, the process is onerous as HALT applicants develop evidence of several thousand words, and are required to apply every three years, whereas Heads of Department must only prepare a short CV for ongoing appointment.

Since the introduction of HALT certifications in 2012, only 1 025 teachers have become certified HALTs; approximately 0.3 per cent of the workforce (AITSL, sub. 27, p. 14). Poor incentives might also be a contributing factor — with some evidence suggesting that even when pay is linked to certification, there is little wage differential between identified HALTs and long-serving proficient teachers (NSW PC 2021, p. 81).

Informal networks can be more accessible

There are also avenues for sharing teaching expertise without formal certification. Such avenues can involve mentoring or coaching by highly effective teachers, observation and feedback, and participation in a collegial discussion (OECD 2019a, p. 8; PC 2012a, p. 155). Review participants noted examples:

- professional teaching associations, some of whom undertake professional development and mentorship by practising teachers (AAAE, sub. DR104, p. 16; APTA, sub. DR102, pp. 3–4)

[146] There is limited public evidence on the progress of state initiatives to identify highly effective teachers. In NSW there has been poor uptake of HALT, with only 274 teachers accredited as of 2022. The NSW Government announced in May 2022 its intention to grow the number of HALTs to at least 2 500 by 2025 (NSW Government 2022). While in WA, uptake of their Level 3 classroom teacher role (box 6.3) has been more successful; in 2017, about 5 per cent of their teaching workforce was Level 3 (Carmody 2017).

[147] And some other instructional leader roles.

- Quality Teaching Rounds (QTR), where teachers work together in small groups to analyse and improve their practice[148]
- peer-to-peer models such as learning circles, action research projects and peer observation models (AHISA, sub. DR94, p. 11).

The Commission previously noted the use of mentoring and networks were particularly important for teachers and staff in schools experiencing disadvantage:

> Staff who are likely to benefit include those in rural and remote schools who have to cope with isolation and limited resources … in low-SES schools where they are more likely to encounter difficult classroom behaviour …, and in Indigenous communities where they need to develop an understanding of cultural practices. (PC 2012a, p. 278)

As informal networks do not require intensive application or certification processes, they can provide an accessible avenue for time-poor teachers to improve their practice. Employing this peer-to-peer effect in combination with a focus on sharing subject-specific expertise where there are teacher shortages, such as mathematics, can also leverage benefits from certification through reducing the costs of out-of-field teaching (Goss and Sonnemann 2020, p. 10).

Existing teaching expertise needs to be better leveraged

Identifying highly effective teachers to deploy in schools to share teaching expertise could be improved by refining the current HALT process.

Setting clear expectations of the tasks required for the certification process (Willis et al. 2022, pp. 34–35)[149] and making it easier to apply for HALT roles, such as by streamlining certification processes, particularly where teachers have undertaken similar processes (AITSL, sub. 27, p. 14) would help. The NTWAP included a target of 10 000 accredited HALTs or equivalent by 2025, and an action for AITSL to create a plan to streamline HALT accreditation processes (EMM 2022d, p. 21).

HALTs also need to be better deployed. This could be through better articulating roles for HALTs, and other highly effective teachers, within the current system of school leadership [150] (C4IE, sub. DR99, p. 10; Willis 2022, p. 37). This might also increase uptake.

For both formalised and informal networks, deployment of teaching expertise could be helped by:

- training for those who have a role in sharing teaching expertise, such as teacher-mentor certification (AHISA, sub. 94, p. 12; Goss and Sonnemann 2020, p. 37)
- scaling of instructional leadership roles to cover more schools (Goss and Sonnemann 2020, p. 5)

[148] There were mixed views on the effectiveness of QTR. For example, some review participants noted that QTR had shown positive effects on the quality of teaching, teacher morale and teacher efficacy (NSW SPC, sub. DR92, p. 1; Teachers and Teaching Resource Centre, University of Newcastle, sub. DR84, p. 6). Meanwhile others noted that research has shown this is not necessarily the case for all subjects, and that QTR is less effective when conducted by classroom teachers instead of trained professionals (AERO, sub. DR113, p. 5; Ashman, sub. DR67, p. 3; Buckingham, sub. DR91, p. 7).

[149] Another suggestion includes having domain-specific expert lead teachers (Grattan Institute, sub. 5, p. 16), which could support those teaching out-of-field. However, AERO (sub. DR113, p. 4) noted that 'the current descriptors in the Australian Professional Standards for Teachers [for HALT] … are not specific enough about the knowledge and skills that should be demonstrated in order to successfully perform instructional specialists and master teacher roles.'

[150] AITSL noted that some jurisdictions have created specific roles for HALTs, while individual principals have also created roles to share quality teaching practice within schools (AITSL, sub. DR93, p. 15).

- better use of materials and technology to support teachers sharing expertise that can alleviate geographic barriers (Ochre Education, sub. DR119, p. 8; NCEC, sub. DR87, p. 8) (section 6.3)
- overcoming institutional impediments such as inadequate time release, and limits on who can observe and provide feedback to teachers (Fahey 2022, p. 34; IEUA, sub. DR78, p. 2)
- ensuring networks focus on evidence-based practice that includes teaching for students from priority equity cohorts, and other cohorts such as English as an Additional Language or Dialect (EAL/D) (AASE NSW, sub. DR107, p. 2; ACTA, sub. DR124, pp. 62–63).

The next intergovernmental agreement provides an opportunity to identify ways to better develop and deploy expert teachers, such as HALTs, to disseminate evidence-based teaching practices.

Finding 6.1

Policies that improve the quality of the teacher workforce are likely to be one of the most significant ways governments can influence student outcomes. Some options warrant particular attention.

Improving teacher effectiveness can provide substantial personal, social and economic benefits.

- Improving initial teacher education (ITE) is likely to be more effective than screening for 'high-quality' candidates for ensuring people entering the profession are well equipped for teaching.
- Teaching performance assessments (TPAs), which assess the classroom readiness of graduate teachers, have only recently been introduced by jurisdictions — it is too early to decide whether TPAs should be changed to embody minimum standards.
- Better access to quality induction and mentoring is likely to accelerate skill acquisition and increase retention when teachers start in the classroom.
- Quality on-the-job learning, including from more experienced colleagues, can lead to ongoing improvement throughout teachers' careers, but it relies on teachers having sufficient time.
  - A key benefit of Highly Accomplished and Lead Teachers (HALTs), and other highly skilled teachers is their ability to share expertise with other teachers.
  - But there has been poor take up of HALT certifications and many certified teachers say they have too little time or opportunity to lead the development of others in their school.
- Governments have announced their intention to improve ITE quality, induction and mentoring and streamline HALT accreditation processes under the National Teacher Workforce Action Plan.
- Although these announced actions have the potential to address concerns about teacher effectiveness, some lack detail and firm commitments and/or may require complementary reforms to ensure their success.

Recommendation 6.1
Parties should design the next intergovernmental school reform agreement to better develop and deploy expert teachers to disseminate evidence-based teaching practices.

Each state and territory should include in their bilateral agreement mechanisms to ensure expert teachers can support colleagues to achieve better student outcomes through the dissemination of evidence-based teaching practices. Actions should:

- be developed in consultation with school leaders and teachers
- support Highly Accomplished and Lead Teachers to share their in-depth knowledge and skills with their colleagues to help them improve.

6.3 Evidence-based practices help drive better student outcomes

Ensuring that teachers are using evidence-based practices is important for teacher effectiveness. Many review participants expressed support for the promotion of best-practice teaching, and strengthening the evidence base underpinning it.[151]

Supporting the use of high-quality, evidence-based practice requires:

- rigorous research into teaching practice, to generate evidence on what works best to support learning; and
- effective mechanisms for making best practice common practice.

The importance of these aspects of the education evidence base was emphasised by the Commission in its 2016 *Education Evidence Base* inquiry, which found that Australia lacked both the capacity to produce high-quality evaluations of education practices, programs and policies, and to ensure that evidence on what works best was being translated into improved teaching and learning in classrooms (PC 2016b).

High-quality research is key to understanding what works best

There is already a significant evidence base on what works best to help students learn (AERO, sub. 6, p. 10). Even so, there is always room for the evidence base to grow through new research on the effectiveness of particular pedagogical approaches, curriculum resources, and other classroom interventions aimed at boosting learning — including how they can be implemented and adapted in diverse contexts. This is especially true given that teachers will increasingly use digital technology to assist them with planning and presenting lessons and assessing students (PC 2022a, pp. 20–26), and the efficacy of new classroom technologies will need to be tested.

The national evidence base would benefit from more rigorous trials and evaluations

Historically, Australia has not produced enough high-quality studies on the effectiveness of education interventions (PC 2016b), and the Commission heard from a number of review participants that there are still

[151] For example: Australian AASE NSW (sub. 20, p. 4); AERO (sub. 6, p. 10); Grattan Institute (sub. 5, pp. 13-14); NSW DoE (sub. 12, p. 8); NSRB (sub. 22, p. 4); Pivot Professional Learning (sub. 33, p. 18).

too few rigorous evaluations of programs and practices. For example, the Teachers and Teaching Resource Centre, University of Newcastle (sub. DR84, p. 3) argued that education studies in Australia are too often methodologically weak and/or have sample sizes too small to enable reliable conclusions to be drawn.

The most robust evidence on teaching practices comes from studies that demonstrate their causal impact and quantify the size of that impact (AERO 2021c; PC 2016b, pp. 207–209). This provides policymakers, school leaders and teachers with a high level of confidence that the practice will be effective — especially if the study was undertaken in a context similar to their own.

Randomised controlled trials (RCTs) are the 'gold standard' methodology for such research. RCTs allow researchers to infer that differences in observed outcomes between respective groups are attributable to the intervention rather than any confounding factors. In recognition of their advantages, education researchers around the world are increasingly turning to RCTs (Connolly, Keenan and Urbanska 2018), and they are favoured by evidence institutes such as the UK's Education Endowment Foundation (EEF) (Edovald and Nevill 2021).[152] But other, less costly methods, such as observation of natural experiments, or studies with robust statistical controls, can also produce reliable evidence on the causal impact of interventions (PC 2016b, p. 212). And some trials or evaluations may not meet the requirements of a rigorous causal study because of limited resources and/or small sample sizes, but nonetheless offer preliminary evidence of an intervention's efficacy (PC 2016b, p. 210).

Ultimately, all of these types of research have a role to play in enhancing the evidence base on effective teaching practice.

Some review participants called for governments to do more to support research into the effectiveness of teaching practices and other interventions — especially using rigorous methods such as RCTs. Grattan Institute (sub. 5, p. 13) argued for more government support for pilots, RCTs and quasi-experimental studies, including of popular instructional programs and materials used in schools. The Teachers and Teaching Resource Centre, University of Newcastle (sub. DR84, p. 3) proposed more government funding for RCTs. Several participants called for AERO to have a stronger focus on commissioning rigorous evaluations, especially RCTs (NSRB sub. 22, p. 4; SVA, sub. DR118, p. 4; Teachers and Teaching Resource Centre, University of Newcastle sub. DR84, p. 4).

But researchers can face barriers when conducting research

An inability to access schools to conduct research can be a significant impediment for education researchers. Some review participants argued that aspects of the process of obtaining approval from jurisdictions to conduct research in schools can prevent projects from going ahead or significantly delay them. For example:

- some projects are conducted across multiple jurisdictions and need separate approval from each. In these cases, inconsistencies between application processes can significantly slow progress (AERO sub. DR113, pp. 1–2)

[152] The number of education RCTs globally has increased significantly in recent decades. In the 1980s they were rare, but the number conducted per year rose to about 80 and 100 globally between 2010 and 2016 (Connolly, Keenan and Urbanska 2018, p. 285). The EEF mainly seeks to add to the evidence base by commissioning RCTs, and had commissioned over 150 education RCTs as of 2020 (Edovald and Nevill 2021, p. 49).

- most of the time, jurisdictions require researchers to obtain consent from each research participant (or a parent, as with school students) rather than offering them the chance to 'opt out' (AARE 2022, p. 1).[153] This can result in researchers being unable to obtain a sufficient sample size to draw reliable conclusions (Teachers and Teaching Resource Centre, University of Newcastle, sub. DR84, p. 3).

Even once approval is granted, international evidence suggests recruiting schools may still be an issue. For example, in the United Kingdom, many schools were unfamiliar with the rationale and potential benefits of RCTs, and some were concerned with the ethics of randomised approaches (Dawson, Yeomans and Brown 2018, pp. 297–299; Edovald and Nevill 2021, p. 49). The EEF (the key education research institute) overcame these barriers by offering financial and other incentives to schools, and was aided by the fact that 'the education system … increasingly recognized the value of high-quality research' (Edovald and Nevill 2021, pp. 49–50).

For these reasons, the Teachers and Teaching Resource Centre, University of Newcastle (sub. DR84, p. 3) argued that '[s]trong buy-in is needed from system leaders if RCTs are to succeed', including through supporting the recruitment of participants through internal communication channels.

The high cost of large-scale projects such as RCTs can also be a major barrier. RCTs generally cost much more on average than other types of education research, which means that they cannot go ahead without substantial funding (PC 2016b, p. 219). The Teachers and Teaching Resource Centre, University of Newcastle (sub. DR84, p. 3) argued that there is not enough research funding available in Australia to support RCTs and other large-scale education research projects, stating that typical research grant amounts are 'wildly insufficient to carry out the kind of large-scale, systematic research required to genuinely inform education policy and practice'.

A lack of longitudinal data on student achievement also constrains the supply of high-quality research. Datasets that enable researchers to track indicators such as academic achievement over time, and link them to other information, can enable rich research into the drivers of student outcomes, and make expensive research such as RCTs more financially viable by preventing researchers from having to collect their own longitudinal data (chapter 3). An example of such a dataset is the UK's National Pupil Database, which links data from national standardised tests to a variety of other administrative information and is frequently used by researchers, including in RCTs commissioned by the EEF (PC 2016b, p. 132). No such datasets exist at the national level in Australia, as this would require having a national unique student identifier in place (chapter 3).

Further, researchers may struggle to access what data does exist because of regulatory barriers. AERO (sub. DR113, p. 1) noted that, in the course of their research, 'access has been slowed by the need to ensure appropriate and mutually agreed governance arrangements are in place'. And historically, Australian education researchers have struggled to access administrative data because of complex administrative and legislative barriers (PC 2016b, 2017a), though the recently legislated *Data Availability and Transparency Act 2022* will likely address many of these issues.[154]

[153] For example, the NSW's State Education Research Applications Process Guidelines state that '[i]n all but exceptional circumstances, the department requires that active consent be granted for all participants', and researchers need special permission to use opt-out consent processes (NSW DoE 2022a, pp. 10–11).

[154] The Act has addressed a number of legislative roadblocks and inconsistencies that prevented data sharing in the public interest. It allows Commonwealth agencies to more easily share data with federal, state and territory agencies and Australian universities for the purposes of research (ONDC 2022).

Evidence on what works needs to be translated into improved practice in the classroom

Having a strong evidence base on what works will only help lift student outcomes if teachers use the pedagogies and resources that the evidence suggests are most effective. But this does not happen automatically, and recent surveys of Australian teachers suggest that many are not using the most effective pedagogical techniques and classroom materials.[155]

Teachers generally do not have the time or knowledge to individually engage with evidence on what works. Most of their time is dedicated to face-to-face teaching, lesson planning and marking (chapter 7), which leaves little left for accessing and considering research evidence. Walsh et al. (2022, p. 12), for example, found that 76 per cent of teachers did not feel that they had 'adequate time to engage with research'. Further, appraising evidence and research is 'complex, skilled work' that can require training (Q Project, Monash University, sub. DR126, p. 7).

When it comes to curriculum planning, recent research suggests that many teachers are not consistently using best-practice approaches. In a survey by Hunter, Haywood and Parkinson (2022, p. 29) about half of teachers reported being the only person responsible for producing lesson plans for their classes, and a further 28 per cent reported sharing the load with their teaching team (rather than being supported by schools). This means that many teachers develop lesson plans from scratch on their own, or use eclectic materials from private platforms that are difficult to quality-assure such as YouTube (figure 6.6) (Hunter, Haywood and Parkinson 2022, pp. 29–31). And even if self-produced lesson plans and classroom tools are individually of a high quality, 'having teachers create their own lessons over time will rarely result in a fully sequenced, coherent learning experience for their students' (Steiner, Magee and Jensen 2018, p. 14).

There are avenues to spread best practice

Teachers need support and guidance if they are to consistently integrate the most effective approaches into their daily practice. Governments should play a role in facilitating the use of best practice, which they can do in a variety of ways.

One way governments can spread best practice is by using their direct leverage over aspects of pedagogy, curriculum and assessment in their schools (especially the public sector). For example, South Australia recently made it compulsory for all year 1 students to undergo a phonics screening check, and implemented a number of phonics-based early literacy programs in schools (Equity Economics, sub. DR65, p. 3; SA Department for Education 2022).[156]

Best-practice pedagogy can also be spread through teacher education and training. For example, governments can ensure that ITE course content covers the most effective practices based on up-to-date evidence on what works best. Where they have direct influence over professional development, governments could ensure that evidence-based practice is promoted. Where professional development is

[155] AERO (2021a) surveyed teachers across Australia about how often they used specific teaching strategies, and concluded that '[s]ome of these strategies are evidence-based, while others are not — in fact some have been found to be ineffective for student learning.' Hunter, Haywood and Parkinson (2022, p. 31) found that curriculum materials from websites that are difficult to quality-assure are generally more popular than curated sources such as government websites.

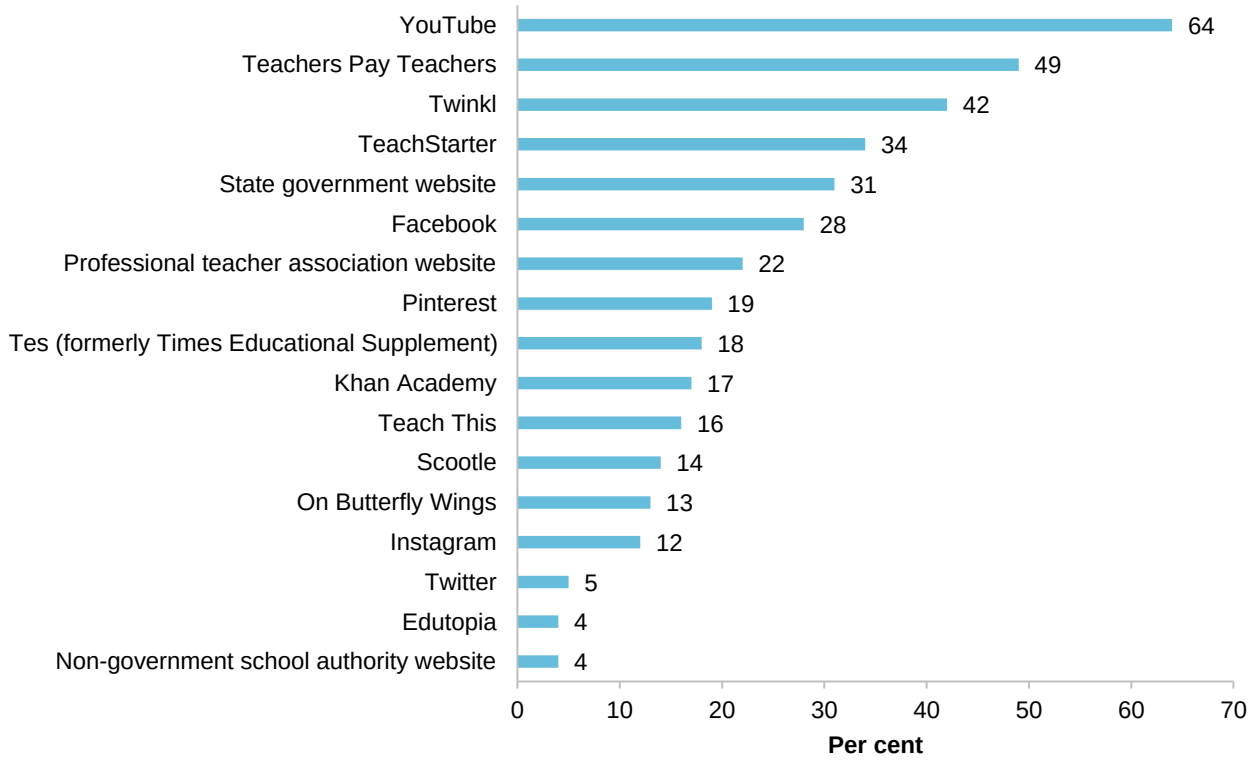
[156] Other state governments have taken a similar approach to South Australia. For example, Western Australia (sub. 19, p. 13) will, from 2023, require public schools to assess students' phonics skills in year 1, and provide them with phonics programs to support students who need additional help with reading. According to the Australian Government Department of Education (2021), 'studies have shown phonics to be the most effective way of teaching children to read words accurately and fluently'.

organised through individual schools, or, in the non-government sector, by independent school authorities, evidence institutes such as AERO can play a key role in spreading best practice by engaging with and influencing these stakeholders.[157]

One recent survey found that teachers are more likely to trust research shared by colleagues than from any other sources (Walsh et al. 2022, p. 13). Governments could therefore also leverage HALTs to help other teachers develop their knowledge and skills in evidence-based practice (section 6.2).

Figure 6.6 – A high share of teachers regularly use materials from sources that are difficult to quality-assure[a,b]

Percentage of teachers that report visiting each site once a fortnight or more



a. The data are from a survey question which asked teachers to '[s]elect any online resource repositories you use regularly (once a fortnight or more, on average) for ideas and/or materials to integrate into your lessons'. **b.** Percentages sum to greater than 100 because teachers could select more than one response.

Source: Hunter, Haywood and Parkinson (2022, p. 31).

Governments should curate high-quality classroom resources and make them available to teachers

Governments can also spread best practice by curating high-quality, evidence-based curriculum resources and making them available and easily accessible for teachers and school leaders.

Doing so would help to increase teachers' use of the most effective resources, and prevent them from having to source eclectic, non-quality-assured material online or develop them on their own. This would likely have a positive effect on student learning — especially if combined with professional development on how best to

[157] AERO (sub. DR113, p. 2) indicated that they are 'looking for opportunities to make our work more easily adaptable by system stakeholders for incorporation into their own programs, policies and professional learning'.

use high-quality curriculum materials.[158] Box 6.4 summarises selected studies on the impact of high-quality curriculum materials.

Box 6.4 – The learning benefits of higher-quality curriculum materials

International studies have found that improving teaching through better curriculum materials can have a positive effect on student academic achievement, especially when partnered with professional development programs for teachers.

In a meta-analysis of international studies, Lynch et al. (2019) found that high-quality STEM instructional improvement programs (either curriculum sequences or professional development, or both) had an average effect of improving student test scores by 0.21 standard deviations. The most effective programs combined curriculum materials with professional development, and/or had particular characteristics such as offering teachers meetings to troubleshoot and discuss classroom implementation of the program (Lynch et al. 2019, p. 284).

Randomised controlled trials have also found positive results. Taylor et al. (2015) found that a program that encouraged the use of evidence-based curriculum materials for high school science classes in the United States, with accompanying professional development, was associated with a 0.09 standard deviation improvement in 10th grade High School Proficiency Exam scores — a modest positive effect. Stokes et al. (2018) found that use of a particular high-quality mathematics curriculum in UK schools, along with professional development, was associated with the equivalent of one extra month of learning.

Monitoring the implementation of instructional improvement programs is key to ensure that the positive effects arising in what are often smaller scale studies are replicated when scaled up and applied in classrooms more broadly (Lynch et al. 2019, pp. 285–286).

Providing teachers with classroom resources would also likely free up much of the time they spend planning lessons. Hunter, Haywood and Parkinson (2022, p. 34) found that the typical teacher surveyed whose school provides them with a comprehensive bank of lesson plans for all subjects spends three hours a week less on sourcing and creating classroom materials than the typical teacher whose school does not. This accords with the experience of the UK's Oak National Academy, whose bank of lesson plans for UK teachers improved the workload of just under half of users in the 2021-22 academic year (ImpactEd 2022, p. 4). Of these users, the median saved three hours per week (ImpactEd 2022, p. 4).

Saving this time would benefit students, as teachers would be able to spend more time thinking about how to teach their classes effectively, and less on what content to include in lessons (Hunter, Haywood and Parkinson 2022, p. 32). It would also benefit teachers themselves, whose already-high workloads are a source of stress (chapter 7).

[158] Hunter, Haywood and Parkinson (2022, pp. 66–75) summarised a number of studies on the effects of high-quality curriculum on student learning, which are mostly positive. Steiner, Magee and Jensen (2018, p. 11) also reported several studies that demonstrate positive effects from high-quality curriculum.

Current resource banks likely help, but are not enough

Several curated curriculum banks supported by governments already exist to help teachers with lesson content. For example:

- the Digital Technologies Hub, the Mathematics Hub and the Literacy Hub are resource banks for digital technology, mathematics and literacy respectively. The resources are pitched at teachers, students, school leaders and parents, and are funded by the Australian Government (ESA, sub. DR79, p. 9)
- ESA has developed Scootle — a national repository of classroom tools for teachers aligned to the Australian Curriculum (ESA, sub. DR79, p. 10)
- the Queensland Government has developed Curriculum into the Classroom, which is a set of curriculum materials that includes whole-school curriculum plans for school leaders as well as individual classroom resources for teachers (Queensland Department of Education 2022).

Even so, large numbers of teachers are still investing several hours per week developing their own lesson plans, and a higher share are sourcing material from private platforms such as YouTube than are using state or territory government websites (figure 6.6). This suggests that existing government resources, though they likely help, are not fully meeting their needs. This may be because the curriculum banks are not comprehensive enough, the tools are difficult to adapt and/or because of insufficient awareness of and trust in them among teachers. Recent research suggests that, among teachers and school leaders who are aware of existing government-provided resources, a large share do not think that they meet their needs or are easy to find (figure 6.7). Governments therefore need to build on their existing efforts to ensure that current gaps in curriculum support are filled.

Several participants have called for governments to curate and provide curriculum resources

Hunter, Haywood and Parkinson (2022) proposed that governments and school authorities:

- invest in high-quality, comprehensive curriculum materials, and make them available to all schools to use and adapt
- strengthen the curriculum expertise of school leaders so they can implement whole-school curriculum plans, and
- monitor curriculum planning and implementation, including through regular reviews of curriculum planning and by funding rigorous evaluations of curriculum materials.

Several review participants called for greater curriculum support.

- AERO (sub. DR113, p. 2) argued that ‘educators need access to quality-assured, evidence-informed resources that are aligned to curriculum and support effective teaching and learning’, to improve the quality of materials being used in schools and save teachers’ time.
- ESA (sub. DR79, p. 9) argued that governments should do more to ensure that teachers have access to curated, high-quality curriculum resources, and that this should be an objective in the next intergovernmental schooling agreement.
- Ochre Education (sub. DR119, p. 10) recommended ‘the development of a national bank of evidence-based, curriculum-linked teaching materials created by highly effective teachers’, in combination with professional development for teachers, and argued that this should be a priority for national collaboration.

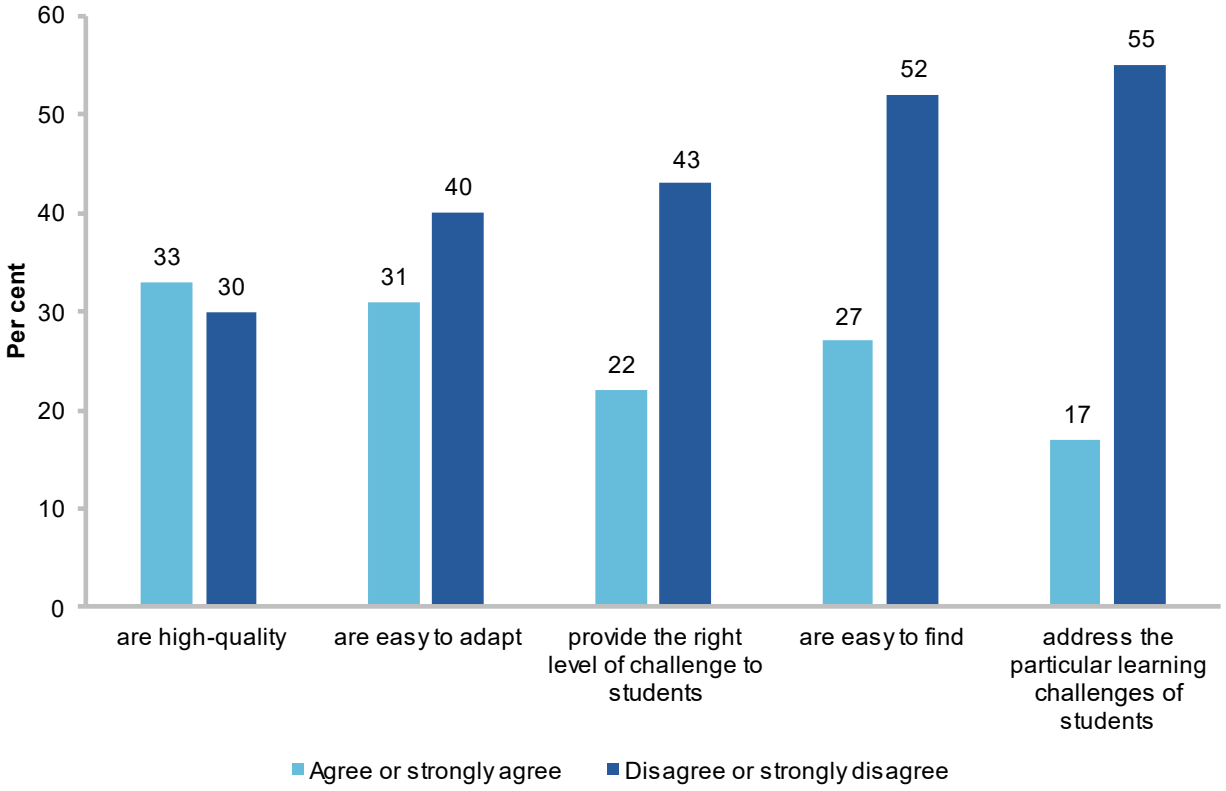
Some review participants went on to note that providing teachers with high-quality curriculum materials would fulfil one of the functions that many stakeholders had envisaged for the Online Formative Assessment Initiative (OFAI). Ochre Education (sub. DR119, p. 9) argued that ‘[a] high-quality resource bank would in

itself help governments to realise the original objectives of the OFAI, by significantly increasing support for teachers to use effective assessment practices'. Similarly, AERO (sub. DR113, p. 2) noted that:

> [a] comprehensive suite of sequential, aligned, high quality teaching and learning resources, delivered through intuitive technology that supports monitoring of student learning progress, could fulfill the incomplete promise of the [OFAI].

Figure 6.7 – There are a number of issues with current government-provided resources[a]

Percentage of teachers and school leaders that agree/disagree with the statement: 'Instructional materials made by governments …'



a. The data are from a survey question that was only asked of teachers and school leaders who indicated that they use government provided materials at least fortnightly in their planning or coaching, and teachers and school leaders who indicated that they were aware of the materials but do not use them regularly.

Source: Hunter, Haywood and Parkinson (2022, p. 42).

Curriculum support for teachers and school leaders could be a national policy initiative in the next intergovernmental agreement

There are clear merits in jurisdictions collaborating to create a comprehensive national bank of high-quality curriculum resources that fills the gaps in existing resources and provides a 'one-stop shop' for school leaders and teachers. A national approach would have several benefits. Most importantly, it would be the most efficient option, as only one set of infrastructure would need to be established and maintained, as opposed to jurisdictions setting up their own, similar initiatives in parallel. It would ensure that smaller jurisdictions are not left out, as they may not have the capacity to build their own curriculum resource banks. Pursuing curriculum support nationally could also more easily leverage the expertise of national-level organisations such as AERO, ACARA, ESA and AITSL.

An example of a national approach comes from the United Kingdom, where Oak National Academy, a body funded by and under the strategic direction of the UK Department for Education (DfE), developed a bank of curriculum resources for UK teachers (box 6.5).

As well as individual lesson plans and classroom tools for teachers, a curriculum resource bank should include school-level and subject-level curriculum resources, to enable school leaders and more senior school staff to support teachers with curriculum planning (figure 6.8).

Box 6.5 – Oak National Academy's national curriculum bank

Oak National Academy in the United Kingdom operates under the strategic direction of the UK Department for Education (DfE) and is responsible for curating curriculum resources for teachers and making them available on their website. It was initially established as a non-profit in April 2020 to support teachers to manage the disruptions created by the COVID-19 pandemic, but in 2022 was reconstituted as an independent public body funded by the UK DfE (Oak National Academy 2022).

Oak National Academy's resources are curated by teachers and include lesson outlines, worksheets and curriculum advice for a range of subjects and for all year levels up to year 11.

A survey of UK teachers conducted by the UK DfE (2021, p. 60) found that, as of December 2020:

- 28 per cent of teachers providing remote education had used Oak National Academy resources
- 74 per cent of teachers who had used the resources rated them as good or excellent
- 67 per cent reported that the resources had reduced their workload.

The UK DfE (2022, pp. 12–16) argued that making Oak National Academy a national public body and providing them with support to continue developing their curriculum bank would help address UK teachers' challenges with curriculum planning — specifically, it would decrease the amount of time they spend planning for lessons (a significant contributor to their high workloads), and raise the quality of the curriculum resources they use.

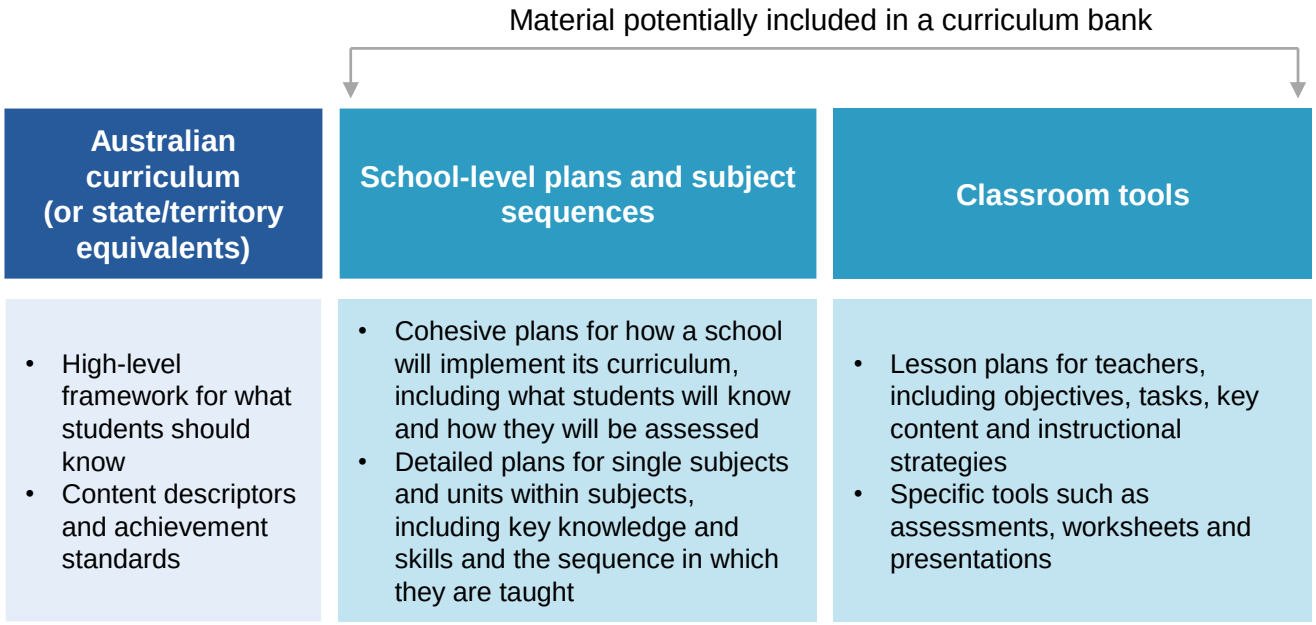
Given that many private providers of classroom resources already exist, the contents of a curriculum bank could be curated mainly from existing material or commissioned where significant gaps exist. This would need to be done by curriculum experts, which could include experienced teachers with curriculum skills and knowledge (Hunter, Haywood and Parkinson 2022, p. 46; Ochre Education, sub. DR119, p. 4). A single national curriculum bank could also make use of existing resources, such as the Mathematics Hub and Literacy Hub (ESA sub. DR79, p. 9). The resources would need to be quality-assured according to whether they are based on evidence on how to design effective curriculum (Hunter, Haywood and Parkinson 2022, p. 46; Ochre Education, sub. DR119, p. 7). This could be done by an independent body such as AERO or ACARA.

Improving the comprehensiveness of the curriculum resource options available to school leaders and teachers is a key priority. Governments should analyse where curriculum gaps exist, and consult with school authorities, school leaders, teachers and other stakeholder groups. This would ensure that the materials are targeted to where support is required, and meet the learning needs of students in all jurisdictions and from diverse cohorts including Aboriginal and Torres Strait Islander students, students with disability and students in regional, rural and remote areas. For example, material that is responsive to perspectives of Aboriginal and Torres Strait Islander people has been highlighted as an area where teachers need more support. AITSL (2022b, p. 20) recently found that:

> educators feel they lack access to quality, authentic, and contemporary Aboriginal and Torres Strait Islander resources and/or, where resources are available, feel they often struggle to discern which are culturally appropriate, legitimate and sensitive.

The curation of high-quality resources for school leaders and teachers has been identified as one way of addressing this gap (AITSL 2022b, p. 20).

Figure 6.8 – Curriculum support should be at multiple levels



Source: Adapted from Ochre Education (sub. DR119, p. 5).

Governments should also consider how best to ensure that a curriculum resource bank is trusted by teachers and school leaders. As noted in chapter 3, one factor in AERO's success will be ensuring that they are a trusted source of advice by teachers, school leaders and school authorities — this is equally true in the case of curriculum support. This requirement was taken into account by the DfE when considering how to provide greater curriculum support for teachers. They concluded that enlisting Oak National Academy, which had already become a trusted brand in the education sector, would 'secure the vital buy-in from teachers', whereas the department directly providing resources would encounter 'barriers of trust and credibility' (UK Department for Education 2022, p. 16).

Finally, curating resources and making them available for teachers should be combined with professional development opportunities focused on implementing high-quality curriculum in the classroom. Evidence suggests that this is necessary to ensure that effective curriculum materials lead to the best possible gains in student learning (Hunter, Haywood and Parkinson 2022, p. 51; Ochre Education, sub. DR119, p.9; Steiner, Magee and Jensen 2018, p. 17; see also box 6.3).

In December 2022, Education Ministers acknowledged the need for more curriculum support for teachers. The NTWAP stated that:

> Ministers will task [ACARA] with examining ways to develop and make available to teachers, optional supports to assist the implementation of the national curriculum … In developing advice to Education Ministers, ACARA will consult with [AERO], [AITSL], [ESA], states and territories, sectors, the teacher and principal workforce and unions. ACARA should also take into account the

> experience of, and lessons learned from, jurisdictions that have undertaken similar exercises, for example, Queensland's Curriculum to the Classroom (C2C) initiative. (EMM 2022d, p. 22)

In order for a national curriculum resource bank to be successful, all states and sectors need be assured of its value and promote its use among their school leaders and teachers. To maximise the likelihood of that buy-in, the development of a national resource bank could form the basis of a National Policy Initiative under the next schools agreement. Irrespective of whether a national curriculum resource bank is pursued under the next intergovernmental school agreement or elsewhere, curriculum supports need to encompass whole-school curriculum plans, whole-subject sequences, lesson plans and classroom tools.

Finding 6.2
High search costs for locating quality teaching resources prevent many teachers from employing evidence-based resources in the classroom.

Many teachers have difficulties locating high quality teaching resources that meet the needs of their students, or verifying the quality of teaching resources.

- More than half of Australian teachers surveyed, who were aware of government provided instructional materials, did not think they were easy to find or that they met the learning needs of their students

Recommendation 6.2
Governments should establish a single portal for teachers and school leaders to access evidence-based instructional material. This could be a national policy initiative in the next intergovernmental school reform agreement.

The Australian, state and territory governments should work together to curate high-quality, evidence-based and government endorsed curriculum resources and make them available for teachers and school leaders from a single source.

Resources should:

- be curated by organisations with relevant curriculum expertise such as the Australian Curriculum, Assessment and Reporting Authority, the Australian Education Research Organisation and/or Education Services Australia
- be independently quality assured based on what research says is most effective
- encompass whole-school curriculum plans, whole-subject sequences, lesson plans and classroom tools
- utilise existing quality materials, including from the private sector, where possible
- be complemented with training in how to use the material.

Spreading best practice requires visibility of classrooms

Efforts to promote evidence-based practice need to be complemented by better information on what happens in classrooms. This will help policymakers understand where gaps in the use of best practice exist, monitor whether, and to what extent, particular evidence-based pedagogies and materials are being taken up, assess whether initiatives to promote best practice are working, and understand barriers to the adoption of effective approaches (AERO sub. 6, p. 10; Sonnemann and Goss 2018, p. 16; Steiner, Magee and Jensen 2018, p. 15).

Understanding what is happening in classrooms will also help ascertain whether approaches promoted by policymakers and institutions, such as AERO, are getting the intended results, by enabling them to make links between the employment of particular interventions and student outcomes (Goss 2017, pp. 13–14; NSRB sub. 22, p. 4; Sonnemann and Goss 2018, p. 16). This may be particularly important if evidence on the effectiveness of a particular intervention comes from a context outside of the jurisdiction in which it is being applied.

However, the Commission heard from review participants that policymakers often have limited visibility of what is happening in classrooms.[159] Though some jurisdictions and school authorities have some means of gaining insight into classroom practice, few regularly measure the extent to which specific evidence-based practices are used by teachers (AERO sub. DR113, p. 5). Several participants called for governments to obtain better information on what practices and materials teachers are using. Grattan Institute (sub. 5, p. 14) called for governments to take steps to 'better understand what is happening in schools now', including pedagogical techniques used by teachers. AERO (sub. DR113, p. 5) argued for a national initiative in the next intergovernmental agreement which would have governments develop 'measurement instruments to monitor and report on the use of evidence-based practice in schools', and could be incorporated into the National Measurement Framework.

However, some review participants expressed concerns. The AEU (sub. DR101, p. 23) argued that collecting data on classroom practice would risk undermining teachers' autonomy, while the IEUA (sub. DR78, p. 8) claimed that it would increase scrutiny of teachers.

Ultimately, there is always room for improvement in pedagogy and curriculum in light of new and emerging evidence on what works best. It is incumbent on governments and school systems to ensure that teachers are using the most effective methods, to enable students to learn as effectively as possible. This requires an understanding of the extent to which teachers are using particular approaches so they can properly target their efforts and understand whether they are successful.

There are several options for getting better information on classroom practice

Governments have a number of options for obtaining a better understanding of what and how teachers are teaching. These include surveys of teachers, surveys of students and direct observation.

- Teacher surveys ask teachers about their own practice, including what pedagogical techniques and curriculum resources they employ, how frequently they do so, and, potentially, what barriers they face to adopting high-quality, evidence-based approaches. For example, AERO (2021a) surveyed teachers on their use of particular techniques, and barriers they face to adopting evidence-based advice.
- Student surveys ask students about what and how their teachers teach. An example of this are the questions on teacher practice in the OECD's Programme for International Student Assessment (PISA), which asks students about the types of tasks they are asked to complete in lessons and teacher behaviours (OECD 2017a, pp. 24–33).
- Direct observation of classroom practice, which involves specialised staff, stationed in classrooms, observing and collecting data on the pedagogies and curriculum materials used by teachers. Halsey (sub. DR69, p. 3) suggested, for example, that highly effective teachers could be seconded to conduct research on classroom practice.

All of these methods have potential costs and limitations. Teacher surveys would be a relatively inexpensive method of gaining insight into classroom practice, as some participants highlighted (AERO, sub. DR113, p. 5; IEUA, sub. DR78, p. 8). However, if surveys were very detailed, and collected on a regular basis, they

[159] This was raised in several consultations as well as submissions from AERO (sub. 6, p. 10), the Grattan Institute (sub. 5, p. 14) and the NSRB (sub. 22, p. 4).

would risk adding significantly to teachers' already high workloads. Further, it is possible that self-reported surveys would yield inaccurate results, as teachers might favourably represent their own practice or struggle to recall how frequently they use particular techniques (AERO sub. DR113, pp. 5–6).

Student surveys would also likely be quite inexpensive to administer. However, students would be unlikely to have a sufficient grasp of pedagogy and curriculum to be able to provide precise and reliable information on teaching practice, and would thus not be able to provide much of the information necessary.

Direct observation would potentially yield rich and accurate data. While being observed would not add to the workload of classroom teachers, school systems would need to strike a balance between having sufficient observations to ensure data are sufficiently detailed, representative and comprehensive and the costs of data collection. Jurisdictions are best placed to consider how to strike that balance.

7. Ensuring a stable supply of teachers

Key points

A stable supply of effective teachers is essential for maintaining and improving student outcomes, but there are teacher shortages in some locations and subjects.

- Gauging the extent of teacher shortages is difficult — while shortages can lead to teacher vacancies and less subject choice, more often shortages result in increased workloads and more out-of-field teaching.
- Evidence points to teacher shortages in regional, rural and remote areas, in subjects such as mathematics, science, English and design and technology, as well as a shortage of teachers from diverse backgrounds.
- Improved data collection and a national teacher labour market model would allow for a systematic understanding of teacher shortages, and help evaluate the impacts of different policies on the workforce.

Improving the attraction and retention of teachers' calls for a range of responses.

- Mid-career professionals are an important pipeline for future teacher supply. Governments should streamline pathways into teaching and lower the switching costs for mid-career professionals. This should include implementing a one-year qualification for secondary teaching in areas of high demand.
- Attracting registered teachers, or retired unregistered teachers, back into the profession could be a cost-effective, short-term lever to alleviate teacher shortages.
- Out-of-field teaching poses significant challenges. Governments should support teachers teaching out-of-field, and better deploy teachers within schools to reduce out-of-field teaching.
- All jurisdictions should work in partnership with First Nations education organisations to develop the new national First Nations Teachers' Strategy, to better attract and retain more Aboriginal and Torres Strait Islander teachers.

High teacher workloads can reduce the quality of teaching, affect teacher wellbeing, and exacerbate teacher shortages.

- Teacher workload has increased over time. At the same time, the number of assistants and support staff has grown, but it is unclear how they are used in schools.
- Reducing unnecessary teacher workload requires a better understanding of what low-value tasks can be reduced or discarded.
- Governments, in consultation with teachers and school leaders, should set out in their bilateral agreements how they intend to reduce low-value tasks and make the best use of teaching assistants.

Attracting and retaining a stable supply of teachers is critical to delivering high quality teaching. However, several review participants raised concerns about teacher shortages; noting that they are both a driver and symptom of the challenges facing the teaching profession.[160]

The importance of having a stable supply of teachers was recognised in the National School Reform Agreement (NSRA), through the reform direction 'supporting teaching, school leadership and school improvement'. This included a national policy initiative to create a National Teacher Workforce Strategy to respond to teacher workforce needs (chapter 3). According to the Education Council, the 'narrative' on National Initiatives to Support Teaching and School Leadership and the workforce strategy *Teaching Futures: A National Teacher Workforce Strategy for Australia* together fulfil these commitments. However, neither provide the resources required by school systems and initial teacher education (ITE) providers to identify and plan for future workforce needs (chapter 3).

In large part, this national policy initiative appears to have been superseded by commitments to help alleviate teacher shortages under the National Teacher Workforce Action Plan (NTWAP) agreed by Ministers in December 2022.[161] The Plan contains 27 actions over 5 priority reform areas to help attract and retain teachers: improving teacher supply; strengthening initial teacher education; keeping the teachers we have; elevating the profession; and better understanding future workforce needs (EMM 2022d).[162]

The next intergovernmental school reform agreement provides an opportunity to augment commitments under the Action Plan with a focus on facilitating mid-career entrants, reducing out-of-field teaching, supporting Aboriginal and Torres Strait Islander teachers and easing teacher workloads.

This chapter considers each of these issues in turn. It begins by considering the nature, extent and drivers of teacher shortages (sections 7.1 and 7.2). The following two sections explore a range of options for attracting and retaining teachers (sections 7.3 and 7.4). Recognising that addressing teacher shortages can take time, and that some shortages may persist, section 7.4 also examines options for supporting out-of-field teachers. Finally, section 7.5 highlights the merits of better identifying and predicting teacher shortages.

While this chapter focuses on ensuring a stable supply of teachers, teacher shortages and teacher effectiveness — the ability of a teacher to affect student outcomes — are inexorably linked. For example, shortages of specialist teachers can result in out-of-field teaching, which is likely to reduce the quality of teaching. Further, some policy levers affect both teacher supply and teacher effectiveness. For instance, improving early career teachers' access to induction and mentoring programs can reduce teacher attrition by providing a more supportive environment, but these same policies can also improve the quality of early career teachers. Teacher effectiveness, including the role of induction and mentoring programs, is canvassed in chapter 6.

[160] ACTA, sub. 37, attach. 1, p. 14; AEU, sub. 36, p. 32; AITSL, sub. 27, p. 10; CSPA, sub. 24, p. 6; DoE NT, sub. 42, pp. 5-6; DoE Tasmania, sub. 46, p. 3; DoE WA, sub. 19, p. 14; IEUA, sub. 15, p. 3; NCEC, sub. 7, pp. 5-6; P&C Federation NSW, sub. 18, p. 15; Pivot Professional Learning, sub. 33, attach. B, p. 1; Speech Pathology Australia, sub. 11, p. 4.

[161] As distinct from the Teacher Workforce Strategy.

[162] The plan was developed by a Working Group led by the Secretary of the Australian Government Department of Education with senior officials from state and territory governments, and representatives from unions and education peak bodies (EMM 2022d, p. 3).

7.1 What is the nature and extent of teacher shortages?

Identifying teacher shortages is not clear cut

Put simply, a teacher shortage occurs when the demand for teachers exceeds the supply.[163] While their effects can be keenly felt, gauging the extent of teacher shortages is difficult (Santiago 2002, p. 22).

While reference is often made to a single labour market for teachers, in practice, the labour market is segmented — by school level (primary and secondary), subject specialisation, and geographic location. Teacher substitution from one segment to another is often constrained by requisite skills (PC 2012a, p. 65). In particular, there is limited substitutability between primary and secondary teachers, and subject-specific teachers (PC 2012a, p. 65). This lack of substitutability means that shortages of teachers in some areas can occur alongside surpluses of teachers in others.

Teacher shortages do not always present as widespread vacancy problems or cancellation of classes (that is, quantitative shortages) (Santiago 2002, p. 21). More often than not, schools will find work arounds to ensure classrooms are staffed.

Teacher shortages can also give rise to 'hidden' effects (that is, qualitative shortages) that undermine teacher effectiveness (Santiago 2002, p. 22). This can include teachers teaching 'out-of-field' in subject areas they have not been formally trained for, and/or facing higher workloads to cover for shortages. Consequently, measures such as vacancy rates can underestimate the magnitude of teacher shortages (Santiago 2002, p. 22).

Evidence points to localised shortages

A lack of timely data makes it difficult to assess, but teacher shortages appear to be concentrated in particular subjects and locations, and can also manifest as a lack of workforce diversity.

Shortages persist in subjects such as mathematics and science

As highlighted by some participants, there are ongoing teacher shortages in secondary school subjects, including in core subjects such as mathematics, science, and English.

Deriving a national picture of subject-based shortages is frustrated by a lack of data (Paul 2021a, p. 89). Data from Victoria — one of the few jurisdictions to publish comprehensive workforce data — provide some insights. It revealed that the no appointment rates (jobs advertised that found no suitable candidate) in government secondary schools were about one-in-three in digital technology (36 per cent), design technology (34 per cent) and languages (30 per cent), and about one-in-five for mathematics (19 per cent), science (20 per cent) and English (17 per cent) in 2020 (AITSL 2022c).

[163] Teacher labour market shortages and surpluses can differ from general market imbalances as there are rigidities and limited substitutability between segments of the teacher labour market, which do not allow typical market forces to bring the market into equilibrium.

A shortage of specialist secondary school teachers has led to out-of-field teaching.[164,165] In 2018, in jurisdictions which release data, 24 per cent of secondary teachers surveyed teaching mathematics had no formal training in the subject they were teaching[166]; a trend echoed in science (18 per cent), design and technology (30 per cent), languages other than English (29 per cent) and English (18 per cent)[167] (AITSL 2021a, p. 89).

Concerns about out-of-field teaching in mathematics and science (NCEC, sub. 7, p. 6; PPL, sub. 33, attach. A, p. 1), are also borne out in data from the OECD. The 2019 Trends in International Mathematics and Science Study (TIMSS) showed that 23 per cent of Year 8 students were being taught by teachers who had not majored in either mathematics or mathematics education (Thomson et al. 2021, p. 49), while 9 per cent were taught by science teachers who had not majored in either science or science education (Thomson et al. 2021, p. 73). Further, the 2015 Programme for International Student Assessment (PISA) results showed that, of Year 10 teachers, 21 per cent of mathematics teachers and 6 per cent of science teachers were teaching out-of-field (Shah, Richardson and Watt 2020, p. 13).

Shortages in regional, rural and remote areas remain a concern

There have been longstanding teacher shortages in regional, rural and remote areas across States and Territories (Paul 2021a, p. 89; PC 2012a, p. 92). The Independent Review into Regional, Rural and Remote Education found that:

> [n]otwithstanding the efforts of governments and others over many decades, attracting and retaining teachers for [regional, rural and remote] schools continues to be one of the most persistent challenges on the education agenda. (Halsey 2018a, p. 38)

Review participants have highlighted that these challenges continue to be experienced across school sectors (AEU, sub. DR101, p. 25; IEUA, sub. 15, p. 3; NCEC, sub. 7, p. 5). As the Independent Education Union of Australia observed:

> … rural and remote schools face significant challenges in attracting and retaining qualified and experienced teachers … [i]n addition, and out of necessity, the occurrence of teachers teaching out of their subject area is widespread. (sub. 15, p. 3).

A recent study similarly concluded that 'some rural schools … suffer from a lack of qualified staff', and that these shortages are 'particularly acute in certain subject areas and specialisations, such as science and special needs' (Echazarra and Radinger 2019, p. 36).

There is a lack of data (especially consistent national data) on the magnitude of shortages in regional, rural and remote areas (AITSL 2022c). The limited available data, which date back several years, revealed that the share of secondary school principals that had major or moderate difficulty finding staff was about 27 percentage points higher in remote than metropolitan schools (PC 2012a, p. 92), and the proportion of

[164] AEU, sub. DR101, pp. 17-18; AHISA, sub. DR94, p. 11; CIS, sub. 45, p. 45; NCEC, sub. DR87, p. 13; PPL, sub. 33, attach. A, p. 1.

[165] The specific definition of out-of-field teaching varies in the literature and depends on how formal training in a subject area is defined. Definitions can include: teachers who have not passed a subject-area exam; teachers who have not completed a set number of courses or teaching certificates; or teacher who have an undergraduate or graduate major or minor in the field (Ingersoll 2019, p. 26). As the definition of out-of-field teaching varies in Australia, the Commission has looked at a range of statistics to better understand the extent of the issue.

[166] With up to 40 per cent teaching out-of-field when including those with training in subject content or pedagogy only.

[167] In New South Wales, Northern Territory and South Australia. Detailed data for all States and Territories are not yet available (AITSL 2022e).

secondary classes that were taught out-of-field was about 12 percentage points higher in remote than metropolitan locations in 2013 (Weldon 2016, p. 1).

More recent data from Victoria reveal that in government schools, no appointment rates increased with remoteness. In 2020, the no appointment rate for government secondary schools was close to 30 per cent in outer regional and remote areas, relative to 18 per cent in major cities (Victorian DET 2021, p. 97).[168]

There is a lack of teachers to respond to diverse student needs

There is also evidence of a shortage of teachers who are qualified to teach particular student cohorts. The Australian Association of Special Education NSW raised the 'lack of qualified special/inclusive educators in Australia' as a concern (sub. 20, p. 1). In the case of teachers of students with disability, in 2018, across New South Wales, South Australia and the Northern Territory, some 31 per cent of teachers who taught special education had no content and pedagogical training for it (AITSL 2021a, p. 89). A lack of qualified teachers has also been highlighted as an issue for students learning English as an Additional Language or Dialect (ACTA, sub. 37, attach. 1, p. 13).

Participants also raised questions over whether all teachers are culturally capable and so able to create a safe learning environment where students experience inclusion and a sense of belonging, particularly in respect of Aboriginal and Torres Strait Islander students.[169] While data on the degree of the workforce's cultural capability is in development, initial evidence suggests that teacher cultural capability is lacking. For example, the Australian Institute for Teaching and School Leadership (AITSL) observed that cultural capability is viewed as a requirement to 'teach culture', or reduced to only performative aspects of culture as opposed to facilitating culturally responsive learning experiences with communities (AITSL 2021a, p. 18, 2022b, p. 7).

More broadly, the teacher workforce is not always representative of the community. For example, in 2018, the proportion of Aboriginal and Torres Strait Islander people employed in the teacher workforce (2 per cent) was below the proportion of Aboriginal and Torres Strait Islander people in the overall student population (5.7 per cent) (ACARA 2022i; AITSL 2021a, p. 18).[170] This trend is likely to continue; in 2019 only 1 per cent of ITE commencements were Aboriginal and Torres Strait Islander people (AITSL 2022c).

Teacher shortages can impose considerable costs

Teacher shortages can impose substantial costs on students, teachers and schools. In the case of quantitative teacher shortages, the cancellation of classes can reduce student subject choice or students may need to source replacement classes (Halsey 2018a, p. 74). In the case of qualitative teacher shortages, costs primarily arise due to reduced teacher effectiveness. This is because teachers with domain-specific expertise tend to be more effective, particularly in upper secondary school grades (Shah, Richardson and Watt 2020, p. 9).

[168] The corresponding rate for government primary schools was 13.1 per cent in outer regional and remote areas and 8.6 per cent in major cities (Victorian DET 2021, p. 61).

[169] AEU, sub. 36, p. 13; AITSL, sub. 27, p. 19; NIAA, sub. DR103, p. 7; IECM, sub. DR125, p. 6. Such lack of qualifications to teach particular student cohorts is analogous to a qualitative shortage like out-of-field teaching. That is, the quality of teaching is affected by a lack of teachers qualified to teach particular student cohorts, which can affect student wellbeing, engagement and learning outcomes particularly for Aboriginal and Torres Strait Islander students (AITSL, sub. 27, p. 19).

[170] As many Aboriginal and Torres Strait Islander communities are located in regional, rural and remote areas, they also face general quantitative teacher shortages (PC 2012a, p. 92).

Out-of-field teaching can also add stress to teachers and principals which, in turn, affects their wellbeing and ability to teach (PC 2012a, pp. 95–96). Given that teachers teaching out-of-field are often more inexperienced, the additional pressures placed on them can contribute to workforce attrition (PC 2012a, p. 96).

The negative impacts of out-of-field teaching on student learning can disproportionately affect students experiencing educational barriers (PC 2012a, p. 95). In addition to there being a lack of inclusive educators, Aboriginal and Torres Strait Islander students and students from low-parental education backgrounds are disproportionately represented in regional, rural and remote areas, where shortages are more pronounced.

While a teacher's subject knowledge and interest in the subject can minimise the costs outlined above, costs can be further reduced through on-the-job experience or professional development (PC 2012a, p. 95) (section 7.5).

7.2 What is driving teacher shortages?

Teacher shortages are driven by a combination of demand and supply-side factors. The factors that drive teacher demand are relatively simple — such as growth in the school-age population (Santiago 2002, p. 12). Teacher supply factors are more complex — they include drivers of workforce attraction and attrition, such as workload, career development and pay structures. Figure 7.1 shows a stylised example of the teacher labour market, and the interactions between teacher supply and demand.

Many of the factors that have contributed to segment-specific shortages may persist, with some participants suggesting they may become more pronounced. As AITSL remarked:

> Australia is facing a critical shortage of teachers due to a number of factors including growing school enrolments, a drop in the number of individuals enrolling in teaching degrees, an ageing workforce and a percentage of teachers leaving the profession to embark on different careers each year. (sub. 27, p. 10)

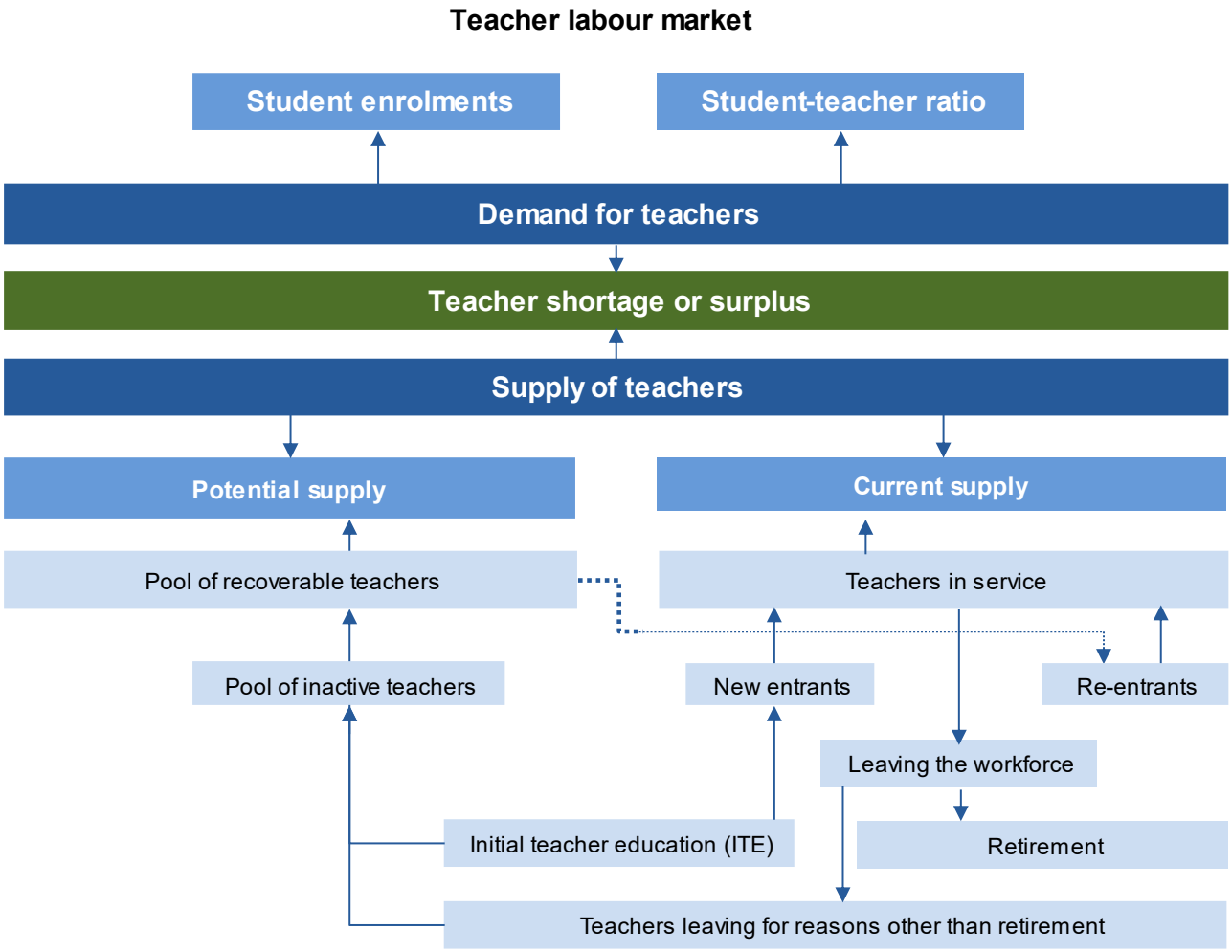
The demand for teachers is increasing

The national demand for teachers is growing.[171] While growth has slowed in recent years, over the period from 2001 to 2021, student enrolments increased by about 18 per cent for primary schools and 29 per cent for secondary schools (figure 7.2). Population projections suggest that the student-aged population will continue to grow over the next decade at about 1.3 per cent per annum (AITSL 2022c).

While national demand for teachers is easier to forecast, limited data make it difficult to predict demand for teachers in specific market segments, such as by geographic location and subject specialisation (improving labour demand data is discussed in section 7.6).

[171] Assuming student-teacher ratios remain constant.

Figure 7.1 – Teacher shortages and teacher effectiveness are determined by the labour market



Supply of teachers	Number of registered teachers who are willing to teach or are teaching
Current supply	Number of registered teachers teaching
Potential supply	Number of registered teachers willing to teach
Re-entrants	Previous teachers returning to teach
New entrants	First time teachers
Recoverable teachers	Inactive but may return to teaching
Inactive teachers	Qualified to teach but not teaching

Leaving for reasons other than retirement	Outflow of teachers leaving before retirement
ITE	Pre-service education and induction for teaching students
Retirement	Outflow of teachers leaving to retire
Demand for teachers	Number of registered teachers required to meet student demand
Student enrolments	Number of students registered for schooling
Student-teacher ratio	Number of students per teaching staff

Source: Adapted from Dolton (2006, p. 1083).

There are concerns teacher supply will not meet demand

At the same time that student numbers are growing, some submissions highlighted that there are problems attracting new entrants into the teaching workforce (AITSL, sub. 27, p. 10; P&C Federation, sub. 18, pp. 14–15; NCEC, sub. DR87, p. 9). As the IEUA reflected: '[t]he current teacher shortage is the combination of a crisis of recruitment and a crisis of retention' (sub. DR78, p. 6).

ITE commencements are declining

One measure of new entrants is ITE commencements. The most recent data reveal ITE commencements declined from 2017 to 2019, albeit after a period of solid growth (figure 7.2). Recent growth in ITE enrolments — the total number of students enrolled in an ITE course — has also stagnated; although this is coming off an all-time high in 2017.[172]

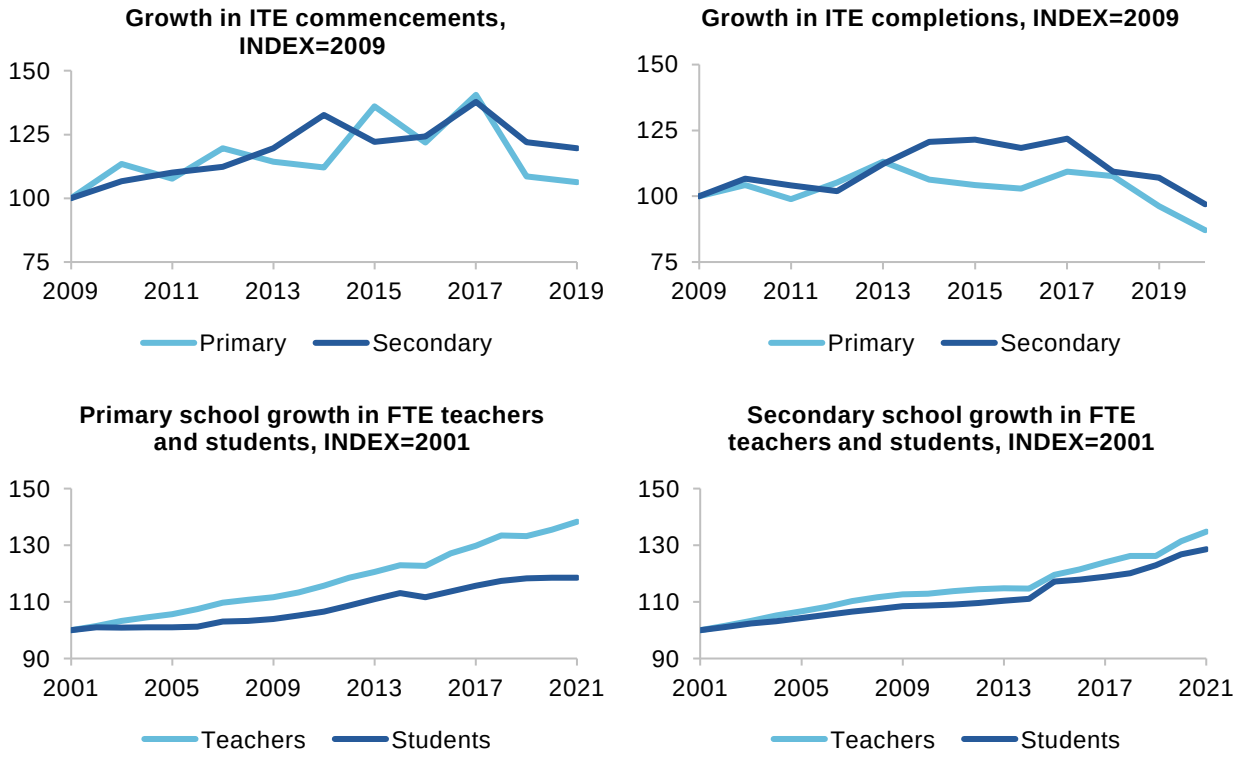
At the same time that commencements have slowed, only about half of undergraduate ITE students are completing their programs. Growth in ITE completions has been generally negative from 2015 and the number of completions was fewer in 2020 than in 2009 (figure 7.2). While completion rates for postgraduate students are higher, they too have declined, coinciding with the shift to two-year postgraduate ITE programs.

However, data on ITE commencements and completions only provide a partial picture. Teacher supply can be divided into two components — current and potential supply. The first comprises people working as teachers, while the second comprises registered teachers who are not teaching but can return to the profession (Dolton 2006, p. 1082). It is important to take re-entrants into account, as along with ITE completions, they determine the growth of the teaching workforce as a whole.

Despite stagnating ITE enrolment growths, so far, growth in the supply of teachers appears to be matching student enrolments. Data show that the growth rate of full time equivalent (FTE) teachers has been steady and outpaced FTE equivalent student enrolment growth from 2001 to 2021 (figure 7.2).

[172] Based on Commission estimates ITE enrolments are still at historically high levels.

Figure 7.2 – Although ITE completions have fallen, growth in the teaching workforce has kept pace with student enrolments



Sources: ACARA (2022a, 2022b); AITSL (2022e).

There are concerns teachers are leaving the profession

Some review participants suggested that attrition has also been contributing to teacher shortages.[173] In broad terms, teacher attrition can be defined as qualified teachers leaving teaching, including to work in other professions.

Australian data on teacher attrition are limited and some are quite dated, making it difficult to draw reliable conclusions about how many teachers are leaving the profession. For example, total annual teacher attrition has been previously estimated at 5.7 per cent nationally in 2014 (Australian Government 2014, p. 50), and 4.1 and 4.9 per cent in Victorian government primary and secondary schools respectively in 2020 (Victorian DET 2021, pp. 69, 105).[174]

Teacher attrition varies across career stages (AAAE, sub. DR104, p. 14; IEUA, sub. DR78, p. 6). For example, estimates of early teacher attrition (within the first five years of teaching) are much higher, ranging from 8 to 50 per cent (although these data are often based on overseas studies or anecdotal evidence, with

[173] AITSL, sub. 27, p. 10; IEUA, sub. DR78, p. 6; P&C, sub. 18, p. 15.

[174] Such data are often limited, based on a point in time, and do not take into account: teachers moving sectors; changes from part-time to full-time employment; or attrition in different market segments. The rate of attrition can also vary depending on the definition of attrition used.

the 50 per cent estimate being particularly dubious[175]) (AITSL 2015b, p. 12; Mason and Matas 2015, p. 60; Weldon 2018, pp. 64–65). In Victorian Government schools, teacher attrition in the first, second, and third year of teaching was estimated to be 1, 6, and 9 per cent respectively in 2020 (Victorian DET 2021, pp. 53, 89).

Ultimately, poor quality attrition data make it difficult to determine the magnitude of any current problem, as Weldon noted:

> The attrition rate of early career teachers in Australia is an issue, but not because it is worryingly high or an intractable problem of epidemic proportions. While these claims may be true there is currently no reliable evidence to support them. Therefore, the main issue is that the attrition rate in Australia is, in fact, not well established. It is unknown. (2018, p. 72)

An ageing workforce

While it is hard to gauge the extent to which teachers are exiting the workforce, there are concerns that factors, such as an ageing workforce[176], could result in higher attrition in the future.

Concerns about an ageing workforce and its potential effect on attrition and teacher supply are not new (Anderson et al. 2007). In 2020, 44 per cent of registered teachers were aged 40-59 years with 18 per cent aged 60 years or more. This increased in 2018 and 2019, while the proportion of teachers aged less than 39 years decreased slightly over the same period (figure 7.3). Noting that older teachers are more likely to retire, data on intentions to leave indicate that in 2018, the number of years a teacher intended to remain in the workforce decreased with age (AITSL 2021a, p. 98).[177]

Concerns about an ageing workforce have also been raised in respect of school leaders (chapter 8).

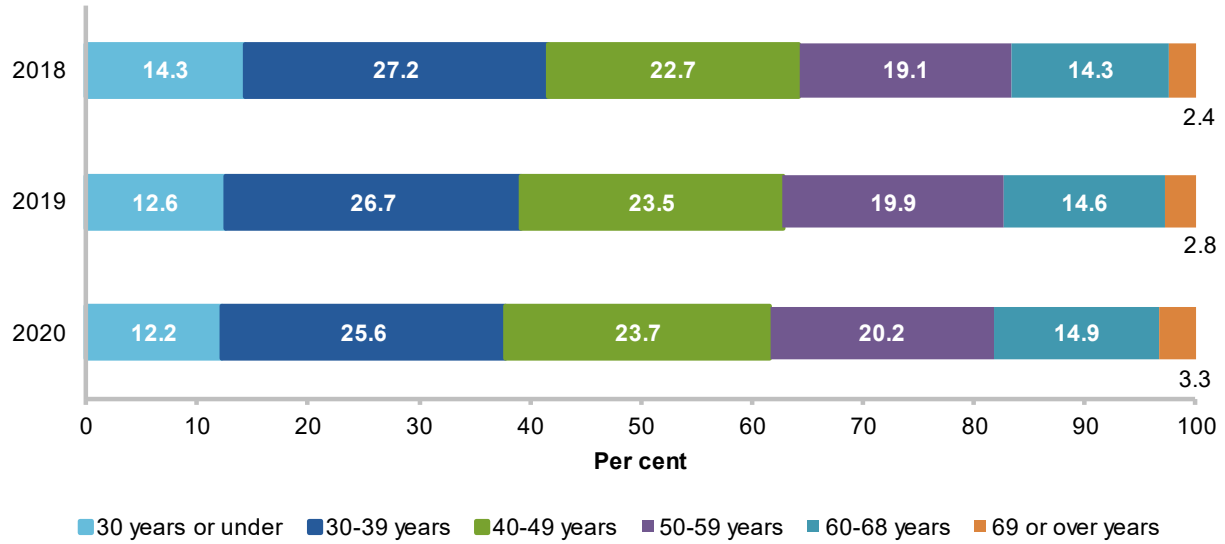
[175] Estimates of 50 per cent attrition are generally attributed to Gallant and Riley (2014) who find that 'nearly half the graduating teachers' in several countries including Australia 'fill positions vacated by teachers who have left with less than five years' experience …' (Weldon 2018, p. 65). Weldon noted that '[t]his is not the same as saying that 50 per cent of teachers leave within the first five years and none of the Australian references given … provide evidence for such a figure' (2018, p. 65).

[176] AITSL, sub. 27, p. 10; InSpEd, sub. DR98, p. 3; Tasmanian Government, sub. 46, p. 3.

[177] Based on teachers surveyed in New South Wales, Northern Territory and South Australia. Detailed data for all States and Territories are not yet publicly available (AITSL 2022e).

Figure 7.3 – The proportion of registered teachers aged less than 39 years decreased between 2018 and 2020[a]

Proportion of registered teachers in Australia



a. Includes early childhood teachers. Previous surveys of teachers showed the age distribution of school teachers was similar to early childhood teachers (AITSL 2021a, p. 46).

Source: AITSL (2022e).

The school environment features heavily in decisions to leave teaching

A broader range of environmental factors — such as workplace conditions, wages and career pathways — also feature heavily in intentions to leave teaching.

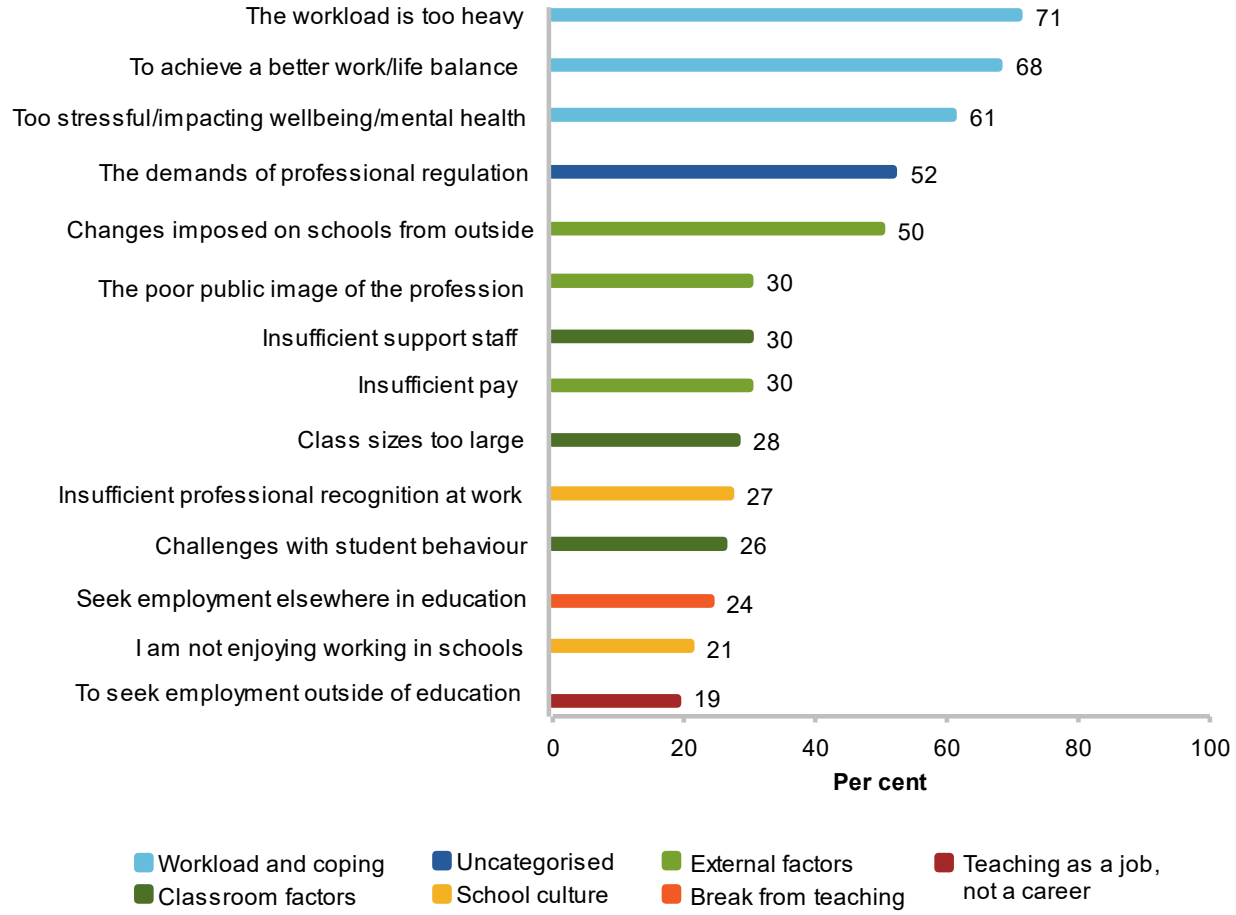
According to the new Australian Teacher Workforce Data (ATWD) dataset, about one-in-ten teachers surveyed by AITSL in 2020 could leave the profession in the next 10 years due to non-retirement reasons.[178] The main factor driving teachers' intentions to leave is workload and burnout (figure 7.4); intentions to leave were broadly consistent for early career teachers (AITSL 2021a, p. 153).[179] Some 30 per cent of teachers surveyed also identified remuneration as a reason for considering leaving the profession — a point echoed in submissions (AEU, sub. 36, p. 33).

While intentions data do not necessarily correlate with attrition, AITSL noted that ' … [i]t can, however, be a good barometer of current perceptions and the mindset in a population' (2021a, p. 24).

[178] 22 per cent indicated they intended to leave the profession before retirement, and 51 per cent of this group intended to do so in 1-9 years; giving 11 per cent who would intend to leave within 10 years (AITSL 2021a, p. 23, 2022e). Surveyed intentions are broadly consistent among classroom and early childhood teachers (AITSL 2021a, p. 23).

[179] Early career support and development is important for retaining teachers. Factors that drive early teacher attrition often involve unstable employment patterns, and heavy and complex workloads (AITSL 2015b, p. 12). Therefore, factors such as supportive school environments, the ability to find stable permanent employment, and adequate pedagogical preparation can help improve teacher retention and development.

Figure 7.4 – Reasons for considering leaving the teaching profession[a]



a. Based on 3216 survey respondents from New South Wales, Northern Territory and South Australia. Detailed data for all States and Territories is not yet publicly available – current data indicate that workload and coping continued to be the most cited reason for considering leaving between 2018 to 2020 (AITSL 2022e).

Source: AITSL (2021a, p. 108).

External pressures have impacted teacher shortages

External pressures, including a tightening Australian labour market and the COVID-19 pandemic, have likely added to difficulties in attracting and retaining teachers in more recent years.

The COVID-19 pandemic

The COVID-19 pandemic has led to short-run teacher shortages as teachers and school staff adhered to COVID-19 isolation policies — taking teachers out of classrooms and leading to school closures in some cases (Carey 2022; O'Flaherty 2022; Smyrk and Moon 2022; Tucci 2022).

However, there have also been concerns that COVID-19 has exacerbated long-run retention and teacher shortages (Carabetta and Wilson 2022). For example, the significant changes to the teaching environment during the pandemic — such as the move to remote learning — have led to claims of increased workload as teachers adapted to teaching both online and face to face (Flack et al. 2020, p. 4; NCEC, sub. 7, p. 5). Accounts of poorer teacher wellbeing have also arisen, including experiences of social isolation and low teacher morale (Flack et al. 2020, p. 4; Fray et al. 2022, p. 18).

Australia's tightening labour market

Concerns about teacher shortages are occurring against the backdrop of a tightening labour market. The most recent *2022 Skills Priority List* Report highlighted the implications of a tightening labour market for skill shortages:

> [a] tightening labour market … [results] in a greater number of occupations in shortage as employers are unable to fill advertised vacancies … ABS data shows that the labour market has tightened significantly since 2021. The tightening can be gauged from the unemployment rate, which fell to 3.4% in July 2022 – the lowest rate recorded since August 1974 … [a]t the same time, the demand for workers has increased rapidly over the past two years to 2022. (National Skills Commission 2022, p. 5)

A tightening Australian labour market may mean that schools face more competition to retain and attract staff, potentially adding to pressures on teacher shortages. The National Skills Commission (2022, p. 23) noted that the teacher labour market has tightened in the last year with the number of suitable applicants per vacancy decreasing from 3.8 in 2021 to 1.8 in 2022.[180]

While the trends identified above point to ongoing pressures, it is important to remember that labour markets are dynamic and can adjust over time, and that forecasts of shortages often assume a fixed classroom size — a key driver of teacher demand. All else equal, increasing classroom size would increase the student-teacher ratio, and could decrease demand pressures for teachers (figure 7.1).

Finding 7.1

Teacher shortages in regional, rural and remote areas and in key subjects, such as maths, science and English impose substantial costs on students, teachers and schools.

There are teacher shortages in regional, rural and remote areas, and in subjects such as mathematics, science, English and design and technology.

The significant disparity between the share of teachers of Aboriginal and Torres Strait Islander background (2 per cent) and students with that background (6 per cent) frustrates culturally appropriate teaching.

Factors such as growing student enrolments, changes in initial teacher education enrolment trends, and an ageing workforce may contribute to continued teacher shortages in the future.

Teacher shortages can impose substantial costs on students, teachers and schools, including because it gives rise to out-of-field teaching, and teachers without domain specific expertise tend to be less effective, particularly in upper secondary school grades.

[180] The proportion of education professional vacancies filled declined from 86 per cent in 2021 to 60 per cent in 2022 (National Skills Commission 2022, p. 22). Education professionals includes early childhood, primary and secondary teachers.

7.3 How can we attract teachers to areas of shortage?

Understanding what motivates people to become teachers is key to attraction

Attracting the right people into teaching is important not just for reducing the costs associated with teacher shortages, but also for improving student outcomes (chapter 6).

People's motivations for joining the teaching profession are complex and driven by intrinsic and extrinsic factors (Whiteford, Kelly and Dawes 2021, pp. 1–2) (figure 7.5).[181] Intrinsic factors are the personal reasons why people choose to teach, such as the desire and joy of teaching. Extrinsic factors are the motivations driven from the teaching environment, such as remuneration or the social status of the profession.

Figure 7.5 – Drivers of attraction to becoming a teacher

Intrinsic factors	• Genuinely liking and being with children • Fulfilling a dream or ambition • Having meaningful engagement with a subject area
Extrinsic factors	• Remuneration rewards • Employment opportunities • Working conditions including workload and non-pecuniary benefits • Social status • Job security

Source: Adapted from Gore et al. (2015, p. 11).

While motivations vary depending on the individual and market segment, the more commonly cited reasons for becoming a teacher include the joy of working with children, the intellectual fulfilment of imparting knowledge, and making a contribution to society (Ashiedu and Scott-Ladd 2012, p. 25). Although extrinsic factors, such as remuneration, job security and length of holidays, have also been linked to teacher attraction, they appear to be less influential (box 7.1). This was mirrored in a survey conducted by the Grattan Institute, which found that young high achievers believed the ability to 'make a difference' and to be intellectually challenged are the most important career attributes (Goss and Sonnemann 2019, p. 18).

People's motivations for entering the teaching profession also depend on the stage of their career. Evidence suggests mid-career entrants into teaching are influenced by intrinsic factors, such as the desire to make a social contribution, as well as extrinsic factors, including the need for new employment opportunities (Bauer, Thomas and Sim 2017, pp. 186–187). These factors can differ by the age and industry background of mid-career professionals (Paul 2021a, pp. 17–18).

[181] Analysis in the literature is based on surveys of current teachers who decided to become teachers and focuses less on the motivations of why people did not choose to become a teacher.

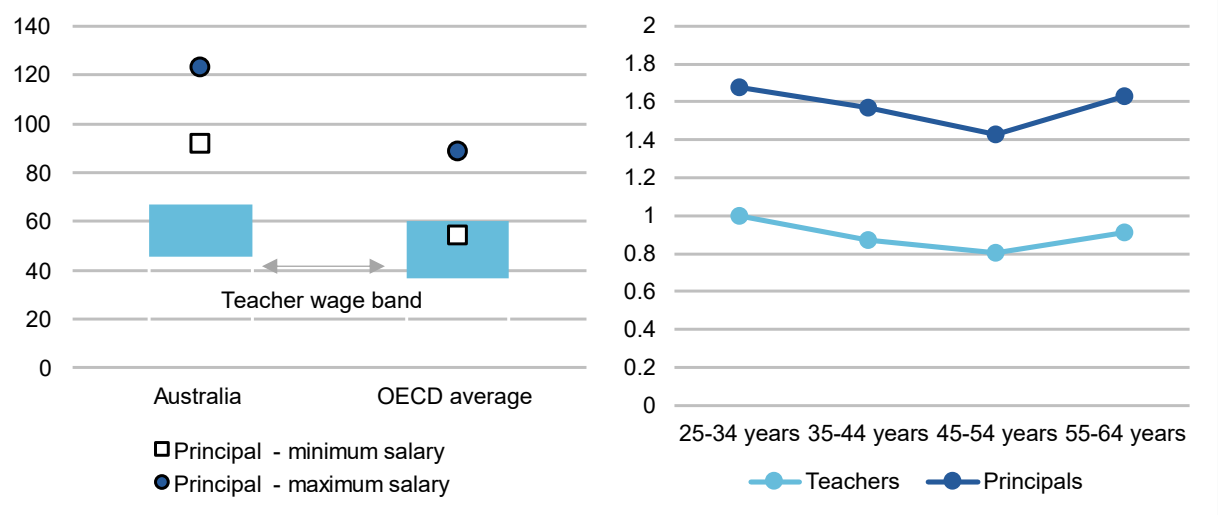
Box 7.1 – Teacher pay is unlikely to be the sole disincentive to teaching

Some submissions suggested that creating higher paying expert teacher career paths could resolve pay compression issues, and improve teacher attraction and retention (AAAE, sub. DR104, p. 13; AERO, sub. 6, p. 12; Grattan Institute, sub. 5, p. 10).

While higher teacher salaries relative to other industries could improve attraction and retention — especially in areas of shortage (Dolton 2006, p. 1153; Fahey 2022, p. 16) — international evidence suggests that teacher pay is unlikely to be the sole disincentive to teaching (OECD 2018). For example, student characteristics, such as socioeconomic status and performance, have been found to have a stronger influence on teacher attrition than wages (Hanushek, Kain and Rivkin 1999, pp. 43–44).

More broadly, evidence suggests that Australian teacher salaries, while slightly more compressed, are higher relative to the OECD average (see below figure). And the compression of salaries mainly affects teachers in the middle of their career — starting salaries for Australian graduates are competitive relative to other tertiary educated workers, and principal pay is measurably higher.

Australian teacher statutory salary bands (left) and salaries relative to earnings for tertiary educated workers (right)[a]



a. Australian and OECD statutory salary bands are in terms of annual statutory salaries of teachers and school heads in USD purchasing power parity (PPP). Australian teacher salaries relative to earnings for tertiary educated workers in terms of actual salaries of lower secondary school level teachers and principals.

Source: OECD (2021).

Encouraging new entrants

There are several options for attracting people into the teaching profession, each with different lead times. For example, raising the profile of the profession and encouraging more school leavers to study to become teachers is one, longer-term strategy, whereas attracting those who already have an undergraduate degree, including mid-career entrants, can provide earlier dividends.

Facilitating mid-career entrants

Mid-career professionals could be an important source of teacher supply, particularly in areas of shortage …

Attracting (and training) high-quality mid-career entrants was raised in a number of submissions as a means of bolstering teacher supply.[182]

Mid-career professionals could be an important pipeline for future teacher supply, particularly in certain subject areas such as mathematics (Bauer, Thomas and Sim 2017, p. 185), geographic locations, and as a means of improving workforce diversity. Recent surveys reveal up to four in ten mid-career professionals would consider a career in teaching, with one in ten planning a career change to become a teacher, and three in ten open to the idea (Paul 2021a, p. 16).

Evidence suggests that mid-career entrants have and will continue to become increasingly important.

- About one quarter of total work experience for Australian teachers came from non-teaching work experience in 2018, emphasising the role that mid-career entrants already play in the workforce (Thomson and Hillman 2019a, p. 39).
- The age of ITE students and the proportion of post-graduate ITE enrolments have both increased (Paul 2021a, p. 10), suggesting that more mid-career entrants are considering teaching.
- More broadly, evidence suggests that career mobility — the movement from one career to another — is becoming more prevalent (Deloitte 2017a; Lyons, Schweitzer and Ng 2014, pp. 8–9).

… but they face switching costs which governments could reduce

However, mid-career teacher entrants face considerable switching costs, including the time to undertake ITE courses and the loss of income while studying and beginning a new career (Paul 2021a, p. 17).[183]

Switching costs have increased with the shift to longer ITE courses. From 2012 to 2017, the typical mid-career pathway to become a teacher for a person with a Bachelor's degree changed from a one-year Graduate Diploma of Education, to a two-year postgraduate degree (AITSL, sub. DR93, p. 12). Estimates in New South Wales suggest the addition of a second postgraduate year increased tuition fees (typically $4000 a year) and opportunity cost of not earning an income (typically $70 652 in the first year of teaching public schools) (Joseph 2022, p. 3).

Higher switching costs may have discouraged some from studying teaching. For example, in 2018, postgraduate commencements decreased by about 14 per cent, while completions declined from 2014 (AITSL 2022e; Paul 2021b, p. 6). Indeed, AITSL noted that some volatility should be expected in commencement rates until changes following the discontinuation of the one-year graduate diploma are well-established (2022e).[184]

Governments have two levers to reduce mid-career switching costs to make teaching more attractive.

1. **Reducing the loss of income from switching careers by providing income and/or ITE subsidies, or employment-based pathways**. Some evidence suggests that mid-career entrants would value financial and study assistance to help them enter teaching (Paul 2021a, p. 16). These factors can differ by the age and industry background of mid-career professionals (Paul 2021a, pp. 17–18).

[182] AITSL, sub. 27, p. 13; IEUA, sub. 15, p. 11; CIS, sub. 43, p. 45; Newcastle University, sub. DR84, p. 9.

[183] Barriers to entry may also be exacerbated by mid-career professionals underestimating the time required to gain teaching qualifications (currently a two-year Master's degree in Australia) (Paul 2021a, p. 16). Other barriers to entry can include subject-eligibility requirements, and recognition of professional experience once teaching (TFA 2021, p. 16).

[184] Although this may reflect other challenges with university admission standards in the field (Joseph 2022, p. 4).

2. **Reducing the length of time to study post-graduate degrees**. As the review into Quality Initial Teacher Education observed:

> [t]he requirement of the two-year Masters qualification has the biggest impact on mid-career professionals who show interest in becoming a teacher. Time out of the workforce, and the associated lack of income, is the most significant barrier to entry for this cohort. (Paul 2021a, p. 33)

Reducing the loss of income

Loss of income while studying is a significant deterrent for mid-career entrants. There are ways for governments to reduce this foregone income while still ensuring mid-career entrants are prepared for the classroom, including:

- **income or ITE subsidies** such as Commonwealth Supported Places, or financial incentives tied to remaining in the teaching profession
- **post-graduate degrees that include paid internships.** As noted by AITSL (sub. DR93, p. 13) '[m]any programs combine paid 'on-the-job training' / 'internships' / 'residencies' at a school with a study component running concurrently throughout their 18–24-month qualification.' While this can reduce the extent of lost income, employment-based pathways or one-year degrees do so to a greater degree
- **employment-based pathways** that combine postgraduate studies with employment in schools. For example, the Australian Government funds the Teach For Australia Leadership Development Program (LDP), which provides employment in areas of teacher shortages while people undertake postgraduate study (DoE 2022b) (box 7.2). A number of jurisdictions are also developing and implementing similar employment-based pathways to meet areas of shortage (Paul 2021a, pp. 30–31).

Box 7.2 – Teach for Australia Leadership Development Program

The Teach for Australia Leadership Development Program (LDP) began in 2010 and selects high calibre university graduates to teach in schools in low-socioeconomic communities (Paul 2021a, p. 31; TFA 2021, p. 2). LDP is funded by the Australian Government through the High Achieving Teachers Program. As of 2021, LDP placed students in Victoria, Western Australia, South Australia, the Northern Territory and Tasmania. LDP has placed 1120 students across 12 cohorts (TFA 2021, p. 2); the most recent 2022 cohort had 171 teachers (TFA 2022, p. 2). The Australian Government recently committed to expand the High Achieving Teachers Program by 1500 more places (Australian Government 2022b, p. 97).

The LDP program involves:

- selecting a small number of 'associates' from a large pool of high-achieving university graduates
- preparing associates for teaching through an initial six-week intensive course and other preparatory work totalling 13 weeks
- placing associates in schools experiencing disadvantage for two years where they work 0.8 full time equivalent teaching hours and receive 80 per cent of a graduate teacher salary
- ongoing support for associates during the two-year placement (Dandolopartners 2017, p. 2).

Submissions to this review largely focused on further developing employment-based pathways as a way to attract more people into teaching (AITSL, sub. DR93, pp. 12–13; NCEC, sub. DR87, p. 4). Initial anecdotal evidence suggests that employment-based pathways could be effective in developing teachers in areas of shortage. For instance, a 2021 independent review into the LDP found that it 'produces highly effective teachers that perform as well or better than graduate teachers'; in 2020, half of principals surveyed said that

LDP participants were more or much more effective than graduate teachers (Dandolopartners 2021, p. 3,27). LDP participants also typically come from STEM backgrounds, helping alleviate subject-specific shortages (Dandolopartners 2017, p. 15).[185]

Employment-based programs and internship models also have the added benefit of allowing students to be in the classroom earlier (AITSL, sub. 27, p. 13). While early classroom interactions work in tandem with extra support, they nonetheless help students build critical classroom management and student engagement skills, as well as allow ITE students to see whether teaching is the right job for them earlier in their degree.

However, there can be challenges in scaling up employment-based programs.

- There is a limited pool of candidates as these programs target a specific type of person — motivated, high-achieving people with specialised knowledge in certain subjects (Dandolopartners 2021, p. 11).
- Schools can have limited capacity to take on candidates as they may require intense support to transition early into the classroom (Dandolopartners 2021, p. 11).
- The model requires investments from government, ITE providers, employers and participating schools (AEU, sub. DR101, p. 21, AITSL, sub. DR93, p. 13).

Reducing the length of time to study

There are also several options for reducing the time to study, including greater reliance on accelerated postgraduate degrees, reverting back to a one-year graduate diploma or qualification, and better recognition of prior learning (RPL).

Some ITE providers and most States have some form of accelerated post-graduate teacher degrees (Paul 2021a, p. 29). While accelerated post-graduate degrees reduce switching costs, they still typically run for 15 to 18 months, and require students to pay the same post-graduate fees as non-accelerated courses.[186] Further, the intensity and duration of such programs means they retain many of the disincentives of a conventional two-year postgraduate pathway (Joseph 2022, p. 6). Also, not all ITE providers provide accelerated pathways. For example, in 2021, only seven out of the 19 Master Teaching programs in Queensland could be completed in 18 months (Paul 2021b, p. 29).

Reverting back to a one-year graduate diploma would reduce the cost barriers associated with accelerated post-graduate degrees. However, some participants raised concerns about this option, particularly those who considered that a one-year diploma did not adequately prepare individuals to become teachers and was at odds with raising the status of the profession.[187] Among the reasons put forth for switching to a two-year postgraduate degree were concerns that there was 'variable quality of the existing one-year graduate diplomas' (AITSL sub. DR93, p. 12).[188]

[185] Some evidence suggests that LDP has good retention; 72 per cent of surveyed alumni were still teaching or leading in schools (TFA 2021, p. 3). However, limited data make it difficult to compare retention with other ITE courses. Further, Dandolopartners (2017, p. 3) also found that about 50 per cent of candidates were still teaching three years after completing their placement.

[186] Post-graduate fees are typically higher than undergraduate fees. However, if a student has access to a Commonwealth Supported Place (CSP), this lowers the cost burden. For instance, at Deakin University a full-fee paying place for a Masters of Teaching (Secondary) was $23 800 per year in 2022, but only $4 124 per year for a CSP (Deakin University 2022).

[187] AITSL, sub. DR93, p. 12; AEU, sub. DR101, pp. 20-21; P&C Federation NSW, sub. DR97, p. 6; NSW SPC, sub. DR92, p. 5; TTRC, sub. DR84, p. 10.

[188] AITSL also suggested that there could be transition costs from any reintroduction of a one-year graduate diploma, and that these costs could fall to ITE providers and Teacher Regulatory Authorities (AITSL, Sub. 93, p. 12).

As an alternative, the *Quality Initial Teacher Education Review* (QITE Review) suggested that better recognition of prior learning or experience could reduce time to study by enabling ITE providers to fast-track candidates with transferable skills (Paul 2021a, p. iv).

More broadly, participants stressed that reducing study time (be it through the reintroduction of one-year courses or improved RPL) needs to be balanced with the benefits of a two-year post-graduate degree — more time to learn the required level of pedagogical, disciplinary and content knowledge required to teach.[189,190] Although, there is limited evidence on the benefits that longer ITE has on teacher effectiveness (Fahey 2022, p. 26; Joseph 2022, p. 4; PC 2012a, p. 119). Joseph (2022, p. 4) noted:

> … [m]ore than 60,000 Australian teachers hold a [Graduate Diploma of Education] … accounting for 29% of secondary teachers (~42,000) and 12% of primary teachers (~18,000). No analysis has ever suggested these teachers' work to be of inferior quality to that of their peers.[191]

Indeed, a number of reviews have recommended reconsidering introducing one-year post-graduate teaching qualifications. The NSW Productivity Commission recommended reviewing the costs and benefits of two-year and one-year full-time equivalent pathways, and implementing alternative accelerated pathways within two years of the review (NSW PC 2021, p. 63). And the *Inquiry into Teacher Shortages in New South Wales* recommended the development of a Masters of Teaching Model that included one year of university study and another year of paid in-school placement (2022, p. 112). There have also been reports of support for one-year postgraduate pathways from some school systems, principals and teachers (Joseph 2022, p. 3).

In weighing up the relative merits of the various accelerated study pathways, the QITE Review concluded that a one-year program was not sufficient to develop the foundations to become a primary teacher. However, they drew a different conclusion in relation to secondary teaching:

> To attract more mid-career professionals to secondary teaching, particularly in specialisations that are experiencing shortages such as maths and science, the Expert Panel recommends that a one-year qualification be offered subject to specific criteria.
>
> There should be flexibility in how this model is offered. It could, for example, be incorporated into the existing two-year program, but with prior experience and subject content knowledge recognised so that fewer units need to be completed. Alternatively, it could be the reintroduction of a one-year Graduate Diploma of Education. This one-year qualification should only be available to well-qualified individuals, who have demonstrated suitability for teaching, in areas of high workforce demand. (Paul 2021a, p. 33)

Governments have made a promising start but a broader, enduring response is required

In the Interim Report, the Commission sought feedback on options for streamlining pathways into teaching, as a means of overcoming shortages, including re-introducing a one-year Graduate Diploma of Education and employment-based pathways.

[189] AITSL, sub. DR93, p. 12; AEU, sub. DR101, pp. 20-21; P&C Federation NSW, sub. DR97, p. 6; NSW SCP, sub. DR92, p. 5.

[190] Other benefits highlighted by ITE providers in the QITE Review included that a Masters-level degree is 'professionally proportionate with the complexity and status of the teaching profession' and that it includes 'valuable research components' (Paul 2021a, p. 28).

[191] According to AITSL's 2018 survey for their 'National Teacher Workforce Characteristics Report' in New South Wales, the Northern Territory and South Australia.

Since the Interim Report, governments have released the NTWAP. While this is a promising start, it does not explore all options for streamlining pathways into teaching and in some cases, commitments are lacking in detail. As an example, in respect of:

- **reducing the loss of income from switching careers by providing income and/or ITE subsidies, or employment-based pathways.** The Australian Government has reaffirmed its commitment in the 2022-23 Budget to fund 5000 bursaries of up to $40 000, which could include mid-career entrants along with 1500 more places in the High Achieving Teachers program, to encourage more professionals to switch careers (Australian Government 2022b, p. 96).[192] Beyond these one-time responses, as part of the NTWAP, the Teacher Education Expert Panel will recommend ways to boost graduation rates, and ensure graduate teachers are better prepared for the classroom through improving postgraduate ITE for mid-career entrants; including exploring paid internships and other employment-based pathways (EMM 2022d, p. 14)
- **reducing the length of time to study post-graduate degrees.** As part of the NTWAP, the Australian Council of Deans will develop a framework to ensure 'First Nations peoples, mid-career professionals and para-professionals can have their skills, expertise and prior learning recognised through credit towards their qualification, whilst maintaining robust teacher qualification requirements' (EMM 2022d, p. 15).[193] It does not, however, address options for making accelerated post-graduate degrees more widely available or the possibility of reintroducing a one-year qualification or Graduate Diploma of Education for prospective secondary teachers in specialisations that are experiencing shortages.

While current government initiatives — such as increasing access to employment-based programs, ITE subsidies, and better RPL — can help reduce switching costs, they still retain many of the disincentives of a conventional two-year postgraduate pathway (Joseph 2022, p. 6). Therefore, on balance, the Commission considers that one-year qualifications in secondary teaching for well qualified individuals should be reinstated; this should focus on in-demand subjects to reduce out-of-field teaching, and work in tandem with other government initiatives to reduce switching costs (recommendation 7.1).

The process to create a one-year qualification for secondary teaching would require both Australian, state and territory government commitments. The ultimate authority for change lies with each state and territory's Teacher Regulatory Authority who accredit ITE programs. However, some jurisdictions link their approval of ITE programs to the national accreditation standards developed by AITSL (Joseph 2022, p. 1).

Implementing a one-year qualification for secondary teaching need not come at the expense of quality. First, the Commission recognises, as did the QITE Review, that a one-year qualification is more suitable for secondary teachers rather than for primary teachers who may need longer to learn the requisite skills. Second, recent measures aimed at improving the quality of ITE will still apply, such as ITE entry requirements, the Literacy and Numeracy Test for Initial Teacher Education (LANTITE), and Teaching Performance Assessments. Finally, as discussed above, evidence suggests that the length of study is not a great predictor of teacher effectiveness.

[192] These places will also be used to pilot new ways to get teachers into schools most in need, and attract more maths, science and Indigenous teachers into schools. This could include exploring ways to support experienced teacher aides to transition into teaching. Some evidence suggests that mid-career entrants would value.

[193] The NTWAP has noted that increasing learning opportunities for classroom support staff should also be facilitated to help attract these professionals into teaching (EMM 2022d, p. 15).

Looking further afield

One option being considered to help bolster teacher supply in the short term is attracting qualified teachers from overseas. Most recently, the Australian Government (through the NTWAP) affirmed its commitment to prioritise teachers for visa applications and streamlining overseas skills recognition.[194]

> At the Jobs and Skills Summit, the Australian Government expanded Australia's permanent Migration Program from 160,000 to 195,000 places. This includes 31,000 in state and territory nominated visa categories and 34,000 places for regional visas, which can be allocated according to jurisdictions' priorities. Teachers are currently on the priority skilled occupation list … States and territories will also work with relevant regulators to streamline overseas skills recognition and consider how to expedite permanent visas for teachers already in Australia. (EMM 2022d, p. 11)

In some cases, Australian government initiatives are complemented by state measures. For example, Victoria is funding incentives of up to $50 000 for international teachers to work in Victoria, supported by expedited teacher registration processes (DoE 2022c, p. 5).

While the international teacher labour market provides opportunities, it is unclear how many Australian visa applications could be allocated for teachers. Other sectors are also experiencing labour shortages (section 7.1) and looking to skilled migration to fill gaps. Further, there is also a tightening teacher labour market globally (AITSL 2022c), which may make it difficult to attract teachers from overseas.

As one of the few policy levers within the Australian Government's remit, attracting qualified teachers from overseas attracts policy attention. But ultimately, the success of such efforts will be constrained by competition for skilled migrants, at home and abroad. Efforts to attract registered teachers, or retired unregistered teachers, back into the profession could be a more cost-effective alternative.

Encouraging teachers back into the workforce

According to survey results, more than one in ten registered teachers are not working in education, with teacher registration data in some jurisdictions pointing to a much larger number (AITSL 2021a, p. 40; Victorian DET 2021, p. 16).

However, AITSL (2022c) noted that there is a lack of data about the number and motivation of these teachers who would be willing to return to the workforce.[195]

> … there may be registered teachers who intend to return to teaching or are available to fill workforce gaps. However, the size of this cohort and their motivations for maintaining registration while not teaching are unknown and as such, it is unclear to what extent this group of registered teachers can contribute to alleviating teacher shortages.

For example, as AITSL (2021a, p. 40) observed, of those registered but not teaching, some were on extended leave from their ordinary employment in a school, others were not employed, and some maintained their registration while working in other organisations — both inside and outside of the education sector. For some, maintaining teacher registration may indicate an intention to return to teaching in the future, while for others it is a mark of professional recognition — particularly while continuing to work in education-related organisations such as education departments, higher education providers and teacher regulatory authorities.

[194] Streamlining overseas skills recognition needs to be balanced with the high-quality registration requirements for Australian teachers.

[195] It is also unclear to what extent these teachers are already re-entering the workforce.

Given concerns about teacher shortages, options for incentivising these teachers back into the workforce could be explored. This could include streamlining any barriers to re-registration, providing alternative authorisation to teach for teachers who no longer hold contemporary qualifications[196], and providing refresher training for teachers looking to return to the workforce. Given the prominence of teacher workload and burnout in intention to leave decisions, more manageable workloads might also encourage former teachers to return to the profession (section 7.4).

Tackling out-of-field teaching

While reducing the barriers faced by prospective teachers or existing teachers looking to re-join the workforce should help reduce shortages, more can be done to directly tackle gaps in particular subject areas. Options include:

- **re-skilling teachers in areas of demand** — incentivising teachers in areas of surplus[197] to retrain in an area of subject shortage. This would require a better understanding of where subject shortages are located in the system, and their magnitude; this would need to be informed by improved data collection (section 7.5)
- **online delivery of classes from in-field teachers** — COVID-19 highlighted the opportunities for increasing online delivery of schooling. Greater reliance on online approaches requires improved access to digital technologies, particularly for students from priority equity cohorts (AEU, sub. 36, p. 20; DoE NT, sub. 42, p. 5; AGPPA, sub. 47, p. 3).[198] This approach might also require addressing any barriers in enterprise agreements to expanding online delivery of classes
- **better deployment of teachers** — teaching out-of-field can sometimes reflect a mismatch of deployment of teachers across and within schools.[199, 200] For example, 17 per cent of surveyed Year 10 STEM teachers were teaching non-STEM subjects in 2015 (Shah, Richardson and Watt 2020, p. 14). While it is less clear why teachers are not teaching in their subject specialisation, the Commission's Productivity Inquiry noted this mismatch can reflect the complexities of school class scheduling[201] (Hobbs and Porsch 2021, p. 601). Providing school systems and school leaders with tools to help deploy teachers across schools and classes could help better match teachers with their area of expertise
- **retaining teachers** — while international evidence suggests that teacher pay is unlikely to be the sole disincentive to teaching (box 7.1), wage expectations will differ according to subject area of specialisation. For instance, mathematics and science teachers tend to earn lower salaries in teaching than their graduating peers in the industry, so may be more responsive to pay (Fahey 2022, p. 16). Allowing school systems or leaders to

[196] State and Territories already have their own processes for allowing people to teach in schools who do not meet the qualification requirements for registration as a teacher (AITSL 2022c). These teachers are typically only allowed to teach in certain contexts. For example, this can include retired teachers who had a three-year undergraduate degree in teaching instead of a four-year undergraduate degree, or people with specialist skills. The NTWAP (EMM, 2022, p. 5) included an action to '[p]rioritise conditional or provisional registration to increase the supply of teachers.'

[197] Teacher surpluses at the primary school level have previously been observed with a significant number of qualified, mainly primary, teachers on stand-by for ongoing, contractual or casual relief work (PC 2012b, p. 65). This is potentially expected to continue with government forecasts showing a national surplus of more than 8,000 primary school teachers by 2025 (Rose and McGowan 2022). It is unclear what the current magnitude of the teacher surplus is.

[198] The Commission's Productivity Inquiry has discussed how technology can be used to help out-of-field teaching and potential barriers (PC 2022a, pp. 22–28).

[199] That is, some specialist teachers in areas of shortage are not teaching in their field of expertise. The Commission's Productivity Inquiry has discussed how teaching out-of-field can reflect a mismatch of teachers across schools (PC 2022a, p. 23).

[200] It is important to note that data on teaching out of field provides a point in time measure: as such teachers who were not teaching a subject at the time of the survey may have done so at a different time in the year (Weldon 2016, p. 5).

[201] Which can make it difficult for some schools, particularly small schools, to have the right mix of teachers to cover the full spectrum of classes demanded by secondary school students.

use remuneration-based incentives can be part of a package of complementary initiatives to help attract and retain suitably qualified teachers into areas of subject shortage (PC 2012a, p. 117).

But these measures will typically take some time to be fully effective. Moreover, the specialist skills required to teach certain subjects — along with market segmentation and changing subject preferences — means that there will likely always be a mismatch between teacher supply and demand, and so some form of out-of-field teaching. Governments can better support educators teaching out-of-field by:

- **providing better access to resources** — providing out-of-field teachers with a shared bank of high-quality curriculum materials can provide more consistent learning outcomes for students (chapter 6)
- **sharing teacher expertise** — facilitating teacher access to expert networks could help provide on-going subject-specific support and development for teachers teaching out of field (chapter 6).

Recommendation 7.1
Reducing out-of-field teaching should be a priority for the next intergovernmental school reform agreement.

Parties to the next school reform agreement should:

- include state-specific reforms, to be set out in their bilateral agreements and developed in consultation with teachers and school leaders:
  - to support educators teaching out-of-field.
  - to attract teachers to areas of shortage, including measures to lower switching costs for mid-career entrants contemplating teaching, particularly in high demand areas and for former teachers looking to return to the profession.
- report annually on the prevalence of out-of-field teaching in their jurisdictions.
- All jurisdictions should reintroduce a one-year qualification for secondary teaching for well-qualified individuals in subject areas of high demand.

Facilitating more Aboriginal and Torres Strait Islander teachers

As set out in section 7.1, Aboriginal and Torres Strait Islander teachers are underrepresented in the teaching workforce — making up only 2 per cent of the workforce, despite comprising close to 6 per cent of the overall student population (AITSL 2021c). The representation of the Aboriginal and Torres Strait Islander workforce is even more disproportionate in some jurisdictions. For example, in 2014, the Northern Territory reported that 'Indigenous employees represent 12% of the workforce, while the Indigenous student cohort is around 40%' (Wilson 2014, p. 190).

This has flow-on effects for outcomes for Aboriginal and Torres Strait Islander students. Evidence suggests that Aboriginal and Torres Strait Islander staff can improve the cultural safety and outcomes for Aboriginal and Torres Strait Islander students (House of Representatives Standing Committee on Employment, Education and Training 2020, pp. 43, 44, 54). The National Indigenous Australian Agency noted that:

> An increase in the number of Aboriginal and Torres Strait Islander teachers also means having more role models to foster higher aspirations among Aboriginal and Torres Strait Islander students and contribute to the development of culturally safe learning environments. (sub. DR103, p. 7)

Aboriginal and Torres Strait Islander educators bring valuable community and cultural knowledge to education settings, particularly in remote communities and can provide continuity for student learning in

schools that may face high teacher turnover (particularly in remote areas) (AITSL 2021c). Aboriginal and Torres Strait Islander community educators also play an integral leadership role in schools, especially those with high proportions of Aboriginal and Torres Strait Islander students.

However, Aboriginal and Torres Strait Islander people seeking to enter teaching face a number of barriers, including limited options for local access to ITE courses. Students with cultural obligations to family, community and country may be reluctant to enrol in an ITE course because of the requirement to be off-country and away from home and family for prolonged periods. These same factors, along with a lack of financial, cultural and academic support structures, and experiences of racism, contribute to low ITE completion rates (NSW Aboriginal Education Consultative Group 2021, p. 8). As some participants in this review observed, initiatives such as the LANTITE (mandatory literacy and numeracy testing) act as a further barrier for Aboriginal and Torres Strait Islander students, for whom English can be a second, third, or fourth language.

Participants also reflected on the lack of supports for Aboriginal and Torres Strait Islander teachers and educators when they transition into the workforce. Aboriginal and Torres Strait Islander teachers, like all teachers, need mentoring programs and other forms of structured support in the first years of their careers (Santoro and Reid 2006, p. 300). Some participants reflected that Aboriginal and Torres Strait Islander teachers are not provided with sufficient opportunity to showcase and develop their teaching skills, and instead are asked to focus on behaviour management in the classroom. Others reflected that while cultural competency and responsiveness are a priority for all teachers, too often, Aboriginal and Torres Strait Islander teachers are expected to carry the responsibility of cultural awareness training and expertise for the whole workforce (NIAA, sub. DR103, p. 7; IECM, sub. DR125, p. 6).

Experiences of racism were also identified by participants as contributing to teacher attrition. As survey results show, there can be a disconnect between the lived experience of Aboriginal and Torres Strait Islander educators and how schools and education departments regard their own inclusiveness and cultural competence. For example, in NSW, despite significant improvements in the share of education staff who feel that they and their colleagues are culturally competent, 58 per cent of Aboriginal survey respondents said that they felt their workplace was not a culturally safe place, 'and the same percentage had known of racism from a member of staff towards First Nations people in the past 12 months' (NSW DoE 2021b). Further, a four-year study that aimed to understand the experiences and career pathways of Aboriginal and Torres Strait Islander teachers found that:

> … given the professional and social isolation often suffered by Indigenous teachers who are usually the only Indigenous teacher in a school and the pressures to 'be all things to all people', it is imperative that Indigenous teachers receive on-going school support, effective, sensitive and targeted professional development and are able to establish and participate in Indigenous teacher networks. (Santoro and Reid 2006, p. 300)

One option identified by participants for growing the Aboriginal and Torres Strait Islander workforce was to provide better career pathways for community educators. These educators work alongside classroom teachers, combining pedagogical knowledge and practice with specific community understanding.

As part of the NTWAP, the Australian Government has committed to co-design a new national First Nations teachers' strategy to apply from 2024, in close partnership with First Nations education organisations (EMM 2022d, p. 16). The strategy will leverage key lessons from the successful 'More Aboriginal and Torres Strait Islander Teachers Initiative' (MATSITI). To maximise the value of the new national First Nations teachers' strategy, all jurisdictions should set out in their bilateral agreements measures they have in place to attract and retain Aboriginal and Torres Strait Islander educators.

The First Nations Teachers' Strategy should also align with government commitments under the *National Agreement on Closing the Gap*. In particular, under priority reform 3 of this agreement — transforming government organisations — Governments should ensure that schools can identify and eliminate racism, embed and practise meaningful cultural safety, and support and engage with Aboriginal and Torres Strait Islander staff.[202] As noted in recommendation 4.3, the Commission considers that all jurisdictions should set out actions in their bilateral agreements that commit to the institution of cultural safety requirements, along with the detection of racism across education systems.

Recommendation 7.2
All jurisdictions should participate in the development of the new national First Nations Teachers' Strategy.

The Australian Government has committed to co-design a new national First Nations Teachers' Strategy in close partnership with First Nations education organisations, to better attract and retain more Aboriginal and Torres Strait Islander teachers.

All jurisdictions should contribute to the development of the Strategy.

Consistent with commitments under The National Agreement on Closing the Gap, the Strategy should include specific measures to identify and remove racism experienced by Aboriginal and Torres Strait Islander educators in the education system.

Subject to the views of First Nations education organisations, the Strategy could identify ways to establish clear pathways for Aboriginal and Torres Strait Islander educators seeking to transition to teaching and/or leadership roles.

7.4 How can we retain existing teachers?

Alongside the recruitment of new teachers, the retention of existing teachers is key in maintaining teacher numbers. Greater retention can reduce the number of highly effective teachers exiting the workforce and so help alleviate teacher shortages.[203] High turnover can also create instability in schools, which can affect student achievement and impose recruitment costs. As the IEUA noted:

> [s]tudents thrive on consistency in student-teacher relationship and the current exodus of teaching staff from the workforce threatens this. (sub. 15, p. 3)

However, not all teacher attrition is bad. For example, teachers might leave for personal or family reasons, and not because they have had a negative experience from teaching (Weldon 2018, p. 71). Teachers may also leave because of poor performance, or because they are not suited to the job. Further, attrition may be

[202] Therefore, ensuring Aboriginal and Torres Strait Islander teachers are culturally safe in schools, is the responsibility of all teachers, not just those in remote Indigenous communities. Improving the cultural responsiveness of the whole workforce occurs at all stages of a teacher's career (chapter 6). Developing cultural capability is important for improving outcomes for Aboriginal and Torres Strait Islander students, and improving the wellbeing, attraction and retention of Aboriginal and Torres Strait Islander teachers.

[203] Incentivising teacher retention also targets the whole workforce, thereby having a more immediate impact on teacher shortages.

driven by labour demand as the workforce becomes increasingly contract-based, or as teachers move out of the classroom and into leadership roles (chapter 8).

Reducing teacher workload pressures is key

Many review participants raised concerns about high and increasing teacher workloads.[204] Workload and burnout are the main drivers of teachers' intentions to leave (figure 7.4),[205] and can negatively impact on student learning. As one teacher reflected:

> [m]y workload has increased substantially in the last 12 years of teaching, so much so, that I am regularly doing 60-70 hours per week. Due to the increased demands, what we NEED is TIME! (comment 18).

Teachers work long hours …

Survey data suggest that teachers are working long hours with estimates ranging from about 44 to 57 hours for full-time teachers in term time (AITSL 2022e; Hunter, Sonnemann and Joiner 2022, p. 7; McGrath-Champ et al. 2018, p. 28; Weldon and Ingvarson 2016, p. 28). Teachers surveyed by AITSL in New South Wales, Northern Territory and South Australia in 2018 stated that they were working between 140-152 per cent of their paid hours[206] (figure 7.6); on average, full-time teachers report working about 57 hours a week. This was similar for primary and secondary teachers, and early career teachers surveyed (AITSL 2021a, pp. 131–132).[207] Meanwhile Aboriginal and Torres Strait Islander teachers surveyed reported working more than the total teacher workforce on average (AITSL 2021a, p. 208).[208]

[204] AAAE, sub. DR104, p. 13; ACARA, sub. 45, p. 7; AEU, sub. DR101, p. 18; AGPA, sub. 47, p. 3; APPA, sub. 48, p. 2; APTA, sub. 50, p. 5; CEMA, sub. 28, p. 2; ESA, sub. DR76, p. 8; Grattan Institute, sub. 5, p. 12; IEUA, sub. DR78, p. 5; NCEC, sub. DR87, p. 7; P&C Federation NSW, sub. 18, p. 14; Teacher's Work in School Research Group, sub. 16, p. 1; Thompson, sub. DR90, p. 2.

[205] Evidence from the UK also suggests that some teachers who left the teaching professions, left for jobs that had less hours of work (Worth et al. 2018, p. 46).

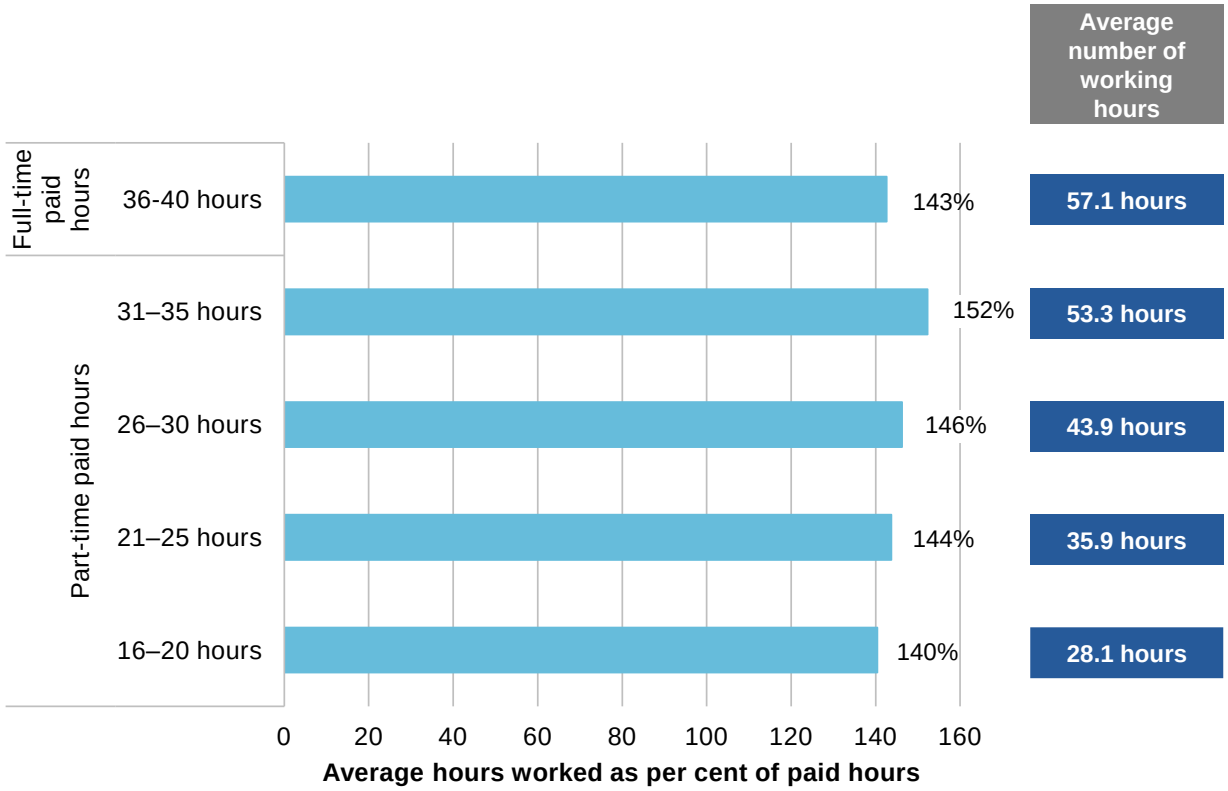
[206] Paid hours refer to what surveyed teachers self-reported they were paid to work each week (AITSL 2021a, p. 63).

[207] Teachers working for 1-5 years.

[208] As discussed in section 7.3, this might reflect the cultural expectations placed on Aboriginal and Torres Strait Islander teachers. For example, some participants reflected that while cultural competency and responsiveness are a priority for all teachers, too often, Aboriginal and Torres Strait Islander teachers are expected to carry the responsibility of cultural awareness training and expertise for the whole workforce (NIAA, sub. DR103, p. 7; IECM, sub. DR125, p. 6). Of surveyed teachers in New South Wales, Northern Territory and South Australia, Aboriginal and Torres Strait Islander teachers spent 3.6 hours more per week on non-teaching tasks than school teachers (AITSL 2022c, p. 210).

Figure 7.6 – Teachers surveyed typically work about 50 per cent more than their paid hours[a]

Average working hours compared with paid hours of teachers surveyed during term time in 2018



a. 11 980 survey respondents from New South Wales, Northern Territory and South Australia. The sample was not sufficient to consider part-time work under 16 hours a week. Only includes school teachers. Teachers were asked the number of hours they actually worked in a typical working week. A typical working week was defined as a week that is not shortened by breaks, public holidays, sick leave etc. Detailed data on classroom teachers for all States and Territories is not yet publicly available (AITSL 2022e).

Source: Commission analysis based on AITSL (2021a, pp. 64, 66).

… and more than their international counterparts …

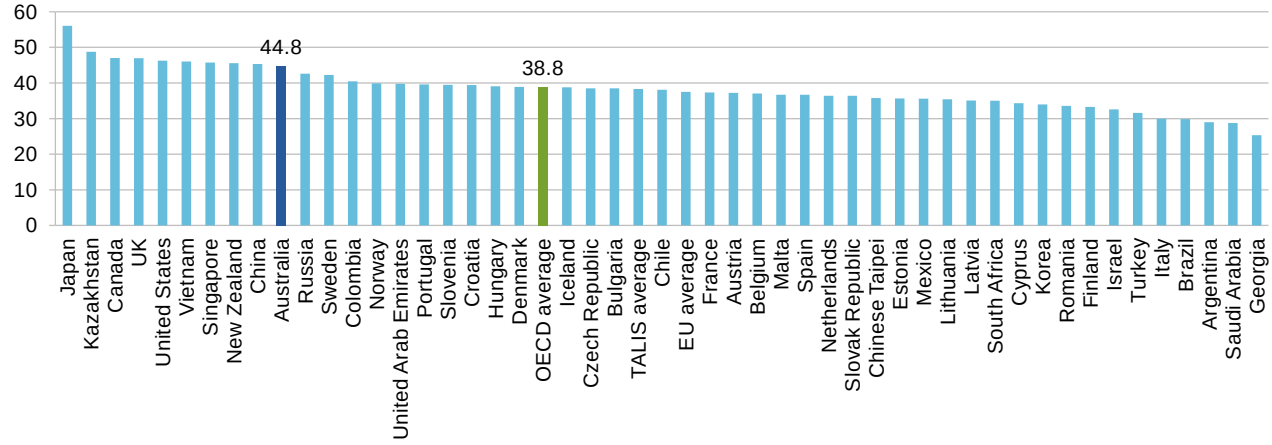
There is evidence that Australian teachers also work more hours than their international counterparts. The OECD's Teaching and Learning International Survey (TALIS) found that Australian lower secondary teachers worked 44.8 hours in a week compared with the OECD average of 38.8 hours during term time[209] in 2018 (figure 7.7).[210]

[209] The survey asked teachers about average working hours during a 'complete' calendar week, that is one that was not shortened by breaks, public holidays, sick leave, etc. (OECD 2019d).

[210] There are two estimates of teaching time used. One from TALIS and one from the ATWD. The estimate from TALIS (44.8 hours) is lower than the estimate from the ATWD (57.1 hours) as TALIS included part-time teachers while the ATWD included only full-time teachers. Additionally, the ATWD is based on a larger sample size (11 980 survey respondents from New South Wales, Northern Territory and South Australia) than TALIS (3 573 survey respondents). As noted, estimates of working hours for full-time teachers range from about 44 to 57 hours in term time (AITSL 2022e; Hunter, Sonnemann and Joiner 2022, p. 7; McGrath-Champ et al. 2018, p. 28; Weldon and Ingvarson 2016, p. 28).

Figure 7.7 – Australian teachers report working more than international counterparts[a]

Average working hours of lower secondary teachers during term time in 2018



a. 3573 survey respondents. Includes part-time teachers. The survey asked teachers about average working hours during a 'complete' calendar week, which is one that was not shortened by breaks, public holidays, sick leave, etc.

Source: OECD (2019d).

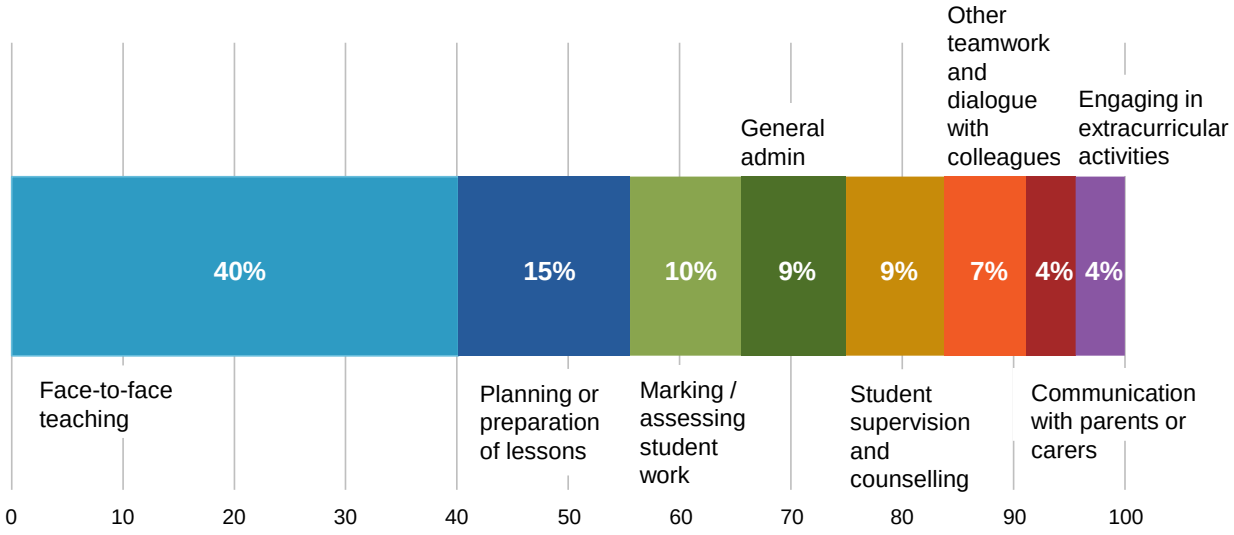
… but spend less time teaching

Teachers typically spend the majority of their time on teaching, lesson planning, marking and general administration (figure 7.8). Full-time teachers surveyed by AITSL reported spending about 40 per cent of their weekly time teaching face-to-face; followed by lesson planning (15 per cent), marking (10 per cent) and general administration (9 per cent) in 2018 during term time (2021a, pp. 67–70).[211] While teaching accounts for the bulk of their time, TALIS data suggest that Australian teachers spend less time teaching than their international counterparts in terms of absolute hours and the proportion of their working week (OECD 2019d).

[211] This was similar for primary and secondary teachers and early career teachers surveyed, although the latter spent slightly more time teaching face-to-face (AITSL 2021a, pp. 67–70, 133–135). Part-time teachers spent a greater proportion of their time teaching face-to-face than other tasks (AITSL 2021a, pp. 67–70). Aboriginal and Torres Strait Islander teachers surveyed reported spending slightly more time on face-to-face teaching as well as on extracurricular activities than the total teacher workforce on average (AITSL 2021a, p. 209).

Figure 7.8 – Teachers surveyed are typically spending most of their time teaching, lesson planning, marking or on general administration[a]

Average proportion of weekly hours spent on teaching tasks during term time by full-time teachers surveyed in 2018



a. Sample of survey respondents varies by task from New South Wales, Northern Territory and South Australia. The sample was not sufficient to consider part-time work under 16 hours a week. Only includes full-time school teachers. Teachers were asked about a typical working week. A typical working week was defined as a week 'that is not shortened by breaks, public holidays, sick leave etc'. Detailed data for all States and Territories is not yet publicly available (AITSL 2022e).

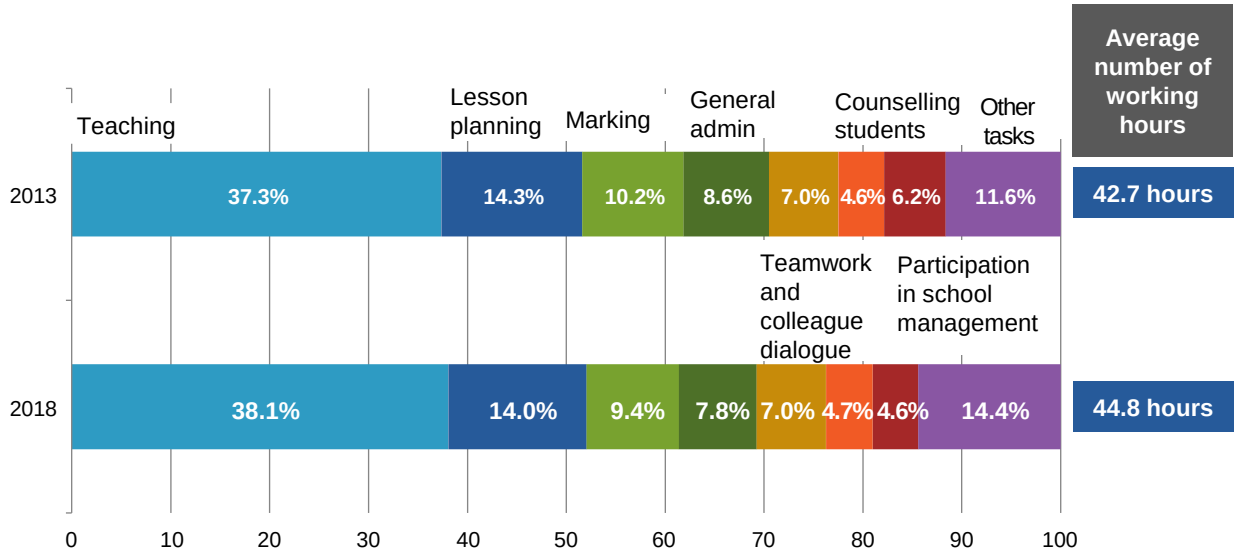
Source: Commission analysis of AITSL (2021a, pp. 64, 67–70).

Teacher workload has been increasing but the cause is less clear

Evidence also suggests teacher workload has increased over time. TALIS reported an increase in average teacher weekly working hours from 42.7 hours in 2013 to 44.8 hours in 2018 (figure 7.9). However, the available data provide little additional insight as to the cause of increasing workloads — the most notable increase was a slight uptick in the time spent on 'other' tasks (figure 7.9).

Figure 7.9 – Teacher workload has been increasing although the composition of time spent on tasks has remained fairly constant[a]

Average proportion of weekly hours spent on teaching tasks of lower secondary teachers during term time



a. 3573 survey respondents. In 2013, other tasks included communication with parents or guardians, engaging in extracurricular activities and other work tasks. In 2018, other tasks included the same tasks as in 2013, with the addition of professional development. Therefore, other tasks are not directly comparable across time. Categories including teaching, lesson planning, marking and general admin are more comparable across time. The survey asked teachers about average working hours during a 'complete' calendar week; that is one that was not shortened by breaks, public holidays, sick leave, etc.

Sources: Commission analysis of OECD (2019d), OECD (2014, pp. 387–388).

Finding 7.2
Teachers work long hours, and their workload has increased.

Australian teacher workload is greater than the OECD average. Australian teachers spend more time on non-teaching tasks, and less time on teaching tasks, than their international counterparts.

Teacher workload has increased over time. Many teachers cite heavy workload as a reason for wanting to leave the profession.

Reducing low-value tasks and administrative tasks could ease the burden

Review participants have remarked that the changing policy landscape has increased the administrative burden placed on teachers.[212] The P&C Federation NSW (sub. 18, p. 15) submitted that the 'substantial increase in reporting, red tape and compliance for teachers has seriously impacted their time to teach'.

[212] AEU, sub. DR101, p. 4; NCEC, sub. DR87, p. 7; NSW SPC, sub. DR92, pp. 3-4.

Data on teacher administrative duties typically focus on communication, paperwork and other clerical duties (OECD 2019d), or general administrative work (excluding marking student work and communicating with parents or carers) (AITSL 2021a, p. 68).

While the data do not point to an increase in administrative burden (at least not between 2013 and 2018), Australian full-time teachers surveyed by AITSL typically spent 5.3 hours of their week on general admin in 2018 (AITSL 2021a, p. 68). On average, Australian teachers spend longer on general administration than their international counterparts: Australian lower secondary teachers reported spending the fifth highest amount of time on general admin amongst the countries that participated in TALIS 2018 (OECD 2019d). Australian teachers also spent more time on school management, teamwork and dialogue with colleagues than other countries (OECD 2019d).

The Australian Government Minister for Education, with the agreement of the Education Council, tasked AITSL to undertake a review to 'reduce red tape for teacher and school leaders, in partnership with states and territories' (AITSL 2020c, p. 3). AITSL found that 'most jurisdictions, systems and sectors in Australia have a focus on, or processes underway, to reduce the impact of 'red tape' on their schools' (2020c, p. 3).[213]

But the key aim of the review was to identify the ways in which jurisdictions, sectors, and schools are reducing 'red tape' for teachers and school leaders, with a view to sharing best practice approaches (AITSL 2020c, p. 7), rather than identifying the low-value tasks that could be minimised or dispensed with altogether.

More detailed information is required to identify and reduce burdens on teacher workload, such as:

- collecting evidence on the ground, for example, through surveys of teacher and principal time, to provide a better understanding of what teachers are spending increasing amounts of their time on.[214] This can augment the insights gleaned from AITSL's consultation and case studies
- identifying if there are low-value tasks that can be removed.[215] This would extend beyond the scope of AITSL's review, which did not determine '[w]hether particular compliance requirements are justified or necessary' as this was excluded from consideration in their terms of reference (AITSL 2020c, p. 45).

Policies to reduce high teacher (and principal) workload could provide substantial benefits for teacher retention. However, it is not just about reducing teacher workload, it is also about ensuring teachers have time to focus on the key tasks that are important for student learning (PC 2022a, p. 31).

Reducing low-value administrative tasks has been previously recommended by both the QITE Review (Paul 2021a, p. vi) and the Grattan Institute (2022, p. 4). Maximising time to teach was also a focus of some actions in the recent NTWAP (box 7.3).

[213] For example, the Department of Education New South Wales have a 'Quality Time Action Plan to simplify administrative practices in schools' with the aim of 'reducing low-value administrative tasks… [by] 20% for our teachers by the end of 2022. This equates to a reduction of 40 hours of low-value administrative tasks per teacher per year' (NSW Department of Education 2021a, p. 2). In South Australia, initiatives to streamline administrative processes have been established including the Education Management System; an online portal that streamlines approval processes and reduces the need for duplication of data entry for public schools and pre-schools (AITSL 2020c, p. 23).

[214] AITSL's previous review was based on the premise that teachers and school leaders are spending increasing amounts of time on compliance administrative tasks (AITSL 2020c, p. 3). However, the exact tasks and regulation that could be reduced is not clear.

[215] It is important to consider the context in which regulation exists. For example, some administrative tasks may be important if they ensure student safety. Further, reducing teacher workload is not just about removing tasks, it is also about improving the efficiency and effectiveness of regulation so that it takes up less teacher time.

Box 7.3 – Government policies to reduce teacher workload

The recent National Teacher Workforce Action Plan contained a number of actions aimed at maximising teacher time to teach, including:

- piloting new approaches to reduce teacher workload through a Workload Reduction Fund with interested jurisdictions on an opt in basis
- building on work already underway in some jurisdictions to maximise teachers' time to teach
- examining ways to support implementation of the national curriculum
- identifying the most effective use of initial teacher education students, teaching assistants and other non-teaching staff
- requiring each initiative in the next National School Reform Agreement to be subject to a Teacher Workload Impact Assessment (EMM 2022d, pp. 18–19, 22–23).

Some jurisdictions have strategies to reduce teacher workload

Jurisdictions, such as Victoria, Queensland, South Australia and New South Wales have strategies aimed at reducing teacher workload. The NSW *Quality Time* program is the most detailed.

The Quality Time program aims to free up staff time spent on low-value work so that teachers can focus on activities that improve student outcomes, and to simplify and modernise the administration processes involved in both teaching and leading (NSW Department of Education 2021a, p. 2). Quality Time specifies a target of reducing the time spent on low-value administration by 40 hours per year for teachers and school based non-teaching staff, and 190 hours per year for principals (NSW DoE 2022c).

However, NCEC (sub. DR87, p. 7) noted:

> [s]uccessive governments over the past decade have maintained the rhetoric of reducing red tape for teachers and school leaders. Despite this, the administrative workload on teachers and school leaders has continued to increase.

Further, the NTWAP does not provide a systematic way to identify and reduce burdens on teacher workload across all jurisdictions. Not all jurisdictions and sectors have policies in place to maximise teacher time, and these policies differ in their comprehensiveness (EMM 2022d, pp. 41–51). This means that some teachers in certain jurisdictions may miss out on the benefits. The NTWAP also does not address overlapping Commonwealth, state and territory regulations, which can increase teacher workload. As AITSL observed in their review on reducing red tape:

> [t]he overlapping Commonwealth, state and territory responsibilities, and the various differing governance arrangements across sectors, have a limiting effect on the ability of individual sectors acting alone to address and ameliorate red tape issues in support of their schools. Ideally, an existing forum would be found to take on this role. (AITSL 2020c, p. 38)

Ideally, all jurisdictions would commit to further actions to reduce low value and administrative and set out their ambition in doing so (as New South Wales has done, box 7.3). The Commission recommends that reducing teacher workload be a focus of the next agreement. While this does not require *identical* approaches across jurisdictions, it does require all jurisdictions to clearly set out the actions they are taking to reduce low-value and duplicative tasks and set clear benchmarks to gauge their success (recommendation 7.3). This process should be undertaken in collaboration with teachers and principals.

There is an opportunity to return to a focus on teaching …

Reducing the administrative burden on teachers (and principals) is only part of the solution. Policy commentators, observed that rising teacher workload is not just caused by increasing administration, but also increasing expectations of teachers and schools; including expectations around personalised teaching delivery, and the scope of what schools deliver (Hunter, Sonnemann and Joiner 2022, pp. 8–9; McGrath-Champ et al. 2018, p. 86).

The increasing focus on personalised learning, where instruction and assessment are adjusted to meet the needs of the individual student has made the role of the teacher both more complex and potentially more time-consuming. Providing a more customised learning experience means that teachers need to understand a student's prior knowledge, provide appropriate instruction to that student's need, evaluate knowledge learnt through assessment (increasingly formative assessment), provide feedback to students and determine the next step in the learning progression.

At the same time that personalised learning has resulted in greater calls on teachers, the scope of what schools deliver also appears to be expanding. Participants reflected that some of the functions previously undertaken centrally and/or supported by education departments have fallen to teachers (and leaders) and that they no longer receive the same support with behaviour management, working with children with special needs, and curriculum materials (chapter 8). The latter observation is echoed in research, which found that many Australian teachers surveyed are responsible for doing their own curriculum planning, without support from schools or school authorities (Hunter, Haywood and Parkinson 2022, p. 3). This means that many teachers are developing their own classroom resources from scratch, including from non-quality assured sources.

Teachers and their representatives also highlighted that the lack of broader supports for students and connections between the education and other government service systems, saw teachers playing a greater role in ensuring students' basic needs were met and/or trying to connect students and families with services such as housing, mental health and disability services (AEU, sub. DR101, p. 5; comment 43).

While the forces at play are diverse, the responses to the issues highlighted above are informed by a single question — where do we most want teachers to focus their efforts? The answer to that question should be informed, in part, by what attracted teachers to the role in the first place, but in the main, should reflect what would result in the best outcomes for students. Arguably, a focus on personalised learning (supported by common tools such as the online formative assessment initiative (chapter 3) would rate highly, whereas each teacher developing their own curriculum materials from scratch (instead of drawing on a common bank of materials) is less likely to offer benefits.

In answering this question, it is also important to keep in mind the division of labour between teachers and teaching assistants. There may be some tasks (new and old) that teaching assistants could undertake and so free up teachers to focus on core teaching functions.

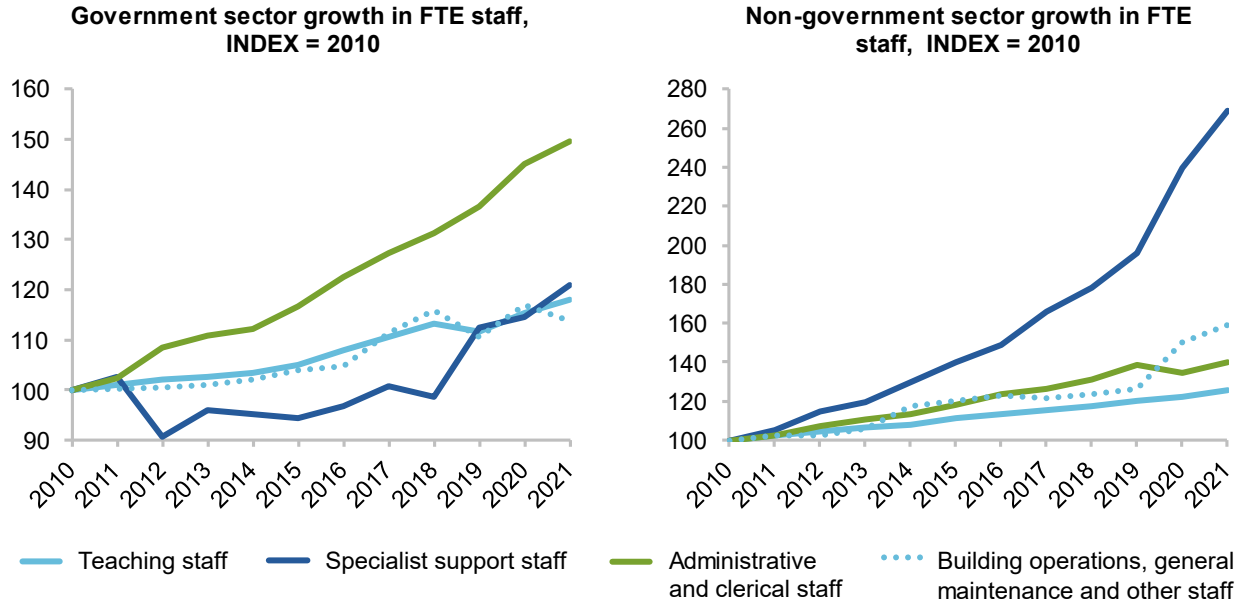
… and to consider how teaching assistants can best add value

At the same time as teacher workload has been increasing, the number of teaching assistants and other support staff has grown. Between 2010 and 2021, the number of administrative and clerical staff – which includes teaching assistants – and specialist support staff grew faster than teaching staff, albeit off a low

base (figure 7.10).[216] In the government sector, administrative and clerical staff increased on average by about 4 per cent per year, while in the non-government sector, specialist support staff increased on average by about 9 per cent per year. By 2021, there were about 300 000 FTE teaching staff, 114 000 FTE administrative and clerical staff and 15 000 FTE specialist support staff, compared with about 250 000, 78 000 and 9000 FTE staff respectively in 2010.

Figure 7.10 – Between 2010 and 2021, the number of teaching assistants and other support staff grew at a faster rate teaching staff[a]

Growth in FTE staff, by staff type and school sector (government – left, non-government – right), from 2010 to 2021



a. This chart is based off Australian Curriculum, Assessment and Reporting Authority's (ACARA) collection of school workforce data as detailed in footnote 27.

Source: ACARA (2022h).

It is not clear how teaching assistants are being deployed

When used effectively and supported well, international evidence has found that teaching assistants can help reduce teacher workload; allow teachers more time to teach and improve the outcomes of some students (Sharples, Webster and Blatchford 2018, p. 7). In Australia, the remit of teaching assistants is broad. Under the direction of the classroom teacher, teaching assistants work in small groups or one-on-one with students; particularly for students requiring learning assistance. They can also support the classroom teacher with day-to-day running of the classroom, including undertaking administrative tasks (ITAC 2021).

[216] Based on Australian Curriculum, Assessment and Reporting Authority's collection of school workforce data, which includes four types of school staff: 1. Teaching staff – employees who spend the majority of their time in contact with students. This can include teachers, principals, deputy principals, and senior teachers mainly involved in administration. 2. Speciality support staff – employees who perform functions to support students or teaching staff. These staff do not teach the school curriculum to students. 3. Administrative and clerical staff – such as teacher aides and teacher assistants. 4. Building operations, general maintenance and other staff.

However, it is not entirely clear how teaching assistants and other support staff are being used in Australian schools (Hunter, Sonnemann and Joiner 2022, p. 21). Some review participants observed that the use of teaching assistants varies significantly within and across schools and jurisdictions[217] — although this might reflect that teaching assistants are used differently by principals to reflect the local needs of the school, and the skills of the available teaching assistants. Participants also went on to note that teaching assistants do not always receive the support or training they need to undertake the myriad of tasks they perform.[218]

Participants highlighted the importance of gaining a better understanding of how teaching assistants are deployed and could be best used[219], including:

- considering existing evidence on the effective use of teaching assistants (SVA, sub. DR118, p. 4)
- examining employment structures of support staff and how duties can be allocated amongst the teaching workforce (IEUA, sub. DR78, p. 7)
- considering training required, particularly for teaching assistants supporting students with diverse needs, such as students with disability (AAAE, sub. DR104, p. 16; AISSA, sub. DR61, p. 4; InSpEd, sub. DR98, p. 3).

Identifying the most effective use of teaching assistants would be beneficial, and was recently proposed as one of the actions in the NTWAP. In undertaking this work, parties should seek to preserve the benefits that come with being able to employ teaching assistants flexibly across schools, sectors and jurisdictions and identify ways to better prepare and support teaching assistants to take on their varied roles.

But there is a strong case for taking a broader frame of reference.[220] Considering how to refocus the role of the teacher on core teaching tasks and within that, how best to utilise teaching assistants would provide a more holistic response. Further, not all non-core teaching tasks should fall to teaching assistants, some might be better undertaken by education departments or other service providers.

To support a return to a focus on teaching, the Commission is also recommending governments work together to curate high-quality, evidence-based and government endorsed curriculum resources and make them available for teachers and school leaders from a single source (chapter 6). The Commission's concurrent Productivity Inquiry has also highlighted the potential role that technology can play in refocusing efforts on teaching.

Finding 7.3
A more systematic and evidence-based approach to deploying the growing number of teaching assistants is required.

While teacher workload has been increasing, the number of teaching assistants and other support staff has grown.

Anecdotal evidence reveals teaching assistants are being deployed in ad hoc ways and do not always have the support or training they need to undertake the myriad of tasks they perform.

A more systematic and evidence-based approach to determining the roles and responsibilities of teaching assistants and support staff, and their appropriate use would be beneficial, including to free up teacher time.

[217] AAAE, sub. DR104, p. 16; AEU, sub. DR101, p. 19; IEUA, sub. DR78, p 7.

[218] AAAE, sub. DR104, p. 16; AISSA, sub. DR61, p. 4; InSpEd, sub. DR98, p. 3.

[219] AITSL, sub. DR93, p 16; InSpEd, sub. DR98, p. 3; NSW PC, sub. DR92, p. 4; P&C Federation NSW, sub. DR97, p. 6; NCEC, sub. DR87, p. 7.

[220] Identifying a more systematic and evidence-based approach to determining the roles and responsibilities of teaching assistants and support staff in an Australian context could form a future research project for an organisation such as AERO.

Recommendation 7.3
Parties should design the next intergovernmental school reform agreement so that it focuses on maximising the value of teachers' and school leaders' time.

Parties to the next school reform agreement should ensure state-specific reforms in bilateral agreements to support teachers and school leaders (developed in consultation with teachers and school leaders) identify how they maximise the value of teachers' and school leaders' time, including by reducing low-value tasks.

7.5 How can we better identify and predict shortages?

A more systematic means of predicting shortages is warranted

Better mechanisms are needed to identify and predict future imbalances in the teacher labour market at a national level. While State and Territory Governments typically undertake workforce planning for their own jurisdictions, these do not give a national picture of supply or demand and are often not widely available or comparable across jurisdictions (AITSL 2021b, p. 11). As AITSL (2022c) noted:

> [t]hough demand can be quantified at the national level, we simply do not have data that provides a more granular level of projection. This is largely attributable to the highly localised nature of education in Australia whereby regional differences in schooling contexts are not captured across data sets. Moreover, the siloed nature of data from different sources makes it difficult to model student enrolment projections across the different labour markets in Australia. This makes it challenging to pinpoint where growth in student enrolments will occur in the coming years, limiting our understanding of which kinds of teachers are needed, and where.

In addition to capturing the broader national landscape, and the trends that affect it, a national picture of supply or demand would provide benefits over and above jurisdiction-specific approaches given:

- teacher workforce challenges are often common across jurisdictions and may require a national response. For example, workforce shortages may require a coordinated response from employers, ITE providers and teacher regulatory authorities (AITSL, sub. 27, p. 10)
- the national teacher labour market is becoming increasingly interconnected. Teachers move across jurisdictions and the rise of online ITE means 'prospective teachers living (and planning to work) in one jurisdiction can study at an ITE provider based in another jurisdiction' (AITSL, sub. 27, p. 9).

Predicting national teacher imbalances can be challenging due to the forecasting assumptions required (PC 2012a, p. 94). But in Australia's case, these difficulties are (unnecessarily) compounded by the lack of consistent and timely data at the national, regional and subject-area level. As AITSL commented, 'our current understanding of national supply and demand trends for the teacher workforce in Australia is immature' with workforce data 'widely dispersed across the various systems and sectors responsible for the employment of teachers' (2021b, p. 18). This was echoed in other reviews (Paul 2021a, p. 87; TEMAG 2014, p. 51), with the Commission previously noting that '[e]xisting data collections on the teacher workforce have been found to be inconsistent and lacking in detail on subject specialisations, which has resulted in difficulties for initial teacher education providers and employers to match supply and demand' (2016b, p. 102). A lack of data similarly limits an understanding of the magnitude and the locations of geographic teacher shortages, with much of the evidence being anecdotal (Paul 2021a, p. 88).

Not only does a lack of data frustrate efforts to predict shortages, given the highly localised nature of education, a lack of granular data, including by region and subject area, means it is difficult to test the effectiveness of policies targeting teacher supply and demand that might work in some contexts but not in others (AITSL 2022c).

Governments have sought to improve national teacher supply data through the ATWD (box 7.4). Originally limited to data from New South Wales, Northern Territory and South Australia, in 2022, data became available for remaining jurisdictions (albeit not for all series) (AITSL 2022e). While the initiative will provide a comprehensive dataset on teacher supply, the lack of complementary teacher demand data remains a barrier to understanding current and future imbalances in the teacher labour market.

Box 7.4 – The Australian Teacher Workforce Data initiative

The Australian Teacher Workforce Data (ATWD) initiative is a nationally agreed data linkage project that will provide the first nationally consistent longitudinal teacher supply dataset in Australia (AITSL 2021a, p. 6).

The purpose of the ATWD is to 'gain an understanding of the lifecycle of the modern teaching career, and to identify trends in teacher education, the teacher supply pipeline and the teacher workforce in Australia, that will help inform national policy and programs to support the profession and improve student outcomes' (AITSL 2021b, p. 34). Coverage includes ITE students and teachers at various stages in their careers, including by jurisdiction, sector, geolocation and subject specialisation.

The first ATWD key metrics dashboard on ITE data was released in June 2022, with the ATWD to provide annual supply data (AITSL, sub. 27, p. 15).

In the Interim Report, the Commission recommended that governments work together to improve teacher workforce demand and supply data, and that this data be used to underpin a national model of the teacher workforce that can better identify and predict the state of the teacher labour market including teacher shortages.

Since that time, Education Ministers, through the NTWAP, have proposed developing and publishing:

- nationally consistent teacher workforce projections based on consistent standards, disaggregated at a regional level and by subject specialisation, to enable a national understanding of teacher demand (to be prepared by the end of 2023 and published by the end of 2024)
- nationally consistent ITE graduate supply data, including disaggregated by subject specialisation and participation in ITE at the regional level, to enable a national understanding of teacher supply (by the end of 2023)
- data about teacher wellbeing and career intentions (to be provided from 2024 onwards) (EMM 2022d, pp. 27–28).

To maximise the value of these proposed initiatives, a labour market model could be developed, which would not only allow teacher shortages to be better identified and predicted, but would also help evaluate the impacts of different policies on the workforce.[221]

[221] For example, the School Workforce Census is conducted in England annually, which collects data on teacher characteristics, employment and timetables (Worth et al. 2018, p. 14), is used to formulate policies in response to challenges facing teacher recruitment and retention.

Finding 7.4
Building on efforts to improve teacher workforce demand and supply data would enable governments to better identify and respond to workforce shortages.

- All governments recently committed to enhanced workforce data collection and nationally consistent teacher workforce projections. This will require ongoing and full participation by all Governments in the Australian Teacher Workforce Data initiative, including the provision of teacher demand data.
- To maximise the value of these commitments, a labour market model could be developed that would allow governments to better identify and predict teacher shortages and evaluate the impacts of different policies on the workforce.

8. School leadership

Key points

- **School leaders, especially principals, are responsible for the educational leadership, management, and accountability of their schools.**
  - Strengthening leadership can raise student outcomes by enhancing quality teaching, better deploying resources, and improving the responsiveness of schools to students' and community needs.
- **The effectiveness of school leaders can be as important as the effectiveness of teachers.**
  - School leaders are a close second to teachers in creating an effective learning environment. However, there is little solid evidence to identify the leadership practices that improve student outcomes.
- **As the intermediary between the classroom, school board, and education system, principals are the locus of innovation and reform in schools.**
  - School decision makers are generally best placed to respond to local changes and the needs of teachers, students, parents, and the community.
  - As the link between education policy and practice, school leaders should be involved in developing, as well as delivering, reform.
- **The roles of school leaders are becoming more complex.**
  - Greater school autonomy, more accountability and governance obligations, and shocks such as COVID-19, have made leadership more challenging, prompting a shift to more specialist leadership roles.
  - School leaders are key to creating culturally safe environments for an increasingly diverse student body but are not always supported to do so.
  - Improved government efforts to identify and prepare school leaders, ensure leaders have the support and professional development they need, and examine alternative sources for specific school leader roles would likely improve principal effectiveness.
- **Parties to the next intergovernmental school reform agreement should improve the evidence base on school leadership in an Australian context and support leaders to adopt best practice, preferably through a national policy initiative.**
- **Parties to the next intergovernmental school reform agreement should set out in their bilateral agreements the actions they are taking to ensure the best use of principal time. This would enable principals to refocus their efforts:**
  - to adopting best practice and developing and supporting teachers
  - to give effect to the institution of cultural safety requirements across all education systems.

This chapter discusses the important role of school leaders, and in particular principals (section 8.1). It examines the escalating pressures they face, and concerns about the future pipeline of leaders (sections 8.2 and 8.3). The chapter concludes by exploring the role that the next intergovernmental school reform agreement could play in building the evidence base on school leadership (section 8.4).

8.1 Why is school leadership important?

School leadership roles are diverse, encompassing principals, assistant principals, and middle leaders (teachers with other pedagogical, student-based or program responsibilities). Together, they shape the educational leadership, culture, management and accountability of their schools; all factors important for improving student outcomes (ACTA, sub. DR124, p. 65; AISSA, sub. DR61, p. 5; AITSL, sub. DR93, p. 8; Stronger Smarter Institute, sub. DR114, p. 6) (box 8.1).

While the importance of school leadership is recognised in the National School Reform Agreement's reform direction of 'supporting teaching, school leadership and school improvement', there was no national policy initiative which focused on school leadership. The (then) Education Council noted that '[s]chool leaders are an important part of the national teacher workforce landscape' and that '[t]his is an area where there may be scope for more national collaboration in the future' (2020b, p. 2).

Box 8.1 – School leadership roles vary in their scope and nature

The focus of school leaders can vary according to their role, but typically includes four core elements.

- Educational leadership — focused on efforts to improve and supervise teachers' professional learning, and activities such as establishing systems for evaluating and monitoring teachers' performance and implementing decisions of the school board.
- Management — including routine school operations such as establishing and managing financial systems, recruitment of teaching and non-teaching staff, and other human resources activities.
- Administration — such as overseeing compliance with Australian government and jurisdictional legislation, regulations and guidelines, as well as implementation and review of school policies, programs and operations.
- Accountability — for student outcomes to education authorities, parents and the wider community.[222]

Leadership roles vary depending on school size

Operational authority for a school does not only reside with the principal and can vary depending on school size. Leadership functions tend to be more devolved in larger schools but, even in smaller schools, it is unusual for all leadership roles to fall to the principal. For example, a principal might engage with groups (such as the school governing body, parents, and system administrators), while a head or lead teacher might be involved in teacher professional development.

Sources: Anderson et al. (2007, p. 27); Pont et al. (2008, p. 18); Spillane, Halverson and Diamond (2001).

[222] More specific guidance on what Australian principals are expected to 'know, understand and do to succeed in their work' is outlined in the Australian Professional Standard for Principals (AITSL 2011).

School leaders create conditions for teaching and learning

School leaders affect school and student outcomes, both through organising and allocating resources, and creating the social institutions that regulate the way school communities interact:

> [l]eadership involves the identification, acquisition, allocation, coordination, and use of the social, material, and cultural resources necessary to establish the conditions for the possibility of teaching and learning. (Spillane, Halverson and Diamond 2001, p. 24)

School leaders foster the conditions for teaching and learning through a variety of channels including cultivating:

- shared purposes and goals by framing, conveying and sustaining the school's vision and goals
- relationships and social networks by engaging with the school community, including students, parents, and teachers
- organisational culture by developing shared meaning and values (Hallinger and Heck 1998, pp. 171–178).

School leaders' ability to develop an organisational culture and shared meaning and values can be especially important for the outcomes of students in specific cohorts, and in particular, Aboriginal and Torres Strait Islander students (ACTA, sub. DR124, p. 65; Stronger Smarter Institute, sub. DR114, p. 6) (box 8.2).

Box 8.2 – The way in which school leaders shape school culture matters for students from priority equity cohorts

One way in which school leaders can develop school culture and shared meaning and values is by developing reciprocal trust, relationship building and focusing on the development of others (Halsey 2018b, p. 42).

In a review into regional, rural and remote education, Halsey noted that school culture is reflected in the school environment and therefore also encompasses 'the physical and emotional safety of students, the orderliness of classrooms and public spaces, or the degree to which a school embraces and celebrates racial, ethnic, linguistic, or cultural diversity' (2018b, pp. 39–40).

The role of school leaders in shaping school culture can be particularly important for students from priority equity cohorts including (ACTA, sub. DR124, p. 65; Stronger Smarter Institute, sub. DR114, p. 6):

- Aboriginal and Torres Strait Islander students — the extent of recognition and inclusion of Aboriginal and Torres Strait Islander cultures and knowledges in teaching at schools can affect Aboriginal and Torres Strait Islander student engagement; and the school's connection with its Aboriginal community
- students with disability — the degree to which a school fosters and maintains an inclusive culture and supports its teachers to recognise diverse needs. This includes fostering a school culture and approach that sees the role of the school as providing support and an inclusive culture for people with disability (chapter 4)
- students in regional, rural and remote areas — school leaders can have significant responsibility in regional, rural and remote locations. Their capacity to form and sustain relationships, which directly and indirectly contribute to the learning culture of a school has been described as crucial, 'especially in locations where there is effectively no other option for families than the local school' (Halsey 2018a, p. 18)
- other cohorts such as students with English as an Additional Language or Dialect — school leadership can play a key role in building inclusive whole school systems of support that meet the language learning needs of these students (ACTA, sub. 37, attach 1, p. 24).

Principals are the locus of innovation and reform in schools

In addition to their more widely recognised roles as educational leaders, managers and administrators, school leaders (and principals in particular) play an important role in the wider education system. As the intermediaries between the classroom, school board, and the education system as a whole, effective school leaders are the main drivers of innovation and translating policy reforms into actions.

School leaders drive innovation in schools …

Local school decision makers are generally best placed to respond to local changes and the needs of teachers, students, parents, and the community. Doing so can require innovation — as the Australian Parents Council observed:

> [c]entring school as the subject matter experts of the community in which they operate leaves them as the best placed to identify need, gaps and challenges and they should be encouraged and incentivised to devise innovative solutions to their problems. School leaders should be skilled and empowered to take these measures. (sub. 8, p. 5)

Innovation in leadership practice is especially important in diverse school contexts (Santamaría and Santamaría 2016, p. 2).

… and enable reforms

School leaders bridge education policy and practice. Policy reforms at the system level provide direction to schools, but success at the school and classroom level depends on the actions of leaders (Pont et al. 2008, p. 19). The Australian Professional Standard for Principals recognises this role of school leaders:

> [p]rincipals work with others to produce and implement clear, evidence-based improvement plans and policies for the development of the school and its facilities. They recognise that a crucial part of the role is to lead and manage innovation and change to ensure the … strategic plan is put into action across the school and that its goals and intentions are realised. (AITSL 2014, p. 16)

Implementing and embedding reforms require school leaders to promote changes to school processes, cultures, attitudes and behaviours (Pont et al. 2008, pp. 19–20). Principals translate the reforms into practice through their teachers. As the Australian Professional Teachers Association (APTA) observed:

> [t]he role of school leaders should be to clearly communicate policy reforms that are most relevant to teachers' work, in plain language, to teachers within their schools so that teachers understand the purpose of the policy reform and what it means for their classroom practice. (sub. 50, p. 3)

As systems rely on school leaders to implement reforms, school leaders need to support and commit to reform. School leaders are more likely to support reforms if they contributed to their development (Pont et al. 2008, p. 20). It follows that school leaders and teachers should be engaged in the development of policies, not just their implementation. APTA underscored the importance of engaging school leaders in both tasks:

> [p]rincipals' associations are able to speak from a managerial perspective of school operations. Teachers are sometimes consulted through teachers' associations such as APTA. Teachers' associations are able to speak from a classroom-focused, practitioner perspective that is directly connected to the student. Both perspectives are important in consultation on new policy development. (sub. 50, p. 4)

Effective leaders are as important as effective teachers

Effective school leaders can improve student outcomes …

School leaders are second only to teachers in terms of their importance in creating an effective learning environment, though recent evidence has suggested the difference is small (Grissom, Egalite and Lindsay 2021, p. 672; Leithwood, Patten and Jantzi 2010). The economic benefits from improving principal effectiveness are as large as for teachers (box 8.3).

Box 8.3 – Comparison of principal and teacher effectiveness

Principals' estimated contribution to student achievement is smaller than, but almost equal with, the effects of teachers (Grissom, Egalite and Lindsay 2021; Helal and Coelli 2016).

There is wide variation in student learning gains between highly effective and less effective principals (Branch, Hanushek and Rivkin 2009; Leigh 2010; Rivkin, Hanushek and Kain 2005). Their effectiveness is larger in scope than that of teachers because they are averaged over all students in a school, rather than a classroom (Grissom, Egalite and Lindsay 2021, p. 43).

Comparison of principal and teacher effectiveness per student[a]

	Mathematics	Reading
Moving a teacher from the 25th percentile to the 75th percentile of performers	3.7 months of learning	3.8 months of learning
	Averaged across **all students in a teacher's classroom**	
Moving a principal from the 25th percentile to the 75th percentile of performers	2.9 months of learning	2.7 months of learning
	Averaged across **all students in the principal's school**	

a. As discussed in chapter 6, moving a teacher from the 25th to 75th percentile of performers is no small feat: the same holds for principals. Fewer studies have examined principal effectiveness compared to teacher effectiveness.

Source: Lindsay, Grissom and Egalite (2021, p. 39).

Principal effectiveness is measured in the same way as teacher effectiveness — by examining how much principals contribute to student achievement (Grissom, Egalite and Lindsay 2021, chap. 5). However, unlike teachers, principals influence student outcomes indirectly, by affecting the environment for student learning (Grissom, Egalite and Lindsay 2021, p. 34; Hallinger and Heck 1998). While most Australian principals teach, they mainly work outside the classroom (AITSL 2021a, p. 180). Their impact on student learning occurs indirectly through other people, events and organisational factors such as classroom practices and school culture (Hallinger and Heck 1998). These indirect influences include: principals' decisions on the allocation, training, and development of teachers; and (where they have the authority) hiring practices.

… but it is less clear what drives effective leadership

The Commission's analysis in chapter 2 revealed there was variation in National Assessment Program – Literacy and Numeracy (NAPLAN) scores among schools with students with similar characteristics (those

schools with a similar Index of Community Socio-Educational Advantage (ICSEA) quintiles).[223] This variation suggests that, after controlling for student characteristics, certain schools perform better — in terms of academic achievement — than others.

However, identifying what creates these between-school differences is difficult. As box 8.3 underscores, school leadership clearly plays a role, but less is known about the specific leadership practices that drive these differences (section 8.4).

8.2 What are the emerging pressures on school leaders?

As education systems have evolved, and the external environment has changed, so too have the roles of school leaders. With greater school autonomy, increased accountability and increased school governance, leadership roles have taken on more complex, demanding and specialised functions (Eacott 2017; PC 2012a, p. 241; Pont 2014, 2020, p. 156).[224] At the same time, centralised support for schools has decreased (Heffernan and Pierpoint 2020, p. 8).

As a result of these factors, the roles of school leaders are becoming more complex.

Leaders have taken on more complex and specialised functions

With more autonomy, leadership roles have increased in scale and scope …

Systems have moved away from central management models, towards decentralisation and greater school autonomy. Some states, such as Victoria, have historically had high levels of school autonomy (PC 2012a, p. 241), while in other states, such as New South Wales and Western Australia, the shift towards greater school autonomy has been more recent.[225]

Greater school autonomy increases the scale and scope of the roles that school leaders perform. School leaders can be given more responsibility over decisions such as staffing, financial budgets, curriculum, assessment and accountability (PC 2012a, p. 246). Further, increased school autonomy (and accountability) has changed the principal role from ‘a more managerial role’ to an ‘instructional leadership’ role focusing directly on student outcomes (Pont 2020, p. 156).

[223] The Commission used ICSEA to measure a school’s socio-educational advantage. ICSEA provides an indication of the socio-educational backgrounds of students by taking into account the parents’ occupation, the parents’ education, the location of the school and the proportion of Aboriginal and Torres Strait Islander students at the school. It has nothing to do with the staff, school facilities or teaching programs. Australian Curriculum, Assessment and Reporting Authority develops ICSEA to allow for fair and reasonable comparisons among schools with similar students. The analysis only includes schools in the lowest ICSEA quintile, as there is a strong correlation between student achievement and ICSEA (ACARA 2014).

[224] Australia is not alone in this trend: internationally, the shift in advanced countries towards knowledge-based economies requiring highly skilled and educated workers; an increased government focus on education policy reforms; and recognising and responding to greater diversity in the student population, have all added to the complexity of school leadership roles (Pont 2014, pp. 6–9; Pont et al. 2008).

[225] New South Wales implemented the ‘Local Schools, Local Decisions’ policy in 2012, which aimed to increase school autonomy by giving principals more say in managing resources, staffing, reducing red tape and overall decision making (NSW Government 2021). Government of Western Australia submitted that ‘[f]or over a decade, a key aspect of Western Australia’s public school improvement strategy has been the move to increased school autonomy that equips and empowers principals and their staff to act with greater authority and responsibility for the success of their school, based on the needs of their students and local community’ (sub. 19, p. 8).

… at the same time schools and leaders have been adapting to changing student needs …

Society also expects more from its schools and school leaders. Schools are expected to deliver a broader range of outcomes for a more diverse cohort of students. This too has added to the complexity of school leaders' roles and responsibilities (AEU, sub. DR101, p. 9; ISA, sub. DR105, p. 5).

In addition to delivering content in traditional subject areas such as English, mathematics, science and history, schools are now expected to deliver content and, in some cases, outcomes on a broader range of social issues, such as student wellbeing, childhood obesity, mental health challenges, cyber bullying, and financial literacy (Deloitte 2017b, p. 6; Hunter, Sonnemann and Joiner 2022, p. 9). Supporting student wellbeing in particular, has taken on greater prominence (AEU, sub. DR101, p. 13; Beyond Blue, sub. DR88, p. 4; Orygen, sub. DR74, p. 3) (box 8.4), while also becoming increasingly demanding, as school leaders have had to adapt their approaches to respond to COVID-19 and a series of natural disasters.

Box 8.4 – School leaders shape approaches to wellbeing

School leadership plays a large part in schools' responses and approaches to wellbeing, which influences student engagement and learning (chapter 5). Cross and Falconer (2021, pp. 2–3) found that '[s]chool leaders, along with teachers, are essential to securing student academic success and wellbeing by creating supportive school environments or building a positive school culture'.

The role principals and school leaders play in building a positive learning environment where the whole school community feels included, connected, safe and respected is recognised in the Australian Student Wellbeing Framework, which identifies leadership as one of five key elements (Education Council 2018, p. 5). Leaders can adopt a number of practices to support the school community to build and maintain safety and wellbeing, including:

- developing the school's vision and values
- actively seeking and incorporating students' perspectives about safety and wellbeing
- developing a climate of student safety in line with the National Principles for Child Safe Organisations
- communicating priorities and encouraging collaborative partnerships
- collaboratively developing whole school policies with staff, students, and families
- regularly monitoring and reviewing school capacity to address safety and wellbeing (Education Council 2018, p. 5).

Positive relationships between all members of the school community underpin wellbeing at school. Research suggests that if school leaders and other school staff feel well and supported in school environments, their positive relationships, for example, can promote students' wellbeing and educational success (Cross and Falconer 2021, p. 3).

Schools and school leaders have also needed to adapt teaching and learning strategies to respond to a more diverse student body (Hunter, Sonnemann and Joiner 2022, p. 11; Pont 2014, p. 8). While data on student diversity are incomplete, the available data reveal that schools now support more students with

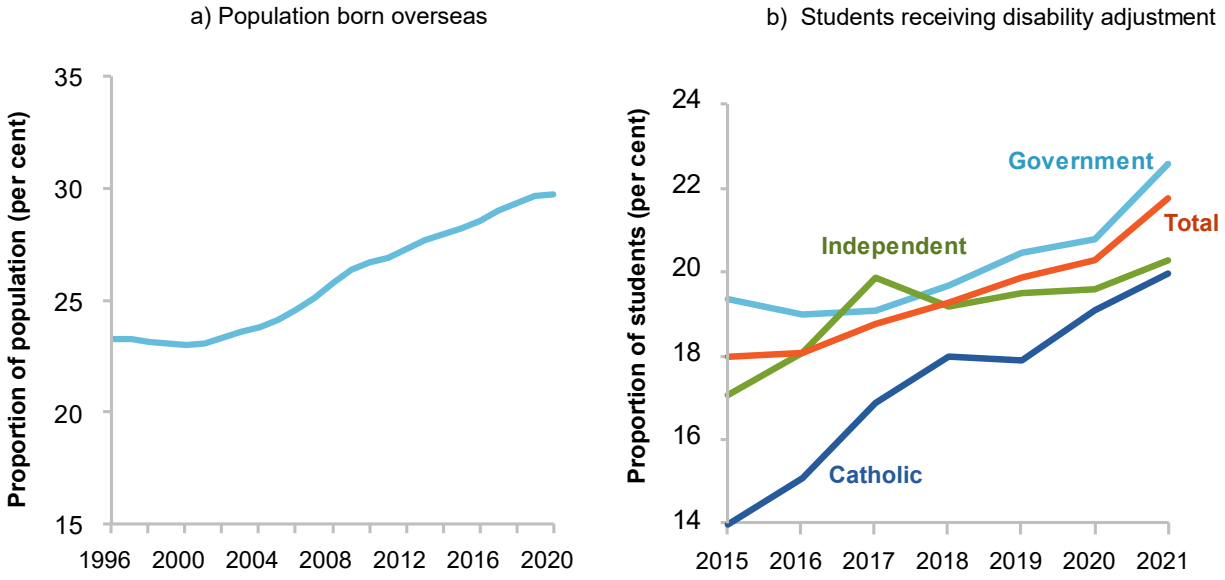
English as an Additional Language or Dialect, behavioural difficulties, and disability (figure 8.1).[226] As the Australian Education Union observed in respect of students with a disability:

> … the responsibility for ensuring that students receive the support they require falls to teachers and principals rather than on the authorities which manage school systems and the State, Territory and Commonwealth Governments that fund them. (sub. 36, p. 18)

Schools have also become more diverse as more students complete their secondary education. For example, the number of students staying through to Year 12 has increased from 75 per cent in 2005 to 83 per cent in 2020 (Hunter, Sonnemann and Joiner 2022, p. 11).

Figure 8.1 – As populations become more diverse, schools are catering for different needs

Proportion of population born overseas from 1996 to 2020 (left), and the proportion of students receiving adjustment due to disability by school sector, 2015 to 2021 (right)



Sources: Commission estimates based on ABS (*Migration, Australia*, *April 2021*, table 5.1); Report on Government Services 2022, table 4A.7.

… and external shocks to the education system

A number of external shocks, including the COVID-19 pandemic and a series of natural disasters, have and will likely continue to pose significant challenges for education systems (CSPA, sub. 24, pp. 4–5; NCEC, sub. 7, p. 7; DoE NSW, sub. 12, p. 3). Managing the burden of these shocks often falls on school leaders. For example, during the COVID-19 pandemic, school leaders had to grapple with remote learning, staffing shortages, and supporting student and staff wellbeing during lockdowns (ACU 2021, p. 21). The Australian Catholic University observed in the Australian Principal Occupational Health, Safety and Wellbeing Survey that:

> [b]urnout and Cognitive Stress were the highest since this survey commenced. We know that principals' work is busy, but the scale of the pandemic and other challenges increased it. (2021, p. 2)

[226] Catering for more students with diverse needs can also increase the complexity of teaching and may result in increased engagement with guardians and families, adding to school workloads (Hunter, Sonnemann and Joiner 2022, p. 11).

High-stakes accountability adds to leadership pressures

Decentralisation has been coupled with an increased focus on accountability, evaluations and results, raising the stakes for school leaders. Review participants noted that education outcome measures often place responsibility for improving education outcomes and supporting students on school leaders and staff (APC, sub. 8, p. 3; AEU, sub. 36, p. 18). Additionally, '[g]rowth in Australian Government funding and specific funding initiatives have led to increased financial accountability regimes' (AITSL 2022a, p. 16).

Greater autonomy has come with greater scrutiny on decision making ...

The move toward autonomy has coincided with an increase in reporting for accountability purposes. Greater accountability is seen as both a condition of, and complementary to, greater autonomy (box 8.5). The Commission previously noted that '[t]he overriding condition for most autonomy initiatives is that school leaders be held accountable for student outcomes' (2012a, p. 262). And research has suggested that '[a]utonomy has more positive results when this is compounded with accountability' (Pont 2014, p. 13).

While increased autonomy requires stronger local governance to ensure school leaders are meeting the needs and expectations of their stakeholders (PC 2012a, p. 248), these governance arrangements have been identified by secondary school principals as one of the largest sources of additional pressure (Heffernan and Pierpoint 2020, p. 9). This includes:

- compliance processes to fulfil regulatory or legislative requirements including: plans and reports for funding initiatives, and policy requirements through completion of forms, reports and other departmental obligations (AITSL 2020c, p. 16)
- data collection for the assessment of students, teachers and schools (Pont 2014, p. 9) and fulfilment of policy requirements (such as the student census) (AITSL 2020c, p. 16).

Primary school principals similarly noted that 'employer and government accountability requirements are an increasing proportion of … workload[s]' (APPA 2017, p. 11).

These sentiments have been echoed in surveys of principals, which revealed that increased scrutiny has exacerbated already intense workloads (APPA 2017, p. 11; Heffernan and Pierpoint 2020, p. 8) and levels of stress (Deloitte 2017b, p. 6). Concerns were also raised that increased administrative and compliance processes limited principals' ability to fulfil their role of leading teaching and learning (AEU, sub. DR101, p. 25; Deloitte 2017, p. 21; Heffernan and Pierpoint 2020, p. 13) and that reporting requirements can be duplicated by accountabilities to different authorities, particularly for non-government schools (AITSL 2020c, p. 20).

Even so, one survey suggested that principals 'would not want to give up their autonomy, even with the increased workload in mind' (Heffernan and Pierpoint 2020, p. 12). This is consistent with research highlighting similar tensions, which found that 'principals with higher autonomy felt empowered to lead school improvement and to meet local needs' (Heffernan and Pierpoint 2020, p. 12).

... and public reporting has raised the accountability stakes

The introduction of system-wide reporting on student outcomes has increased public transparency at the school level. For example, national reporting of NAPLAN and publication on the My School website has increased transparency of education systems, but in particular, scrutiny on principals (Deloitte 2017b, p. 6).

Box 8.5 – School autonomy and complexity of leaders' roles

School autonomy is a broad concept, but is usually taken to mean devolving to school leaders such responsibilities as managing budgets, as well as hiring staff and allocating them to specific roles (PC 2012a, p. 247). The extent of school autonomy varies across States and Territories. In States and Territories where schools have a high degree of autonomy, school principals have greater flexibility to choose how to fill vacancies, vary the mix of staff to meet student needs, and the ability to use part of a school budget to attract or retain staff (NSW Government 2021).

Accountability is critical for autonomy to be successful, as the OECD observed: 'greater autonomy … tend[s] to be associated with better student performance, particularly when schools operate within a culture of accountability' (2011, p. 4). But more accountabilities add to the complexity of leader roles. And there are other costs of accountability, both at the school-governance level, through expanded duties of school boards, and at the system-level, through greater compliance and reporting on matters related to delegated decisions (PC 2012a, pp. 245–249).

The impact of autonomy is contingent on the setting and the capacity of schools (Caldwell 2014, p. 6). Along with ensuring accountability for student outcomes, the scope of school leaders' responsibilities needs to balance the benefits from schools being able to tailor decisions to student needs against their capacity to take on those responsibilities (PC 2012a, pp. 245–246). This in turn is a function of leaders' skill sets, scope to take on additional roles and responsibilities, and the complexity of student population needs (PC 2012a, pp. 246–248).

Rather than a one-size-fits-all approach, decision-making responsibilities should be delegated according to each school's capacity to self-manage its affairs (PC 2012a, p. 246).

Leaders face more complex and intense workloads

New and increasingly complex roles may have contributed to higher workloads for school leaders.

About two-thirds of Australian principals surveyed identified high workload and level of responsibility in their job as issues that 'substantially limited their effectiveness' in 2018 (Thomson and Hillman 2019b, p. 7). Participants in this review also raised high workload, including from compliance burdens (AEU, sub. DR101, p. 25; ISA, sub. DR105, p. 6). The Australian Primary Principals Association pointed to the intensification of teacher and principal workload in recent years (APPA, sub. 48, p. 2), while the Independent Education Union of Australia observed that members of school leadership teams are experiencing 'significant levels of burnout' (sub. 15, p. 4).

Results from the Australian Principal Occupational Health, Safety and Wellbeing Survey, undertaken by the Australian Catholic University, suggests that the COVID-19 pandemic added to already growing workload pressures.

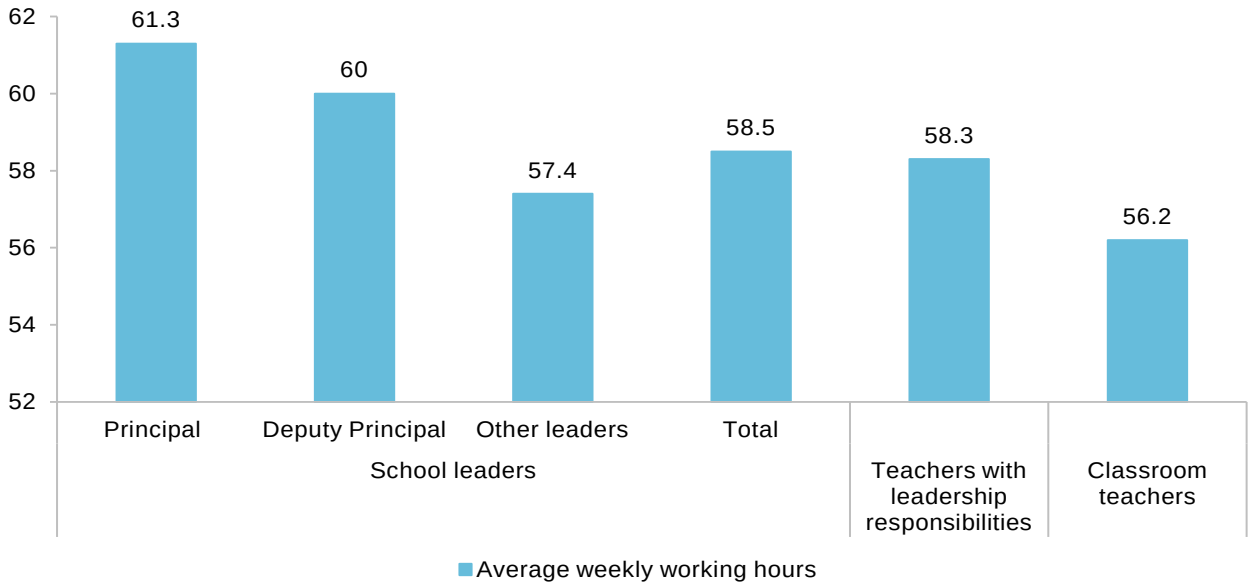
> COVID-19 … has presented a range of challenges. The workload has been increased due to the reduction of staff on site and dealing with a constantly changing COVID landscape. Extended lockdown requires school leaders continuously supporting students, staff and parents. (2021, p. 21)
>
> … [i]n 20 years the significant increase in workload, stress and emotional and physical demands to the role has to come to a head. (2021, p. 59)

Data bear out concerns about high workload — principals surveyed by the Australian Institute for Teaching and School Leadership (AITSL) worked on average 61.3 hours per week in 2018 (figure 8.2). While principals spent a portion of their work week engaging with students, teachers and parents, they spent the majority of their time on administrative tasks, leadership tasks and meetings (figure 8.3).

The Commission considers that there is a strong case for States and Territories to outline in their bilateral agreements state-specific reforms they are taking to maximise the best use of principal time along with teacher time, including efforts to reduce low-value tasks (recommendation 7.3). This would help principals focus their time on important tasks, such as developing and supporting teachers.

Figure 8.2 – Principals surveyed work on average 61.3 hours per week[a]

Average weekly working hours by leadership role, 2018

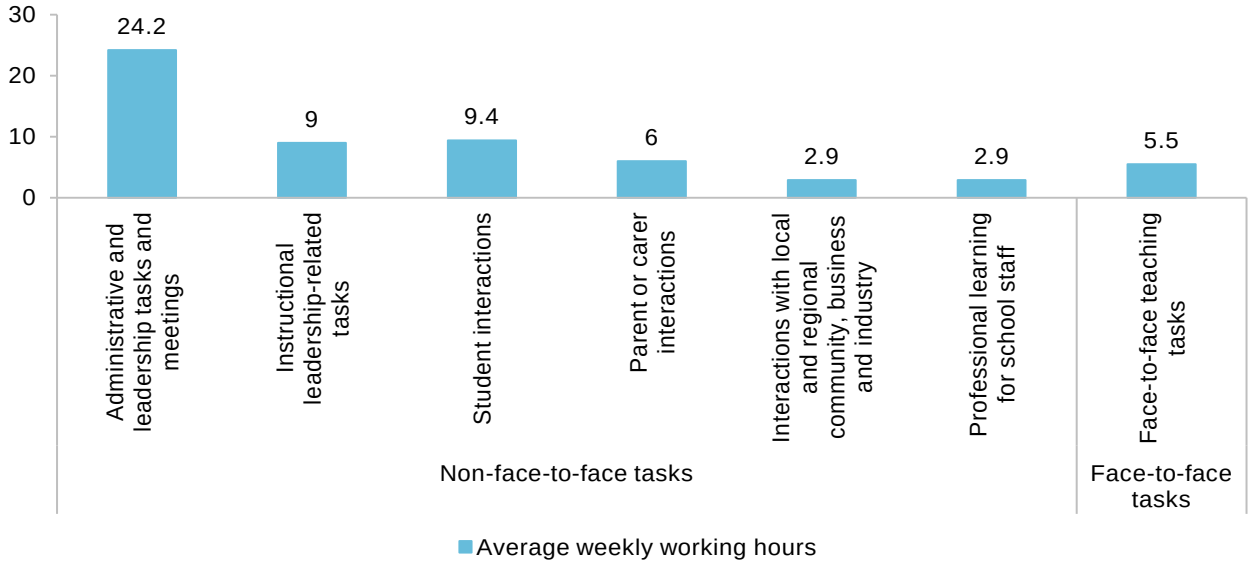


a. Data are from the Australian Teacher Workforce Data initiative and included respondents from New South Wales, Northern Territory and South Australia in 2018. The number of respondents was 322 for principals, 653 for deputy principals, 1 037 for other leaders (2 012 in total), 1 167 for teachers with leadership positions, and 4 632 for classroom teachers.

Source: AITSL (2021, p. 178).

Figure 8.3 – Principals surveyed spend much of their time on administrative and leadership tasks[a]

Average weekly working hours for a principal by type of work, 2018



a. Data are from the Australian Teacher Workforce Data initiative and included respondents from New South Wales, Northern Territory and South Australia in 2018. The number of respondents was 318 (except for interactions with local and regional community, business and industry, which was 316).

Source: AITSL (2021, pp. 180–181).

8.3 Is the pipeline of future leaders sustainable?

Generating high quality leadership skills takes time and investment. The little research that is available suggests some teachers are deterred from taking up formal leadership roles, contributing to concerns about future shortages.

Potential candidates are shying away from leadership careers

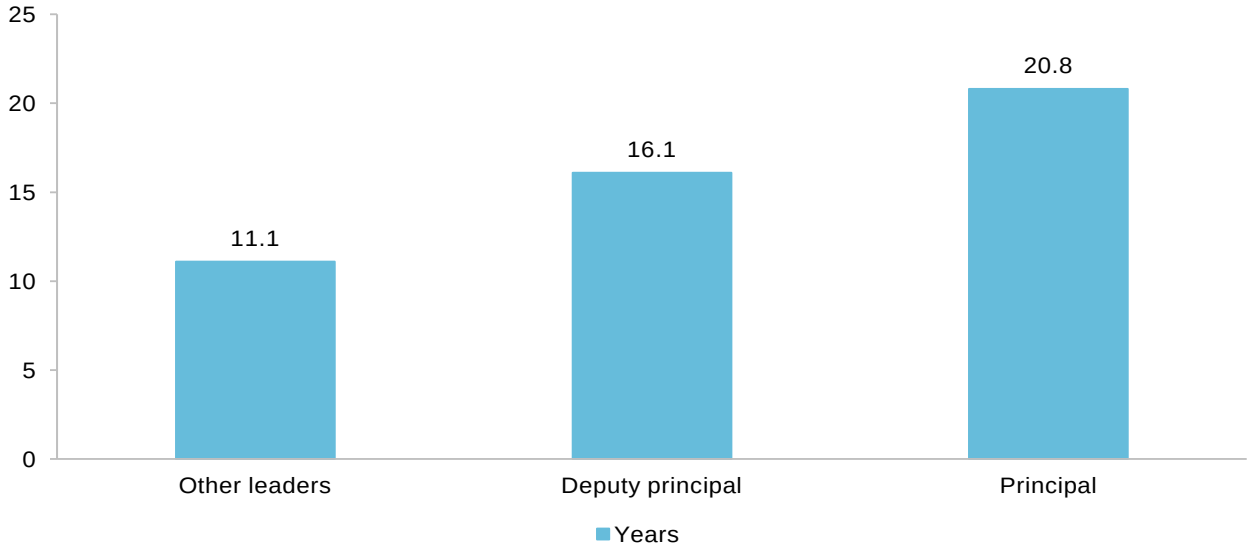
Traditional leadership pathways involve long lead times

Becoming an experienced teacher is the traditional pathway to school leadership, with some school leaders continuing to hold a teaching position alongside leadership responsibilities (AITSL 2021a, p. 154). The Australian Teacher Workforce Data reveal that the average principal surveyed in New South Wales, Northern Territory and South Australia had taught for close to 21 years before becoming a principal in 2018 (figure 8.4) — longer than the average classroom teacher had been in the profession (AITSL 2021a, p. 170).[227]

[227] The OECD's Teaching and Learning International Survey found that the average teaching experience of secondary principals in Australia was 23 years in 2018, above the OECD average (20 years) (Thomson and Hillman 2019b).

Figure 8.4 – School leaders surveyed typically have significant teaching experience prior to taking up leadership roles[a]

Average years teaching prior to leadership role in 2018



a. Data are from the Australian Teacher Workforce Data initiative that included 2 650 principals, deputy principals and other leaders in schools from New South Wales, Northern Territory and South Australia. Data for 'other leaders' came from South Australia only. The number of respondents was 367 for principals, 821 for deputy principals, and 699 for other leaders.

Source: AITSL (2021, p. 171).

Sourcing future leaders from the teaching population involves trade-offs

With the pipeline of school leaders largely drawn from the teaching workforce (chapter 7), some have worried that '[t]oday's teacher crisis will be tomorrow's leadership crisis' (Henebery 2022). And sourcing future leaders from the teaching workforce involves trade-offs — reducing the pool of teachers available to teach, and potentially exacerbating any teacher shortages (chapter 7). This is of particular concern for the pool of highly effective teachers, presuming they are more likely to aspire to, or assume school leadership roles. However, while leadership progression might remove effective teachers from the classroom, these teachers can still affect student achievement through effective leadership and sharing their expertise with other teachers, with potentially large effects on student performance (chapter 6, section 8.1).

Some potential leaders are deterred by high workload and limited preparation

Some aspiring school leaders are discouraged from taking on school leadership roles due to concerns about:

- high workload, particularly at the principal-level (Pont 2014, p. 23) and its negative effect on health and wellbeing (APPA 2017, p. 4)
- increased complexity of the work required covering both educational leadership and managerial tasks (AEU, sub. DR101, p. 25)

- low levels of support (Pont 2014, p. 23). For example, 35 per cent of principals surveyed by the OECD in Australia had no school administration or principal training, while 30 per cent had not undertaken any instructional leadership training (AITSL 2015a, p. 6)[228]
- lack of career development prospects for principals (Pont 2014, p. 23).

Indeed, there have been reports that teachers in middle leadership positions, having observed the significant workload involved, are hesitant to seek promotion to principal (Heffernan and Pierpoint 2020, p. 11).[229]

Evidence points to localised leader shortages

As with teachers, identifying whether there are school leader labour market imbalances is not clear cut because:

- there is no single measure of leader shortages. The nature of leadership roles, and the availability of suitable candidates, differs across schools — be it primary and secondary schools, small and large schools, and/or metropolitan and regional, rural and remote schools[230]
- there are persistent problems with a lack of complete and timely data on school leaders (Anderson et al. 2007, p. 52; AITSL 2021a, p. 7; Education Council 2020b, p. 2).

Concerns of school leader shortages are not new (Anderson et al. 2007, p. 52).[231, 232]

As with teachers, evidence suggests shortages are localised, with supply issues resulting in shortages in applicants in particular schools at particular times. A shortage of applicants with the requisite skills may also reflect candidate perspectives about hiring and selection processes.[233]

Where evidence of school leader shortages has appeared, this has been:

- in regional, rural and remote areas where attracting and retaining quality leaders continues to remain a challenge (Halsey, sub. 10, p. 8; House of Representatives Standing Committee on Employment, Education and Training 2020, p. 106). This can disproportionately affect Aboriginal and Torres Strait Islander students in those settings (Barty et al. 2005, p. 5; House of Representatives Standing Committee on Employment, Education and Training 2020, p. 100)
- apparent in the Aboriginal and Torres Strait Islander school leader workforce. For example, in 2015, there were few Aboriginal and Torres Strait Islander principals and deputy principals (Buckskin 2016, p. 7)
- dependent on the size of the school, with either very large or small schools found to attract fewer applicants than average, as they were viewed as particularly challenging environments in some States and Territories (Barty et al. 2005, p. 6).

[228] However, the Commission previously noted that '[a]rguably, any new job that involves a substantial escalation of responsibilities may seem initially daunting... [r]einforcing this point, leaders' confidence in their own abilities appears to grow as they become more established in their roles' (PC 2012a, p. 231).
[229] Hesitancy to apply for school leadership roles has been observed in other countries as well (Pont et al. 2008, p. 9).
[230] However, there has been evidence of mobility in the principal labour market within jurisdictions (Anderson et al. 2007, p. 48) suggesting there is less segmentation in the school leader labour market than the teacher labour market.
[231] Because there is typically a limited number of school leaders per school (and so fewer options for sharing the workload), shortages of school leaders may be more likely to show up as quantitative rather than qualitative shortages.
[232] For example, principal vacancies in NSW Catholic schools attracted an average of about 3 applications per school in 2004 (Anderson et al. 2007, p. 52).
[233] Barty et al. (2005, pp. 7–9) found that fewer candidates applied for principal positions when an incumbent was expected to apply for the job, the complexity and amount of time needed to apply were considered frustrating, and confidence in merit selection was low.

There is a question mark over future workforce pressures

There are concerns that broader school leader shortages will emerge in the future. The combination of a mature school leader workforce and retirement intentions have led some to conclude that: 'Australia will soon experience recruitment and retention problems' (Riley et al. 2021, p. 7).

As with the teacher workforce, evidence suggests that the school leadership workforce is ageing. Between 2018 and 2020, the proportion of middle and senior leaders aged 60 years or more — a cohort nearing retirement — increased from 14 per cent and 17 per cent to 18 per cent and 22 per cent respectively (AITSL 2022e).[234] Further, school leaders may leave before retirement. While intentions to leave do not necessarily translate to exits, nearly one-in-ten school leaders surveyed by AITSL in 2020 stated they could leave the profession in the next 5 years (AITSL 2022e).[235]

However, concerns of an ageing workforce have been longstanding with an 'imminent retirement of a large proportion of principals and other school leaders' raised in 2007 (Anderson et al. 2007, p. 35); although it is unclear to what extent this materialised. Further, an ageing workforce is a concern held across the broader economy (The Commonwealth of Australia 2021, p. viii).

Better analysis of, and planning for a pipeline of school leaders is needed

Assessing whether there is a sufficient pipeline of skilled school leaders is challenging due to the forecasting assumptions required, and a lack of available and timely data at the national level (Anderson et al. 2007, p. 52; Barty et al. 2005, p. 4). More effective leadership planning, supported by complete and timely data, is important.

8.4 What role could the next agreement play in supporting the pipeline of leaders?

There are three areas where governments could potentially focus their collaborative efforts:

- ensuring policy efforts to identify and prepare leaders are effective
- ensuring principals have the resources, support and professional development they need
- examining alternative sources for specific school leader roles, including outside of the profession.

Focusing on these three interconnected areas would help improve the quality of educational leadership, enable principals to better manage the increasing complexity of their roles, and aid in school leadership attraction and retention. The Commission sought feedback on each of these in its interim report.

[234] Ageing aside, 6.8 per cent of school leaders surveyed in the 2020 Australian Principal Occupational Health, Safety and Wellbeing Survey indicated their intention to retire in 2021 due to continuous stress and the uncertainty brought by the COVID-19 pandemic (Riley et al. 2021, p. 7). However, it is unclear whether this has led to higher retirements.

[235] 21 per cent of middle leaders indicated they intended to leave the profession before retirement, and 46 per cent of this group intended to do so in 1-5 years; giving 10 per cent who would intend to leave within 5 years. 15 per cent of senior leaders indicated they intended to leave the profession before retirement, and 41 per cent of this group intended to do so in 1-5 years; giving 7 per cent who would intend to leave within 5 years (AITSL 2022e).

A more systematic approach to early leadership identification and development might help

International experience suggests that there may be merit in a more structured approach to school leadership pathways. For example, in order to more efficiently target professional development, Singapore 'streams' teachers into three professional tracks, one of which targets school leaders (box 8.6).

A more structured approach to leadership career pathways can foster the development of specialist expertise. This can allow future leaders to be better prepared to manage the complex roles of a principal, as well as become a better educational leader. This could also help principal attraction and retention.

Box 8.6 – Case study: Singapore's Teacher Career Ladder

Singapore's approach to teacher and leader pathways centres on 'streaming' teachers into three professional tracks — a teaching, leadership, and senior specialist track. All teachers commence at the same level and then can choose to specialise in one of the tracks (Hairon 2017, p. 171).

The teaching track is designed for teachers who aspire to become expert teachers — remaining in classrooms as experts in pedagogy and mentoring their colleagues — while senior specialist roles allow teachers to develop deep expertise in specific disciplines (NISL 2019, p. 1).

The leadership track provides a pathway for teachers who are identified early on as having leadership potential. About one quarter of teachers in Singapore's system are on the leadership track (NISL 2019, p. 5). In this track, teachers progress through various roles from subject heads, heads of departments, vice principals, principals, and positions in government.

Streaming is combined with a consistently-applied evaluation and feedback program for all staff against the professional standards for the relevant track (NISL 2019, p. 1). Progress through pay schedules is based on performance against the standards rather than experience.

In Australia, some of the architecture that would be required for a 'streaming' framework is already in place: AITSL's Principal Professional Standard has been developed in consultation with States and Territories, and there are also nationally agreed guidelines for principal preparation (AITSL, sub. DR93, p. 8). However, these are voluntary and so far, not embedded in local agreements or tied to teacher or principal renumeration.

Recognising their potential to progress into senior leadership roles, a number of review participants noted that the current framework could also be improved by focusing on middle leaders.[236] Middle leaders make up about 10 per cent of the workforce (AITSL 2022f). Many teach in classrooms alongside having leadership roles, which can include: responsibility for a specific curriculum area or year level; leading strategy and development within a particular focus area; or having line management duties (AITSL 2022f).

Some participants observed that there is a disconnect between the teaching standards and the principal standard, and that investing in middle leaders could help improve the future pipeline of school leaders

[236] AITSL, sub. DR93, p. 8; ACEL, sub. DR70, p. 2; AHISA, sub. DR94, p. 4; NSW DoE, sub. DR117, p. 3.

(AHISA, sub. DR94, p. 14; AITSL, sub. DR93, p. 8; Queensland Government, sub. DR123, p. 4).[237] For example, AITSL noted:

> [f]uture national action could involve developing and adopting middle leadership standards, to provide a clearer pathway to principalship as well as better support for those in middle leadership roles. In addition, jurisdictions could commit to implementing best practice principal preparation and induction programs, and sharing evidence on what is working in this area. (sub. DR93, p. 8)

Some States and school sectors — such as New South Wales, Queensland, Tasmania and the Catholic school sector — already have programs in place to better develop middle leadership. For instance,

> [a] key action by NSW in this space is the School Leadership Institute, established in 2018, which provides a range of rigorous development programs for current and future schools leaders. Additionally, NSW has established an additional permanent middle leadership role, the Assistant Principal, Curriculum & Instruction, in NSW public schools with P-6 enrolments to collaboratively lead evidence-informed literacy and numeracy teaching and assessment practices for improved student learning outcomes across the curriculum. (NSW DoE, sub. DR117, p. 3)

AITSL and Queensland have also recently partnered to develop middle leadership standards. This seeks to:

- support career pathways for teachers who aspire to become middle leaders and/or principals
- address the gap between the Australian standards for teaching and principals,
- be used by career middle leaders, and those aspiring to become principals (DoE 2022c, p. 13).

There was some support among review participants for maintaining a pipeline of appropriately experienced school leaders (AEU, sub. DR101, p. 25), including for developing standards for pathways to principalship including through middle leadership (AITSL, sub. DR93, p. 8).

However, the Australian Council for Educational Leaders (ACEL, sub. DR70, p. 7) argued that identifying or developing the leadership pipeline may not be conducive to a national approach because of the diversity of school systems in Australia. ACEL (sub. DR70, pp. 7-8) went on to note that leadership strategies need to be context sensitive, culturally responsive, and community based, which may require jurisdictional judgement.

The Commission notes that there is clear merit in jurisdictions adopting a more structured approach to school leadership pathways, but that parties to the National School Reform Agreement have identified a desire to have a more focused set of national initiatives.[238] With that in mind, the Commission considers that there would be greater value in governments coming together to better understand what drives differences in school outcomes and what, specifically, principals can do to improve school performance (discussed below).

Ensuring principals have access to support and development is key, including for cultural responsiveness

The Commission has previously noted that the quality of school leadership can be improved through access to high-quality professional development (PC 2012a, p. 223). Increased principal support could also have the added benefit of better retention of school leaders.

[237] Professional development of teachers is discussed in chapter 6.

[238] NSW DoE, sub. DR117, p. 1; NT Government, sub. 42, p. 4; Queensland Government, sub. DR123, p. 2; Tasmanian Government, sub. DR127, p. 3; Victorian Government, sub. 31, p. 9.

Similar to teachers (chapter 6), school leadership professional development can vary in type.

> Universities, professional associations, school systems, and other providers constitute some of [the] different avenues [for professional development]. In some cases, the support is provided by the system in which principals work; in other cases, individual principals seek out short courses, workshops, or seminars which may be paid by themselves or by their school budgets. Support and professional development can also be informal, unstructured, and idiosyncratic depending upon the individual principal and their context. (ACEL, sub. DR70, p. 2)

Some review participants argued that access to quality professional development could be improved. The ACT Principals' Association (sub. DR89, p. 5) noted '[s]tate/territory education systems have processes in place, but we understand there is a high degree of variability in what is offered, and in the quality of what is received'. Meanwhile ACEL (sub 70, p. 2) argued that while '[t]here are many professional development opportunities … access is not universal and there is variability'.

However, survey data reveal that school leaders have high access to professional development. The Australian Teacher Workforce Data suggest that of surveyed school leaders in New South Wales, Northern Territory and South Australia, 99 per cent had undertaken professional learning in 2018, with the average number of hours completed being 53; this was substantially higher than teachers at 42.6 (AITSL 2021a, p. 184). Further, ACEL (sub. DR70, p. 2) noted that '[o]pportunities for professional development for school leaders have increased exponentially over the past 20 years'.

Further, school leaders appear relatively satisfied with the professional learning they have received. While gauging the quality of the professional development received can be difficult, in 2018, 90 per cent of surveyed school leaders agreed that their professional learning was aligned with their needs or priorities; this was higher than classroom teachers at 80 per cent (AITSL 2021a, p. 185).

More specialised development opportunities can strengthen cultural responsiveness

Review participants argued that principal professional development, selection and support could be better targeted to improve principal cultural responsiveness and support Aboriginal and Torres Strait Islander teachers and students (ACTA, sub. DR124, pp. 71–73; Stronger Smarter Institute, sub. DR114, p. 3). As discussed in section 8.1, principals play an important role in setting the school culture and ensuring Aboriginal and Torres Strait Islander students and teachers are culturally safe.

However, school leaders may have poor understanding about how to empower and engage First Nations students and teachers (Stronger Smarter Institute, sub. DR114, p. 3). ACTA (sub. DR124, pp. 71-73) highlighted the need for quality cultural responsiveness training, provided both initially and on an on-going yearly basis for principals appointed to remote Indigenous communities. Further, AITSL (2022b, p. 14) noted:

> [school] leaders need to ensure that the development of cultural responsiveness is a core competency of each staff member's professional development and learning. School leaders must also articulate the importance of cultural responsiveness to all staff and include their school community in the process. Most importantly, school leaders must lead by example.

Ensuring Aboriginal and Torres Strait Islander students and teachers are culturally safe in schools is the responsibility of all principals, not just those in remote Indigenous communities, particularly in light of government commitments to the *National Agreement on Closing the Gap*. As noted in recommendation 4.3, the Commission considers that all jurisdictions should set out actions in their bilateral agreements that commit to the institution of cultural safety requirements, along with the identification and elimination of racism across education systems.

Looking beyond traditional sources …

Another option for overcoming leadership supply concerns is to source school leaders from outside of the teaching profession. This can also involve outsourcing specific roles of the principal, so that they can focus more on educational leadership.

Teaching is the traditional school leadership pathway because teaching skills and experience are relevant to school leadership roles. Effective school leadership practices, such as working collaboratively with teachers, and instructional leadership, can be informed by teaching experience (Pont 2014, pp. 11–12). Teachers also value having school leaders with teaching experience (Ballou and Podgursky 1995, p. 250); this can help build trust between teachers and principals, which is important for improving student achievement and maximising the benefits of autonomy (Pont 2014, p. 12).

But school leaders are not just educational leaders. They also need skills in management, financial oversight and administration. Some specialised leadership roles might therefore benefit from a skill set outside of that afforded by traditional teaching pathways. Sourcing from outside the teaching profession has previously been considered in jurisdictions such as Victoria (Jennings 2014). And some principals are already supported by leadership teams that include non-teaching positions, such as compliance managers, who are responsible for administrative and compliance requirements (AITSL 2021a, p. 14).[239]

Overwhelmingly, participants were of the view school leaders, particularly principals, should not be recruited from outside the teaching profession.[240] Submissions noted that educational leadership, pedagogical knowledge, and understanding the work of teachers are key to improving student outcomes and require teaching experience and accreditation.[241]

At the same time, review participants recognised that there is an opportunity for non-teaching specialists to support the managerial and administrative responsibilities of school leaders.[242] This would allow school leaders to devote more time to educational leadership (AEU, sub. DR101, p. 25; ACEL, sub. DR70, p. 6; NSW PC, sub. DR92, p. 4). They noted that this could be achieved by hiring non-teaching specialists to work alongside school leaders with segregated responsibilities as part of school leadership teams (ACEL, sub. DR70, p. 7; NSW PC, sub. DR92, p. 4).

Meanwhile other review participants noted that school leaders should be supported with their managerial and administrative responsibilities through governments centralising some of these processes and reviewing or streamlining compliance requirements that underpin these responsibilities (AEU, sub. DR101, p. 25; ACTA, sub. DR124, p. 69).

… and exploring different models

One suggested way to ensure schools have an organisational culture that is well connected and engaged with the community — particularly in Aboriginal and Torres Strait Islander communities — is through the

[239] This is more likely in larger schools with more students (AITSL 2021a, p. 14).
[240] AAAE, sub. DR104, p. 19; ACEL, sub. DR70, p. 6; AEU, sub. DR101, p. 25; APPA, sub. DR110, p. 6; Halsey, sub. DR69, p. 4; NSW DoE, sub. DR117, p. 3.
[241] ACEL, sub. DR70, pp. 6-7; AEU, sub. DR101, p. 25; Halsey, sub. DR69, p. 4; NSW DoE, sub. DR117, p. 3; NSW PC, sub. DR92, p. 4.
[242] Such as managing budgets, finance, human resources, and health and safety (AEU, sub. DR101, p. 25; NSW PC, sub. DR92, p. 4).

co-principalship model[243] (Halsey 2018, p. 48; Stronger Smarter Institute, sub. DR114, p. 6). This is a multiple principal model, with one principal managing teaching and learning while another, typically an educator from the local community, manages the community interface and student engagement (Halsey 2018a, p. 48). This can allow 'First Nations community leaders [to work] alongside school principals with equitable decision making power' and has been suggested as effective in connecting and engaging with local communities, as well as reducing principal turnover (Halsey 2018, p. 48; Stronger Smarter Institute, sub. DR114, p. 6). The Stronger Smarter Institute noted that '[w]e have seen a number of successful examples of co-principal models and community elders mentoring principals' (sub. DR114, p. 6).

However, too often, Aboriginal and Torres Strait Islander teachers are expected to carry the responsibility of cultural awareness training for the whole workforce (NIAA, sub. DR103, p. 7; IECM, sub. DR125, p. 6). There is a risk that a co-principal model would see responsibility for cultural inclusive practices fall to a single individual.

As part of the National Teacher Workforce Action Plan, the Australian Government committed to co-design a new national First Nations Teachers' Strategy in close partnership with First Nations education organisations. As noted in chapter 7, the Strategy provides an opportunity to explore (potentially innovative) pathways for Aboriginal and Torres Strait Islander educators seeking to transition to leadership roles.

Building the evidence base in the next intergovernmental agreement is key

As highlighted above (and in chapter 2), Commission analysis reveals variations in NAPLAN scores among schools with students with similar characteristics, suggesting that after controlling for student characteristics, certain schools perform better — in terms of academic achievement — than others.

While it is broadly acknowledged that school leadership influences whether certain schools perform better than others, less is known about the specific leadership practices that drive differences in school outcomes.

High-level themes of effective leadership have been identified …

Researchers have identified a series of broad areas of leadership activity that have been associated with improved student outcomes:

- establishing goals and high expectations (ACER 2016, p. 13; CESE 2015, p. 3; Pont et al. 2008, p. 44)
- planning, supporting, evaluating and developing teacher quality (CESE 2015, p. 3; Pont et al. 2008, p. 44), including facilitating professional learning communities (Grissom, Egalite and Lindsay 2021, p. 58)
- identifying and addressing the needs of individual learners and monitoring their progress (ACER 2016, p. 13), including through intelligent assessment systems (Pont et al. 2008, p. 44)
- using resources strategically (CESE 2015, p. 3) and aligning them with pedagogical purposes (Pont et al. 2008, p. 44)
- building a productive and supportive school climate (Grissom, Egalite and Lindsay 2021, p. 58), including ensuring an orderly environment (CESE 2015, p. 3)
- engaging with the community (Pont et al. 2008, p. 44)
- maintaining a mindset of ongoing improvement (CESE 2015, p. 3), including by setting an explicit and shared school improvement agenda (ACER 2016, p. 13).

The Australian Professional Standard for Principals also provides common capabilities that Australian school leaders require: vision and values; knowledge and understanding; and personal qualities, social and

[243] Co-principal models have also been suggested to help address school leader shortages overseas (Wexler Eckman 2006, p. 1).

interpersonal skills. These requirements are spread across five areas of practices: leading teaching and learning; developing self and others; leading improvement, innovation and change; leading the management of the school; and engaging and working with the community (AITSL 2014, p. 10).

… but there are still gaps, especially in Australia

While high-level themes have been identified in the literature, they suffer from three significant flaws.

- **They are too high-level to provide clear guidance to school leaders** on actions they could take in their schools to lift student outcomes. For example, while research suggests that school leaders should focus on identifying and addressing the needs of individual learners, it is not clear exactly how they should do this. In addition to lacking specificity on the practices associated with success, as Grissom (2021, p. 81) observed, the school leadership evidence base provides 'little about the conditions under which principals typically have larger impacts on student outcomes and the skills … that are associated with success'.
- **The evidence underpinning studies is variable in research approach and quality**.[244] Grissom (2021, p. 81) found that while this can be an asset as variation can help form well-rounded conclusions, it can also make it challenging as there are a number of weak studies that support claims of effective leadership.
- **They are largely based on international research** so may not reflect broad areas of leadership activity that prove important in the Australian context. Previous Australian research has highlighted models (similar to the professional standard highlighted above) rather than practices for effective leadership (Dinham et al. 2011; Drysdale and Gurr 2011; Gurr, Drysdale and Goode 2010). As AITSL (2015a, p. 4) noted:

  > [p]resently there is little research being done that links the effectiveness of specific school leadership development experiences to school outcomes.

More needs to be done so Australian school leaders are not left trying to implement broad themes and coming up with their own versions of what it means to 'build a productive school climate' or 'maintain a mindset of ongoing improvement'. As Grissom et al. (2021, pp. 87–88) noted after reflecting on the state of the evidence base, there is merit in building 'a more rigorous, robust, cohesive research base on… school principalship' including improving understanding of what effective leadership practices influence student outcomes.

The Australian Council of Educational Research (ACER) has similarly acknowledged the importance of strengthening the school leadership evidence base in Australia (Anderson et al. 2007, p. 46). In response to a study it conducted on school leadership developments and issues in Australia, ACER noted that:

> [t]he research and knowledge base on how school leadership interacts with a wide range of other factors to enhance student learning needs to be strengthened. Although this [study] was able to draw on a wide range of Australian research studies, this is a challenging area of work that needs ongoing support, the development of new conceptualisations and empirical approaches, and close interaction with the fields of policy and practice. (Anderson et al. 2007, p. 46)

There was also some support among review participants for improving the evidence base on school leaders (PRF, sub. DR109, p. 6; SVA, sub. DR118, p. 2). AITSL (2015a, p. 4) has previously argued that a 'stronger focus on evaluating the impact of the professional opportunities that comprise principal preparation is a critical need'.

[244] The variation in evidence may reflect the varying contexts in which schools operate. Some practices need to be adapted to the context, culture and community that the principal serves (ACEL, sub. DR70, p. 7). Also, the indirect way that school leadership affects student outcomes — such as through teachers — can make it difficult to quantify the impacts of different leadership practices.

What might be the focus of efforts?

There is a strong case for jurisdictions to come together to progress this critical work. There are substantial opportunities for sharing learnings and best practice: it would avoid duplication of effort, and would also enable jurisdictions to better use national education institutions, such as the Australian Education Research Organisation (AERO) and AITSL.[245] While some practices may need to be adapted to the context, culture and community that the principal serves (ACEL, sub. DR70, p. 7), examples of tangible actions that school leaders could take that have been proven to work in an Australian context would provide a strong foundation.

To ensure the improved evidence base equips school leaders with the information they need to improve outcomes for their students, it will need to be robust — both so that it is well founded and so that leaders have confidence in its findings — harnessing the expertise of AERO and AITSL, and leaders themselves will help in this regard. Evidence on leadership practices will also need to be effectively communicated to and adopted by school leaders.

Further, the evidence base should also be developed with a view to identifying the distinct practices that contribute to successful outcomes for specific student cohorts (chapter 4). This would involve gaining a better understanding of what leadership practices can help improve the outcomes of students from priority equity cohorts.

This evidence base should be pursued through a national policy initiative to avoid duplication of effort. With this in mind national action should be focused on:

1. **settling a clear and cohesive research agenda**, focused on promising areas of principal practice, which can be adapted to the Australian context
2. **progressing high-quality studies to fulfil the agenda**, based on sound research design. These could comprise of both quantitative and qualitative studies that explore the causal relationship between principal practices and student outcomes,[246] underpinned by a variety of data, such as administrative data, interviews, time-use instruments, and in-person observations, to provide a more comprehensive and nuanced view of principals' practice
3. **ensuring evidence of best practice is disseminated to school leaders.** The success of this measure comes down to its adoption by principals and dissemination into Australian classrooms. This could involve reflecting best practice in principal development programs, or into the Australian Professional Standard for Principals. Governments could also create a repository of best practice, for principals to refer to, and issue guidance for leaders to follow (as recommended for teachers in section 6.3). Further, ensuring that these practices are used by principals may require freeing up principal time to enable adoption (recommendation 7.3).

[245] This echoes current efforts such as ACARA's *Case studies of high gain schools, which* examines the methods principals use at schools that have consistently achieved above average progress in NAPLAN assessments for numeracy, reading and writing (ACARA 2019a).

[246] For example, quantitative studies investigating a causal relationship between principal practices and student outcomes must rule out alternative explanations (Grissom, Egalite and Lindsay 2021, p. 87). Determining causation could, for instance, be better accomplished by using random assignment, or with strategies that leverage natural experiments or changes over time.

Finding 8.1

Improving school leadership can boost students' learning. Workforce planning, mentoring and professional development for school leaders can help ensure a sustainable supply of effective school leaders.

School leaders are second only to teachers in improving student outcomes. Improving the effectiveness of leaders, especially principals, would generate sizeable benefits.

Long lead times for teachers to move into leadership roles, and the emergent pressures on the current cohort of school leaders, underscore the importance of effective leadership planning to ensure a sustainable pipeline of future school leaders.

School leaders would benefit from greater guidance on specific measures they can adopt in their schools to improve student outcomes.

Recommendation 8.1

Governments should improve the local evidence base on school leadership in an Australian context as a national policy initiative in the next intergovernmental school reform agreement.

Parties to the next school reform agreement should commission education bodies, such as the Australian Education Research Organisation and Australian Institute for Teaching and School Leadership, to improve the local evidence base on effective school leadership practices. This would form a research agenda involving:

- identifying the most important gaps in the school leadership evidence base
- conducting high quality studies to fill these gaps
- ensuring that the results of the studies are used to inform leadership practice, such as through professional development for current and future leaders.

Once an evidence base is available, each jurisdiction should update their bilateral agreements to identify specific reforms they will undertake to incorporate the evidence base, and publicly report on progress implementing these reforms.

9. The National Measurement Framework

Key points

- **The Measurement Framework for Schooling in Australia (MFSA)'s Key Performance Measure (KPM) dataset has reporting gaps against the National School Reform Agreement (NSRA) performance reporting framework, particularly on outcomes for students from priority equity cohorts.**
  - Many of these reporting gaps could be readily filled for Aboriginal and Torres Strait Islander students and students from regional and remote areas, accompanied by appropriate caveats about sample sizes and margins of error.
  - Where sub-outcomes and targets in the NSRA remain unreported in the KPMs for Schooling in Australia dataset, they should be publicly noted as reporting gaps to encourage governments to fill them.
  - Reporting gaps on the outcomes of students with disability are more difficult to address but governments should make this a data development priority.
- **The NSRA has an accountability deficit. In addition to the MFSA not being wholly relevant and complete as a tool to measure progress against the Agreement sub-outcomes, visibility of governments' progress is diminished by the absence of standalone reporting.**
  - The MFSA is the main tool for public reporting against the targets, outcomes and sub-outcomes in the Agreement, but was not designed specifically for this purpose, and reports on a broader range of measures. As such, performance data to help assess progress against the National School Reform Agreement outcomes and sub-outcomes are not readily accessible, diminishing public accountability.
  - Standalone reporting on NSRA sub-outcomes and targets should be developed, and the report should be tabled in Parliament.
- **The sub-outcomes in the next intergovernmental schools agreement should remain as a high-level 'health check' for each of the NSRA outcomes, including for the proposed new outcome on student wellbeing.**
- **The Australian Curriculum, Assessment and Reporting Authority (ACARA) is responsible for regular updates of the MFSA. ACARA anticipates the MFSA will undergo a revision over the course of 2023.**
  - The review of the MFSA should be undertaken in consultation with students, teachers and communities.
- **Stakeholders have also identified an opportunity to better align KPMs to the goals and commitments to action in the Alice Springs (Mparntwe) Education Declaration.**
- **To reduce the costs of new national data collection, the use of existing datasets, such as surveys of students, parents and teachers, could be considered for incorporation into a revised MFSA.**

9.1 Assessing NSRA performance reporting arrangements

Effective national performance reporting is a powerful tool for providing accountability to the community and ensuring governments remain committed to their endorsed goals for schooling.

Schedule C of the Intergovernmental Agreement on Federal Financial Arrangements notes that:

> The purpose of the performance indicators is to inform the general public about government performance in making progress towards identified outcomes. Performance indicators will provide a clear picture of the achievement of governments in delivering services (CFFR 2009, s. C6)

The Commission has been asked to assess the appropriateness of the national Measurement Framework for Schooling in Australia (MFSA) in measuring progress towards achieving the outcomes of the National School Reform Agreement (NSRA).

The NSRA includes agreed outcomes and sub-outcomes

The overarching objective of the NSRA is captured in a single statement — that Australian schooling provides a high-quality and equitable education for all students. This objective is supported by three outcomes — relating to student achievement, engagement, and transition to further study, work or life success — and seven related sub-outcomes (indicators) to track progress (table 9.1).

The NSRA also includes three national targets:

1. by 2025, Australia considered to be a high-quality and high-equity schooling system by international standards
2. by 2031, increase the proportion of people (aged 20-24) attaining Year 12 or equivalent qualification to 96 per cent
3. by 2031, increase the proportion of Aboriginal and Torres Strait Islander people (aged 20-24) attaining year 12 or equivalent qualification to 96 per cent.

The third target mirrors Target 5 under the National Agreement on Closing the Gap.

Together, these outcomes, sub-outcomes and targets form the NSRA performance reporting framework.

The MFSA is used to track performance against NSRA outcomes and sub-outcomes

There is no standalone document used to report annually on performance against NSRA sub-outcomes and targets. Some of the sub-outcomes are reported in the Performance Reporting Dashboard published by the Productivity Commission (2022c). Another annual national performance report, the Report on Government Services (RoGS), also reports on student engagement, achievement and skills attainment, but uses different measures (SCRGSP 2022a).

In the absence of standalone reporting, the MFSA is the primary tool for reporting against the NSRA's outcomes and sub outcomes (Department of Education 2019b), although this is not explicitly stated in the NSRA. The MFSA pre-dates the NSRA, and is designed to provide:

> … the basis for Australian education ministers to report to the community on the performance of schooling, in accordance with the Education Goals for Young Australians as expressed in the Alice Springs (Mparntwe) Education Declaration. (ACARA 2020a, p. 1)

The MFSA contains nationally agreed Key Performance Measures (KPMs), which are reported via two mechanisms:

- the Australian Curriculum, Assessment and Reporting Authority's (ACARA) annual *National Report on Schooling in Australia* (National Report), which also includes schooling contextual data, school funding data and schooling policies and priorities
- ACARA's (2022e) Key Performance Measures for Schooling in Australia dashboard and dataset, which include time-series data and an analysis of long-term trends. The dashboard is part of a broader National Report on Schooling data portal, which includes separate webpages for supplementary datasets relevant to the National Report more broadly, including staff numbers, student-teacher ratios, and teacher education.

Several (but not all) of the NSRA's sub-outcomes are included in the MFSA, which also includes KPMs not directly aligned to NSRA outcomes, consistent with its broader remit.

The Education Council has delegated the management of the MFSA to ACARA, including the assessment of data needs and a review of the framework at least every three years (ACARA 2020a). ACARA can make minor changes to the MFSA but more substantial changes to the KPMs and data reported against them are considered by the Australian Education Senior Officials Committee and approved by Education Ministers.

Because progress against the NSRA's sub-outcomes is reported as part of a broader measurement framework and an even broader national report on schooling, the public's ability to understand the performance of governments in achieving NSRA outcomes is diminished. This has implications for transparency and accountability. The Queensland Government (sub. 53, p. 15) noted that:

> The KPMs were not designed or intended to monitor progress on achievement of the goals set out in the NSRA, and the purpose of the Measurement Framework is longer-term and broader than the measurement of outcomes of the NSRA.

Three criteria can be used to assess the appropriateness of the MFSA

Drawing on the *Performance Measurement and Monitoring* guidance developed by the Australian National Audit Office, the Commission has assessed the appropriateness of the MFSA KPMs (in measuring progress towards achieving the outcomes of the NSRA) using three criteria (figure 9.1).

These criteria are broadly consistent with criteria in Schedule C of the Intergovernmental Agreement on Federal Financial Relations, which states that parties to the agreement are expected to:

> … ensure that performance indicators will be meaningful, simple and comprehensible to members of the public, that there is underlying data to support the indicators, that the indicators meaningfully measure what they purport to measure and are reliable. (CFFR 2009, s. C7)

Figure 9.1 – Criteria for assessing the appropriateness of the MFSA against the NSRA

Appropriate performance measures are:		
Complete	**Relevant**	**Reliable**
They provide a balanced examination of the overall performance story, and collectively address the objectives	They address a significant aspect of the objective, provide sufficient information to inform the reader about achievement against objectives and are clear and concise	They use and disclose information sources and methodologies that are fit-for-purpose (including as a basis or baseline for measurement or assessment) and are free from bias

Source: adapted from the Australian National Audit Office (2021).

The MFSA does not provide a complete view of progress against NSRA outcomes

Complete: *performance measures should provide a balanced examination of the overall performance story, and collectively address the objectives.*

There are several reporting gaps in the MFSA dataset, leading to an incomplete view of progress against the NSRA outcomes. Some, but not all, are noted in the MFSA — for example, the reporting of National Assessment Program – Literacy and Numeracy (NAPLAN) proficiency standards (ACARA, sub. 45).[247]

The most significant reporting gap in the MFSA relates to outcomes for students from priority equity cohorts (figure 9.2). Priority equity cohorts are defined in section 38 of the NSRA to include Aboriginal and Torres Strait Islander students, students living in regional, rural and remote locations, students with a disability and students from educationally disadvantaged backgrounds. Three sub-outcomes and one of the targets relate to students from priority equity cohorts, and Parties to the NSRA also agreed to disaggregate sub-outcomes by priority equity cohorts, where data are available. This lack of reporting on equity of outcomes was noted by participants to this review (Australian Child Rights Taskforce, sub. 40; CEMA, sub. 28; Sahlberg and Cobbold, sub. 21).

To report progress against the NSRA, the sub-outcomes should be disaggregated by priority equity cohort not only at the national level, but at the state and territory level. While the KPM dashboard includes some reporting on Aboriginal and Torres Strait Islander students' sub-outcomes in relation to attendance level and academic achievement, these data are not reported for each State and Territory, and data for other equity cohorts are entirely absent.

In some cases, data are available which could be used to report against NSRA targets and sub-outcomes by priority equity cohort, noting that sample sizes and margins of error will be issues in some cases, particularly for smaller jurisdictions. In terms of reporting of sub-outcomes by priority equity cohort:

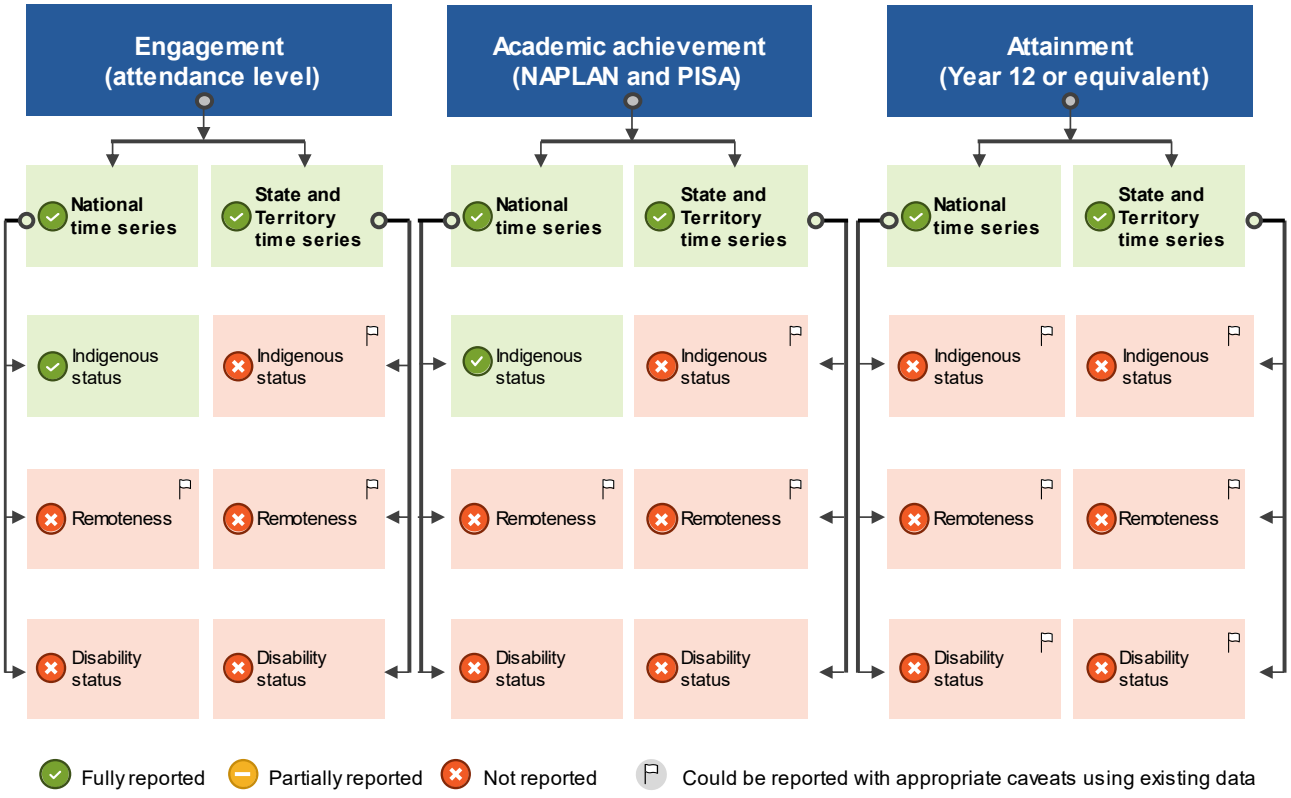
- **for academic achievement**, NAPLAN results are published by remoteness and Indigenous status for each State and Territory in on the National Report on Schooling data portal (ACARA 2022). Results from the Programme for International Student Assessment (PISA) are available by Indigenous status and remoteness area and are reported separately by the Australian Council for Educational Research (Thomson et al. 2019)
- **for engagement**, the National Report on Schooling data portal includes disaggregations by Indigenous status and remoteness area at the State and Territory level
- **for attainment**, the National Report on Schooling data portal includes disaggregations by Indigenous status, disability status and remoteness area at the State and Territory level (ACARA 2022). More frequent reporting by remoteness area is available from the Survey of Education and Work (ABS 2021). The Australian Bureau of Statistics (ABS) Survey of Disability, Ageing and Carers (SDAC) could be used to report on attainment for students with disability nationally.[248]

[247] ACARA had completed work on NAPLAN proficiency standards, with reporting expected to commence following approval from Education Ministers.

[248] Caveats would be needed to explain that the count of students with disability varies significantly based on the methodologies underpinning the Census, SDAC and the Nationally Consistent Collection of Data on School Students with Disability (NCCD). The NCCD is used for school funding arrangements and is related to the educational adjustments required for students identified by their teacher as having a disability.

Figure 9.2 – Completeness of MFSA reporting by NSRA priority equity cohorts[a]

The MFSA Key Performance Measure (KPM) dataset has substantial gaps in reporting on outcomes for students from the NSRA's priority equity cohorts[b]



a. Green boxes indicate that KPMs are reported at this level in the ACARA KPM dataset. Red boxes indicate that KPMs are not reported at this level in the ACARA KPM dataset. **b.** Several of the disaggregations are reported elsewhere on ACARA's National Report on Schooling data portal.

Source: Commission analysis of ACARA (2022e).

ACARA (sub. 45) noted that it would commence reporting by remoteness area and disability for five KPMs that use Census data in the KPM dataset in 2022, subject to agreement.

However, it is not possible to fill all reporting gaps with readily available data. For students with disability, some of the reporting gaps occur because the cohorts are not identified in the datasets used for KPMs.

The Nationally Consistent Collection of Data on School Students with Disability (NCCD) identifies and collects annual data on Australian school students receiving an educational adjustment due to disability. The NCCD reported 22 per cent of school students had disability in 2021 (ACARA 2022e). Although high-level summary statistics regarding level of adjustment and broad category of disability are reported by ACARA via their data portal, the data are not linked nationally to the datasets such as NAPLAN that are used to report KPMs in the MFSA or sub-outcomes in the NSRA.

The MFSA also states that KPMs will be disaggregated by language background and socioeconomic background (where possible and appropriate) but no data on these student cohorts are included in the KPM dataset (ACARA 2020a). The latter cohort could be seen as a proxy for students from 'educationally disadvantaged backgrounds', which is a priority equity cohort in the NSRA. Although this cohort is not well defined in the NSRA, it represents another group for which it would be desirable to build a more complete understanding of outcomes.

Finally, the National Report does not publish results for the NSRA target and sub-outcome that define success in relation to international performance. One of the NSRA's three targets is that Australia is considered to be a high-quality and high-equity schooling system by international standards by 2025. PISA was identified as the source for this comparative analysis in the previous national schools agreement. The Trends in International Mathematics and Science Study (TIMSS), and Progress in International Literacy Study (PIRLS) international sample assessments also provide opportunities to benchmark results for Australian students against students in other countries. However, relevant comparative data are not included in the MFSA.

The 2018 National Report is the latest to include PISA results, but it only compared Australia's results with the OECD average (ACARA 2018b, p. 107). This report did not include any discussion of whether Australia has a high equity schooling system by international standards. Similarly, the 2016 National Report only compared the average PIRLS reading score of Australian students with the average score for other countries (ACARA 2016, p. 96). The 2019 National Report is the latest to report TIMSS and included no international comparisons (ACARA 2019b).

Many of the data gaps in the KPM dataset outlined in figure 9.2 are reported elsewhere on the ACARA data portal supporting the National Report. However, these are not included in the KPM dashboard and dataset, which 'includes only disaggregations that can be achieved for all KPMs' (ACARA, sub. DR120, p. 7). The exclusion of these data from centralised reporting against the MFSA weakens visibility of outcomes for priority equity cohorts, especially for the purposes of assessing progress against the national agreement.

The relevance of the MFSA KPMs to NSRA sub-outcomes should be improved

Relevant: *performance measures should address a significant aspect of the objective, provide sufficient information to inform the reader about achievement against objectives and be clear and concise.*

Most sub-outcomes included in the NSRA are clear, concise, and have a closely aligned MFSA KPM. There are, however, some differences between the student achievement sub-outcomes and the MFSA KPMs that use NAPLAN and PISA data.

The MFSA KPMs that use NAPLAN and PISA are defined using the proportions of students meeting PISA proficient standards and NAPLAN national minimum, proficient and highly proficient standards. The NSRA sub-outcomes are defined based on the changes in the proportion of students in the top and bottom two bands of performance in NAPLAN and PISA, and the achievement gap in PISA between students from 'various socioeconomic backgrounds' compared with other schooling systems internationally. These differences make understanding performance against the NSRA's academic achievement outcome difficult.

A related point is that the MFSA also includes KPMs which are relevant to the outcomes of the NSRA but are not listed as sub-outcomes in the NSRA. For example, the MFSA includes measurement of the proportion of young people aged 17–24 years who have left school and are in education, training or work, which is a relevant measure of the outcome on transition to further study, work and life success.

Overall, the Commission considers that the relevance of MFSA KPMs for reporting NSRA outcomes and sub-outcomes is adequate, but should be improved by aligning the definition of measures between the NSRA and the MFSA, and by including relevant MFSA KPMs as sub-outcomes in the NSRA performance reporting framework.

The MFSA sets a high bar for reliability

Reliable: *performance measures should use and disclose information sources and methodologies that are fit-for-purpose (including a basis or baseline for measurement or assessment) and be free from bias.*

In its guidance on the performance reporting of the Australian schooling system (which is used by ACARA and all jurisdictions in reporting against the MFSA), the Education Council states that:

> Reporting should involve balancing the community's right to know with the need to avoid the misinterpretation or misuse of the information. (Education Council 2009, p. 4)

Each KPM is clearly defined in the MFSA, is based on nationally comparable data and enables valid and consistent reporting (ACARA 2020a). The datasets are all managed by Australian and international agencies, including ACARA, the ABS, the National Centre for Vocational Education Research, the OECD and the International Association for the Evaluation of Educational Achievement (ACARA 2020a).

ACARA's reporting against the MFSA includes comparisons of KPMs over time, as well as across jurisdictions. This provides a suitable benchmark for the assessment of performance against the KPMs.

The KPM dataset includes few disaggregations by equity cohort at the state and territory level (figure 9.2). ACARA explained that the reason that some KPMs are not disaggregated by Indigenous status and remoteness status for each State and Territory is because the error associated with most of the data collections is quite high at this level of disaggregation, particularly in the smaller States and Territories (ACARA, pers. comm., 12 August 2022). However, the Commission considers that there would be benefit in greater reporting of indicators at this level, provided that appropriate caveats are included and large statistical errors are reported and clearly explained. The value of additional transparency in these outcomes would exceed the risk of misinterpretation.

Several KPMs are not ideal for the purpose of reporting progress against a five-year intergovernmental agreement because their reporting cycles are infrequent. The PISA, TIMSS and PIRLS testing regimes only release results every three or four years and the ABS Census is available every five years. This affects the frequency of reporting on some NSRA sub-outcomes. For example, the target on skills attainment for Aboriginal and Torres Strait Islander students can only be reported once during the life of the NSRA. Infrequent reporting was noted by the Commission as an issue for the National Agreement for Skills and Workforce Development.[249]

In some cases, timely survey-based data sources are reported alongside less timely population-based datasets for the same KPMs. For example, some disaggregations of the Survey of Education and Work would not be reliable enough for the KPM dataset due to the sample size and sampling methodology so KPMs using this dataset are supplemented by the ABS Census.

No data are perfect — the NSW Department of Education (sub. 12, p. 22) suggested that the MFSA KPMs 'vary in their reliability and robustness' and that each dataset 'has its own specific limitations'. To manage data reliability risks, ACARA uses multiple methods, including by adding caveats to the National Report and data dashboard, omitting data and trends, contextualising results in the National Report, and using multiple data sources. For example, the retention rate KPM is called the *apparent* retention rate because the data needed for a true retention rate are not available, and the indicative measure is explained clearly in the National Report (ACARA 2020b).

Changes to NAPLAN may lead to a break in the timeseries reporting in the MFSA and on the NSRA sub-outcomes. The transition to NAPLAN Online includes adaptive testing, which provides more questions to students that are better targeted at their achievement level (McGaw, Louden and Wyatt-Smith 2020). Moreover, new reporting will commence once the proficiency standards are approved. ACARA should assess any comparability issues associated with future changes to NAPLAN and manage and communicate these accordingly.

[249] The Commission found that some performance indicators were only compiled periodically, and that these indicators were therefore were 'unable to regularly assess the acquisition of foundation skills' (PC 2020b, p. 142).

The MFSA KPMs are reliable as the measures use public, fit-for-purpose data and methodologies, and data reliability risks have been considered.

The MFSA is not appropriate for measuring progress towards the outcomes of the NSRA

Table 9.1 summarises the relevance, reliability, and completeness of the MFSA KPMs in reporting against the NSRA sub-outcomes.

Table 9.1 – Relevance, reliability, and completeness of the Measurement Framework for Schooling in Australia for reporting against the National School Reform Agreement

National School Reform Agreement (NSRA) Performance Reporting Framework		The Measurement Framework for Schooling in Australia's Key Performance Measures		
NSRA outcomes	NSRA sub-outcomes	Relevant	Reliable	Complete[c]
Academic achievement improves for all students, including priority equity cohorts.	Lower the proportion of students in the bottom two bands and increase the proportion of students in the top two bands of performance in the National Assessment Program–Literacy and Numeracy (NAPLAN) Literacy and Numeracy, of Years 3, 5, 7 and 9.	Partial[a]	Yes	No
	Lower the proportion of students in the proficiency Levels 1 and 2 and increase the proportion of students in the proficiency Levels 5 and 6 for the Programme for International Student Assessment (PISA) testing in reading, mathematics and science.	Partial[a]	Yes	
	Lower the proportion of students from priority equity cohorts in the bottom two bands and increase the proportion of students in the top two bands of performance in NAPLAN.	Partial[a]	Yes	
	Reduce the gap in achievement between students from various socioeconomic backgrounds in Australia's PISA educational performance compared to other countries and the OECD average.	Not included in MFSA	Yes, if included in MFSA	
	Increase the proportion of young people from priority equity cohorts, who have completed Year 12 or equivalent or have gained a non-school qualification at Certificate III level or above.	Yes	Yes	
All students are engaged in their schooling.	Increase the proportion of students attending school 90 per cent or more of the time, including students from priority equity cohorts. [b]	Yes	Yes	No
Students gain the skills they need to transition to further study and/or work and life success.	Increase the proportion of young people who have completed Year 12 or equivalent or have gained a non-school qualification at Certificate III level or above.	Yes	Yes	No

a. NSRA sub-outcomes have been considered to have partially relevant KPMs in the MFSA in cases where indicators are not aligned, despite similarities in broad aims. **b.** The MFSA and the RoGS report on attendance for Years 1 to 10 only. **c.** Completeness has been assessed based on the Key Performance Measures for Schooling in Australia dataset.

Finding 9.1
The Measurement Framework for Schooling in Australia is not appropriate for measuring progress on National School Reform Agreement outcomes.

While reliable, and largely relevant, the Measurement Framework for Schooling in Australia is not a complete means of reporting progress on National School Reform Agreement outcomes.

9.2 Improvements to national performance reporting on schooling

The terms of reference state that the final report should include recommendations to inform the design of the next intergovernmental school reform agreement, and improvements to the MFSA. This section identifies potential improvements to both the NSRA's performance reporting framework and the MFSA, taking into account costs and benefits, existing data sources and data development projects, and the proposals in earlier chapters.

Improving the NSRA's performance reporting framework

NSRA sub-outcomes should be aligned with the MFSA

Although the MFSA pre-dates the NSRA and serves a broader purpose than monitoring against the agreement, the sub-outcomes in the agreement should be aligned with the KPMs in the MFSA. Without alignment between the two frameworks, the MFSA cannot adequately act as the main reporting tool against the NSRA.

ACARA suggested that the NSRA sub-outcomes should be drawn from the broader collection of KPMs in the MFSA, rather than the MFSA being revised to suit the performance reporting framework embedded in the NSRA (ACARA, sub. DR120, p. 5). Given the broader scope of the MFSA, this is a sensible approach. However, in instances where MFSA reporting does not yet include measures that are of key interest to future schooling agreements — for example, data on priority equity cohorts — work should be progressed to expand the MFSA and enable these data to be captured.

The role of the MFSA in reporting on progress against the NSRA should be made clear both in future intergovernmental schooling agreements and in the preamble to the MFSA.

NSRA sub-outcomes could be improved without growing significantly in number

There were mixed views provided to the Commission about whether the NSRA's performance reporting framework should keep its narrow focus or take a broader view of outcomes. The Independent Education Union of Australia (sub. 15, p. 7) suggested that the existing metrics in the NSRA:

> … focus on narrow conceptualisations of education … [P]erformance on NAPLAN and PISA tests represents just one form of learning and, while it is appropriate to increase numbers of students from equity-targeted groups that attain literacy and numeracy benchmarks, this is not sufficient to ensure that those students will successfully transition to meaningful social and economic participation.

The Federation of Parents and Citizens Associations of NSW (sub. 18, p. 4) noted that NAPLAN has limited learning domains and that it only provides information on the 'general trend in a child's learning trajectory'.

Others considered that the indicators (sub-outcomes) in the next intergovernmental agreement should remain at a high level. The Victorian Government (sub. 31, p. 10) stated that the MFSA is intended to act as

a 'whole-of-system health check', and that it is 'not intended to be a complete measurement framework for schooling in Australia'. The NSW Department of Education (sub. 12, p. 24) noted its preference for 'a small number of high-level measures that are published with appropriate context'.

The Commission considers that it would be beneficial for the NSRA performance reporting framework to focus on tracking each outcome, and the equity of these outcomes, in a concise way. Fewer measures, chosen carefully, may better help the community to understand overall school system performance than a large suite of additional measures. A single sub-outcome is unlikely to fully encompass all the elements of an outcome. However, additional measures may be better suited to the MFSA than the performance framework of the NSRA (discussed in the next section).

The Commission considers that there is scope to both add and subtract from the performance reporting framework in the NSRA to retain a tightly targeted set of national outcomes and sub-outcomes (table 9.2).

There should be a clear statement in the next intergovernmental schooling agreement to publicly report on each NSRA outcome by jurisdiction for each priority equity cohort.

Including additional sub-outcomes for student achievement ...

The NSRA outcome for academic achievement is defined in terms of improvements for all students. Several participants identified opportunities to build a broader understanding of performance against this outcome.

The Australian Education Union (sub. 36 and sub. DR101) considered that the sub-outcomes have a heavy reliance on NAPLAN outcomes in the literacy and numeracy domains. This does not provide a view of whether students are improving relative to their prior achievement.

ACARA (sub. 45, DR120) and the National Catholic Education Commission (sub. DR87) supported the addition of a learning gain measure. This would be more aligned with *learning improvement* relative to prior achievement compared to the existing sub-outcomes, which are based on *learning levels.* The ACT Government (sub. 39, p. 3) noted that 'progress in student learning gain is an important measure of evaluating educational outcomes'. Section 39 of the NSRA foreshadowed the need for a new measure for learning gain, by stating that parties to agreement would consider enhancements, such as sub-outcomes on learning gain.

ACARA (2022e) already uses a measure of learning gain in their data portal supporting the National Report, where it is disaggregated by jurisdiction and by some priority equity cohorts. ACARA (sub. DR120) suggested:

> Learning gain would be reported at the national and jurisdictional level and by priority cohorts as the increase in NAPLAN scale points between the most recent assessment and the one undertaken two years previously. For each domain there would be three measures of gain, from Year 3 to Year 5, from Year 5 to Year 7, and from Year 7 to Year 9.[250]

... engagement ...

Although student engagement is a multifaceted outcome, the NSRA includes only one related sub-outcome. The NSRA sub-outcome on attendance levels is a measure of participation in schooling; engagement also comprises a broader definition of behavioural engagement (such as participation in school activities or classroom behaviours), emotional engagement (the connections to school) and cognitive engagement (students' effort and motivation) (Fredricks, Blumenfeld and Paris 2004). Neither the NSRA performance reporting framework or the MFSA report these broader levels of behavioural, cognitive or emotional engagement.

[250] ACARA noted inclusion of a measure of learning gain would be subject to further consultation with the National Assessment Data and Reporting Advisory Group (sub. DR120).

Participants to the review suggested new measures of student engagement for inclusion in the MFSA such as measures of school belonging and inclusion (ACT Government, sub. 39; AITSL, sub. 27; P&C Federation NSW, sub. 18; Save the Children Australia, sub. 23). ARACY (sub. 38) and the Paul Ramsay Foundation (sub. DR109) proposed measures of factors that affect student engagement, such as cultural connection. The Australian Parents Council (sub. 8, p. 6) noted that, on its own:

> … measuring student attendance doesn't interrogate students' level of engagement nor the reasons for the lack of engagement.

While the inclusion of broader measures of engagement would be valuable to the performance reporting framework of a future agreement, there are no nationally consistent data collections available to fill this gap in the short term.[251] Better measurement of student engagement would be particularly valuable for groups of students that frequently experience exclusion, including Aboriginal and Torres Strait Islander students, students with disability and children who have had interactions with child protection systems.

Several review participants raised the need for reporting on exclusionary practices for priority equity cohorts, including suspensions and expulsions (IECM, sub. 52; SA CCYP, sub. DR54). Children and Young People with Disability Australia (CYDA, brief comment C71) argued that 'capturing attendance, disciplinary absences, enrolment refusal, behavioural incident, and absenteeism data from students with disability' would assist with policy reform that supports inclusive education. Queensland Advocacy for Inclusion (sub. 1, attachment A) raised concerns about the use of, and lack of publicly available data on, school disciplinary absences, which is a concern among students with disability and Aboriginal and Torres Strait Islander students with disability. Deloitte Access Economics (2017a, p. xii) recommended to the Queensland Department of Education that:

> Use of School Disciplinary Absences as a measure of engagement should be incorporated into measurement frameworks and used to measure improvements in policy change over time.

To add an additional sub-outcome on exclusionary practices, there would need to be national data available for reporting. Governments should use the MFSA to develop a new measure and data on school disciplinary absences, which would enable the development of a new sub-outcome in a future agreement.

… and transition to further study, work and life success

The third NSRA outcome, which relates to students gaining the skills they needed to transition to life success, further study or work could also be measured using a broader set of sub-outcomes than the current single indicator (increase the proportion of young people who have completed Year 12 or equivalent or have gained a non-school qualification at Certificate III level or above).

Parties to the Agreement should include one of the three KPMs included in the MFSA on the number of young people engaged in employment, education or training to use as a sub-outcome for the next agreement. An alternative approach, with additional costs, would be to survey students about whether they felt well prepared for their transition out of school.

[251] The OECD does collect some engagement data (such as school belonging) as part of PISA. However, changes to the PISA questionnaire in different years mean that there may be no reliable benchmark against which to report new data.

To support a new wellbeing outcome, a future agreement should include a wellbeing sub-outcome

Recommendation 5.1 proposes that student wellbeing be added as a fourth outcome in the next agreement, and that a sub-outcome of student wellbeing is developed with annual reporting based on existing data collections.

The case for adding this sub-outcome is discussed in chapter 5, with reference to the Student Wellbeing Data Project, which is being progressed as part of the NSRA's National Policy Initiatives and led by the ACT Education Directorate. The project has resulted in a measurement framework for deriving an indicator of subjective wellbeing (which has not yet been considered by Education Ministers) and an assessment of the extent to which each department for education surveys school students about their wellbeing (Cárdenas et al. 2021).

Some existing NSRA sub-outcomes could be removed, as they do not support a better understanding of performance

There are two areas where the Commission considers that sub-outcomes could be removed to support the introduction of new measures, while retaining a concise NSRA performance reporting framework overall. These are:

- where sub-outcomes provide a more detailed breakdown of other sub-outcomes (for example, one of the achievement sub-outcomes is identical to the attainment sub-outcome, but is disaggregated by priority equity cohorts)
- where the identified dataset is not fit for purpose for NSRA reporting or duplicates other sub-outcomes.

A future agreement should remove sub-outcomes that provide a more detailed breakdown of other sub-outcomes, where there is a clear expectation that these will be reported through other sub-outcomes. This would result in the removal of the following sub-outcomes:

- lower the proportion of students from priority equity cohorts in the bottom levels and increase the proportion of students in the top levels of performance in NAPLAN
- increase the proportion of young people from priority equity cohorts, who have completed Year 12 or equivalent or have gained a non-school qualification at Certificate III level or above.

The sub-outcome relating to PISA proficiency levels does not provide significant additional understanding of performance against the objective of improving academic achievement. It somewhat duplicates the existing NAPLAN sub-outcome, only provides information about one group of students (15 year olds) and the PISA sample is not sufficient for reporting on priority equity cohorts at the state and territory level. As such, this sub-outcome could be removed in the next agreement without impacting the quality of the reporting framework overall.

These changes would make room for new sub-outcomes on learning gain, post-school outcomes and student wellbeing.

However, the PISA dataset should still play a role in tracking progress against the NSRA. In particular, the PISA dataset could provide a valuable view of the relative equity of Australia's education outcomes internationally by comparing the gap in outcomes between students from high and low socioeconomic backgrounds.[252] This aligns with an existing sub-outcome, although its definition could be clearer in the next agreement.

International benchmarks should be carefully selected for meaningful comparisons. There are risks associated with reporting Australia's performance in PISA as a ranking or in comparing results across all

[252] The methodology for the PISA Socioeconomic Index has changed over time. This would also need to be taken into account in any analysis over time. Appendix B discusses other potential limitations of PISA analysis.

PISA countries because the list of countries changes over time. The OECD average is also not a consistent comparison over time, due to the entry of new countries to the OECD in the last decade. However, ACARA (in consultation with the Australian Council for Educational Research) could identify a group of countries who participate in PISA for whom the average would be a meaningful benchmark for comparing Australia's PISA results over time.

The MFSA would need to be altered to accommodate the suggested PISA sub-outcome in table 9.2. The MFSA does not include any measures of PISA performance other than the KPMs for proportion of students achieving above proficient standard in reading, mathematics and science. These existing KPMs are not useful in reporting against the proposed sub-outcome; they would need to be supplemented by KPMs that provide a view of achievement for students in the top and bottom quartiles of the PISA socioeconomic index in Australia and a selection of comparator countries (including the average across those countries).

Table 9.2 – Outcomes and sub-outcomes proposed for the next agreement

National School Reform Agreement outcomes	Sub-outcomes proposed for the next agreement *(all of which should be reported for all students and for students from priority equity cohorts)*	
Academic achievement improves for all students	Increase the proportion of students who meet proficient and highly proficient national standard in NAPLAN literacy and numeracy in Years 3, 5,7, and 9.	MODIFIED
	Increase the proportion of students who make at least one year of learning gain for one year of schooling.	NEW
	Reduce the gap in achievement between students in the top and bottom quartiles of the socioeconomic index in PISA compared to the average gap for selected comparator countries.	MODIFIED
All students are engaged in their schooling	Increase the proportion of students in Years 1 to 10 attending school 90 per cent or more of the time.	EXISTING
Students gain the skills they need to transition to further study or work and life success	Increase the proportion of young people who have completed Year 12 or equivalent or have gained a non-school qualification at Certificate III level or above.	EXISTING
	Increase the proportion of young people in education, training or work.	NEW
Improved student wellbeing (recommendation 5.1)	Based on the proposed national indicator of student wellbeing (recommendation 5.1).	NEW

Reporting on NSRA's outcomes should be more prominent, accessible and complete

Public scrutiny of the progress towards NSRA outcomes has been diminished through reliance on the *National Report on Schooling in Australia* as a proxy reporting tool, and the absence of standalone annual reporting on NSRA sub-outcomes and targets. It can also be difficult to identify which KPMs in the MFSA align with specific NSRA outcomes and sub-outcomes. The Australian Council of TESOL Associations (ACTA) noted that:

> The multiplicity of current reporting mechanisms and their various components makes it virtually impossible for a national advocacy body … to decipher what is being done to further the achievements of the students we seek to represent. (ACTA, sub. DR121, p. 75)

To allow for greater accountability to the public for progress against the agreement, governments should commit to separate reporting on the specific sub-outcomes in the NSRA, either by developing a new report for this purpose or augmenting an existing report.

The National Catholic Education Commission (sub. DR87) and the Independent Education Union of Australia (sub. DR78) expressed support for a standalone report on progress against the NSRA outcomes and sub-outcomes, separate to the National Report. The Australian Alliance of Associations in Education (sub. DR104) expressed concern that, should a standalone report be instituted, only indicators included in that report will receive attention. However, this risk could be mitigated by retaining the National Report in addition to a new report on NSRA outcomes.

Rather than introducing a new standalone report, ACARA instead suggested including reporting against NSRA sub-outcomes as a new section of a revised National Report (ACARA, sub. DR120, p. 5). The Commission considers that this would be an appropriate approach to reporting on the NSRA, provided that ACARA clearly identify which KPMs are included as sub-outcomes or targets in the next agreement. However, any new sub-section would not be short — reporting on the NAPLAN sub-outcome alone would contain 864 data items.[253]

To further elevate accountability through transparency, the new report on progress against the NSRA outcomes and sub-outcomes should be tabled annually in the Australian Parliament. The Commission recommended the National Disability Report under the National Disability Agreement be tabled in Parliament (PC 2019a, p. 38). Similarly, jurisdictions agreed in the National Agreement on Closing the Gap to table their annual public reports of progress against the Agreement in Parliaments (ss. 118-119).

Finding 9.2

Performance data to help assess progress against the National School Reform Agreement outcomes and sub-outcomes is not readily accessible.

The visibility of governments' progress against the National School Reform Agreement sub-outcomes and targets is diminished by the absence of a standalone report and the reliance on the broader *National Report on Schooling in Australia* and Key Performance Measure dashboard for performance reporting.

[253] There would be 24 measures assuming four NAPLAN Year Levels and three proficiency levels and two learning domains (literacy and numeracy). These measures are disaggregated for 9 jurisdictions and four priority equity cohorts, leading to 864 individual data items..

Recommendation 9.1
Parties should introduce standalone performance reporting against the National School Reform Agreement outcomes.

Australian, State and Territory Governments should commit to standalone reporting on progress against the National School Reform Agreement sub-outcomes and targets. To achieve this, Australian, State and Territory Governments should either:

- publish a new report for the purposes of reporting on progress against the National School Reform Agreement sub-outcomes and targets, or
- augment the National Report on Schooling in Australia with a new sub-section.

At a minimum, the Australian Curriculum, Assessment and Reporting Authority should clearly identify in the Measurement Framework for Schooling in Australia and the *National Report on Schooling in Australia,* which key performance measures are sub-outcomes or targets for the National School Reform Agreement.

The report should be tabled annually in the Parliament of Australia.

Reporting on the NSRA should provide better visibility of outcomes for students from priority equity cohorts

Governments can and should prioritise improved reporting on outcomes for students from priority equity cohorts. The ACT Government (sub. 39, p. 2) stated that 'it is important that the National Measurement Framework focus on equity for all learners', while the NSW Department of Education (sub. 12, p. 25) noted that the 'focus on equity is not fully realised in the [MFSA]'.

To support a granular understanding of performance against NSRA sub-outcomes for students from priority equity cohorts, ACARA's next review of the MFSA should identify which KPMs relevant to NSRA outcomes are not reported in the KPM dataset at the State, Territory and national levels for Aboriginal and Torres Strait Islander students, students with disability, students in regional and remote areas, and any other priority equity cohort identified in the next agreement. Of these, ACARA should document which gaps:

- could be readily filled using existing datasets that already feature in the MFSA, subject to appropriate caveats about sample size and margins of error
- are pending government approval or have not been approved for reporting
- could be readily filled using other datasets, such as the ABS SDAC
- could be filled if MFSA datasets were linked with other national datasets (such as the NCCD or administrative data from the National Disability Insurance Scheme).

The NSRA is about reform that delivers improvements in student outcomes over time. For this reason, and to align with strengths-based reporting principles, data published by cohort should focus on time series reporting and the changes in outcomes for students in the cohort over time, rather than gaps in outcomes between cohorts. The goal of reporting should be to communicate the progress (or otherwise) in outcomes for students in the cohort of interest. For State and Territory level data, the same principle applies — reporting should compare changes in results over time for each jurisdiction, rather than emphasising absolute differences between jurisdictions.

Participants to the review have also called for clear definition, measurement and reporting of equity in the NSRA. CYDA (brief comment C71) called for the word 'inclusion' to be cited in the sub-outcomes and outcomes. The Teachers' Work in Schools Research Group (sub. 16, p. 2) argued that:

> A data, measurement and accountability framework for schooling that is … more aligned with the pursuit of broad educational goals, especially equity … would alleviate some of teachers' frustrations.

Among other measures of equity, Prof. Pasi Sahlberg and Trevor Cobbold (sub. 21) and ACARA (sub. 45) noted that the gaps in relative distribution of education outcomes between different social groups is a measure of the equity or fairness of the education system. ACARA (sub. 45) advised that it will consider building on the experience of producing a recent report on educational equity with a view to incorporating appropriate additional measures of educational equity in a revised MFSA. The issue of educational equity is discussed in chapter 4.

A determinant of a student's schooling performance is English language proficiency. The Australian Education Research Organisation (AERO, sub. 6 and DR113) noted that all states and territories collect data on English language proficiency but that the information is not reported nationally. Reporting on this cohort in the MFSA was also supported by ACARA (sub. 45) and the Australian Council of TESOL Association (sub. 37). Chapter 4 discusses the specific challenges faced by students who are learning English as an additional language or dialect, and refugees.

Opportunities to develop reporting on outcomes for students with disability

Participants raised the lack of reporting on outcomes for students with disability as a particularly serious gap in national data collections (CYDA, brief comment C71; CEMA, sub. 28). These views are supported by recent reviews, including the Review of Disability Standards conducted by the Department of Education, Skills and Employment, which found that insufficient data were reported on the participation and achievement of students with disability (DESE 2020, p. 52).[254]

Work is underway which may help these identified data gaps:

- Australia's Disability Strategy 2021–31 includes a commitment to improve data and reporting
- the new National Disability Data Asset, which is in development, and broader work on data linkages.

Australia's Disability Strategy 2021–2031 states that 'governments are committed to collecting and sharing relevant data to support effective monitoring and reporting of outcomes for people with disability' (DSS 2021a, p. 41). The Strategy's Outcomes Framework lists three measures for education and learning in the school system, two of which require additional data development before they can be reported (DSS 2021b).[255]

A Data Improvement Plan for the Strategy's Outcomes Framework is being developed to make sure data needed to measure outcomes for people with disability is collected, shared and improved over the life of the Strategy. The Data Improvement Plan is expected to set out how data for the future measures will be developed as well as how data for current measures may be improved (Department of Social Services, pers. comm., 4 November 2022).

[254] The Review of Disability Standards, conducted by the Department of Education, Skills and Employment, was intended to assess whether the *Disability Standards for Education 2005* effectively supported students with disability to access and participate in education (DESE 2020). Participants to the Review of Disability Standards felt that not measuring outcomes leads 'to a lack of action, and this lack of data was constraining the ability to improve the experience of students with disability'. (DESE 2020, p. 53). The participants also advocated for the collection and publication of data relating to academic attainment, suspensions and expulsions, part time attendance, and complaints made under the Standards.

[255] The two indicators requiring additional data development are the proportion of students with disability attending school at least 90 per cent of the time, and the proportion of students with disability in Year 9 achieving at or above the minimum standard for reading. The third indicator, Year 10 and Year 12 completion rates for students with disability, can already be reported using SDAC data.

The National Disability Data Asset, which is a cross-sectoral data linkage project aimed at better identifying people with disability in existing data collections, is also under development. One of the five National Disability Data Asset pilot test cases was undertaken with South Australian data on 'Education to Employment'. The test case identified students with disability in the SA Department of Education disability dataset and the Disability Services National Minimum dataset, which were linked with various datasets on NAPLAN participation, NAPLAN scores, school enrolment, Year 12 completion, post-school qualifications and employment (Mahuteau, Karmel and Zhang 2021). This test case illustrates the potential to link national datasets and enable reporting on NSRA outcomes, which should be investigated by governments (Mahuteau, Karmel and Zhang 2021).

The Commission has identified three main options for developing schooling outcomes data for students with disability.

- Linking through the NCCD. The Centre for Educational Measurement and Assessment (sub. 28, p. 5) raised the NCCD as an opportunity to improve national reporting via data linkage, and ACARA (sub. DR120) noted that the Australian Government Department of Education 'set up a working group in 2021 to tackle the issue of reporting by the NCCD attributes'.[256]
- Using data held by the National Disability Insurance Agency to identify outcomes for students with disability. The National Disability Insurance Scheme (NDIS) outcomes framework includes a measure of the percentage of NDIS participants aged 5 to 14 years who attend school (including home schooling) (DSS 2021b), which is similar but not identical to the engagement sub-outcome. The outcomes framework also includes indicators for the percentage of NDIS participants aged 15 to 24 who have completed Year 12 or above, who have completed a post-school qualification, and who currently participate in education, training or skills development. The data for these indicators could be used to report on sub-outcomes on study, work of life success. Further data development, such as data linkage, would be required for sub-outcomes that are not aligned with the NDIS outcomes dataset.[257]
- Allowing students to identify whether they have a disability when completing their details during NAPLAN and NAP sample assessments. Although this carries the risk that some students will be missed in cases where they do not identify as having a disability, it may also allow data to be collected for students who identify as having a disability but are not identified in the NCCD or participants in the NDIS.

[256] Further work may be required before this option was fully ready for progression. The NSW Department of Education (sub. 12, p. 25) warned that the NCCD 'is not yet consistent across jurisdiction and sector'.

[257] Many students identified in the NCCD do not participate in the NDIS. Although there were 878 242 students counted in the NCCD in 2021 (ACARA 2021b), there were only 159 796 young people aged 0 to 14 participating in the NDIS at 30 June 2020 (National Disability Insurance Agency 2021).

Recommendation 9.2
Parties should improve the performance reporting framework of the next intergovernmental school reform agreement.

Parties to the next intergovernmental school reform agreement should improve the performance reporting framework of the next school reform agreement by:

- clearly articulating the role of the Measurement Framework for Schooling in Australia in enabling the reporting of the sub-outcomes and targets of the agreement
- developing data to enable reporting on outcomes for students with disability. This may include by exploring opportunities to use the National Disability Insurance Scheme outcomes framework data, options for data linkage, or asking students to state whether they identify as having a disability as part of NAPLAN and National Assessment Program sample assessments
- publicly reporting on each outcome by jurisdiction for priority equity cohorts (students with disability, Aboriginal and Torres Strait Islander students and students in regional and remote areas)
- adding new sub-outcomes for learning gain, post-school outcomes and the measure of student wellbeing proposed in recommendation 5.1
- updating the NAPLAN sub-outcome to use proficiency standards rather than learning bands.

Improvements to the Measurement Framework for Schooling in Australia

Consistent with the terms of reference, this section considers improvements to the MFSA directly related to its role in understanding performance against the objective and outcomes of the NSRA. However, a number of participants identified broader opportunities to deliver improvements to the MFSA, particularly with regards to better alignment with commitments made by Education Ministers in the Alice Springs (Mparntwe) Education Declaration (box 9.1). The following discussion proposes some areas of priority focus for ACARA in undertaking their review of the MFSA. Developments to the MFSA could enable improved reporting on NSRA outcomes in future agreements.

ACARA is responsible for regular updates of the MFSA and anticipates that the Framework will be revised in 2023 to reflect and support the next iteration of the NSRA (ACARA, sub. 45, p. 2).

The ACT Government (sub. 39, p. 3) suggested that there would be value in undertaking a significant review and revision of the framework:

> The ACT urges that wholesale reform of the National Measurement Framework be considered rather than minor amendments or 'tweaks' which have characterised changes in recent years.

The Centre for Educational Measurement and Assessment (sub. 28) suggested that indicators should be derived from the goals and commitments to action in the Mparntwe Declaration, and the existing KPMs should be mapped to these.

As part of any review, there would be value creating a performance indicator framework for the MFSA. This would enable the intended scope of the MFSA (the NSRA and the Mparntwe Declaration) to be mapped against the KPMs and for ACARA to document gaps in reporting.

Box 9.1 – The Alice Springs (Mparntwe) Declaration Goals and commitments to action

The Mparntwe Declaration includes two high-level goals for Australian education:

1. The Australian education system promotes excellence and equity
2. All young Australians become confident and creative individuals, successful lifelong learners, and active and informed members of the community.

The Mparntwe Declaration contains 11 commitments to action by all Australian governments, including to developing stronger partnerships, supporting quality teaching and leadership, building foundational skills, promoting world-class curriculum and assessment, supporting Aboriginal and Torres Strait Islander learners and young Australians at risk of educational disadvantage to reach their full potential, embedding pathways for learning throughout life and supporting effective transitions.

Students in their middle years are flagged as being at greater risk of disengagement, and the Declaration focuses on the development of their literacy and numeracy skills, social relationships, wellbeing and engagement.

In the Mparntwe Declaration, governments also committed to strengthening accountability and transparency with strong meaningful measures. It states that good data on the educational experience and outcomes will be used to track progress against the goals of the Declaration but that collection of data should be proportionate and not unduly add to the workloads of educators.

Source: COAG (2019)

The MFSA should be aligned to the Mparntwe Declaration

The Mparntwe Declaration sets out the national vision for education and the commitment of governments to improving educational outcomes, as agreed by Education Ministers. It was developed in consultation with young people, educators, education and training providers, parents, business and industry – over 260 submissions were received and over 900 people attended consultation events.

Several participants raised concerns regarding the lack of alignment between the Mparntwe Declaration and the MFSA (CEMA, sub. 28; CSPA, sub. 24; NCEC, sub. 7).

> … additional metrics are needed to truly monitor progress and ensure the education community is on track to deliver the commitments outlined in the Mparntwe Declaration. (AITSL, sub. 27, p. 20)

ACARA's (sub. 45) analysis of the MFSA found that four of the eleven Mparntwe Declaration commitments to action were not represented in the MFSA, including those related to stronger partnerships, early childhood education, teachers and leaders, critical and creative thinking, wellbeing and English language proficiency. The Australian Education Union (sub. 36) added lifelong learning, effective transitions, and supporting all young people at risk of educational disadvantage to the list of gaps against the Mparntwe Declaration. The NSW Department of Education (sub. 12, p. 25) noted the MFSA's lack of 'culturally responsive metrics' to tell a balanced or full story for Aboriginal and Torres Strait Islander learners. The Australian Parents Council (sub. 8, p. 6) considered that the biggest omission in the MFSA was parent and community engagement.

The MFSA could include new types of measures

The MFSA is intentionally focused on student outcomes measures (ACARA, sub. 45; Victorian Government sub. 31), with no indicators for the school workforce or schooling processes. However, the introduction of broader indicators would be relevant to many of the Mparntwe Declaration's commitments to action. It would also assist in understanding progress towards the overarching NSRA objective that Australian schooling provides a high-quality and equitable education for all students. The Report on Government Services, for example, includes indicators of effectiveness such as quality, access and appropriateness (SCRGSP 2022a).

ACARA has foreshadowed a revised structure for the MFSA with three categories:

- social determinants of educational outcomes (which would include external influences on student outcomes or 'beyond-school gate' factors)
- system performance measures (including workforce indicators) and
- student educational outcomes (ACARA, sub. 45, sub. DR120).

This three tiered approach is consistent with that used by the National Health Performance Framework, which groups its indicators into measures of health determinants, the health system, and health status (NHIPPC 2017).

Introducing system performance measures can provide early insights into the progress made against the NSRA's overarching objective and the effectiveness of reforms. Changes in educational outcomes typically have long lead times, with changes only observed many years after a new schooling policy is introduced (assuming that policy is effective at all) (NSW DoE, sub. 12). The Commission has previously found that, in the context of education and social policy, outcome measures 'provide only partial insights into system performance' (PC 2020b, p. 143).

The Northern Territory Government (sub. 42, p. 6) described how outcomes data on its own does not tell the full story:

> In the NT, there are high numbers of students who experience significant social disadvantage which impact education outcomes, and in turn, caution should be taken when using the current [National Measurement Framework] data in isolation to guide national policy and report achievement.

The Indigenous Education Consultative Meeting (sub. 52, p. 3) recommended that data on outcomes and reform action should be:

> … treated in a more formative capacity to enable early and ongoing analysis of progress. The current NSRA presents lofty data items for reporting. How can we break this down into meaningful elements that can be measured and provide progressive insights into how we are tracking towards achieving the higher order goals?

Several participants suggested measures that would fall into these two new categories.

Potential measures related to educators were suggested by ACARA (sub. 45), the Australian Institute of Teaching and School Leadership (sub. 27), the Australian Education Union (sub. 36 and sub. DR101), the Independent Education Union of Australia (sub. 15), and the Victorian Government (sub. 31), including measures of initial teacher education scholarships, the proportion of schools meeting staffing requirements, and teacher workload. The Australian Education Union (sub. DR101) suggested several measures related to teachers, including retention rate and reasons for potential attrition. Some of this data, including teachers' intentions to change occupations and their reasons for doing so, are already reported as part of the Australian Teacher Workforce Dataset (AITSL 2021a) and could be reported as a KPM in the MFSA.

The focus on teachers in the Mparntwe Declaration relates to teacher supply, the recognition of high-quality teachers and the role of leaders in fostering quality teaching. In time, nationally consistent measures of teacher shortages could be developed.

AERO suggested the development of data measuring the use of evidence-based practice in schools, to be included in the MFSA (AERO, sub. DR113). Although some existing tools measuring specific teaching practices, such as PISA student-level surveys, are useful for research purposes, data suitable for national performance reporting may not be feasible to collect in the short term.

Reporting of social determinants of educational outcomes can also support reporting against the goals set out in the Mparntwe Declaration. For example, the inclusion of measures related to children's development prior to starting schooling could provide useful context about factors that affect learning and how these vary across jurisdictions and support the commitment under the Mparntwe Declaration to strengthen early childhood education. AERO suggested using the Australian Early Development Census and noted that 'every state and territory in Australia has designed its own entry to school assessment which could provide valuable national insights on learning trajectories' (AERO, sub. 6, p. 8).

Finally, the need for data that provides a broader view of engagement outcomes, particularly for students from priority equity cohorts, was discussed earlier in this chapter. Governments should commit to reporting on disciplinary absences in the MFSA, either by developing a new nationally consistent data collection or by reporting data that is not nationally consistent.

Data on school disciplinary absences should be disaggregated for student groups who face increased rates of exclusionary practices, including Aboriginal and Torres Strait Islander students and students with disability. This is in line with the goal of inclusive education and commitment to supporting young Australians at risk of educational disadvantage outlined in the Mparntwe Declaration. In the case of Aboriginal and Torres Strait Islander students, this disaggregation would reflect Priority Reform 4 of the National Agreement on Closing the Gap, under which governments committed to:

> … collect, handle and report data at sufficient levels of disaggregation, and in an accessible and timely way, to empower local Aboriginal and Torres Strait Islander communities to access, use and interpret data for local decision making. (s. 71c)

Existing surveys of students, parents and teachers could be used to fill reporting gaps

The benefits of a more complete MFSA should be considered against the costs of additional data collection and reporting. Participants urged that performance reporting measures should be cost-effective and not impose an undue burden on schools.[258] National collections have the added cost and challenge of achieving data consistency across jurisdictions.

To minimise costs, the MFSA should consider opportunities to relax the constraint of only using nationally comparable datasets. Many State and Territory Governments have well-established and repeating surveys of students, parents and carers, and teachers that cover the domains that participants have suggested (box 9.2).

The views of students, parents and teachers (with appropriate caveats) at the state and territory level would be valuable if the data were comparable over time, even if reporting against an indicator is not nationally complete or comparable across jurisdictions. This would be consistent with the approach taken in a previous intergovernmental education agreement — the National Education Agreement, which reported on State and Territory literacy and numeracy testing prior to the introduction of nationally consistent testing in 2008 (COAG 2008b).

[258] Government of Western Australia, sub. 19; ISA, sub. 44; Queensland Government, sub. 53; NSW DoE, sub. 12; P&C Federation NSW, sub. 18; Teachers' Work in Schools Research Group, sub. 16; Victorian Government, sub. 31

Broader measures of student engagement (section 9.1) could use data from these surveys.

> Engagement in the classroom is best determined by teachers. The reasons for engagement or disengagement are best determined by asking students. (P&C Federation NSW, sub. 18, p. 11)

And the use of student perspectives in the MFSA could make national reporting on schooling more accessible:

> [we] found both the NSRA objectives, targets and outcomes and the national measurement framework to be rather sterile, technocratic and managerial in tone. (Connors AO, Lyndsay and McMorrow, Dr Jim, sub. 3, p. 2)

Box 9.2 – State and Territory Government surveys of students, parents and teachers

Although there are no nationally agreed measures for cognitive or emotional engagement, all jurisdictions other than Western Australia collect data on these domains.

New South Wales collects wellbeing and engagement data via their Tell Them from Me survey, collected twice a year from 2013 for primary and secondary school students. Data are also collected from parents and teachers as part of the survey. The teacher component of Tell Them from Me includes items for teaching strategies, school inclusiveness, use of data, and parent/carer engagement. Items administered to parents include questions about their participation in their child's schooling, whether they feel welcome and informed, and whether they support their child's learning at home.

Victoria has collected data from government school students in Years 4 to 12 annually at least from 2017. The Attitudes to School Survey includes a focus on student wellbeing and engagement, with elements of emotional and cognitive engagement included. Separate surveys are also conducted to gather opinions from teachers, parents, and principals.

The **Queensland** Engagement and Wellbeing survey was first offered to Queensland government schools in 2021.

The **South Australia** Wellbeing and Engagement Collection includes data from Years 4 to 12 students. While some form of wellbeing and engagement data have been collected from 2013, the collection now covers most government schools. Results are published annually on the proportion of students who report low, medium, and high levels of wellbeing across various domains. South Australia also runs a short survey of parental engagement.

Tasmania has conducted the Student Wellbeing and Engagement Survey annually from 2019 for students in Years 4 to 12 in public schools.

In conjunction with the **ACT** School Satisfaction Survey, all public school students in the ACT from Years 4 to 12 and all parents and staff from preschool to Year 12 are invited to complete the Australian School Climate and School Identification Measurement Tool.

The **Northern Territory** conducts the Annual School Survey surveys from staff (including teachers and administrative staff), students in Years 5 to 12, and their families. These surveys include questions across domains of student wellbeing and engagement, and school performance, culture and services.

Source: NSW Department of Education (2022a), NT DoE (2022), SA DfE (2022a), SCRGCP (2022a), Tasmanian DoE (2022), Victorian DET (2022).

ACARA may find instances where using these datasets would be worth sacrificing a degree of reliability to achieve greater breadth of reporting in the MFSA. One limitation of the State and Territory Government surveys is that they are generally only administered in public schools. In time, ACARA could consult with other school sectors and non-government organisations that collect school outcomes data to explore opportunities to report data on students in independent and Catholic schools in the MFSA.

One potential challenge in the reporting of State and Territory data that is not nationally consistent is that it could lead to misleading or invalid comparisons between jurisdictions. ACARA argued that this 'may do more harm than good' and 'is a departure from the agreed approach for the MFSA' (ACARA, sub. DR120, p. 8). Instead, ACARA proposed that information on classroom environment and engagement could be collected using surveys attached to national assessments such as NAPLAN (ACARA, sub. DR120, p. 6).

While this is a sensible approach to the collection of new nationally consistent data, it is subject to agreement from each sector and jurisdiction, and could also potentially impose additional administrative and resourcing costs. Care would need to be taken to ensure that the new survey instruments were valid and reliable measures of class environment or engagement. However, were such a data collection to be developed and implemented, it would form a suitable basis for an additional student engagement sub-outcome in a successor agreement, as noted earlier in this chapter.

The MFSA review should be undertaken in consultation with students, teachers and communities

Participants suggested that in reviewing the MFSA, and potentially in developing selected new KPMs, ACARA should consult with those who are represented in the data, those who are asked to collect it and users of the measures (AEU, sub. 36; CEMA, sub. 28; NSW DoE, sub. 12). If new data are needed, the community may have insights about how it should be collected, managed and shared. For example, the *Western Australian Aboriginal Child Health Survey Vol. 3* provided a good example of how new data collections can be co-designed, particularly in cases where children may experience multiple forms of disadvantage (such as Aboriginal and Torres Strait Islander children in regional, rural and remote communities) (Zubrick et al. 2006).

ACARA expressed reservations about the value of consultation with students and school communities on the development of KPMs, noting that input to the development of KPMs requires a level of data literacy (ACARA, sub. DR120, p. 7). While students and communities may not be expected to understand all technical aspects of KPM development they should, at a minimum, be consulted on whether the KPMs in the MFSA adequately reflect the aspirations set out in the Mparntwe Declaration.

Where KPMs concern particular equity groups, such as the priority equity cohorts set out in the NSRA, consultation with students and school communities is especially important. Governments' commitments under the National Agreement on Closing the Gap, particularly relating to Priority Reform One (shared decision making) and Priority Reform Four (improving and sharing access to data and information) apply here. More information on the implications of the National Agreement on Closing the Gap for a future National School Reform Agreement is included in chapter 4.

Recommendation 9.3

ACARA should identify and implement improvements to the Measurement Framework for Schooling in Australia as part of its next review.

For its next review of the Measurement Framework for Schooling in Australia, the Australian Curriculum, Assessment and Reporting Authority (ACARA) should:

- develop a performance indicator framework, whereby Key Performance Measures (KPMs) are mapped to the National School Reform Agreement sub-outcomes and targets, and the goals and commitments of the Alice Springs (Mparntwe) Education Declaration
- categorise the indicators in the performance indicator framework as either student outcomes of schooling, external influences on outcomes and system performance measures
- seek and consider feedback from students, educators and communities on a draft performance indicator framework and draft recommendations for new or amended KPMs
- seek to include a new measure and data on school disciplinary absences
- publicly document which National School Reform Agreement sub-outcomes and targets are unreported in the *National Report on Schooling in Australia* and KPM Dataset
- publicly document which goals and commitments of the Mparntwe Declaration are unreported.

ACARA should work towards filling reporting gaps by exploring the use of State and Territory Government data that are comparable over time, even if it is not nationally complete or comparable across jurisdictions. Well-established State and Territory Government surveys of students, parents and carers, and teachers should be given due consideration.

Appendices

A. Public engagement

The Commission has actively encouraged public participation in this review. This appendix outlines the engagement process undertaken and lists the organisations and individuals that have participated in this study.

- The terms of reference were received on 7 April 2022. A call for submissions paper was released on 9 May 2022 to assist those wishing to make a written submission to the review.
- An interim report was released on 14 September 2022. The Commission received 127 submissions, including 53 prior to the release of the interim report and 74 post the interim report (table A.1). Participants also made 80 brief comments on the review's website. The submissions and brief comments are available online at https://www.pc.gov.au/inquiries/completed/school-agreement/submissions.
- Consultations were held with representatives from State, Territory and Australian Government agencies, education bodies, unions and professional organisations representing different members of the schools workforce, peak non-profit organisations, representative and advocacy bodies, researchers, and parent representative bodies (table A.2).
- Consultations were also held with groups of children and young people, including the ACT Youth Advisory Council, Child Wise Youth Advisory Board, CREATE Young Consultants and the Student Executive Advisory Committee of the Victorian Student Representative Council.
- The Commission attended the Indigenous Education Consultative Meeting (IECM) on 20 June 2022 and met again with members of the IECM on 25 October 2022.

The Commission would like to thank everyone that participated in this review.

Table A.1 – Submissions

Participants	Submission
ACT Government	39
Ashman, Greg	DR67
Association for Language Testing and Assessment of Australia and New Zealand (ALTAANZ)	DR115
Association of Heads of Independent Schools of Australia (AHISA)	4, DR94
Association of Independent Schools of South Australia (AISSA)	DR61
Aurora Education Foundation	DR68
Australian Alliance of Associations in Education (AAAE)	DR104
Australian Association of Mathematics Teachers (AAMT)	DR80
Australian Association of Special Education, NSW Chapter (AASE NSW)	20, DR107
Australian Capital Territory Principals' Association (ACTPA)	DR89
Australian Child Rights Taskforce	40, DR71
Australian Council for Educational Leaders (ACEL)	DR70
Australian Council of State School Organisations (ACSSO)	51
Australian Council of TESOL Associations (ACTA)	37, DR124
Australian Curriculum, Assessment and Reporting Authority (ACARA)	45, DR120
Australian Education Research Organisation (AERO)	6, DR113
Australian Education Union (AEU)	36, DR101
Australian Government Primary Principals Association (AGPPA)	47
Australian Institute for Teaching and School Leadership (AITSL)	27, DR93
Australian Learning Lecture (ALL)	2
Australian Parents Council (APC)	8
Australian Primary Principals Association (APPA)	48, DR110
Australian Professional Teachers Association (APTA)	50, DR102
Australian Research Alliance for Children and Youth (ARACY)	38, DR95
Ben Blackburn Racing	49
Beyond Blue	25, DR88
Blackburn, Vincent	DR116
Bradley, Cecelia	DR76
Buckingham, Dr Jennifer	DR91
Cahalan, Paul	DR57
Caldwell, Emeritus Professor Brian	DR62
Catholic School Parents Australia (CSPA)	24
Centre for Community Child Health (CCCH)	14
Centre for Educational Measurement and Assessment (CEMA), University of Sydney	28

Participants	Submission
Centre for Inclusive Education (C4IE)	DR99
Centre for Independent Studies (CIS)	43
Centre for Research in Educational and Social Inclusion (CRESI), University of South Australia	DR63
Collins, David	DR82
Commissioner for Children and Young People, South Australia (CCYP SA)	DR54
Connors AO, Lyndsay and McMorrow, Dr Jim	3
Creagh, Dr Sue	DR77
Curtis, David	DR73
Dixon, Jane; Dixon, Don; Dixon, Peter and Dixon, James	DR75
Education Services Australia (ESA)	DR79
Equity Economics	DR65
Farr, Anthony	DR56
Federation of Parents and Citizens Associations of New South Wales (P&C Federation NSW)	18, DR97
Gifted Education Research, Resource and Information Centre (GERRIC), University of New South Wales	17
Government of Western Australian (WA Government)	19
Grattan Institute	5
Griffin AM, Dr Desmond	DR83
Halsey, Emeritus Professor John	10, DR69
Holmes, Noel	DR108
Independent Education Union of Australia (IEUA)	15, DR78
Independent Schools Australia (ISA)	44, DR105
Indigenous Education Consultative Meeting (IECM)	52, DR125
Institute of Special Educators (InSpEd)	DR98
Learning Creates Australia	35
Life Without Barriers	DR60
McIntosh, Gabrielle and Worrall, Hugh	DR66
Name withheld	DR58
Name withheld	DR86*
Name withheld	DR111
National Catholic Education Commission (NCEC)	7, DR87
National Children's Commissioner	DR106
National Indigenous Australians Agency (NIAA)	DR103
National Mental Health Commission (NMHC)	26
National School Resourcing Board (NSRB)	22

Participants	Submission
New South Wales Department of Education (NSW DoE)	12, DR117
New South Wales Secondary Principals' Council (NSW SPC)	DR92
Northern Territory (NT) Government	42
Ochre Education	DR119
Orygen	13, DR74
Paterson, Molly; Parasnis, Dr Jaai and Rendall, Associate Professor Michelle	9
Paul Ramsay Foundation (PRF)	DR109
Pivot Professional Learning	33*
Q Project, Monash University	DR126
Queensland Advocacy for Inclusion (QAI)	1
Queensland Association of Teachers of English to Speakers of Other Languages (QATESOL)	DR85
Queensland Family and Child Commission (QFCC)	32
Queensland Government	53, DR123
Queensland Nurses and Midwives' Union (QNMU)	30
Reconciliation Australia	DR122
Restacking the Odds	41
Ross, Dr Marty	34
Sahlberg, Professor Pasi and Cobbold, Trevor	21
Save the Children and 54 reasons	DR64
Save the Children Australia	23
School Library Coalition	DR72
Searson, Catherine	DR55
Slagter, Marcelle	DR59
Social Ventures Australia (SVA)	DR118
Speech Pathology Australia	11
Square Peg Round Whole (SPRW)	DR121
Stronger Smarter Institute	DR114
Tasmanian Government	46, DR127
Teachers and Teaching Research Centre (TTRC), University of Newcastle	DR84
Teachers' Work in Schools Research Team	16
The Smith Family	29, DR112
Thompson, Professor Greg (QUT); Hogan, Dr Anna (QUT); Mockler, Associate Professor Nicole (Sydney); Stacey, Dr Meghan (UNSW) and Creagh, Dr Sue (QUT)	DR90
Todhunter, Patrick	DR100
Usher, Christine	DR96

Participants	Submission
Victorian Government	31
Ware, Margaret	DR81

An asterisk (*) indicates that the submission contains confidential material not available to the public

Table A.2 – Consultations

Participants
ACT Education Directorate
ACT Youth Advisory Council
Aurora Education Foundation
Australian Council for Education Research (ACER)
Australian Council of State School Organisations (ACSSO)
Australian Curriculum, Assessment and Reporting Authority (ACARA)
Australian Education Research Organisation (AERO)
Australian Education Union (AEU)
Australian Government Department of Education (DoE) (formerly Department of Education, Skills and Employment)
Australian Government Department of Social Services (DSS)
Australian Institute for Teaching and School Leadership (AITSL)
Australian Parents Council (APC)
Australian Primary Principals Association (APPA)
Australian Professional Teachers Association (APTA)
Australian Secondary Principals' Association (ASPA)
Australian Teacher Education Association (ATEA)
Centre for Independent Studies (CIS)
CEOs of the Teacher Regulatory Authorities
Child Wise Youth Advisory Board
Children and Young People with Disability Australia (CYDA)
Children's Ground
Coalition of Peaks
Commission for Children and Young People, Victoria (CCYP Victoria)
Commissioner for Children and Young People, South Australia (CCYP SA)
Community Resource Unit (CRU)
CREATE Foundation Young Consultants
Education Services Australia (ESA)
First Peoples Disability Network (FPDN)
Gore, Laureate Professor Jenny and Carey, Tom (Teachers and Teaching Research Centre, University of Newcastle)
Grattan Institute
Halsey, Emeritus Professor John
Hattie, Emeritus Professor John
Independent Education Union of Australia (IEUA)
Independent Schools Australia (ISA)
Indigenous Education Consultative Meeting (IECM)

Participants
Literacy for Life Foundation
Louden AM, Emeritus Professor Bill
National Aboriginal and Torres Strait Islander Principals Association (NATSIPA)
National Catholic Education Commission (NCEC)
National Children's Commissioner
National Disability Insurance Agency (NDIA)
National Indigenous Australians Agency (NIAA)
National Indigenous Youth Education Coalition (NIYEC)
National School Resourcing Board (NSRB)
New South Wales Department of Education (NSW DoE)
Northern Territory Department of Education (NT DoE)
Pivot Professional Learning
Queensland Collective for Inclusive Education (QCIE)
Queensland Department of Education (Queensland DoE)
Sahlberg, Professor Pasi and Cobbold, Trevor
Savage, Associate Professor Glenn (Graduate School of Education, University of Western Australia)
South Australian Department for Education (SA DfE)
Stronger Smarter Institute
Tasmanian Department for Education, Children and Young People (DECYP) (formerly Department of Education)
The Smith Family
Torres Strait Islanders' Regional Education Council (TSIREC)
United Workers Union (UWU)
Universities Australia
Victorian Department of Education and Training (Victorian DET)
Victorian Student Representative Council (VicSRC)
Western Australian Department of Education (WA DoE)
Yalukit Yulendj (Aboriginal and Torres Strait Islander education committee for the Australian Education Union)

B. Trends in student outcomes

This appendix provides supporting evidence and econometric modelling for the assessment of student achievement described in the overview, chapter 2 and chapter 4. While the aggregate achievement results are insightful, it is important to consider the influence of student-level characteristics on student outcomes. With this in mind:

- section B.1 considers the achievement of Australian school students in the Programme for International Student Assessment (PISA); this section draws on the results of an econometric model to estimate changes in PISA results over time, after controlling for changes in the demographics of the PISA sample
- section B.2 examines the academic performance of students from specific equity cohorts, similarly applying an econometric model to National Assessment Program – Literacy and Numeracy (NAPLAN) data
- section B.3 discusses the methodology used for converting NAPLAN test points to an equivalent years of learning measure, which provides a more tractable way to understand and interpret NAPLAN test results.

B.1 Achievement of Australian students — analysis of PISA data

The policy landscape and PISA

PISA is an international test of mathematics, reading, and science competency, administered by the Organisation for Economic Co-operation and Development (OECD) every three years since 2000 to 15-year-old school students (box B.1). PISA tests a student's ability to *apply* their knowledge in each of these subject areas.[259]

PISA is intended to provide an evaluation of a school system's performance — both domestically and relative to other countries — to assist participating countries in undertaking evidence-based reform (OECD 2022).

[259] This contrasts with the NAPLAN assessment, which tests how familiar students are with the subject matter.

Box B.1 – Programme for International Student Assessment

The Programme for International Student Assessment (PISA) is designed to infer students' ability to apply their knowledge and skills from a limited set of questions. This is a challenging task, particularly when comparisons are being made both across countries (which often have substantial differences in linguistic and cultural contexts) and over time. In order to draw sensible conclusions, PISA adopts a complex sampling and psychometric methodology.

PISA's sampling methodology

PISA test results rely on sampling and weighting techniques to draw inferences about Australia's population. The stratification of the sample is based on jurisdiction, school sector, geographic location, school gender composition, and a socioeconomic background variable (OECD 2020). The sample of Australian students is larger than the OECD average, as Australia deliberately oversamples to allow for reliable disaggregation of data (for example, by State and Territory). Observations are then weighted to allow for appropriate inference when estimating population parameters.

Sampling methods differ substantially **between** participating countries, including in the variables used for sample stratification (OECD 2020). Sampling approaches also differ **within** the same country over time; for example, PISA 2018 was the first time that Australia included 15-year-old Technical and Further Education students (OECD 2020).

Technical concepts in PISA

Plausible Values

Rather than all students receiving a single test consisting of a small number of common questions, participants are administered a random sample of test items from a large pool of questions. Therefore, instead of expressing a student's performance in terms of a 'score', a distribution of possible scores for each student is obtained using their responses to the questions they received.

Once this distribution is obtained, actual values are randomly drawn from it. These values, called Plausible Values (PVs), represent a range of possible competencies of a student based on their performance on the test. The OECD recommends estimating population statistics using each PV separately and then averaging the analysis, rather than performing analysis on the average of the PVs.

Linking errors

The exact items administered to students differ in each wave. However, some common questions are retained each year to allow the OECD to appropriately scale students' performance based on the relative difficulty of questions. The choice of which questions to retain is an additional source of uncertainty that should be accounted for in any statistical analysis of PISA scores over time. To account for this, the OECD derives 'linking errors' for any statistics of change in performance between two time points t_1 and t_2:

$$\sigma(\Delta_{t_2-t_1}) = \sqrt{\sigma_{t_2}^2 + \sigma_{t_1}^2 + error_{t_2,t_1}^2}$$

Some are critical of the PISA method of calculating linking errors, suggesting that they underestimate the level of uncertainty resulting from choice of anchor questions (Monseur and Berezner 2007).

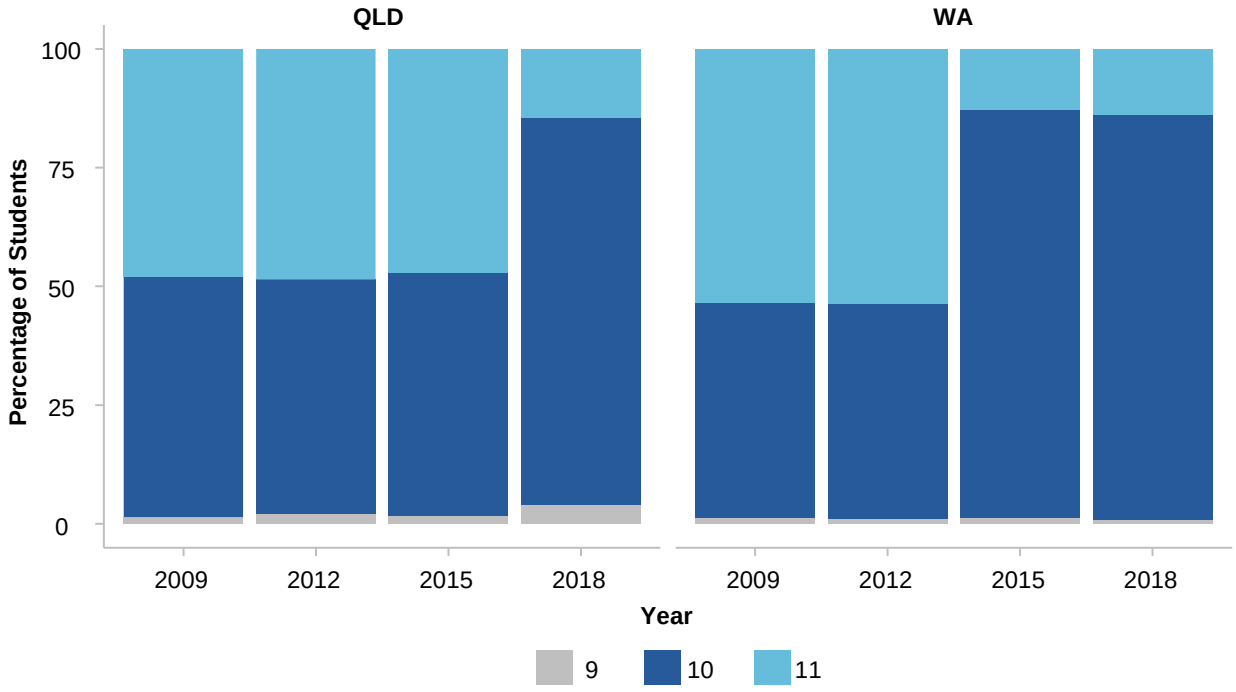
Changes in performance over time

Chapter 2 shows there has been a decline in PISA results since 2009 (albeit the decline was not statistically significant between 2015 and 2018). While these headline results receive significant attention, there are a number of factors that might explain the decline in PISA results.

- **Changes in the Australian PISA sample —** in both 2015 and 2018, an increased proportion of students in the PISA sample had an entire year less schooling, relative to students in previous PISA waves (figure B.1).[260] As year 11 students tend to score higher than year 10 (and year 9) students, this would be expected to reduce the national average.[261]
- **Changing demographics in the Australian population —** Australia's student population is continually changing, and student demographics are a key driver of academic achievement. Therefore, as the population changes, performance would reasonably be expected to change.
- **A decline in performance —** the decline in results could reflect a true decline in the performance of Australia's students. This could be a function of lower ability of Australian students, or a growing gap between what PISA tests and what is taught in the Australian curriculum (sometimes referred to as 'curriculum drift').

Figure B.1 – More students sitting PISA have less schooling[a]

Share of total students in each PISA wave, by year level



a. Students below Year 9 or above Year 11 are excluded from this analysis.

Source: Commission estimates based on PISA data.

Therefore, the Commission has undertaken an analysis to assess the potential reasons behind the changes to Australian PISA scores over time.

[260] Changes in school starting age in some jurisdictions are likely to have been a contributory factor.

[261] When the trend is disaggregated by year level and benchmarked against the OECD average, the evidence for a downward trend is mixed.

A pooled weighted least squared (PWLS) model was used to control for student characteristics and changes to the student sample. Changes in performance not attributable to these factors could be considered to be a decline in performance, although further research is required to identify the underlying causes of this decline.

The analysis focused on changes in performance, relative to the OECD mean. PISA is an international standardised test, with results typically reported as a comparison of the Australian school system's performance relative to the OECD. Therefore, the results focus on test scores relative to the OECD average. Using OECD average scores as a benchmark allows analysis to better account for any changes that affect other countries equally (for example, differences in scaling procedures due to the entrance of new countries sitting the test).

Methodology

Data preparation

Unit record data for Australian students from four waves of PISA testing (2009, 2012, 2015 and 2018) were obtained from the Australian Council for Educational Research webpage.[262] Data were pooled together, with a small number of common variables retained for multivariate analysis (table B.1). These variables were chosen for conceptual reasons (as they are strongly correlated with student performance and thus likely to explain variations in student performance), and practical reasons (as these variables were common across the four waves of students). This resulted in a combined dataset of 57 535 observations. Each student's PISA scores were estimated using the first five Plausible Values (PVs) for each domain (box B.1).

Econometric model

To identify whether there has been a true decline in the PISA scores of Australian students, a PWLS regression model was used. This model controls for compositional changes in the population and the PISA sample, as well as a number of student characteristics that are likely to influence PISA performance. The model also included a time fixed-effect. Equation 1 shows the estimating equation for the PWLS model (table B.1)[263]:

$$score_{i,t,k} - OECD_{t,k} = \gamma_{t,k} + \delta_k(grade_{i,t}) + \boldsymbol{\beta'}_k \boldsymbol{x}_i + \varepsilon_{i,t,k} \qquad (\mathbf{1})$$

$$\varepsilon_{i,t,k} \sim N(0, \sigma_k^2)$$

For $t = 2009, 2012, 2015, 2018$ and $k = \text{maths, science, reading}$

$\gamma_{t,k}$ is the coefficient of interest and shows the difference in PISA scores in a given year relative to 2018 (table B.1). A positive statistically significant value for $\gamma_{t,k}$ would suggest a decline in PISA results between year *t* and 2018.

Given the changes in year level composition between the 2012 and 2018 (figure B.1), the year level variable is a particularly important control in the model.

[262] The Australian Council for Educational Research is the custodian of PISA data for Australia.

[263] All observations were weighted based on the weights provided by the OECD (2020b). Standard errors were adjusted to include both sampling error and linking error.

Table B.1 – PISA model variables and parameters

Variable/ Parameter	Variable or parameter descriptions	Included in specification		
		(1)	(2)	(3)
$score_{i,t,k} - OECD_{t,k}$	Dependent variable. Mean of PISA Plausible Values for student i, at year t, for subject k, minus OECD mean at year t, for subject k	✓	✓	
$score_{i,t,k}$	Alternate dependent variable. Mean of PISA Plausible Values for student i, at year t, for subject k, without adjustment for OECD mean			✓
β'_k	Vector of coefficients corresponding to each control variable for subject k	✓		✓
x_i	Vector of student controls to account for school sector, state, student gender, gender, Indigenous status, number of books in the home (less than 100, 100-500, or more than 500), geolocation of school, migrant status, parental education and occupation	✓		✓
$\gamma_{t,k}$	The coefficient of interest, shows the fixed effect for year t for subject k. This is interpreted as the difference in points in year t relative to 2018, all other factors held equal.	✓	✓	✓
$\varepsilon_{i,,t,k}$	Idiosyncratic error for student i in year t for subject k	✓	✓	✓
δ_k	Coefficient for year level	✓	✓	✓
$grade_i$	Student's year level at the time of sitting the PISA test (minimum year 7, maximum year 12)	✓	✓	✓

The analysis focuses on the results from 2009 onwards, with a particular interest in changes from 2012 to 2018. There are three main reasons behind this choice.

1. The *Australian Education Act 2013* (Cth) represented a change in the direction of school policy, which might have affected student results.
2. Some changes have been made to PISA questionnaires that make comparisons prior to 2009 difficult.[264]
3. Compositional changes to the PISA sample (such as the year level of students) are most pronounced in the period between 2012 and 2018.

Three model specifications were estimated to ensure results were reliable and robust.

- Specification 1 — included all control variables and an adjustment for the OECD mean. This is considered the main model.
- Specification 2 — included only year level as a control, and an adjustment for the OECD mean.
- Specification 3 — included all controls, but used test scores as a dependent variable (that is, did not adjust for the OECD mean).

[264] The exact questions used in the PISA questionnaires change in each wave. This leads to some inconsistencies in variable definitions, for example in the geolocation variable. There are also changes to the ways that indices (for example, for occupational status) are calculated.

Results

Regression results

The base year in the specification is 2018. A positive statistically significant coefficient at time t indicates test scores were *higher* at time t (and therefore have declined between time t and 2018). A negative coefficient indicates the opposite.

The regressions results[265] set out in table B.2 show that, relative the OECD mean score, results have declined since 2009 for maths and science, but there have been no statistically significant changes over the period 2012–2018. For reading, there have been no statistically significant changes over the period 2012–2018. Specifically:

- specification 1 (the main model) shows a decline in maths and science scores from 2009 to 2018, but no significant decline since 2012
- specification 2 (which controls for the year levels of students only) shows almost identical results as specification 1 (although a notably lower R^2 due the removal of a number of key explanatory variables). An implication of this is that changes in student demographics result in little change in PISA test results
- specification 3 (which is not specified relative to the OECD mean) shows a statistically significant drop in all subjects between 2009 and 2018, a significant drop in maths and science between 2012 and 2018, and no significant changes in any subject between 2015 and 2018.

Robustness checks

To examine whether the regression results were robust, the analysis was replicated with some minor changes to the PVs in the model. PVs are random draws from a distribution of possible student competencies for each domain (box B.1). In order to check that the regressions' results were not sensitive to random uncertainty in student abilities, the model was replicated with each of the five PVs individually for all three domains. Results were consistent with the findings in table B.2.

Limitations of the analysis

While the PWLS model found evidence that after controlling for various factors, the decline in Australia's PISA results was less than generally considered, the analysis was not without its limitations.

- The model used data drawn from multiple waves of PISA, in which the questionnaires administered to students differed in a number of ways. Although the data were prepared to ensure that the variables from each wave are comparable, there may be subtle differences in the way students responded to the test in each wave (for example, due to changes in context or fatigue related to the longer questionnaires in later waves).
- Changes to the countries participating in the test in each PISA wave may impact on the way PISA scores are scaled, or on the OECD mean. This could affect the OECD demeaned scores (specification 1 and 2).
- Due to non-response from students completing the questionnaire, there are some missing values in the variables used in the main model. This led to the omission of 7389 observations from specification 1. This is problematic given that these observations are unlikely to be missing at random – students who do not complete all questions may be more likely to be disengaged, and tend to perform more poorly on average. However, no variables were omitted from specification 2 as the year level variables were available for all students. This provides some assurance that the general result is robust.

[265] Analysis of the regression residuals suggested that the assumptions of the PWLS model were a good fit for the data.

- As the questionnaires administered in each year are not identical, there may be subtle differences in the way each variable is worded or framed in each wave. The variables selected for this analysis were relatively comparable across waves, so the effect of any inconsistencies should be minimal.

Table B.2 – There is some evidence of a decline in PISA scores[a,b]

Pooled regression results for three specifications, for each PISA subject

	Math	Reading	Science
Specification 1: Main model			
2009	15.73***	3.73	10.73*
	(4.53)	(4.60)	(4.69)
2012	4.81	-2.60	3.63
	(4.32)	(4.81)	(5.09)
2015	-0.43	-8.34	0.81
	(3.30)	(4.99)	(2.58)
R^2	0.22	0.22	0.20
Specification 2: Year level fixed effects only			
2009	13.72**	3.53	9.62*
	(4.59)	(4.68)	(4.74)
2012	4.60	-2.47	3.94
	(4.38)	(4.89)	(5.14)
2015	-0.33	-6.99	1.42
	(3.36)	(5.07)	(2.64)
R^2	0.03	0.02	0.02
Specification 3: No OECD control			
2009	21.73***	9.73*	22.73***
	(4.53)	(4.60)	(4.69)
2012	9.81*	6.40	15.63**
	(4.32)	(4.81)	(5.09)
2015	0.57	-2.34	4.81
	(3.30)	(4.99)	(2.58)
R^2	0.22	0.22	0.21

a. Asterisks indicate statistical significance at the following levels: *** $p < .001$ ** $p < .01$ * $p < .05$. **b.** Standard errors in parentheses are derived using a combination of standard sampling error and PISA linking errors

Source: Commission estimates based on PISA data.

B.2 Learning achievement for students from priority equity cohorts

Ensuring high quality and high equity education for students has long been a goal of Australian schooling (chapter 4). Equitable education is important as better educational outcomes can provide benefits for the individual, economy and broader society (chapter 2). However, evidence suggests that some students experience persistent educational barriers (chapter 4).

The Commission investigated learning outcomes for these cohorts by replicating the model used in section B.1 with NAPLAN data (box B.2). NAPLAN collects demographic data on students, enabling analysis of NAPLAN achievement scores for students from three priority equity cohorts: students in outer regional and remote locations; Aboriginal and Torres Strait Islander students; and students with parents with low educational attainment.[266] Two lines of inquiry were pursued.

1. **How does the learning gain of students from priority equity cohorts compare with other students?** The *Review to Achieve Educational Excellence in Australian Schools* identified that learning level is only one aspect of measuring student performance; another important aspect is learning gain (Gonski et al. 2018, p. 31). Of particular interest to this question is whether all students, regardless of their background, demonstrate similar learning gain in their NAPLAN test scores.
2. **How do multiple educational barriers affect student achievement?**[267] Chapters 2 and 4 highlight that Australia has been unable achieve an equitable school system. Part of this stems from the persistent differences in outcomes that occur between students from priority equity cohorts and other students. This research question is intended to estimate the effect that belonging to more than one equity cohort has on student test scores.

Box B.2 – NAPLAN has important differences and similarities with PISA

National Assessment Program – Literacy and Numeracy (NAPLAN) is an annual assessment of reading, numeracy, writing, and conventions of language (such as spelling) administered nationally to students in years 3, 5, 7 and 9. NAPLAN provides insight into how students are progressing in foundational skills against national standards.

While NAPLAN and the Programme for International Student Assessment (PISA) both assess student achievement, they have a number of differences.

- NAPLAN assesses students in years 3, 5, 7 and 9, which can allow for a student's performance to be tracked over time; NAPLAN is a cross-sectional dataset with the potential to be used as a panel dataset. In contrast, PISA is conducted every three years, and only administered to a sample of 15-year-old students; PISA is a cross-sectional dataset.
- NAPLAN and PISA assess different aspects of education. NAPLAN is designed to assess fundamental literacy and numeracy skills based on the Australian Curriculum (ACARA 2021a, p. iv).

[266] For this analysis, students with parents who did not complete secondary school are assumed to represent students from a priority equity cohort.

[267] Multiple educational barriers is defined as students who belong to multiple equity cohorts. For example, an Aboriginal and Torres Strait Islander student who lives in an outer regional or remote location.

Box B.2 – NAPLAN has important differences and similarities with PISA

PISA is designed to assess students' abilities to apply knowledge and skills to 'real-life problems and situations', and does not prescribe any one curriculum (Thomson et al. 2019, p. xiv).

- PISA tests a significantly smaller sample of students compared with NAPLAN. PISA assesses a random sample of 15-year-old students taken from a nationally representative sample of schools (Thomson et al. 2019, p. xiii) – 14 273 students were tested in PISA 2018. NAPLAN tests the majority of Australian students – approximately 1 150 600 students participated in NAPLAN in 2018[268], with a participation rate of approximately 95 per cent (ACARA 2018a, p. 64).

However, NAPLAN and PISA share some important features.

- Both NAPLAN and PISA provide indicators of progress in student achievement across different cohorts and over time. However, both represent a limited view of education that excludes other outcomes such as achievement in other subjects, and student wellbeing.
- There is evidence that NAPLAN and PISA results are correlated suggesting they could test similar skills (Lumsden et al. 2015, p. 9).

Data

De-identified student-level NAPLAN data were used to investigate both questions. NAPLAN data were obtained from the Australian Curriculum, Assessment and Reporting Authority (ACARA). There were eight waves of data from 2013–2021; there were no data in 2020 as NAPLAN was not conducted due to the COVID-19 pandemic. Data were pooled together, with a number variables retained for multivariate analysis (table B.3 and B.5). This resulted in a combined dataset of 9 501 618 observations.

Inquiry 1: How does the learning gain of students from priority equity cohorts compare with other students?

Methodology

To estimate the learning gain of students from priority equity cohorts relative to other cohorts, lagged NAPLAN achievement scores were used. The NAPLAN dataset provides lagged achievement scores for students in year 5 and year 9.[269] This allows for the separate estimation of the learning gains made for each subject (numeracy and reading) between year 3 and year 5 and between year 7 and year 9. Specifically, ordinary least squares (OLS) models (using data for 2013–2021) were estimated using the following equation:

$$y_{i,t,k,g} - y_{i,t,k,g-2} = \beta_0 + \beta_1(Aboriginal\ and\ Torres\ Strait\ Islander_i) + \beta_2(remote_i) + \beta_3(low\ parental\ education_i) + \boldsymbol{\beta_k}'\boldsymbol{x_i} + \gamma_t + \varepsilon_{i,t,k.} \quad (2)$$

$$\varepsilon_{i,t,k} \sim N(0, \sigma_k^2)$$

$$\text{For } t = 2013 - 2019, 2021 \text{ and } k = \text{numeracy, literacy}$$

[268] Averaged across NAPLAN domains and year levels (ACARA 2022b).

[269] Lagged student achievement was included in a cross-sectional dataset only for year 5 and year 9 students, and therefore, students could not be tracked overtime from years 3 to 9. That is, a panel data analysis could not be conducted. Data were not linked from year 5 to year 7 because there is no unique student identifier to track students from primary school to high school.

A description of the variables is provided in table B.3. Three empirical specifications were used for the two dependent variables.

- Specification 1 — baseline specification (yearly observations from 2013–2021), which includes the coefficients of interest (β_1, β_2 and β_3).
- Specification 2 — baseline specification with year fixed effects.
- Specification 3 — baseline specification with year fixed effects and student controls.

Specification 3 is the preferred estimation as it best controls for any omitted variable bias by introducing the student control variables that were available in the NAPLAN data.

Table B.3 – Student learning gain model variables and parameters

Variable/ Parameter	Variable or parameter descriptions	Included in specification		
		(1)	(2)	(3)
$y_{i,t,k,g} - y_{i,t,k,g-2}$	Dependent variable. NAPLAN learning gain for student i, at year t, for subject k and year level g.[a]	✓	✓	✓
β_0	Intercept	✓	✓	✓
$\beta_k{}'$	Vector of coefficients corresponding to each control variable			✓
x_i	Vector of student controls to account for school sector, state, student sex, parental occupation, language background other than English, NAPLAN test type (online or paper), whether the student stayed in the same school, test participation, and previous NAPLAN score			✓
β_1	The coefficient of interest which shows the learning gain for an Aboriginal and Torres Strait Islander student relative to a non-Aboriginal and Torres Strait Islander student	✓	✓	✓
Aboriginal and Torres Strait Islander	A dummy variable, taking the value of 1 if the student identifies as an Aboriginal and Torres Strait Islander student, or 0 otherwise	✓	✓	✓
β_2	The coefficient of interest which shows the learning gain for an outer regional and remote student relative to a metropolitan student	✓	✓	✓
$remote$	A location of student variable. This takes the value of 1 if the student attends school in an outer regional or remote location, or 0 otherwise (if the student is in an inner regional or metropolitan location)	✓	✓	✓
β_3	The coefficient of interest which shows the learning gain of a student whose highest parental education is Year 11 or below relative to a student whose highest parental education is a Bachelor degree	✓	✓	✓
$low\ parental\ education$	A level of parental education variable. This takes the value of 1 if a parent's highest level of educational attainment is 'year 11 or below, or 0 otherwise.	✓	✓	✓
γ_t	Yearly time dummy variables (time fixed effects)		✓	✓
$\varepsilon_{i,t,k}$	Idiosyncratic error	✓	✓	✓

a. Subjects include NAPLAN numeracy and reading. Student learning gain is measured between year 3 and year 5, and between year 7 and year 9.

Regression results

The regression results estimate that students from priority equity cohorts gained fewer NAPLAN points, relative to other cohorts between year 3 and year 5, and year 7 and year 9 in reading and numeracy (table B.4), all else equal. Learning gain differs for students based on their previous NAPLAN score (or starting point); this analysis controls for the previous score, and therefore, compares the learning gain for year 5 (year 9) students who were at similar levels in year 3 (year 7). This way, the analysis isolates the difference in learning gain associated with belonging to each priority equity cohort.

Students with parents with low-parental education experienced the largest difference in their learning gain, followed by Aboriginal and Torres Strait Islander students. Students in outer regional and remote areas only experienced a small difference in their learning gain.

For example, the preferred specification (3) estimated that, holding all else equal, between years 3 and 5 in numeracy:

- an Aboriginal and Torres Strait Islander student gained on average 9 NAPLAN points less than a non-Aboriginal and Torres Strait Islander student
- a student whose parents' highest level of education was year 11 or less gained on average 16 NAPLAN points less than a student whose parents' highest level of education was a Bachelor degree
- an outer regional and remote student gained on average 3 NAPLAN points less than a metropolitan student.

Inquiry 2: academic achievement for students who experience multiple educational barriers

Methodology

The following equation was used to estimate how experiencing multiple barriers affect academic performance for student i, at year t, for subject k and year level g using an OLS model.

$$\begin{aligned} y_{i,t,k,g} = \beta_0 &+ \beta_1(Aboriginal\ and\ Torres\ Strait\ Islander_i) + \beta_2(remote_i) + \beta_3(low\ parental\ education_i) \\ &+ \beta_4(Aboriginal\ and\ Torres\ Strait\ Islander_i * remote_i) \\ &+ \beta_5(remote_i * low\ parental\ education_i) \\ &+ \beta_6(low\ parental\ education_i * Aboriginal\ and\ Torres\ Strait\ Islander_i) + \boldsymbol{\beta_k}'\boldsymbol{x_i} + \gamma_t + \varepsilon_{i,t,k.} \end{aligned} \quad (3)$$

Equation 3 is similar to equation 2, but the dependent variable ($y_{i,t,k,g}$) was changed to a student's NAPLAN score (rather than their learning gain). Equation 3 also includes interaction variables ($Aboriginal\ and\ Torres\ Strait\ Islander_i * remote_i$, $remote_i * low\ parental\ education_i$ and $low\ parental\ education_i * Aboriginal\ and\ Torres\ Strait\ Islander_i$).

Table B.4 – Regression results for the three learning gain specifications[a]

	Specification 1 (Baseline: coefficients of interest)	Specification 2 (Baseline with year fixed effects)	Specification 3 (Baseline with year fixed effects and student controls)
Numeracy Scores			
Year 3 to Year 5 learning gain			
Aboriginal and Torres Strait Islander students	0.35*	0.47**	-8.96***
	(0.17)	(0.17)	(0.17)
Students in outer regional and remote locations	-0.52***	-0.20	-2.68***
	(0.14)	(0.14)	(0.14)
Students with parents with low educational attainment	2.44***	2.11***	-15.99***
	(0.13)	(0.13)	(0.15)
R-squared	0.001	0.005	0.234
Year 7 to Year 9 learning gain			
Aboriginal and Torres Strait Islander students	1.73***	1.96***	-4.64***
	(0.163)	(0.16)	(0.16)
Students in outer regional and remote locations	4.21***	0.78***	-0.09
	(0.11)	(0.13)	(0.13)
Students with parents with low educational attainment	-0.95***	2.93***	-10.15***
	(0.13)	(0.11)	(0.13)
R-squared	0.001	0.028	0.203
Reading Scores			
Year 3 to Year 5 learning gain			
Aboriginal and Torres Strait Islander students	1.60***	1.83***	-12.07***
	(0.21)	(0.21)	(0.19)
Students in outer regional and remote locations	3.80***	4.24***	-2.30***
	(0.17)	(0.17)	(0.16)
Students with parents with low educational attainment	7.92***	7.44***	-18.72***
	(0.16)	(0.16)	(0.17)
R-squared	0.003	0.005	0.290
Year 7 to Year 9 learning gain			
Aboriginal and Torres Strait Islander students	-2.28***	-2.13***	-8.40***
	(0.19)	(0.18)	(0.18)
Students in outer regional and remote locations	-2.31***	-1.17***	-2.13***
	(0.15)	(0.15)	(0.15)
Students with parents with low educational attainment	2.07***	1.44***	-12.80***
	(0.13)	(0.13)	(0.15)
R-squared	0.001	0.008	0.1703

a. Data ranged from 2013 to 2021 (there are no data for 2020 as NAPLAN was not conducted due to COVID-19). Only the coefficients of interest were included in this table. Not all of the coefficients were statistically significant in the regressions. Standard errors presented in parentheses. *** p<.001 ** p<.01 * p<.05

Source: Commission estimates based on NAPLAN de-identified student-level data.

The interaction variables show how a student who identifies as belonging to two equity cohorts — such as an Aboriginal and Torres Strait Islander student who lives in outer regional or remote areas — may negatively affect a students' NAPLAN performance (table B.5). Specifically, equation 3 identifies, *all else equal,* how:

1. **belonging to a single priority equity cohort** affects student academic achievement. That is, the coefficients: β_1, β_2 and β_3
2. **belonging to multiple priority equity cohorts** affects student academic achievement. For example, for an Aboriginal and Torres Strait Islander student who lives in outer regional and remote areas. This can be determined by adding β_1 and β_2 together
3. **belonging to multiple equity cohorts results in further compounding effects** on student academic achievement (coefficients β_4, β_5 and β_6). If β_4, β_5 and β_6 are statistically significant and negative, it suggests that belonging to more than one equity cohort is negatively correlated with student academic achievement above the sum of β_1, β_2 or β_3. For example, β_4 provides an estimate for if there is an additional impact on NAPLAN scores for an Aboriginal and Torres Strait Islander student living in outer regional and remote area (above the effect identified through summing β_1 and β_2).

The model was estimated eight times: regressions were run separately for students in years 3, 5, 7, and 9 for both NAPLAN numeracy and reading. This model also has the same year (γ_t) fixed effects, and vector of student controls (x_i) as equation 2 (table B.3).

Table B.5 – Compounding barriers model variables and parameters[a]

Variable/ Parameter	Variable or parameter descriptions
$y_{i,t,k,g}$	Dependent variable. NAPLAN score for student i, at year t, for subject k and year level g[a]
β_4	The coefficient of interest. It shows the NAPLAN score of an Aboriginal and Torres Strait Islander student who lives in outer regional or remote areas relative to a non-Aboriginal and Torres Strait Islander student who lives in a metropolitan area
*Aboriginal and Torres Strait Islander * remote*	An interaction variable between an Aboriginal and Torres Strait Islander student dummy variable and a location variable
β_5	The coefficient of interest. It shows the NAPLAN score of a student whose highest parental education is year 11 or below and lives in an outer regional or remote area, relative to a student whose highest parental education is a Bachelor degree and lives in a metropolitan area
*remote * low parental education*	An interaction variable between a location variable and a highest parental education variable
β_6	The coefficient of interest. It shows the NAPLAN score of an Aboriginal and Torres Strait Islander student whose highest parental education is year 11 or below, relative to a non-Aboriginal and Torres Strait Islander student whose highest parental education is a Bachelor degree
*Aboriginal and Torres Strait Islander * low parental education*	An interaction variable between an Aboriginal and Torres Strait Islander student dummy variable and a highest parental education variable

a. This table only includes descriptions of the new variables in equation 3 compared with equation 2. That is, only the different dependent variable and new interaction terms. All other variables are the same as described in table B.3.

Regression results

The regression results (table B.6) show that:

- **students from a single priority equity cohort score on average less in NAPLAN reading and numeracy across all year levels (β_1, β_2 and β_3).** Students from low-parental education households experienced the largest difference in their NAPLAN scores, followed by Aboriginal and Torres Strait Islander students, and outer regional and remote students. For example, holding all else equal in year 3, an Aboriginal and Torres Strait Islander student scored on average 37 NAPLAN points less than a non-Aboriginal and Torres Strait Islander student in numeracy, and 41 points less in reading
- **students belonging to multiple priority equity cohorts score on average less in NAPLAN reading and numeracy than students from one priority equity cohort across all year levels, this suggests that the effects of barriers can be compounding.** For example, holding all else equal, a year 3 Aboriginal and Torres Strait Islander student who lives in an outer regional or remote area would score on average about 72 points less in numeracy than a non-Aboriginal and Torres Strait Islander student from a metropolitan area.

The Commission also found some examples where belonging to multiple equity cohorts resulted in further compounding effects on student academic achievement.

- Aboriginal and Torres Strait Islander students who live in outer regional and remote locations ($Aboriginal\ and\ Torres\ Strait\ Islander * remote$) scored on average even less across all year levels (denoted by the statistical significance of the $ATSI * remote$ indicator).
- However, evidence of further compounding effects was not universal. For example, Aboriginal and Torres Strait Islander students from low-parental education households ($Aboriginal\ and\ Torres\ Strait\ Islander * parental_{education}$) on average did not experience additional compounding negative effects on outcomes. The same was found for students from outer regional and remote areas with parents with low educational attainment ($remote * parental_{education}$).
- It is possible that the education variable suffers from an endogeneity problem, which could distort the interaction terms and cause them to appear positive. This is discussed in the limitations section below.

Limitations of the analysis

The NAPLAN models were subject to a number of limitations.

- Data were not linked in a panel format. If the data were linked, the analysis could control for the unobserved, time-invariant student characteristics (such as inherited factors like ability) that affect student test scores.
- Outer regional and remote student estimates are likely to be positively biased for those students located in very remote areas. This is because the variable in the NAPLAN data changed in 2016 to include outer regional students who are closer to inner regional areas.
- There are a number of priority equity cohorts not captured in the data that are important to consider. For example, there is no NAPLAN achievement data for students with disability or students with English as an additional language or dialect, which limits the breadth of the analysis.
- The analysis estimates the p-values for a large number of parameters. Reporting many p-values inflates the likelihood of making at least one Type 1 error (that is, claiming a statistically significant relationship when there is none).[270]

[270] Given the very small standard errors, common adjustments such as the Bonferroni correction are unlikely to change the results.

Table B.6 – Regression results for compounding barriers model[a]

	Year 3	Year 5	Year 7	Year 9
Numeracy scores				
Aboriginal and Torres Strait Islander	-37.19***	-36.27***	-42.24***	-41.32***
	(0.74)	(0.72)	(0.74)	(0.76)
remote	-15.28***	-16.47***	-18.69***	-18.63***
	(0.38)	(0.38)	(0.43)	(0.43)
low parental education	-55.45***	-53.95***	-56.86***	-53.83***
	(0.28)	(0.26)	(0.27)	(0.25)
*Aboriginal and Torres Strait Islander * remote*	-19.56***	-19.54***	-20.77***	-12.60***
	(0.67)	(0.64)	(0.70)	(0.74)
*Aboriginal and Torres Strait Islander * low parental education*	12.61***	11.12***	15.72***	17.49***
	(0.87)	(0.84)	(0.88)	(0.92)
*remote * low parental education*	10.94***	11.72***	11.69***	16.29***
	(0.74)	(0.69)	(0.75)	(0.75)
R-squared	0.17	0.18	0.20	0.19
Reading scores				
Aboriginal and Torres Strait Islander	-40.74***	-35.39***	34.78***	-32.38***
	(0.87)	(0.80)	(0.71)	(0.76)
remote	-16.66***	-13.48***	-13.60	-11.56***
	(0.45)	(0.42)	(0.41)	(0.43)
low parental education	-62.42***	-56.64***	-51.91***	-49.39***
	(0.33)	(0.29)	(0.26)	(0.25)
*Aboriginal and Torres Strait Islander * remote*	-23.32***	-24.57***	-20.99***	-18.79***
	(0.78)	(0.68)	(0.67)	(0.73)
*Aboriginal and Torres Strait Islander * low parental education*	9.60***	5.01***	7.68***	4.88***
	(1.02)	(0.93)	(0.85)	(0.91)
*remote * low parental education*	3.85***	2.36**	7.69***	2.23**
	(0.87)	(0.76)	(0.44)	(0.75)
R-squared	0.16	0.17	0.18	0.17

a. Data ranged from 2013 to 2021 (there are not data for 2020 as NAPLAN was not conducted due to COVID-19). Only the coefficients of interest were included in this table. Not all of the coefficients were statistically significant in the regressions. Standard errors presented in parentheses. *** p<.001 ** p<.01 * p<.05.

Source: Commission estimates based on de-identified student-level NAPLAN data.

- Parental education attainment is likely to be correlated with a number of unobservable factors that may influence a student's achievement — including heritable factors such as intelligence or ability, and environmental factors such as parental enthusiasm about learning. This implies that the parental education variable would be endogenous (that is, correlated with the error term $\varepsilon_{i,t,k}$), and β_3 would be negatively biased. Further, this would likely have implications for the interaction effects involving low-parental education (β_4 and β_5 in the multiple barriers model); such as the sign, magnitude and significance of the results.

Conclusion

Overall, the preliminary results show evidence that students from priority equity cohorts experience less learning gain than other students for NAPLAN numeracy and reading. The difference in learning gain was most prevalent for students from low-parental education households, and for Aboriginal and Torres Strait Islander students. Further, the results show that students who experience one or multiple barriers, score on average less than other students, across all year levels for numeracy and reading, suggesting that the effects of barriers can be compounding. The Commission also found some examples where belonging to multiple equity cohorts resulted in further compounding effects on student academic achievement.

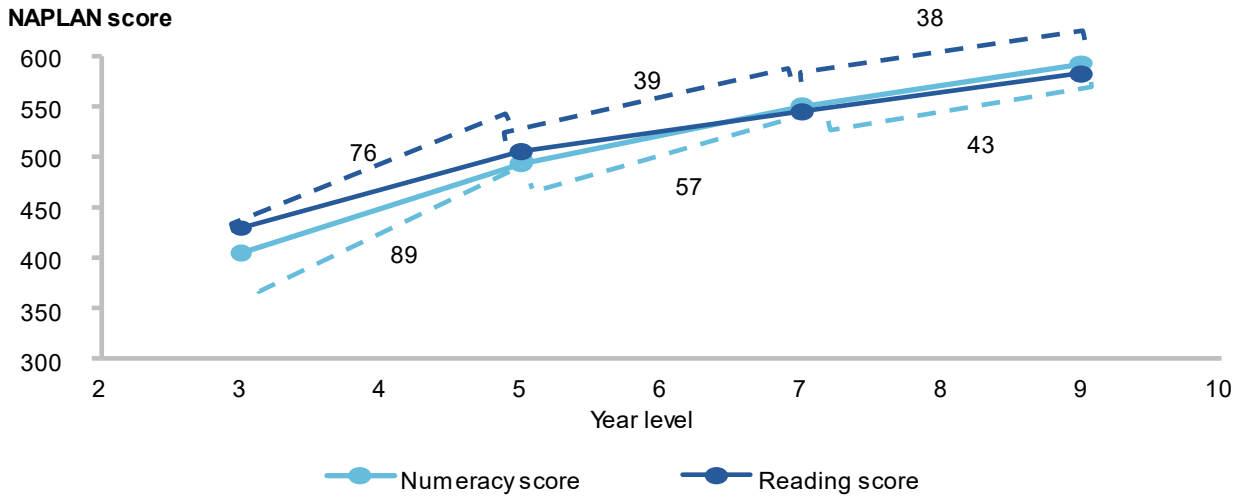
B.3 Equivalised years of learning

Learning gain — NAPLAN points gained overtime — can provide insights into how students are progressing in terms of academic achievement. However, the interpretation of learning gain is limited by the lack of direct interpretation of NAPLAN scores — a given score represents the same level of achievement over time but 'the numbers themselves have no particular meaning' — especially for most students and their families (ACARA 2022d; Goss and Chisholm 2016, p. 6). Additionally, it is difficult to compare students from different starting points due to the non-linear growth path of NAPLAN scores between year levels. The increase in NAPLAN points for the average student falls as students progress through school (ACARA 2015, p. 5) (figure B.2).[271]

[271] This means that the expected gains in NAPLAN points are not the same between year levels (Goss, Sonnemann and Emslie 2018, p. 8). This could potentially reflect a non-linear growth path of student learning where students increase their skill level faster from a lower base, meaning that learning progress slows down over time (Goss and Chisholm 2016, p. 8).

Figure B.2 – Average learning gains fall as students progress to higher year levels

Scores for NAPLAN numeracy and reading, 2013 to 2021 (average)



Source: Commission estimates based on de-identified student-level NAPLAN data.

Alternative measures of learning can provide better insight into how students are progressing. One potential measure is equivalised years of learning (EYL).[272] EYL translates NAPLAN scores into a measure of how much a student has learnt in terms of years of learning, and is therefore more likely to be readily understandable. For example, a student who performs at the year 3 average NAPLAN score is assumed to have an EYL of three years. This measure allows for a better understanding of how students are progressing relative to:

- a benchmark of the average student
- other students with different levels of prior achievement.

Developing an equivalised years of learning measure for NAPLAN

To estimate EYL a logarithmic function was used to fit NAPLAN data. This logarithmic function was then transposed to estimate the EYL. This involved a four-step process.

1. Calculate mean scores for NAPLAN numeracy and reading for each year level across the entire sample (2013 to 2021).[273]
2. The mean scores are assumed to represent the EYL of an average student for that year level. This is shown in figure B.3.
3. The relationship between mean scores and EYL is estimated using a logarithmic function (figure B.3).[274]
4. These functions were then transposed to make EYL the subject. This allows one to predict the EYL from a given NAPLAN score. The EYL difference between students in different cohorts can also be calculated (box B.3).

[272] The Grattan Institute created an Equivalent Year Level measure for NAPLAN data (Goss and Chisholm 2016). The method adopted by the Commission is a simplified version of the method created by the Grattan Institute.

[273] It is important to estimate numeracy and reading scores separately, as the logarithmic function that fits the average scores is different for each subject. Replicating the analysis for each year in the dataset does not greatly change the results, so the data were pooled across all years.

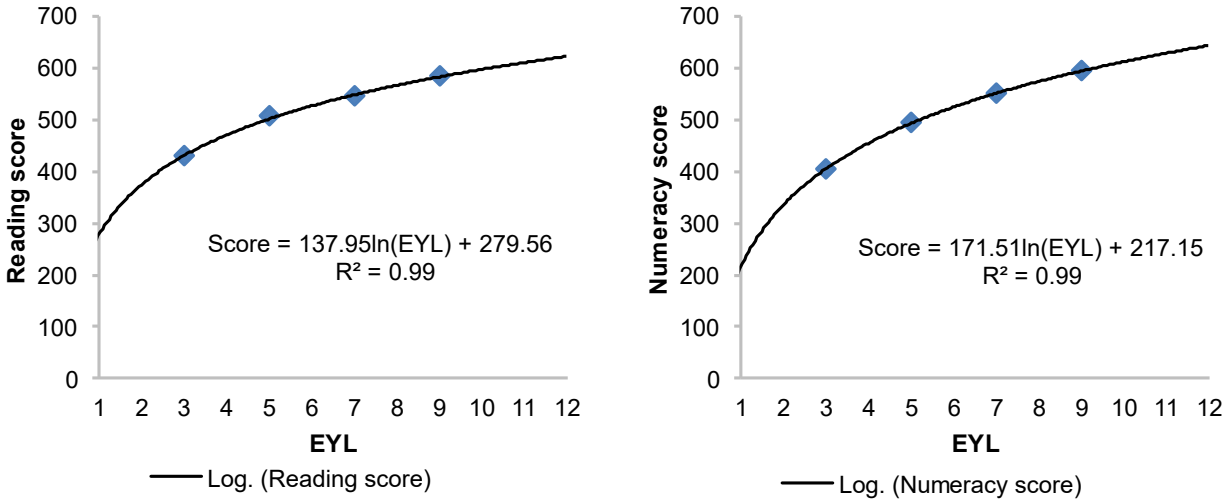
[274] This function provided a very good fit for the data – an R-squared of 0.99 for both numeracy and reading.

Numeracy: $EYL = \exp\left(\frac{Score - 217.15}{171.15}\right)$

Reading: $EYL = \exp\left(\frac{Score - 279.56}{137.95}\right)$

Figure B.3 – NAPLAN scores are fitted with a logarithmic function[a]

Average NAPLAN scores for reading and numeracy, and their fitted logarithmic functions



a. Averages are based on data from 2013 to 2021 (excluding 2020 as NAPLAN was not conducted due to COVID-19).

Source: Commission estimates based on NAPLAN de-identified student-level data.

This EYL measure expresses a student's NAPLAN scores relative to the average in terms of years of learning. The difference between two EYL scores shows the time it takes for an average student to make up that difference (box B.3).

Interpreting the EYL measure requires some nuance — if the difference in EYL scores between two students increases over time, this is not necessarily an indication that one student has learned less than the other. The difference in NAPLAN scores represent a 'knowledge gap' between two students; whereas the difference in EYL represents the time it would take to bridge that knowledge gap. As student learning growth in the NAPLAN data is faster when students are younger (figure B.2), a constant gap in knowledge (NAPLAN scores) would take longer to bridge (as measured by EYL) as a student gets older.

Interpreting differences in EYL between cohorts over time also requires some care. In general, NAPLAN scores show a decline in the knowledge gap over time between student cohorts, while the EYL figures show that it will take longer to bridge this (smaller) knowledge gap. For example, figure B.4 shows that from year 3 to year 9, the average NAPLAN numeracy score difference between outer regional and remote students, and metropolitan students decreased (from 37 points to 33 points). In contrast, the EYL difference increased from 0.6 to 1.6 years. The decline in the difference between NAPLAN scores means that the numeracy 'knowledge gap' has decreased; that is, the difference in numeracy knowledge in year 9 is less than in year 3. In contrast, the increase in the EYL difference overtime means it will take students longer to bridge this 'knowledge gap'.

Box B.3 – An example of applying the equivalised years of learning function

To convert National Assessment Program – Literacy and Numeracy (NAPLAN) scores to equivalised years of learning (EYL), the fitted logarithmic equations in figure B.3 are transposed to make EYL the subject of the equation. This function can then be applied to NAPLAN scores to predict the EYL. For example, a year 9 outer regional and remote student's average numeracy score is 567.3, and a year 9 metropolitan student's average numeracy score is 600.5.

EYL of an average outer regional and remote student $= \exp\left(\frac{567.3-217.15}{171.15}\right) = 7.7\ years$

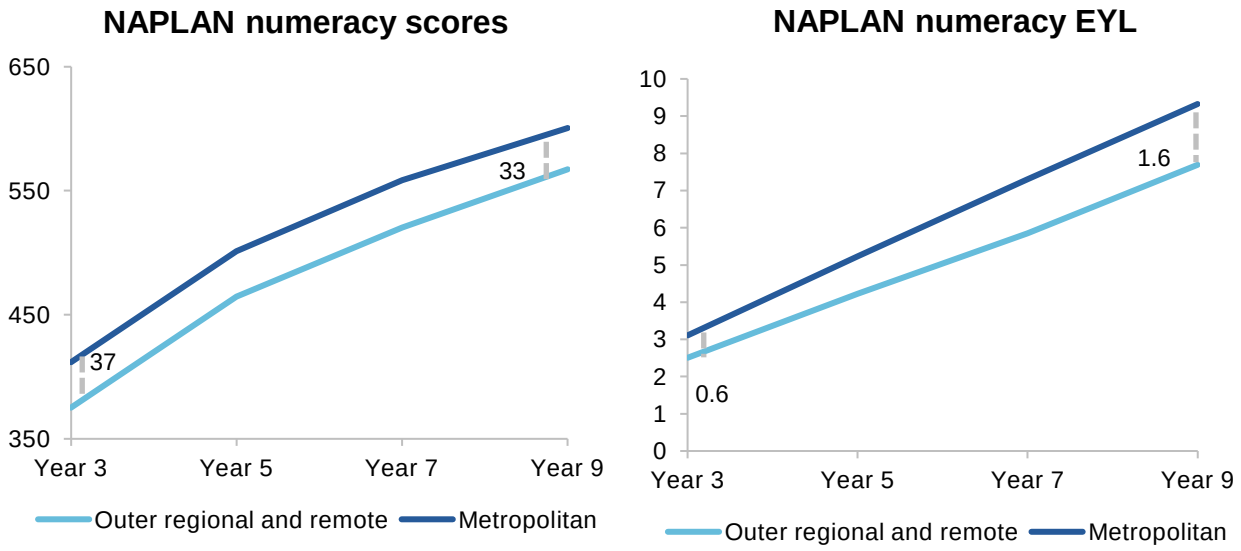
EYL of an average metropolitan student $= \exp\left(\frac{600.5-279.56}{137.95}\right) = 9.3\ years$

Therefore, the EYL difference is $9.3 - 7.7 = 1.6\ years$. This means that, **on average**, it would take about 1.6 years for a year 9 outer regional and remote student to attain the same NAPLAN score as a metropolitan student.

Source: Commission estimates based on de-identified student-level NAPLAN data.

Figure B.4 –EYL measures a different perspective on outcome gaps[a]

Average NAPLAN numeracy scores and average NAPLAN EYL, by location



a. Data were pooled across the whole sample from 2013 to 2021 (excluding 2020 as NAPLAN was not conducted due to COVID-19). Dotted lines show the difference in terms of NAPLAN numeracy scores (left) and EYL (right) for year 3 and year 9.

Source: Commission estimates based on de-identified student-level NAPLAN data.

Assumptions and limitations

There are two core assumptions that underpin the conversion of NAPLAN scores to EYL:

1. A student would receive the same NAPLAN score, regardless of the test they sit. This is a strong assumption, as a year 9 student, who is two years behind and being taught the year 9 curriculum, may

sit the year 9 NAPLAN test and perform below the year 7 level. However, if they were taught the year 7 curriculum and were to sit the year 7 NAPLAN test, their outcome may be different.

2. The rate at which a child gains NAPLAN points is measured based on their EYL, not their year level. For example, a year 7 student performing at the year 5 level is expected to learn at the year 5 rate, not the year 7 rate. If they acquire knowledge at the same rate as their year level, the EYL measure finds they are actually falling further behind.

The NAPLAN EYL measure is subject to limitations.

- The measure should only be used on large groups of students and avoid student- and school-level comparisons, and analysis of extreme observations. This is because NAPLAN data have large measurement error at the individual-level.
- The measure would be less accurate for EYL that are less than 3 years or greater than 9 years. This is because NAPLAN is not conducted before year 3 and after year 9. Extrapolating past these bounds may lead to misleading or biased results, as there is no way to verify if the logarithmic function is a good fit.
- The measure assumes a 'typical' student achieves the average NAPLAN score. This measure does not model a typical student based on student characteristics.

C. National Policy Initiatives: background and assessments

C.1 The task

The terms of reference indicate that the Commission should assess 'the effectiveness and appropriateness of the National Policy Initiatives outlined in Part 3 of the NSRA [National School Reform Agreement], recognising that national reform takes time to implement and mature, and for the effects of nationally coordinated reform efforts to materialise'. This fulfils the requirements under section 29 of the National School Reform Agreement.

Eight National Policy Initiatives (NPIs) were included under the NSRA. Milestones and timing were set out in Schedule B of the NSRA, and subject to Education Council considering and agreeing the cost and cost sharing arrangements, scope and governance of each NPI, acknowledging the different local contexts and starting points of each jurisdiction.[275]

The NPIs were nested within three reform streams:

A. Supporting students, student learning and student achievement

i. Enhancing the Australian Curriculum to support teacher assessment of student attainment and growth against clear descriptors

ii. Assisting teachers to monitor individual student progress and identify student learning needs through opt-in online and on demand student learning assessment tools with links to student learning resources, prioritising early years foundation skills[276]

iii. Reviewing senior secondary pathways into work, further education and training

B. Supporting teaching, school leadership and school improvement

i. Reviewing teacher workforce needs of the future to attract and retain the best and brightest to the teaching profession and attract teachers to areas of need

ii. Strengthening the initial teacher education (ITE) accreditation system

C. Enhancing the national evidence base

i. Implementing a national unique student identifier (USI) that meets national privacy requirements in order to support better understanding of student progression and improve the national evidence base

ii. Establishing an independent national evidence institute to inform teacher practice, system improvement and policy development

[275] Schedule B notes that milestones may be added or amended.

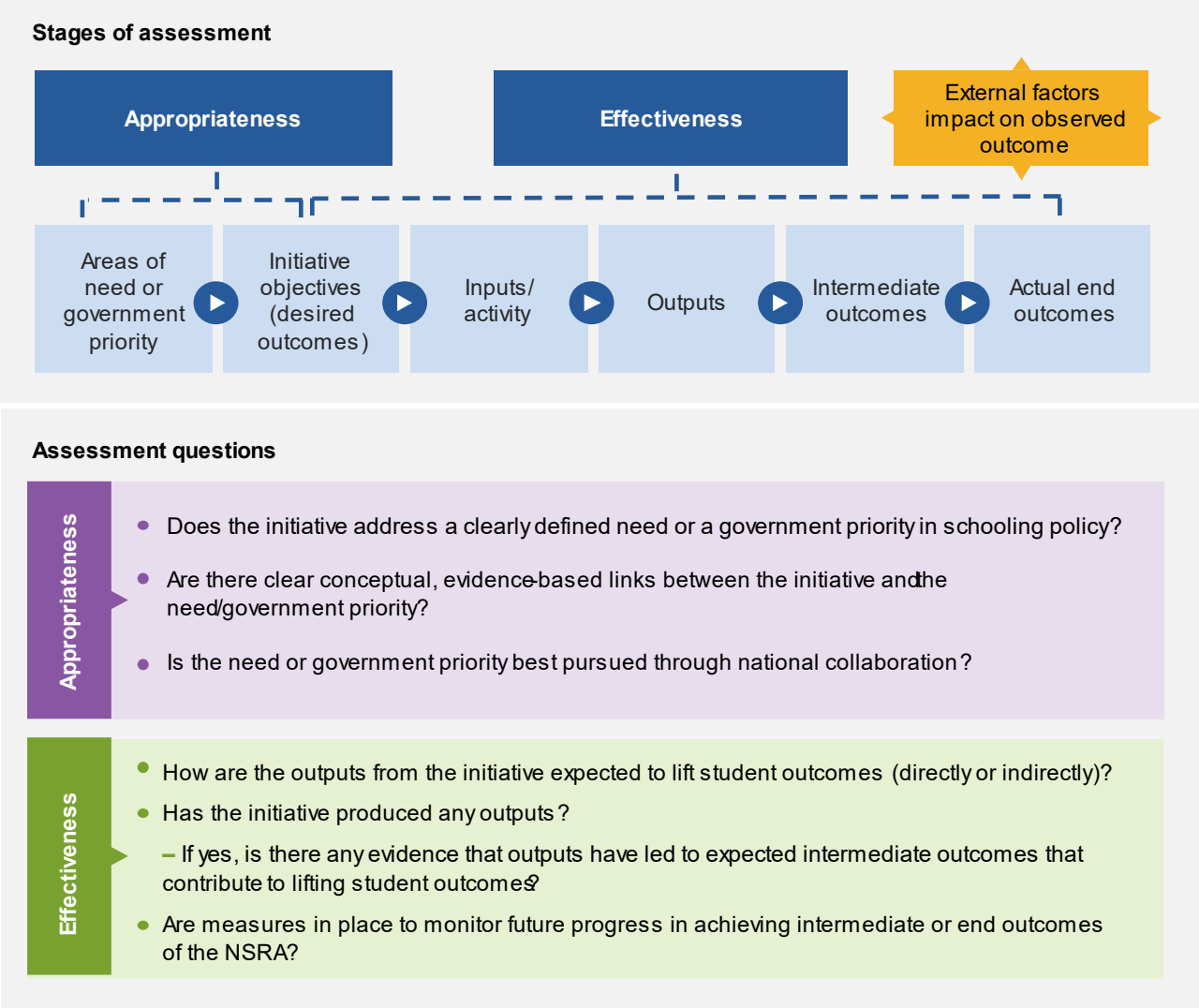
[276] Initiatives A (i) and (ii) were combined to form the Online Formative Assessment Initiative.

iii. Improving national data quality, consistency and collection to improve the national evidence base and inform policy development.

C.2 The Commission's approach

The Commission's proposed approach to assessing the effectiveness and appropriateness of the NPIs is summarised at figure C.1. In assessing both effectiveness and appropriateness, a clear articulation of how the activities undertaken as part of the NPIs will lead to the desired NSRA outcomes (sometimes referred to as the 'theory of change' or 'program logic') can be highly valuable. The Commission's approach draws on Australian Government Department of Finance evaluation advice, as well as previous work undertaken the Commission (Department of Finance 2021; PC 2013). Assessments were informed by relevant research, key documents that informed the selection of the NPIs, progress updates made available on the Department of Education website, and responses to the call for submissions.

Figure C.1 – Approach to defining and assessing appropriateness and effectiveness



Source: Adapted from various guidelines, including Department of Finance (2021).

C.3 Assessment of individual National Policy Initiatives

The NSRA states that the eight NPIs build on existing activities, have a robust and evidence-based rationale, and concentrate reform effort on 'key enablers that drive improvements in educational outcomes'.[277] Initiative selection was informed by key inputs set out at section 8 of the NSRA including the Review to Achieve Educational Excellence in Australian Schools. As noted in chapter two, the ideas behind some of the initiatives were around several years before the NSRA.

Consistent with the shared responsibilities set out at section 56 of the agreement, responsibility for progressing individual NPIs has been shared between national education agencies and bodies (such as ACARA) and groups of officials reporting through the Education Council, as well as dedicated project management boards and individual jurisdictions. Reports on progress towards implementing the NPIs are published annually on the Department of Education website. More detailed fact sheets are also available on the Department of Education website.[278]

Supporting students, student learning and student achievement

NPIs A (i) and (ii) *Enhancing the Australian Curriculum to support teacher assessment of student attainment and growth against clear descriptors* and *Assisting teachers monitor individual student progress and identify student learning needs through opt-in online and on demand student learning assessment tools with links to student learning resources, prioritising early years foundation skills*

Table C.1 – Online Formative Assessment Initiative (OFAI) (NPI A (i) & A (ii))

Assessment of effectiveness and appropriateness

Assessment question	Answer
Appropriateness	
Does the initiative address a clearly defined need or government priority in schooling policy?	Yes. The Australian Government's *Through Growth to Achievement* report emphasised, and analysis undertaken by the Productivity Commission for this review confirmed, that in any given school year-level, there is a wide spread of achievement. The online formative assessment initiative would help teachers identify a student's level, teach to their standard, and maximise learning growth (Gonski et al. 2018, pp. 61–66). Through providing support to teachers in this way, this initiative also has the capacity to help manage teacher workloads and competing demands on time.
Are there clearly defined conceptual, evidence-based links between the initiative and the need/government priority?	Formative assessment has been used with some success in subjects such as science and writing (Lane et al. 2019). The OFAI is yet to commence however, teachers and schools have been comprehensively consulted to align the design of the tool with what is most likely to be helpful.
Is the need or government priority best pursued through national collaboration?	This is unclear. Larger jurisdictions may perceive less value in pursuing a nationally consistent approach — some jurisdictions have pressed ahead with their own (typically less ambitious) solutions, concerned about the pace of national efforts (NSW Department of Education, sub. 12, p. 17), while others have suggested that the online formative assessment shares some

[277] National School Reform Agreement, paragraph 43

[278] These were last updated in May 2021.

Assessment question	Answer
	features with tools they already adopt.[279] Smaller jurisdictions may be more likely to find value in the economies of scale brought about through national collaboration.[280] Pursuing implementation of an OFAI via a national approach, even on an 'opt in' basis raises a number of complex matters (legislative requirements, privacy, ICT platforms, cost sharing, interface with existing school and systems) to overcome for the tool to be successful (Government of Western Australia, sub. 19, p. 13). On 15 December 2022, Education Ministers endorsed a path forward on the OFAI that would leverage and align existing resources from NSW, Victoria and Queensland to establish a national bank of assessments. While this model would avoid some of the difficulties noted above, there are trade-offs, as the revised model lacks some of the functions originally envisioned as part of the OFAI.
Effectiveness	
How are the outputs from the initiative expected to lift student outcomes (directly or indirectly)?	Directly under the original OFAI model, indirectly under the newly announced plan. The original OFAI model was expected to improve teacher practices by allowing them to 'to efficiently and effectively identify where students are in their learning, make informed decisions about what to do next, and monitor student learning to continually drive progress over time' (ACARA, ESA, and AITSL 2020). The newly announced plan for a bank of assessments does not appear to enable this full suite of benefits.
Has the initiative produced any outputs?	Yes. A series of intermediate outputs, including learning progressions, a discovery phase report, and a literature review have been completed.[281] However, the main output under the original OFAI model — an online tool to help teachers, has not been completed, or introduced into schools.
If yes, is there any evidence that outputs have led to expected intermediate outcomes that contribute to lifting student outcomes	No. As the outputs are only intermediate outputs, nothing has been implemented in the classroom.
Are any measures in place to monitor future progress in achieving intermediate or end outcomes of the NSRA?	Progress on this initiative had been monitored via NSRA annual reports on progress and the stand-alone Online Formative Assessment Initiative website. The last OFAI newsletter was released in June 2021. It is unclear how the impacts of the newly planned assessment bank will be monitored.
Conclusion	
The OFAI as originally envisaged had the potential to effectively influence student outcomes. However, the newly announced plan for a national bank of assessments appears to fall short of the OFAI's original ambition. Governments should set a firm deadline to complete the project. A government-established portal of high-quality curriculum resources (recommendation 6.2) could provide some of the other functions originally envisaged as part of the OFAI.	

[279] Victorian Government, sub. 31.

[280] Northern Territory Government, sub. 42; National Catholic Education Commission, sub. DR87.

[281] These are available at https://ofai.edu.au

NPI A (iii) Reviewing senior secondary pathways into work, further education and training

Table C.2 – Senior Secondary Pathways Review (NPI A (iii))

Assessment of effectiveness and appropriateness

Assessment question	Answer
Appropriateness	
Does the initiative address a clearly defined need or government priority in schooling policy?	Yes. The review was an 'urgent' recommendation of the Australian Government's *Through Growth to Achievement* report, which described the state of the senior secondary schooling curriculum and delivery structure as 'unsatisfactory'. The recommendation specified three areas of focus for the review: the kind and quality of educational experiences provided in senior secondary; the adequacy of senior secondary education for students' employment outlook; and how student achievements are assessed and reported (Gonski et al. 2018, pp. 53–55). These areas continued to be raised as being of importance in consultations undertaken for this review, and several submissions from stakeholder groups expressed general support for the review.[282] New South Wales (NSW Department of Education 2021b) and Victoria (sub. 31, pp. 5–6) have also commissioned related reviews at state level.
Are there clearly defined conceptual, evidence-based links between the initiative and the need/government priority?	Partly. The Gonski report identified senior secondary schooling as a specific problem area within the school system. While a dedicated review might have been a sensible approach to progressing work in this area, in and of itself, it does not address the policy needs outlined above. That would require the review to identify meaningful reforms and for these reforms to be implemented.
Is the need or government priority best pursued through national collaboration?	There was a strong case for the initial NPI being pursued through a national approach due to funding and regulatory responsibilities for both schools and vocational education and training being shared between the Australian Government and the States and Territories. Moving forwards, the need for a nationally collaborative approach is less clear. Some of the review's recommendations would ideally (or are explicitly directed to) be carried out nationally, while others could potentially be undertaken separately by jurisdictions.[283] Both New South Wales (sub. 12, p.13; NSW Department of Education 2022b) and Victoria (sub. 31, p. 9-10) have foregone at least some of the national response to the review in favour of their own

[282] National Catholic Education Commission, sub. 7; Catholic School Parents Australia, sub. 24; Learning Creates Australia, sub. 35; Australian Education Union, sub. 36.

[283] Examples of recommendations suited to national collaboration include the development of a national strategy on VET in schools (which is being overseen under the Heads of Agreement for Skills Reform (DoE 2022a)), formalising the relationship between education authorities and industry bodies, and the national transition from school program. Examples of recommendations that could be undertaken separately by jurisdictions include the strengthening of career guidance and ensuring that all students with disability have access to work exploration opportunities and be given a post-school transition plan.

Assessment question	Answer
	processes. Both states commented on the time or administrative cost of attempting to achieve national consensus when progressing initiatives.
Effectiveness	
How are the outputs from the initiative expected to lift student outcomes (directly or indirectly)?	Indirectly. The review's recommendations centre on helping students to leave school better-equipped to succeed outside of the academic realm. Some recommendations attempt to address this directly, such as those on improving the quality of Vocational Education and Training (VET). Learner profiles, arguably the most prominent recommendation, would potentially have both a direct and indirect impact, though they are still a largely untested concept. Learner profiles may indirectly incentivise schools and students to put more of their focus towards non-academic skills and outcomes, but may also help directly support post-school employment outcomes by better communicating non-academic skills and attributes. However, few of the remaining recommendations represent actions that are both clearly defined and would be expected to have a substantial impact on the outcomes of the NSRA.
Has the initiative produced any outputs?	Yes. The review was completed, with its report released in June 2020. Education Ministers agreed to all of its recommendations 'in-principle' and agreed on a workplan to implement some of them in December 2020 (DESE 2021e), but it is unclear which have since been implemented.
If yes, is there any evidence that outputs have led to expected intermediate outcomes that contribute to lifting student outcomes	Not as yet.
Are any measures in place to monitor future progress in achieving intermediate or end outcomes of the NSRA?	Noting that this initiative as defined under the NSRA has been completed, the plan for implementing the majority of the report's recommendations and monitoring their impact is unclear.
Conclusion	
Some report recommendations are appropriate for progression at a national level. Ideally, parties would agree on and publicly announce which of the remaining Review recommendations will involve further national cooperation to implement. They should put in place clear responsibilities for further evaluation and, where appropriate, implementation, tracking of progress and assessing impacts on student outcomes.	

Supporting teaching, school leadership and school improvement

National Policy Initiative B (i) *Reviewing teacher workforce needs of the future to attract and retain the best and brightest to the teaching profession and attract teachers to areas of need*

Table C.3 – Teacher workforce review (NPI B (i))

Assessment of effectiveness and appropriateness

Assessment question	Answer
Appropriateness	
Does the initiative address a clearly defined need or government priority in schooling policy?	Yes. The teacher workforce review and strategy aimed to address the need for national, collaborative teacher workforce planning, and better identify issues in the national teacher labour market (AITSL 2021b, p. 2). The teacher labour market has experienced ongoing shortages, concentrated in particular subjects, skill sets, and in regional, rural and remote areas (chapter 7).
Are there clearly defined conceptual, evidence-based links between the initiative and the need/government priority?	Partly. The teacher workforce review and strategy's core functions were to identify current and future issues in the teacher workforce and strategies to overcome them. However, any evidence-based links to policy problems (such as teacher attraction and retention) rely on the review identifying meaningful reforms and these reforms being implemented.
Is the need or government priority best pursued through national collaboration?	Yes. While State and Territory governments typically undertake workforce planning for their own jurisdictions, these do not fit together to give a national picture of supply or demand (chapter 7). Having a national picture would provide benefits over and above jurisdiction-specific approaches given: • teacher workforce challenges are often common across jurisdictions and may require a national response (AITSL, sub. 27, p. 10) • the national teacher labour market is becoming increasingly interconnected (AITSL, sub. 27, p. 9).
Effectiveness	
How are the outputs from the initiative expected to lift student outcomes (directly or indirectly)?	Indirectly. Improved workforce planning can support teacher effectiveness — the most important in-school factor driving student outcomes (chapter 6). Better workforce planning can reveal where and why some shortages might occur so that they can be mitigated, and assist in overcoming coordination problems between initial teacher education (ITE) providers, employers, and teacher regulatory authorities (AITSL, sub. 27, p. 10).
Has the initiative produced any outputs?	Yes. According to the Education Council, the 'narrative' on *National Initiatives to Support Teaching and School Leadership* (2020b) and the workforce strategy *Teaching Futures: A National Teacher Workforce Strategy for Australia* (the latter of which has only been published as a background paper (AITSL 2021b)) together fulfilled governments' commitments to review teacher workforce needs (Education Council 2021, p. 6).
If yes, is there any evidence that outputs have led to expected intermediate	No. Jurisdictions had not announced a clear plan to implement the National Teacher Workforce Strategy. In large part, jurisdictions' work in this area has

Assessment question	Answer
outcomes that contribute to lifting student outcomes	now been superseded by a new initiative — the National Teacher Workforce Action Plan, agreed in December 2022 (chapter 7).
Are any measures in place to monitor future progress in achieving intermediate or end outcomes of the NSRA?	Given Education Ministers have subsequently agreed the National Teacher Workforce Action Plan, the Workforce Strategy no longer appears to be a driver of actions that could influence end outcomes.
Conclusion	
Ongoing work on the teacher workforce — including improving teacher supply and demand data — is a priority at the national level. The Teacher Workforce Strategy has been largely superseded by the National Teacher Workforce Action Plan, in which jurisdictions committed to enhanced workforce data collection and nationally consistent teacher workforce projections. To maximise the value of these commitments, a labour market model could be developed that would allow governments to better identify and predict teacher shortages and evaluate the impacts of different policies on the workforce (finding 7.4).	

NPI B (ii) Strengthening the initial teacher education accreditation system

Table C.4 – Initial teacher education (NPI B (ii))

Assessment of effectiveness and appropriateness

Assessment question	Answer
Appropriateness	
Does the initiative address a clearly defined need or government priority in schooling policy?	Yes. The NPI was established as part of a number of national reforms, introduced in September 2018, to strengthen the initial teacher accreditation system introduced in September 2018 (DESE 2021g, p. 1). These were in response to challenges the Teacher Education Ministerial Advisory Group (TEMAG) raised regarding ITE (which were subsequently highlighted in the Australian Government's *Through Growth to Achievement* report). These included deficits in ITE quality and selection processes, shortcomings in subject and content preparation, and a lack of classroom readiness particularly at career commencement (Gonski et al. 2018, pp. 73–74). TEMAG's recommended reforms were made in response to evidence that teachers are a major source of variance in student achievement and 'significant public concern regarding variability in the quality of teaching in Australian classrooms and the effectiveness of the preparation of new teachers for the profession' (TEMAG 2014, p. 1).
Are there clearly defined conceptual, evidence-based links between the initiative and the need/government priority?	Yes. The initiative aims to improve the consistency of ITE preparation, classroom readiness and the quality of teaching in Australian classrooms. It requires pre-service teachers in ITE to complete an endorsed final-year teaching performance assessment prior to graduation, and for jurisdictions to collaborate with AITSL in undertaking national quality assurance activities to strengthen the accreditation system for ITE programs.
Is the need or government priority best pursued through national collaboration?	Yes. Both Australian and State and Territory governments play roles in ITE. Further, ITE is becoming increasingly connected across Australia, meaning changes in one jurisdiction can affect teacher graduates in another. For example, AITSL (sub. 27, p. 9) noted '[t]he rise of online ITE means

Assessment question	Answer
	prospective teachers living (and planning to work) in one jurisdiction can study at an ITE provider based in another jurisdiction. A quarter of ITE students study fully online, and a third of these live in a jurisdiction other than the one where there provider is based and regulated.'
Effectiveness	
How are the outputs from the initiative expected to lift student outcomes (directly or indirectly)?	Improving the quality of ITE can improve teacher effectiveness through better preparing ITE graduates for the classroom and improving classroom practices.
Has the initiative produced any outputs?	Yes. All milestones outlined in the NSRA are reported as having been fully completed (DESE 2022c, p. 2). • States and Territories have ensured that accredited initial teacher education programs require pre-service teachers to have successfully completed an endorsed final-year teaching performance assessment prior to graduation (DESE 2022c, p. 3). • National quality assurance activities have commenced in cooperation with all jurisdictional authorities (DESE 2022c, p. 3).
If yes, is there any evidence that outputs have led to expected intermediate outcomes that contribute to lifting student outcomes	It is difficult to assess whether the requirement for teaching performance assessments has affected the quality of ITE preparation, and therefore the intermediate outcome of teacher preparedness or quality of teaching. The performance assessment requirement has only been newly introduced (the Education Council first reported that *most* providers had met the milestone at the end of 2020) so has only impacted a small proportion of the teacher workforce (Education Council 2021, p. 6).
Are any measures in place to monitor future progress in achieving intermediate or end outcomes of the NSRA?	This initiative is reported as having been completed, but it is unclear what measures are in place to monitor whether and how changes in ITE standards improve teacher preparedness and the quality of teaching.
Conclusion	
Governments have met agreed milestones relating to ensuring accredited initial teacher education programs require final year Teaching Performance Assessment (TPA). Governments could review the arrangements in three years to determine whether there are significant problems with TPAs (chapter 6), and to decide whether minimum standards should be introduced (finding 6.1).	

Enhancing the national evidence base

NPI C (i) *Implementing a national unique student identifier (USI) that meets national privacy requirements in order to support better understanding of student progression and improve the national evidence base*

Table C.5 – Unique student identifier (NPI C (i))

Assessment of effectiveness and appropriateness

Assessment question	Answer
Appropriateness	
Does the initiative address a clearly defined need or government priority in schooling policy?	Yes. The unique student identifier (USI) is a piece of supporting data infrastructure that could ultimately enable researchers to generate more high-quality, policy-relevant quantitative evidence on Australian schooling. Governments committed to introducing a national USI since as far back as 2009 (MCEETYA 2009, p. 19). Developing a nationally consistent system of unique student identifiers was recommended by the Commission as part of its 2016 inquiry into the National Education Evidence Base (PC 2016b, pp. 136–138).
Are there clearly defined conceptual, evidence-based links between the initiative and the need/government priority?	Yes. The USI would improve the coverage of longitudinal student data (by enabling data collection for students in jurisdictions without their own existing sub-national systems, and tracking of students who cross jurisdictions) and streamline access to national-level data for researchers. It could — depending on its design and rules around its use — also assist in forming a more comprehensive education dataset (AERO, sub. 6, p. 16; NSW Department of Education, sub. 12, pp. 12–13) and enable easier linkage to other datasets (DET 2016, p. 10; PC 2016b, p. 132). This would effectively improve the inputs and lower costs for conducting quantitative research on Australian schooling, particularly in relation to the drivers of student outcomes. USIs have been used to generate evidence on the drivers of student outcomes and the effectiveness of education interventions in the United Kingdom (Jay, Grath-Lone and Gilbert 2019), and in Australia, by the Smith Family for students participating in its Learning for Life program (The Smith Family 2016, 2018, sub. 29, p. 7).
Is the need or government priority best pursued through national collaboration?	Yes. A USI (along with national data linkage) would facilitate sharing of information across education systems and provide operational and research benefits.
Effectiveness	
How are the outputs from the initiative expected to lift student outcomes (directly or indirectly)?	Indirectly. The USI could support the delivery of high quality, quantitative evidence on schooling, including on key determinants of student outcomes, and evaluation of effective policies, practices and approaches. This, in turn, would support better informed policy and investment decisions, and outcomes for students. On 15 December 2022, Education Ministers announced that they had agreed on a model to roll out the USI nationally to all school students, with a baseline use of 'contribut[ing] to an existing information exchange scheme

Assessment question	Answer
	operating across Australian jurisdictions related to the safety and wellbeing of children' (2022a, p. 1). While a lack of detail makes it difficult to determine, it is not clear that the use proposed for the USI under this model will provide the anticipated research benefits of the initiative.
Has the initiative produced any outputs?	No. Jurisdictions reached agreement on some of the key features of the new system, late in the course of the NSRA.
If yes, is there any evidence that outputs have led to expected intermediate outcomes that contribute to lifting student outcomes?	N/A.
Are any measures in place to monitor future progress in achieving intermediate or end outcomes of the NSRA?	Progress on this initiative has been monitored via annual reporting under the NSRA, although there has been little transparency regarding the work that has been undertaken on the USI to date, and the reasons for its slower than expected progress.
Conclusion	
The development of a USI is appropriate to pursue at the national level, and — depending on its design and rules around its use — has the capacity to have an indirect impact on student outcomes, through supporting better informed policy and investment decisions. The Commission has recommended that parties to the agreement set firm deadlines to complete the USI, and, once it has been established, consider opportunities to realise its full potential for informing education policy by linking the USI with other data sets and permitting additional uses beyond the agreed initial baseline (recommendation 3.1).	

NPI C (ii) *Establishing an independent national evidence institute to inform teacher practice, system improvement and policy development*

Table C.6 – Independent national evidence institute (NPI C (ii))

Assessment of effectiveness and appropriateness

Assessment question	Answer
Appropriateness	
Does the initiative address a clearly defined need or government priority in schooling policy?	Yes. The new national evidence institute, the Australian Education Research Organisation (AERO), was established to fill a well-established gap in Australia's national education evidence base: the lack of institutional architecture to support the generation of evidence on what works best to improve student outcomes, and the translation of this evidence into usable material for stakeholders such as teachers (PC 2016b). The establishment of a national evidence institute to carry out these functions was recommended by the Australian Government's Through Growth to Achievement review (Gonski et al. 2018). The Commission also recommended the creation of a national evidence institute in its 2016 inquiry into the National Education Evidence Base (PC 2016b).
Are there clearly defined conceptual, evidence-based links between the	Yes. AERO's core functions are generating, presenting and encouraging the adoption of relevant, high-quality education evidence for use by policymakers and practitioners (AERO 2021d). These broadly align with the functions of a national

Assessment question	Answer
initiative and the need/government priority?	evidence institute proposed by the Commission in its National Education Evidence Base inquiry as well as those recommended by Clinton et al. (2018).[284]
Is the need or government priority best pursued through national collaboration?	Yes. The need to support the generation and dissemination of evidence on what works best in education is common to all jurisdictions. Creating a single national body is the most efficient way to achieve this, as it avoids jurisdictions having to duplicate their efforts. AERO's structure — a company owned by Australian, state and territory education ministers, and jointly funded by their respective governments (DESE 2021a) — ensures that it is accountable to ministers, and that its research is relevant to the needs of each jurisdiction.
Effectiveness	
How are the outputs from the initiative expected to lift student outcomes (directly or indirectly)?	AERO aims to facilitate the implementation of evidence-based policies and practices, by generating evidence on effective interventions and presenting newly generated or existing evidence into an accessible form for end users. The ultimate outcome of this is intended to be improvements to student outcomes, through enabling a better understanding among policy makers and education practitioners of what works best.
Has the initiative produced any outputs?	Yes. The key output so far is the establishment of AERO. In addition, AERO has published a Strategic Plan, which outlines their objectives and functions (AERO 2021d), and a Research Agenda for July 2021 to December 2022, which outlines their research areas of focus and was produced in consultation with a wide range of education stakeholders (AERO 2021b). AERO has also published a number of research reports and other resources for practitioners such as practice guides and curriculum materials.
If yes, is there any evidence that outputs have led to expected intermediate outcomes that contribute to lifting student outcomes?	It is still unclear whether AERO's work has thus far led teachers or other education stakeholders to implement their recommended practices or policies. There is some indication of a lack of awareness of AERO and its products among education stakeholders, though this is most likely because AERO is so newly established (NSW Department of Education, sub. 12, p. 12). To be successful in disseminating evidence on what works, AERO will need to ensure that it develops a strong profile among teachers, school leaders and school authorities, and it considered a trusted and reliable source of advice by them. Further, if AERO is to be successful in producing new evidence on what works, it will need to be granted access to schools and data for research. Education researchers can sometimes face barriers to accessing schools and data by state and territory regulatory requirements (chapter 6). AERO is already working with jurisdictions to ensure that processes for obtaining access to schools and data are streamlined (AERO sub. DR113, p. 2).

[284] The Through Growth to Achievement report recommended four functions for a national evidence institute: generating and sourcing relevant research and evidence; synthesising evidence; transferring, brokering and managing knowledge, and; accelerating and mediating the practical utilisation of knowledge (Gonski et al. 2018). This was based on a framework developed from Clinton et al. (2018), which was commissioned by the review.

Assessment question	Answer
Are any measures in place to monitor future progress in achieving intermediate or end outcomes of the NSRA?	AERO has a three-year evaluation plan to monitor progress towards intermediate outcomes (supporting educators and policymakers to implement evidence-based practices and policies). AERO has developed specific indicators of the 'reach, relevance and usefulness' of its work, which include website downloads and page views (AERO, sub. 6, p. 4). Isolating AERO's influence on the NSRA's end outcomes may be difficult given the indirect mechanism through which it is intended to influence outcomes.
Conclusion	
The establishment of AERO, and its ongoing funding and ownership, are appropriate to progress nationally. AERO's work will support the development and dissemination of research and evidence to effectively drive improvements in student outcomes. A key challenge AERO faces is developing a profile and reputation as a trusted source of reliable and relevant evidence-based advice and resources, among school systems, leaders and teachers.	

NPI C (iii) *Improving national data quality, consistency and collection to improve the national evidence base and inform policy development*

Table C.7 – Improving national data quality (NAPLAN proficiency standards and other projects) (NPI C (iii))

Assessment of effectiveness and appropriateness

Assessment question	Answer
Appropriateness	
Does the initiative address a clearly defined need or government priority in schooling policy?	**NAPLAN proficiency standards** Yes. Proficiency standards provide a meaningful benchmark for assessing trends in student academic achievement. Better understanding student proficiency can support better monitoring of system performance and inform future areas of focus. **Other measures to enhance the national evidence base** Measures of child development status at school entry, general capabilities, student attainment, learning gain, retention and wellbeing, and post-school outcomes and destinations are of ongoing relevance and interest in schooling policy. However, the extent to which there are data and evidence gaps varies. For example, there are established data collections relating to child development status at school entry, but no agreed national approach to collecting and reporting data on student wellbeing. The Student Wellbeing Data Project could play a role in informing the development a wellbeing indicator for the next intergovernmental agreement (chapter 5).
Are there clearly defined conceptual, evidence-based links between the initiative and the need/government priority?	Yes. Improved national data quality would support better informed policy and investment decisions on student readiness, achievement, learning gain, attainment, wellbeing and post-school outcomes.

Assessment question	Answer
Is the need or government priority best pursued through national collaboration?	**NAPLAN proficiency standards** Yes. The proficiency standards have been developed by ACARA as part of the administration of the National Assessment Program. A nationally consistent approach is important to build understanding of performance, and the proficiency standards are included as part of the national Measurement Framework for School in Australia. **Other measures to enhance the national evidence base** Yes. These areas are of common interest across jurisdictions, and adopting a nationally consistent approach would improve transparency around variations in outcomes in these domains over time and across jurisdictions.
Effectiveness	
How are the outputs from the initiative expected to lift student outcomes (directly or indirectly)?	The proficiency standards and some of the other projects are intended to improve or expand the measurement of student outcomes (rather than acting to influence them). For example, one project improves the accuracy of socioeconomic background data, which feeds into funding allocations (DESE 2021b).
Has the initiative produced any outputs?	**NAPLAN proficiency standards** On 11 December 2019, Education Ministers approved a revised Measurement Framework for Schooling in Australia, which includes the NAPLAN proficiency standards in its key performance measures. ACARA has developed a proposal on the proficiency standards. Reporting will commence once Education Ministers have approved the design (ACARA, sub. 45, p. 4). **Other measures to enhance the national evidence base** Eight focus areas were initially listed in the NPI schedule, culminating in one project (measures of student learning gain) that has been completed and three (student wellbeing, school readiness and post-school destinations survey and data linkage) that are expected to be completed in 2023. The learning gain project led to changes to My School reporting in 2020 (DESE 2021b). The Student Wellbeing Data Project is being led by the ACT Education Directorate. The main output of the project is a report that sets out a framework for measuring student wellbeing, reviews survey instruments that align with the framework, and assesses the extent to which each department for education collects data that align with the proposed framework (Cárdenas et al. 2021). Education Ministers are likely to consider the advice of a working group for the project in the first quarter of 2023 (ACT Education Directorate, pers. comm., 6 December 2022). An additional project on improved socioeconomic background data has also been completed — ACARA was funded to enable the collection of student background data from independent schools, in addition to government schools (DESE 2021b).
If yes, is there any evidence that outputs have led to expected intermediate	Not yet applicable.

Assessment question	Answer
outcomes that contribute to lifting student outcomes?	
Are any measures in place to monitor future progress in achieving intermediate or end outcomes of the NSRA?	Reporting for this NPI is through the annual updates on progress made available on the Department of Education website.

Conclusion

Improving data quality has the capacity to benefit all jurisdictions and indirectly improve student outcomes. Key aspects of this initiative, such as the introduction of NAPLAN proficiency standards, needed to be pursued nationally, as they were tied to national processes. Two of the data projects are of particular relevance to the next intergovernmental school reform agreement: once approved by Education Ministers, NAPLAN proficiency standards should be used for the NAPLAN sub-outcome of the agreement (recommendation 9.2), while the Student Wellbeing Data Project is an informative resource for the development of a wellbeing sub-outcome (recommendation 5.1).

D. Estimates of teacher effectiveness

This Appendix outlines the Commission's approach to estimating the value of improving teacher effectiveness referenced in chapter 6.

D.1 Studies that measure teacher effectiveness

Studies that measure teacher effectiveness (that is, the ability of a teacher to affect student outcomes) use a value-added model, and measure teacher effectiveness in terms of standard deviations (section 6.1).

The value-added model

Economic models that measure teacher effectiveness use a 'value-added model', which examine student learning gain from one point in time to another. Student learning gain is used instead of real student scores at a point in time because real student scores can be influenced by prior family, community and school experiences — such data are usually not available (Rivkin, Hanushek and Kain 2005, pp. 423–424). Therefore, focusing on the relationship between the *growth* of student achievement and school inputs over time allows one to better control for the history of parental and school influences. Equation 1 shows an example of a value-added model:

$$\Delta A_{ijgs}^{c} = X_{ig}^{c}\beta_X + \delta_j + S_{gs}^{c}\beta_S + f_i + \varepsilon_{ijgs}^{c} \qquad (1)$$

ΔA_{ijgs}^{c} is the gain in student achievement for individual i, in cohort c, with teacher j, in grade g, of school s. This gain is measured as the difference between a student's test score in grade *g* and *g-1*. ΔA_{ijgs}^{c} depends on family background (X); inherent teacher characteristics (δ_j); school characteristics (S); inherent student abilities (f_i); and a random error (ε).

δ_j is the variable of interest and is a teacher fixed effect; it shows the change in student achievement that can be attributed to non-measurable, time-invariant teacher characteristics (that is, teacher effectiveness). To avoid selection bias — noting that parents will choose the school their child attends — studies should focus on the within school variation captured by δ_j, rather than the between school variation (Rivkin, Hanushek and Kain 2005, p. 424).

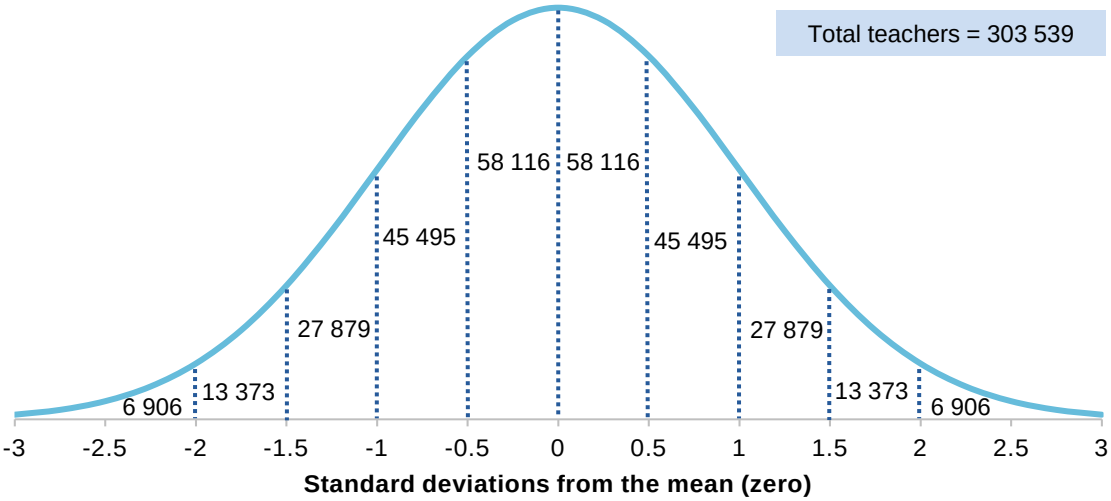
Teacher effectiveness is measured in standard deviations

Economic models measure teacher effectiveness (δ_j) in standard deviations, with the mean of teacher effectiveness standardised to zero and the standard deviation set to one. Common estimates of teacher effectiveness are between 0.2 to 0.3 standard deviations of total student achievement variation (Hanushek 2011, p. 472). This means that a teacher whose effectiveness is one standard deviation above average teacher effectiveness, is estimated to increase student achievement by 0.2 to 0.3 standard deviations above that of the average student in a given year.

The distribution of teacher effectiveness is plotted in figure D.1. Moving teachers from below the mean of zero to above the mean of zero can have substantial benefits. For example, moving teachers from the 25th percentile of performers to the 75th percentile of performers can increase learning gains by about one additional term of school for an average student in a given year (Leigh 2010, p. 484).

Figure D.1– Number of teachers, distributed by teacher effectiveness[a]

Normal distribution of teacher effectiveness, mean standardised to zero



a. Teachers are assumed to be distributed across a normal distribution according to their ability to affect student outcomes, with the mean teacher effectiveness standardised to zero.

Source: ACARA (2022h).

D.2 Estimating the benefits of improved teacher effectiveness

Teachers are the most important in-school factor driving student outcomes (section 6.1). However, the economic value that a teacher provides to society beyond student achievement is less understood. Improved student outcomes can provide substantial personal, economic and social benefits (PC 2012a, p. 42). For instance, students with higher educational attainment can have higher lifetime earnings and experience lower levels of unemployment (sections 2.1 and 6.1).

A study conducted by Hanushek (2011) aimed to estimate the marginal economic benefits of improving teacher effectiveness. The Commission replicated Hanushek (2011) for Australia using ABS income data.

The model focused on the demand side of the teacher labour market and was based on the premise that teacher effectiveness was the major element that defined student achievement. Therefore, the demand for teacher effectiveness can be derived from the effect that teachers have on student achievement.

Hanushek (2011) identified estimates of key parameters from the academic literature for two models:

1. an extended Mincer earnings model — shows how cognitive skills impact a person's earnings
2. a student achievement model — shows how a teacher can impact a student's achievement.

Hanushek (2011) linked parameter estimates from these two models to create an expression that estimates the marginal annual economic value from improved teacher effectiveness on student lifetime earnings.

Mincer earnings model

The extended Mincer earnings model (equation 2) shows how educational attainment, experience, and cognitive skills (CS) affect labour market earnings (Hanushek 2011, p. 471).

$$lnY_i = \alpha_0 + \mathrm{r}S_i + \alpha_1 Exper_i + \alpha_2 Exper_i^2 + \emptyset CS_i + \varepsilon_i \quad (2)$$

Y_i is earnings of individual i, S_i is school attainment, $Exper$ is potential labour market experience, and ε_i is a random error. When cognitive skills are standardised to mean zero and a standard deviation of one, $\emptyset$ shows the percentage increase in annual earnings that can be attributed to a one standard deviation increase in achievement. $\emptyset$ is the parameter of interest. Based off estimates in the literature, a lower bound value of 13 per cent was chosen. This value can be applied to the net present value of a full-time worker from ages 25-70 to determine the total economic benefits of improved cognitive skills over a person's lifetime.

Student achievement model

Teacher effectiveness is determined by a basic student achievement (A) model for student i in grade g (Hanushek 2011, p. 472).

$$A_{it} = (1-\theta)A_{it-1} + \delta_j + \beta X_i + v_{it} \quad (3)$$

A_{it-1} is lagged achievement for student i, δ_j is a teacher fixed effect and X is a vector of other factors that might affect performance. Two variables of interest are used. First, θ shows the depreciation of prior learning. This helps indicate how much of the learning attributable to a teacher carries over after the student leaves the classroom. Based off the literature, a θ value of 0.3 was chosen. Second, the variation in δ_j is used to identify the standard deviation of teacher effectiveness (σ_T). σ_T shows how a *one standard deviation increase in teacher effectiveness above the average impacts the standard deviation of student achievement*. Based off the literature, a lower bound σ_T value of 0.2 was chosen.

Economic value of teacher effectiveness

By combining the coefficients of interest ($\emptyset$, θ, and σ_T) an expression can be derived, which is an estimate of the marginal annual economic value of improving teacher effectiveness (equation 4) (Hanushek 2011, p. 473).

$$Marginal\ annual\ economic\ value = \delta * \sigma_T * (1\text{-}\theta) * \phi * n * Y \quad (4)$$

Here, δ is the standard deviation level of a teacher's effectiveness above or below the mean, and *n* is the number of students in the teacher's class (the more students in a teacher's class, the greater the economic benefit (cost) of an effective (less effective) teacher in a given year), and Y is a student's lifetime income.

The Commission utilised the values of $\sigma_T = 0.2$, $\phi = 0.13$ and $\theta = 0.3$, which are lower bound estimates in the literature. Student lifetime earnings (Y) were estimated to be 1 960 831 AUD using ABS data.[285] The Commission found that a highly-effective teacher, who is one standard deviation above the average teacher, instructing a classroom of 15 students, could increase the average *lifetime earnings* of the classroom by about $530 000 in a

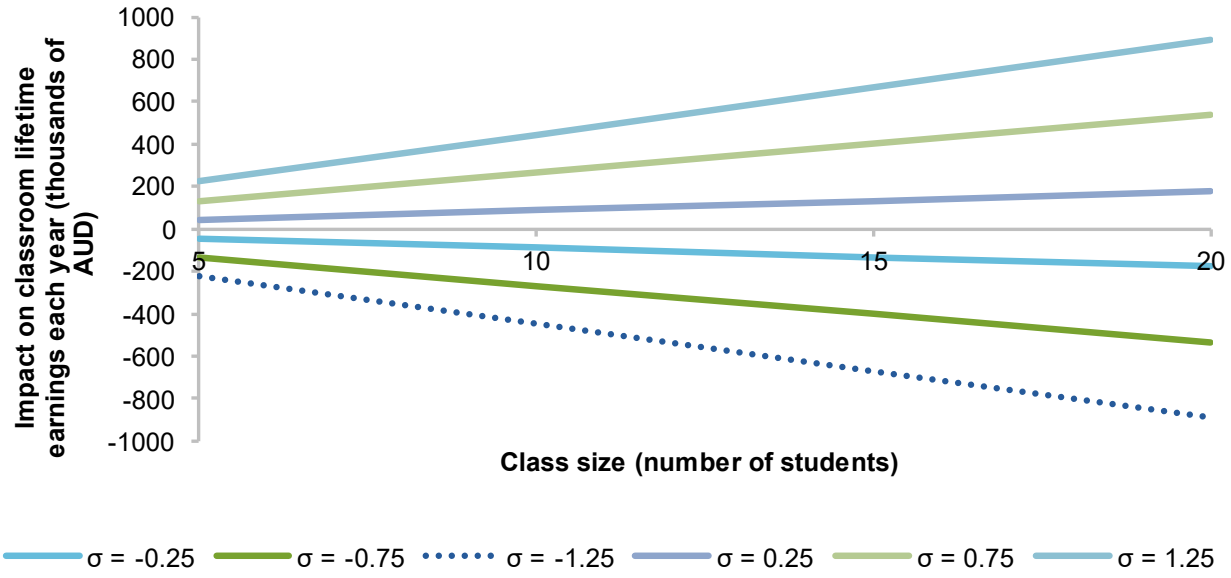
[285] Calculations use 2018-19 (adjusted to 2020-21 values) ABS average income data by age group to determine the lifetime income of a full time worker from age 25-70. Income is assumed to increase by 1 per cent per year, and future income streams are discounted to a net present value at 3 per cent. Commission estimates based on ABS (Personal Income in Australia, December 2021, Table 4); Hanushek (2011).

given year; or about $35 000 per student. This means that each year a student has a teacher one standard deviation above the average, their average lifetime earnings could increase by $35 000.

This effect increases with both class size[286] and teacher effectiveness (σ_T) (figure D.2). Similar results are obtained for principals: while the net learning gain per student is lower, effective principals benefit more students at once (chapter 8).

Figure D.2 – The economic value of improved teacher effectiveness is large, and scales in class size

Marginal private economic value of teacher effectiveness each year, by class size[a]



a. Teacher effectiveness (σ) is measured as standard deviations above (positive) and below (negative) the mean. Marginal annual economic value is given by $\boldsymbol{MEV = \delta * \sigma_T * (1 - \theta) * \phi * n * Y}$, where the teacher fixed effect is $\boldsymbol{\delta}$; standard deviation of teacher effectiveness $\boldsymbol{\sigma_T = 0.2}$; prior learning depreciation $\boldsymbol{\theta = 0.3}$; skills premium $\boldsymbol{\phi = 0.13}$; class size $\boldsymbol{n}$ – variable; life-time earnings $\mathbf{Y} = \$\mathbf{1.96}\ \boldsymbol{million}$.

Source: Commission estimates based on ABS (Personal Income in Australia, December 2021, Table 4); Hanushek (2011).

[286] The study assumes a linear relationship with class size and classroom lifetime earnings. However, if class sizes got very large you would expect teacher effectiveness to decline and the per student lifetime earnings to become smaller.

E. Performance against the sub-outcomes

Figure E.1 – Performance against sub-outcomes[a,b]

Progress across NSRA sub-outcomes between 2018 and 2022[c]

Sub-outcomes	All students	Aboriginal and Torres Strait Islander students	Students in regional and remote areas	Students from educationally disadvantaged backgrounds
Lower the proportion of students in bottom two bands in the NAPLAN – reading				
Year 3	↑ +2.6 ppt	↑ +3.6 ppt	↑ +2.1 ppt	↑ +6.6 ppt
Year 5	↓ -1.6 ppt	↓ -5.0 ppt	↓ -1.2 ppt	↓ -2.3 ppt
Year 7	↓ -1.1 ppt	↓ -4.2 ppt	↓ -0.2 ppt	↓ -0.2 ppt
Year 9	↑ +4.7 ppt	↑ +2.6 ppt	↑ +2.6 ppt	↑ +9.0 ppt
Lower the proportion of students in bottom two bands in the NAPLAN – numeracy				
Year 3	↑ +3.1 ppt	↑ +4.5 ppt	↑ +3.7 ppt	↑ +8.7 ppt
Year 5	↑ +2.2 ppt	↑ +3.7 ppt	↑ +3.7 ppt	↑ +6.3 ppt
Year 7	↑ +4.4 ppt	↑ +7.7 ppt	↑ +8.7 ppt	↑ +11.2 ppt
Year 9	↑ +3.7 ppt	↑ +5.8 ppt	↑ +3.1 ppt	↑ +10.0 ppt
Increase the proportion of students in the top two bands in the NAPLAN – reading				
Year 3	↑ +0.6 ppt	↑ +2.2 ppt	↑ +0.6 ppt	↑ +0.3 ppt
Year 5	↑ +0.7 ppt	↑ +1.0 ppt	↓ -2.6 ppt	↑ +0.5 ppt
Year 7	↑ +0.1 ppt	↑ +0.4 ppt	↓ -1.3 ppt	↓ -0.3 ppt
Year 9	↑ +0.4 ppt	↑ +0.2 ppt	↓ -0.1 ppt	↓ -0.6 ppt

Sub-outcomes	All students	Aboriginal and Torres Strait Islander students	Students in regional and remote areas	Students from educationally disadvantaged backgrounds
Increase the proportion of students in the top two bands in the NAPLAN – numeracy				
Year 3	↓ -5.0 ppt	↓ -1.3 ppt	↓ -3.5 ppt	↓ -3.5 ppt
Year 5	↓ -2.7 ppt	↓ -1.3 ppt	↓ -1.8 ppt	↓ -1.8 ppt
Year 7	↑ +2.8 ppt	↑ +0.9 ppt	↓ -0.7 ppt	↓ -0.5 ppt
Year 9	↓ -5.4 ppt	↓ -2.2 ppt	↓ -2.7 ppt	↓ -3.8 ppt
Lower the proportion of Australian students in the bottom levels for PISA tests (sample of 15-year olds) Note that PISA testing has not been undertake since the introduction of the NSRA. This table shows the results from the most recent PISA test (in 2018), rather than the change in results.				
Reading	19.6%	43.0%	33.7%	31.2%
Maths	22.4%	48.4%	41.5%	36.6%
Science	18.9%	43.9%	34.1%	30.8%
Increase the proportion of students in the top levels of performance for PISA tests (sample of 15-year olds) Note that PISA testing has not been undertake since the introduction of the NSRA. This table shows the results from the most recent PISA test (in 2018), rather than the change in results.				
Reading	13.0%	4.6%	9.1%	5.8%
Maths	10.5%	2.5%	5.1%	4.0%
Science	14.6%	2.6%	5.9%	3.9%
Reduce the gap in achievement between students from various socioeconomic backgrounds in Australia's PISA educational performance compared to other countries and the OECD average (sample of 15-year olds)				
Reading	—	—	—	—
Maths	—	—	—	—
Science	—	—	—	—

Sub-outcomes	All students	Aboriginal and Torres Strait Islander students	Students in regional and remote areas	Students from educationally disadvantaged backgrounds
Increase the proportion of students attending school 90 per cent or more of the time				
Foundation to year 10	↓ -4.0 ppt	↓ -7.4 ppt	↓ -7.2 ppt	——
Increase the proportion of young people who completed year 12 or equivalent or gained a Certificate III or above				
18-24 year-olds	↑ +0.6 ppt	——	↑ +1.2 ppt	——

Legend: ↑↓ **Outcome improved** (could be due to an increase or a decrease, depending on the sub-outcome); ↑↓ **Outcome worsened** (could be due to an increase or a decrease, depending on the sub-outcome); —— **Data not collected**

a. This figure illustrates the changes in outcomes since the NSRA commenced in 2019. **b.** The figure shows outcomes for three priority equity cohorts (Aboriginal and Torres Strait Islander students, students from regional and remote locations, and students from an educationally disadvantaged background). As the latter is not defined in the NSRA, this is taken to mean students of parents without a year 12 (or equivalent) qualification for NAPLAN data and students in the lowest socioeconomic quintile for PISA data. No annual data is published for the fourth priority equity cohort (students with disability) so this is not included in the table. **c.** The data for attendance and attainment finish at 2021

Sources: ACARA (2021), ACARA (2022), Productivity Commission (2022a).

Abbreviations

ABS	Australian Bureau of Statistics
ACARA	Australian Curriculum, Assessment and Reporting Authority
ACER	Australian Council for Educational Research
AECG	Aboriginal Education Consultative Group
AERO	Australian Education Research Organisation
AITSL	Australian Institute for Teaching and School Leadership
APTA	Australian Professional Teachers Association
ATAR	Australian Tertiary Admission Rank
ATWD	Australian Teacher Workforce Data
COAG	Council of Australian Governments
CRPD	Convention on the Rights of Persons with Disabilities
EAG	Expert Advisory Group
EAL/D	English as an Additional Language or Dialect
EEF	Education Endowment Foundation
ESA	Education Services Australia
EYL	Equivalised Years of Learning
FTE	Full Time Equivalent
HALT	Highly Accomplished and Lead Teachers
ICSEA	Index of Community Socio-Educational Advantage
ICT	Information and Communication Technology
IECM	Indigenous Education Consultative Meeting
IEUA	Independent Education Union of Australia
ITE	Initial Teacher Education
KPM	Key Performance Measure
LANTITE	Literacy and Numeracy Test for Initial Teacher Education
LDP	Leadership Development Program
MFSA	Measurement Framework for Schooling in Australia
NAP	National Assessment Program
NAPLAN	National Assessment Program – Literacy and Numeracy
NCCD	Nationally Consistent Collection of Data on School Students with Disability
NDDA	National Disability Data Asset
NDIS	National Disability Insurance Scheme

NIAA	National Indigenous Australians Agency
NIRA	National Indigenous Reform Agreement
NMF	National Measurement Framework
NMS	National Minimum Standard
NPI	National Policy Initiative
NSRA	National School Reform Agreement
NSRB	National School Resourcing Board
NTWAP	National Teacher Workforce Action Plan
OECD	Organisation for Economic Co-operation and Development
OFAI	Online Formative Assessment Initiative
PIRLS	Progress in International Literacy Study
PISA	Programme for International Student Assessment
QITE Review	Quality Initial Teacher Education Review
QTR	Quality Teaching Rounds
RCT	Randomised Controlled Trial
RPL	Recognition of Prior Learning
SDAC	Survey of Disability, Ageing and Carers
TAFE	Technical and Further Education
TALIS	Teaching and Learning International Survey
TEMAG	Teacher Education Ministerial Advisory Group
TESOL	Teaching English to Speakers of Other Languages
TIMSS	Trends in International Mathematics and Science Study
TPA	Teaching Performance Assessment
USI	Unique Student Identifier
VET	Vocational Education and Training

References

AARE (Australian Association for Research in Education) 2022, *National Application Form Guidelines*.

ABS (Australian Bureau of Statistics) 2021, *Education and Work, Australia*, https://www.abs.gov.au/statistics/people/education/education-and-work-australia/latest-release (accessed 29 April 2022).

ACARA (Australian Curriculum, Assessment and Reporting Authority) 2014, *About ICSEA*.

—— 2022a, *NAPLAN results*.

—— 2022b, *Adjustments for students with disability*, https://www.nap.edu.au/naplan/accessibility/adjustments-for-students-with-disability (accessed 22 November 2022).

—— 2015, *My School fact sheet: Interpreting NAPLAN results*.

—— 2016, *National Report on Schooling in Australia*.

—— 2018a, *National Assessment Program - Literacy and Numeracy Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2018*.

—— 2018b, *National Report on Schooling in Australia*.

—— 2019a, *Case studies of high gain schools*, https://acara.edu.au/reporting/my-school-website/case-studies-of-high-gain-schools (accessed 1 December 2022).

—— 2019b, *National Report on Schooling in Australia*.

—— 2020a, *Measurement Framework for Schooling in Australia 2020*.

—— 2020b, *National Report on Schooling in Australia*.

—— 2021a, *National Assessment Program - Literacy and Numeracy Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2021*.

—— 2021b, *National Report on Schooling Data Portal - School students with disability*, https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/national-report-on-schooling-in-australia-data-portal/school-students-with-disability (accessed 30 June 2022).

—— 2022b, *Deidentified student-level NAPLAN data, 2013 to 2021*.

—— 2022c, *Interpreting financial data*, Sydney.

—— 2022d, *NAP - NAPLAN results - Time Series*, https://reports.acara.edu.au/Home/TimeSeries (accessed 29 March 2022).

—— 2022e, *National Report on Schooling Data Portal - List of data sets*, https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/national-report-on-schooling-in-australia-data-portal (accessed 29 April 2022).

—— 2022f, *Personal and Social Capability*, https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/personal-and-social-capability/ (accessed 26 August 2022).

—— 2022g, *School students with disability*, https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/national-report-on-schooling-in-australia-data-portal/school-students-with-disability (accessed 25 August 2022).

—— 2022h, *Staff Numbers*, https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/national-report-on-schooling-in-australia-data-portal/staff-numbers (accessed 30 June 2022).

—— 2022i, *Student Numbers*, https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/national-report-on-schooling-in-australia-data-portal/staff-numbers (accessed 30 June 2022).

—— 2022j, *Teacher Education*, https://www.acara.edu.au/reporting/national-report-on-schooling-in-australia/national-report-on-schooling-in-australia-data-portal/teacher-education (accessed 4 July 2022).

——, ESA, and AITSL (Australian Curriculum Assessment and Reporting Authority, Education Services Australia, and Australian Institute for Teaching and School Leadership) 2020, *The Online Formative Assessment Initiative: February - March 2020*, https://ofai.edu.au/media/dozlfcau/ofai_information_sheet_march_2020.pdf (accessed 21 December 2022).

ACER (Australian Council for Educational Research) 2016, *Five Challenges in Australian School Education*.

ACU (Australian Catholic University) 2021, *The Australian Principal Occupational Health, Safety and Wellbeing Survey 2021 Data*.

AERO (Australian Education Research Organisation) 2021a, *Evidence-based teaching strategies – how often are Australian teachers using them?*, https://www.edresearch.edu.au/articles/evidence-based-teaching-strategies-how-often-are-australian-teachers-using-them (accessed 7 December 2022).

—— 2021b, *Research Agenda 2021-2022*.

—— 2021c, *Standards of Evidence*.

—— 2021d, *Strategic Plan 2021-2024*.

AIHW (Australian Institute of Health and Welfare) 2022a, *Accessing data through the AIHW*, https://www.aihw.gov.au/about-our-data/accessing-data-through-the-aihw (accessed 20 December 2022).

—— 2022b, *Data tables: 2020-21 National Hospital Morbidity Database - Intentional self-harm behaviours*, https://www.aihw.gov.au/suicide-self-harm-monitoring/data/data-downloads (accessed 29 August 2022).

—— 2022c, *Our data collections*, https://www.aihw.gov.au/about-our-data/our-data-collections (accessed 20 December 2022).

—— 2022d, *People with disability in Australia 2022*, DIS 72.

AITSL (Australian Institute for Teaching and School Leadership) 2020a, *Spotlight: Inclusive Education: Teaching Students with Disability*, https://www.aitsl.edu.au/research/spotlights/inclusive-education-teaching-students-with-disability (accessed 20 December 2022).

—— 2011, *Australian Professional Standard for Principals*.

—— 2014, *Australian Professional Standard for Principals and the Leadership Profiles*.

—— 2015a, *Preparing future leaders – Effective preparation for aspiring school principals*, Melbourne.

—— 2015b, *Spotlight: What Do We Know About Early Career Teacher Attrition Rates in Australia?*

—— 2016, *Graduate to Proficient: Australian guidelines for teacher induction into the profession*, Melbourne.

—— 2019a, *Initial teacher education: Data report 2019*, Melbourne.

—— 2019b, *Spotlight: Highly Accomplished and Lead Teachers*.

—— 2019c, *Spotlight: Attendance Matters*

—— 2020b, *Indigenous cultural competency in the Australian teaching workforce: Discussion paper*, Melbourne.

—— 2020c, *Review to reduce red tape for teachers and school leaders*.

—— 2020d, *Sample Initial Teacher Education Program Outlines: Reading Instruction*, Melbourne.

—— 2021a, *Australian Teacher Workforce Data: National Teacher Workforce Characteristics Report*, Melbourne.

—— 2021b, *Teaching Futures – Background Paper*.

—— 2021c, *The impact of Aboriginal and Torres Strait Islander educators*.

—— 2022a, *Australian Professional Standards for Teachers*, Melbourne.

—— 2022b, *Building a culturally responsive Australian teaching workforce: Final report for Indigenous cultural competency project*.

—— 2022c, *Building a sustainable teaching workforce*, AITSL, https://www.aitsl.edu.au/research/spotlights/building-a-sustainable-teaching-workforce (accessed 4 November 2022).

—— 2022d, *Career stages*, https://www.aitsl.edu.au/standards/understand-the-teacher-standards/career-stages (accessed 11 November 2022).

—— 2022e, *Key metrics dashboard*, https://www.aitsl.edu.au/research/australian-teacher-workforce-data/key-metrics-dashboard (accessed 6 November 2022).

—— 2022f, *Middle leadership in Australian schools*, AITSL, https://www.aitsl.edu.au/research/spotlights/middle-leadership-in-australian-schools (accessed 25 November 2022).

—— 2022g, *Spotlight: Wellbeing in Australian Schools*, https://www.aitsl.edu.au/research/spotlights/wellbeing-in-australian-schools (accessed 20 December 2022).

ANAO (Australian National Audit Office) 2017, *Monitoring the Impact of Australian Government School Funding*, Canberra.

—— 2021, *Monitoring the Impact of Government School Funding — Follow-up*, 37, Canberra.

Anderson, M., Gronn, P., Ingvarson, L., Jackson, A., Kleinhenz, E., McKenzie, P., Mulford, B., & Thornton, N. 2007, *OECD Improving School Leadership Activity: Australian Country Background Report*, ACER (Australian Council for Educational Research).

Andrews, D. (Victorian Government Premier) 2022, *Tutors To Continue Supporting Students In Our Schools*, Media release, 14 September 2022, https://www.premier.vic.gov.au/tutors-continue-supporting-students-our-schools (accessed 6 December 2022).

Anglicare Victoria 2014, *Children in Care Report Card*.

ANU (Australian National University) 2022, *The Australian School Climate and School Identification Measurement Tool*, https://psychology.anu.edu.au/research/projects/australian-school-climate-and-school-identification-measurement-tool (accessed 26 August 2022).

APPA (Australian Primary Principals Association) 2017, *Back To Balance: How Policy And Practice Can Make Primary Principals Highly Effective*.

APS (Australian Psychological Society) 2016, *The Framework for Effective Delivery of School Psychology Services: A Practice Guide for Psychologists and School Leaders*, Melbourne.

Ashiedu, J. and Scott-Ladd, B. 2012, 'Understanding Teacher Attraction and Retention Drivers: Addressing Teacher Shortages', *Australian Journal of Teacher Education*, vol. 37, no. 11, pp. 23–41.

Australian Curriculum Assessment and Reporting Authority and ACARA 2014, *English as an Additional Language or Dialect Teacher Resource*.

Australian Government 2014, *National Teaching Workforce Dataset*.

—— 2022a, *Budget 2022-23: Budget Measures Budget Paper No. 2*, March, Canberra.

—— 2022b, *Budget October 2022-23: Budget Measures Budget Paper No. 2*, October, Canberra.

Ballou, D. and Podgursky, M. 1995, 'What makes a good principal? How teachers assess the performance of principals', *Economics of Education Review*, vol. 14, no. 3, pp. 243–252.

Barty, K., Thomson, P., Blackmore, J. and Sachs, J. 2005, 'Unpacking the issues: Researching the shortage of school principals in two states in Australia', *The Australian Educational Researcher*, vol. 32, no. 3, pp. 1–18.

Bauer, C., Thomas, S. and Sim, C. 2017, 'Mature age professionals: Factors influencing their decision to make a career change into teaching', *Issues in Educational Research*, vol. 27, no. 2, p. 13.

Belsito, C. 2016, 'The Importance of "Teacher Quality" and "Quality Teaching" on Academic Performance', *Journal of Student Engagement: Education Matters*, vol. 6, no. 1, pp. 28–38.

Berger, E. 2019, 'Multi-tiered approaches to trauma-informed care in schools: a systematic review', Springer-Verlag London Ltd., *School Mental Health*, vol. 11, no. 4, pp. 650–664.

Beyond Blue 2022, *Professional Learning*, Be You, http://beyou.edu.au/learn (accessed 20 December 2022).

Biddle, N., Edwards, B. and Gray, M. 2021, *The Impact of Covid-19 on Child Mental Health and Service Barriers: The Perspective of Parents – August 2021*, ANU Centre for Social Research and Methods, Canberra.

Bloomfield, J. 2019, *It's time to do more about the mental health of children with intellectual disability*, Emerging Minds, https://emergingminds.com.au/resources/its-time-to-do-more-about-the-mental-health-of-children-with-intellectual-disability/ (accessed 20 December 2022).

Bodkin-Andrews, G. and Carlson, B. 2014, 'The legacy of racism and Indigenous Australian identity within education', *Race Ethnicity and Education*, vol. 19, no. 4.

Branch, G., Hanushek, E. and Rivkin, S. 2009, *Estimating Principal Effectiveness*, Working Paper, National Center for Analysis of Longitudinal Data in Education Research.

Buckskin, P. 2016, *More Aboriginal and Torres Strait Islander Teachers Initiative. Final Report*, Adelaide.

Burgess, S. 2016, *Human Capital and Education: The State of the Art in the Economics of Education*, IZA Discussion Paper 9885.

Caldwell, B.J. 2014, *Impact of School Autonomy on Student Achievement in 21st Century Education: A Review of the Evidence*, Contribution to the International Study on School Autonomy and Learning, Educational Transformations.

Carabetta, G. and Wilson, R. 2022, *COVID and schools: Australia is about to feel the full brunt of its teacher shortage*, http://theconversation.com/covid-and-schools-australia-is-about-to-feel-the-full-brunt-of-its-teacher-shortage-174885 (accessed 9 March 2022).

Cárdenas, D., Lattimore, F., Steinberg, D. and Reynolds, K.J. 2022, 'Youth well-being predicts later academic success', *Scientific Reports*, vol. 12, no. 1, p. 2134.

——, Reynolds, K.J., Sahib, A., Cheng, Y. and Goodman, G. 2021, *On behalf of the National Student Wellbeing Project*.

Carey, A. 2022, 'Victoria COVID: Education department calls registered teachers back to classrooms', *The Age*, 1 June.

Carmody, R. 2017, *Teachers to Challenge Move to Restrict Higher Salaries, Say Industrial Deal Broken*, ABC News.

Centre for Education Statistics and Evaluation 2015, *Student engagement and wellbeing in NSW*, April, Learning Curve, NSW Government.

CESE (Centre for Education Statistics and Evaluation) 2020a, *What works best 2020 update*, April.

—— 2015, *Effective Leadership*.

—— 2020b, *Trauma-Informed Practice in Schools: An Explainer*, NSW Department of Education.

—— 2020c, *Supporting high academic expectations*, NSW Department of Education.

Clare, J. (Australian Government Minister for Education) 2022, *Taking the stress out of going to high school*, Media release, 18 October, https://ministers.education.gov.au/clare/taking-stress-out-going-high-school (accessed 17 November 2022).

Clinton, J., Aston, R. and Quach, J. 2018, *Promoting evidence uptake in schools: A review of the key features of research and evidence institutions*, University of Melbourne.

COAG (Council of Australian Governments) 2008a, *Melbourne Declaration on Educational Goals for Young Australians*.

—— (Council of Australian Governments) 2008b, *National Education Agreement*.

—— (Council of Australian Governments) 2018, *National School Reform Agreement*.

—— (Council of Australian Governments) 2019, *Alice Springs (Mparntwe) Education Declaration*.

Coalition of Aboriginal and Torres Strait Islander Peak Organisations and All Australian Governments 2020, *National Agreement on Closing the Gap*.

Cologon, K. 2019, *Towards inclusive education: A necessary process of transformation*, October, Department of Educational Studies, Macquarie University for CYDA.

Connolly, P., Keenan, C. and Urbanska, K. 2018, 'The trials of evidence-based practice in education: a systematic review of randomised controlled trials in education research 1980–2016', Routledge, *Educational Research*, vol. 60, no. 3, pp. 276–291.

Cross, D. and Falconer, S. 2021, *Our Schools - Our Future*, Independent Schools Queensland.

CYDA (Children and Young People with Disability Australia) 2019, *Time for Change: The State of Play for Inclusion of Students with Disability, Results from the 2019 CYDA National Education Survey*.

Dandolopartners 2017, *Teach for Australia Program Evaluation Report*.

—— 2021, *High Achieving Teachers program evaluation*.

Davies, N., Atkins, G. and Sodhi, S. 2021, *Using targets to improve public services*, Institute for Government, London.

Dawson, A., Yeomans, E. and Brown, E.R. 2018, 'Methodological challenges in education RCTs: reflections from England's Education Endowment Foundation', Routledge, *Educational Research*, vol. 60, no. 3, pp. 292–310.

Deakin University 2022, *Master of Teaching (Secondary)*, Deakin University.

Deloitte 2017a, *Catch the wave: The 21st-century career*.

—— 2017b, *Principal workload and time use study*, NSW Department of Education.

Deloitte Access Economics 2016, *The economic impact of improving schooling quality*, November, Department of Education.

—— 2017a, *Review of education for students with disability in Queensland state schools*.

—— 2017b, *School quality in Australia*, December, Department of Education.

—— 2019, *Unpacking drivers of learning outcomes of students from different backgrounds*, Department of Education.

Department of Education 2019a, *Executive Minute on Joint Committee of Public Accounts and Audit Report No.476: Australian Government Funding*.

—— 2019b, *Executive Minute to the Joint Committee of Public Accounts and Audit on Report No. 476 Australian Government Funding*, 14 August.

—— 2021, *Year 1 Phonics Check*, Text, https://www.education.gov.au/australian-curriculum/year-1-phonics-check (accessed 7 December 2022).

Department of Finance 2021, *Set evaluation objectives*, https://www.finance.gov.au/government/managing-commonwealth-resources/planning-and-reporting/commonwealth-performance-framework/evaluation-commonwealth-rmg-130/how-evaluate/2-set-evaluation-objectives (accessed 9 March 2022).

DESE (Department of Education, Skills and Employment) 2019, *Benefits of educational attainment*.

—— 2020, *Disability Standards for Education 2005: 2020 Review*, Canberra.

—— 2021a, *Australian Education Research Organisation (AERO)*.

—— 2021b, *Improving National Data Quality*, Canberra.

—— 2021c, *National Unique Student Identifier (USI) for School Students*, Canberra.

—— 2021d, *Online Formative Assessment Initiative*, Canberra.

—— 2021e, *Review of Senior Secondary Pathways*, Canberra.

—— 2021f, *Reviewing Teacher Workforce Needs*, Canberra.

—— 2021g, *Strengthening the Initial Teacher Education Accreditation System*, Canberra.

——2022a, *Australian Early Development Census National Report 2021*.

—— 2022b, *Engaged Classrooms: Supporting all students to achieve*, https://www.dese.gov.au/engaged-classrooms-supporting-all-students-achieve (accessed 26 August 2022).

—— 2022c, *National School Reform Agreement: 2021 Annual Report on progress in implementing the national policy initiatives*, June, Canberra.

DET (Department of Education and Training) 2016, *Submission to the Productivity Commission Inquiry into the National Education Evidence Base*.

Dinham, S., Anderson, M., Caldwell, B. and Weldon, P. 2011, 'Breakthroughs in school leadership development in Australia', *School Leadership & Management*, vol. 31, no. 2, pp. 139–154.

Dix, K., Ahmed, S.K., Carslake, T., Sniedze-Gregory, S., O'Grady, E. and Trevitt, J. 2020, *Student health and wellbeing: A systematic review of intervention research examining effective student wellbeing in schools and their academic outcomes*, Evidence for Learning, Sydney.

DoE (Australian Government Department of Education) 2022a, *Improving VET delivered to secondary students*, https://www.dese.gov.au/skills-reform/skills-reform-overview/improving-vet-delivered-secondary-students#toc-what-is-being-done- (accessed 25 August 2022).

—— 2022b, *Alternative Pathways*, https://www.dese.gov.au/teaching-and-school-leadership/alternative-pathways (accessed 21 July 2022).

—— 2022c, *Draft National Teacher Workforce Action Plan*.

—— 2022d, *Final Report of the Quality Initial Teacher Education Review*, https://www.education.gov.au/quality-initial-teacher-education-review/announcements/final-report-quality-initial-teacher-education-review (accessed 16 December 2022).

Dolton, P.J. 2006, 'Chapter 19 Teacher Supply', *Handbook of the Economics of Education*, vol 2, Elsevier, pp. 1079–1161.

Downey, L. 2007, *Calmer Classrooms: A Guide to Working with Traumatised Children*, Victorian Child Safety Commissioner, Melbourne.

Drysdale, L. and Gurr, D. 2011, 'Theory and practice of successful school leadership in Australia', *School Leadership & Management*, vol. 31, no. 4, pp. 355–368.

DSS (Department of Social Services) 2021a, *Australia's Disability Strategy 2021-2031*.

—— 2021b, *Australia's Disability Strategy 2021-2031 Outcomes Framework*.

Durlak, J., Weissberg, R., Dymnicki, A., Taylor, R.D. and Schellinger, K. 2011, 'Enhancing students' social and emotional development promotes success in school: Results of a meta-analysis', *Child Development*, vol. 82, pp. 474–501.

Eacott, S. 2017, 'School leadership and the cult of the guru: the neo-Taylorism of Hattie', *School Leadership & Management*, vol. 37, no. 4, pp. 413–426.

Echazarra, A. and Radinger, T. 2019, *Learning in rural schools: Insights from PISA, TALIS and the literature*, OECD Education Working Paper No. 196, Paris.

Edovald, T. and Nevill, C. 2021, 'Working Out What Works: The Case of the Education Endowment Foundation in England', *ECNU Review of Education*, vol. 4, no. 1, pp. 46–64.

Education Council 2009, *Principles and Protocols for Reporting on Schooling in Australia*.

—— 2018, *Australian Student Wellbeing Framework*.

—— 2020a, *Education Council Meeting Communique - 15 December 2020*, Carlton.

—— 2020b, *National Initiatives to Support Teaching and School Leadership*.

—— 2021, *National School Reform Agreement: 2020 Annual Report on Progress in Implementing the National Policy Initiatives*.

Emerson, L., Fear, J., Fox, S. and Sanders, E. 2012, *Parental engagement in learning and schooling: Lessons from research.*, A report by the Australian Research Alliance for Children and Youth (ARACY) for the Family-School and Community Partnerships Bureau: Canberra.

EMM (Education Ministers Meeting) 2022a, *Communique*.

—— 2022b, *Education Ministers Meeting Communique - 15 December 2022*.

—— 2022c, *National Teacher Workforce Plan*.

—— 2022d, *The National Teacher Workforce Action Plan December 2022*.

ESA (Education Services Australia) 2022, *Student Wellbeing Hub*, https://www.esa.edu.au/solutions/our-solutions/student-wellbeing-hub (accessed 26 August 2022).

Fahey, G. 2022, *Teacher workforce: fiction vs fact*, Research Report 43, Centre for Independent Studies.

Filia, K., Brennan, N., Freeburn, T., Clarke, E., Browne, V., Kos, A., Plummer, J., McGorry, P., Christie, R., Killackey, E. and Gao, C.X. 2022, *Clusters of COVID-19 Impact: Identifying the impact of COVID-19 on young Australians in 2021*, Mission Australia and Orygen, Sydney, Melbourne.

Flack, D.C.B., Walker, D.L., Bickerstaff, A., Earle, H. and Margetts, C. 2020, *Educator perspectives on the impact of covid-19 on teaching and learning in Australia and New Zealand*, Pivot Professional Learning.

Forbes, M., Barker, A. and Turner, S. 2010, *The effects of education and health on wages and productivity*, Productivity Commission Staff Working Paper, Melbourne.

Fray, L., Jaremus, F., Gore, J., Miller, A. and Harris, J. 2022, 'Under pressure and overlooked: the impact of COVID-19 on teachers in NSW public schools', *The Australian Educational Researcher*.

Fredricks, J.A., Blumenfeld, P.C. and Paris, A.H. 2004, 'School engagement: Potential of the concept, state of the evidence', *Review of Educational Research*, vol. 74, no. 1, pp. 59–109.

Freeman, L. 2013, 'NAPLAN: A Thin Veil of Fairness – Excerpt from Senate Submission into the effectiveness of NAPLAN', *TESOL in context*, vol. 23, no. 1 & 2, pp. 74–81.

Goldhaber, D., Krieg, J. and Theobald, R. 2020, 'Effective like me? Does having a more productive mentor improve the productivity of mentees?', *Labour Economics*, vol. 63, p. 101792.

Gonski, D., Arcus, T., Boston, K., Gould, V., Johnson, W., O'Brien, L., Perry, L.-A. and Roberts, M. 2018, *Through Growth to Achievement: The Report of The Review to Achieve Educational Excellence in Australian Schools*, Commonwealth of Australia.

Goodsell, B., Lawrence, D., Ainley, J., Sawyer, M., Zubrick, S. and Maratos, J. 2017, *Child and adolescent mental health and educational outcomes*, University of Western Australia Graduate School of Education, Perth.

Gore, J., Holmes, K., Smith, M. and Fray, L. 2015, *Investigating the factors that influence the choice of teaching as a first career. A Report commissioned by the Queensland College of Teachers.*, University of Newcastle.

Goss, P. 2017, *Towards and adaptive education system in Australia*, Grattan Institute.

—— and Chisholm, C. 2016, *Widening gaps: what NAPLAN tells us about student progress*, Technical Report, Grattan Institute.

—— and Sonnemann, J. 2019, *Attracting high achievers to teaching*, Report No. 2019-08, Grattan Institute.

—— and —— 2020, *Top Teachers: Sharing expertise to improve teaching*, Report No. 2020-02, Grattan Institute.

——, —— and Emslie, O. 2018, *Measuring student progress: A state-by-state report card*, Report No. 2018-14, Grattan Institute.

Gregory, T., Dal Grande, E., Brushe, M., Engelhardt, D., Luddy, S., Guhn, M., Gadermann, A., Schonert-Reichl, K.A. and Brinkman, S. 2021, 'Associations between School Readiness and Student Wellbeing: A Six-Year Follow Up Study', *Child Indicators Research*, vol. 14, no. 1, pp. 369–390.

Grissom, J.A., Egalite, A.J. and Lindsay, C.A. 2021, *How Principals Affect Students and Schools: A Systematic Synthesis of Two Decades of Research*, The Wallace Foundation, New York.

Gurr, D., Drysdale, L. and Goode, H. 2010, 'Successful School Leadership in Australia: A Research Agenda.', *International Journal of Learning*, vol. 17, no. 4, pp. 113–129.

Hairon, S. 2017, 'Teacher Leadership in Singapore: The Next Wave of Effective Leadership', *Research in Educational Administration and Leadership*, vol. 2, no. 2, pp. 170–194.

Hallinger, P. and Heck, R.H. 1998, 'Exploring the Principal's Contribution to School Effectiveness: 1980-1995', *School Effectiveness and School Improvement*, vol. 9, no. 2, pp. 157–191.

Halsey, J. 2018a, *Independent Review into Regional Rural and Remote Education - Final Report*.

—— 2018b, *Independent Review into Regional, Rural and Remote Education - Literature Review*.

Hanushek, E., Kain, J.F. and Rivkin, S.G. 1999, *Do Higher Salaries Buy Better Teachers?*, Working Paper 7082, NBER.

Hanushek, E.A. and Woessmann, L. 2012, 'Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation', *Journal of Economic Growth*, vol. 17, no. 4, pp. 267–321.

Hanushek, H.A. 2011, 'The Economic Value of Higher Teacher Quality', *Economics of Education Review*, vol. 30, pp. 466–479.

Hattie, J. 2003, 'Teachers Make a Difference, What is the research evidence?', presented at Paper presented at the Building Teacher Quality: What does the research tell us ACER Research Conference, Melbourne.

Headspace 2020a, *About SAFEMinds*, https://safeminds.org.au/about/ (accessed 26 August 2022).

—— 2020b, *Coping with Covid: The Mental Health Impact on Young People Accessing Headspace Services*, Melbourne.

Heckman, J. and Masterov, D. 2007, *The Productivity Argument for Investing in Young Children*.

Heffernan, A. and Pierpoint, A. 2020, *Autonomy, Accountability, and Principals' Work: An Australian Study*, Final Report.

Helal, M. and Coelli, M.B. 2016, *How Principals Affect Schools*, SSRN Scholarly Paper, 1 June, ID 2788316, Social Science Research Network, Rochester, NY.

Henebery, B. 2022, *Today's teacher crisis will be tomorrow's leadership crisis, warns expert*, https://www.theeducatoronline.com/k12/news/todays-teacher-crisis-will-be-tomorrows-leadership-crisis-warns-expert/280671 (accessed 27 July 2022).

Higgins, D. and Morley, S. 2014, *Engaging Indigenous parents in their children's education*, July, AIHW.

Hill, Adam, Lyons, Anthony, Jones, Jami, McGowan, Ivy, Carman, Marina, Parsons, Matthew, Power, Jennifer and Bourne, Adam 2021, *Writing Themselves in 4: The Health and Wellbeing of Lgbtqa+ Young People in Australia. National Report.*, La Trobe University, Melbourne.

Hobbs, L. and Porsch, R. 2021, 'Hobbs and Porsch 2021', *European Journal of Teacher Education*, vol. 44, no. 5, pp. 601–610.

House of Representatives Standing Committee on Employment, Education and Training 2020, *Education in remote and complex environments*, The Parliament of the Commonwealth of Australia, Canberra.

House of Representatives Standing Committee on Indigenous Affairs 2017, *The power of education: From surviving to thriving. Educational opportunities for Aboriginal and Torres Strait Islander students*, December, The Parliament of the Commonwealth of Australia, Canberra.

Hunter, J., Haywood, A. and Parkinson, N. 2022, *Ending the lesson lottery: how to improve curriculum planning in schools*, Grattan Institute, Melbourne, p. 82.

—— and Sonnemann, J. 2022, 'Student catch-up programs are vital beyond pandemic', *The Australian*, 12 September, https://www.theaustralian.com.au/commentary/student-catchup-programs-are-vital-beyond-pandemic/news-story/ae64adc1dbadd001cb8981bd5acbd5ee?btr=0f1a5a9724c5b9c6d12f1ee31070c6cd (accessed 22 November 2022).

——, —— and Joiner, R. 2022, *Making Time for Great Teaching: How Better Government Policy Can Help*, Grattan Institute, Melbourne.

Huppert, F.A. 2009, 'Psychological Well-being: Evidence Regarding its Causes and Consequences', *Applied Psychology: Health and Well-Being*, vol. 1, no. 2, pp. 137–164.

ImpactEd 2022, *Oak National Academy 2021/22 Evaluation Report*, London.

Ingersoll, R. 2019, 'Measuring out-of-field teaching', *Examining the Phenomenon of "Teaching Out-of-field"*, Springer, pp. 21–51.

Ingvarson, L. and Rowe, K. 2008, 'Conceptualising and Evaluating Teacher Quality: Substantive and Methodological Issues', *Australian Journal of Education*, vol. 52, no. 1, pp. 5–35.

ITAC (Institute of Teacher Aide Courses) 2021, *What do teacher aides do?*, https://www.itac.edu.au/what-do-teachers-aides-do (accessed 18 August 2022).

Jay, M.A., Grath-Lone, L.M. and Gilbert, R. 2019, 'Data Resource: the National Pupil Database (NPD)', *International Journal of Population Data Science*, vol. 4, no. 1, pp. 1–11.

Jennings, J. 2014, 'No school experience required - government considers outside principals', *The Age*, 7 August.

Joseph, R. 2022, *A shorter path to teaching: Exploring one-year postgraduate qualifications*, Sydney.

Knight, R. and Rossi, S. 2018, *Children in out-of-home care and their educational outcomes: A literature review September 2018*, The Australian Centre for Philanthropy and Nonprofit Studies, Queensland University of Technology.

van der Kolk, B.A. 2007, 'The Developmental Impact of Childhood Trauma', in Kirmayer, L.J., Barad, M. and Lemelson, R. (eds), *Understanding Trauma: Integrating Biological, Clinical, and Cultural Perspectives*, Cambridge University Press, Cambridge, pp. 224–241.

Krakouer, J. 2015, *Literature review relating to the current context and discourse on Indigenous cultural awareness in the teaching space: Critical pedagogies and improving Indigenous*

learning outcomes through cultural responsiveness, November, ACER.

Lamb, S. and Huo, S. 2017, *Counting the costs of lost opportunity in Australian education*, Mitchell Institute.

Lane, R., Parrila, R., Bower, M., Bull, R., Cavanagh, M., Forbes, A., Jones, T., Leaper, D., Khosronejad, M., Pellicano, L., Powell, S., Ryan, M. and Skrebneva, I. 2019, *Formative Assessment Evidence and Practice Literature Review*, AITSL, Melbourne.

Lawrence, D., Dawson, V., Houghton, S., Goodsell, B. and Sawyer, M.G. 2019, 'Impact of mental disorders on attendance at school', *Australian Journal of Education*, vol. 63, no. 1, pp. 5–21.

——, Johnson, S., Hafekost, J., Boterhoven de Haan, K., Sawyer, M., Ainley, J. and Zubrick, S.R. 2015, *The Mental Health of Children and Adolescents*, Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing, August, Department of Health, Canberra.

Leigh, A. 2008, 'Returns to Education in Australia', *Economic papers*, vol. 27, no. 3, pp. 233–249.

—— 2010, 'Estimating teacher effectiveness from two-year changes in students' test scores', *Economics of Education Review*, vol. 29, no. 3, pp. 480–488.

Leithwood, K., Patten, S. and Jantzi, D. 2010, 'Testing a Conception of How School Leadership Influences Student Learning', *Educational Administration Quarterly*, vol. 46, no. 5, pp. 671–706.

Lloyd, N., Lewthwaite, B., Osborne, B. and Boon, H. 2015, 'Effective Teaching Practices for Aboriginal and Torres Strait Islander Students: A Review of the Literature', *Australian Journal of Teacher Education*, vol. 40, no. 11.

Louden, W. 2008, '101 Damnations: the persistence of criticism and the absence of evidence about teacher education in Australia', *Teachers and Teaching: theory and practice*, vol. 14, no. 4, pp. 357–368.

Lumsden, M., Semo, R., Blomberg, D. and Lim, P. 2015, *Linking NAPLAN scores to the Longitudinal Surveys of Australian Youth*, NCVER, Adelaide.

Lynch, K., Hill, H., Gonzalez, K. and Pollard, C. 2019, 'Strengthening the research base that informs STEM instructional improvement efforts: A meta-analysis.', *Educational Evaluation and Policy Analysis*, vol. 43, no. 3, pp. 260–293.

Lyons, S., Schweitzer, L. and Ng, E. 2014, 'How have careers changed? An investigation of changing career patterns across four generations', *Journal of Managerial Psychology*, vol. 30, no. 1, pp. 8–21.

Mahuteau, S., Karmel, T. and Zhang, W. 2021, *NDDA Pilot South Australian Test Case: Education to Employment*, https://ndda.dss.gov.au/wp-content/uploads/2022/09/14-Summary-of-NDDA-Pilot-findings-Education-to-Employment.pdf (accessed 12 December 2022).

Mason, S. and Matas, C. 2015, 'Teacher Attrition and Retention Research in Australia: Towards a New Theoretical Framework', *Australian Journal of Teacher Education*, vol. 40, no. 11, pp. 45–66.

Masters, G. 2016, *The 'long tail' of underachievement*, 1 February, Australian Council for Educational Research.

MCEETYA (Ministerial Council on Education, Employment, Training and Youth Affairs) 2009, *Ministerial Council on Education, Employment, Training and Youth Affairs four-year plan, 2009 – 2012: A Companion Document for the Melbourne Declaration on Educational Goals for Young Australians*, March.

McGaw, B., Louden, W. and Wyatt-Smith, C. 2020, *NAPLAN Review Final Report*, August.

McGrath-Champ, S., Wilson, R., Stacey, M. and Fitzgerald, S. 2018, *Understanding Work in Schools: The foundation for teaching and learning.*

McKinsey and Compary 2007, *How the worlds' best performing school systems come out on top*.

Mitchell, R.J., McMaugh, A., Schniering, C., Cameron, C.M., Lystad, R.P., Badgery-Parker, T. and Nielssen, O. 2021, 'Mental disorders and their impact on school performance and high school completion by gender in Australia: A matched population-based cohort study', *Australian and New Zealand Journal of Psychiatry*, Preprints.

Monseur, C. and Berezner, A. 2007, 'The Computation of Equating Errors in International Surveys in Education', *Journal of Applied Measurement*, vol. 8, no. 3, pp. 323–335.

Morrison, A., Rigney, L.-I., Hattam, R. and Diplock, A. 2019, *Towards an Australian Culturally Responsive Pedagogy. A narrative review of the literature*, University of South Australia.

Mundy, L.K., Canterford, L., Tucker, D., Bayer, J., Romaniuk, H., Sawyer, S., Lietz, P., Redmond, G., Proimos, J., Allen, N. and Patton, G. 2017, 'Academic Performance in Primary School Children With Common Emotional and Behavioral Problems', *Journal of School Health*, vol. 87, no. 8, pp. 593–601.

Munns, G., O'Rourke, V. and Bodkin-Andrews, G. 2013, 'Seeding success: Schools that work for Aboriginal Students', *The Australian Journal of Indigenous Education*, vol. 42, no. 1.

National Disability Insurance Agency 2021, *Young people in the NDIS*, https://data.ndis.gov.au/reports-and-analyses/participant-groups/young-people-ndis (accessed 12 December 2022).

National Skills Commission 2022, *2022 Skils Priority List*.

Naylor, R. and Sayed, Y. 2014, *Teacher Quality: Evidence Review*, Department of Foreign Affairs and Trade.

NCTSN (National Child Traumatic Stress Network, Complex Trauma Task Force) 2003, *Complex Trauma in Children and Adolescents*, White Paper, National Child Traumatic Stress Network.

NHIPPC (National Health Information and Performance Principal Committee) 2017, *Australian Health Performance Framework*.

NISL (National Institute for School Leadership) 2019, *Singapore's Career Ladder System*, Technical Note.

NMHC (National Mental Health Commission) 2021, *The National Children's Mental Health and Wellbeing Strategy*, Sydney.

Noble, T. and Wyatt, T. 2008, *Scoping study into approaches to student wellbeing*, Australian Catholic University and Erebus International.

NT DoE (Northern Territory Department of Education) 2022, *Annual school survey*, https://education.nt.gov.au/statistics-research-and-strategies/school-survey (accessed 19 August 2022).

Nous Group 2011, *Schooling challenges and opportunities. A report for the review of funding for schooling panel*, Melbourne Graduate School of Education.

—— 2014, *Perspectives On the Use of Performance Frameworks in the Australian Federation*, Canberra.

NSC (National Skills Commission) 2022, *Projecting employment to 2026*,

https://www.nationalskillscommission.gov.au/insights/projecting-employment-2026 (accessed 8 November 2022).

NSW Aboriginal Education Consultative Group 2021, *NSW AECG Submission to the Quality Initial Teacher Education Review*.

NSW DEC (NSW Department of Education and Communities) 2015, *The Wellbeing Framework for Schools*, Sydney, p. 9.

NSW Department of Education 2021a, *Quality Time Action Plan to simplify administrative practices in schools*.

—— 2021b, *Review on the NSW vocational education and training sector*, https://education.nsw.gov.au/about-us/strategies-and-reports/our-reports-and-reviews/review-on-the-nsw-vocational-education-and-training-sector (accessed 26 August 2022).

—— 2022a, *About Tell Them From Me*, https://education.nsw.gov.au/student-wellbeing/tell-them-from-me/about-tell-them-from-me- (accessed 19 August 2022).

—— 2022b, *NSW Education Wallet*, https://education.nsw.gov.au/public-schools/career-and-study-pathways/nsw-student-learner-profile---digital-wallet.html (accessed 8 December 2022).

NSW DoE (New South Wales Department of Education) 2022a, *State Education Research Applications Process (SERAP)*, Sydney.

—— 2021a, *Student Re-engagement Programs*, Sydney.

—— 2021b, *Results of our Progress Survey*, https://education.nsw.gov.au/about-us/strategies-and-reports/our-reconciliation-action-plan/reconciliation-action-plan/results-of-our-progress-survey--2021-- (accessed 21 November 2022).

—— 2022b, *The Case for Change: A Briefing on Rewarding Excellence in Teaching*.

——2022c, *The Quality Time Program*, NSW Government.

NSW Government 2021, *Local Schools, Local Decisions – a Reform from the Past*, https://education.nsw.gov.au/public-schools/school-success-model/school-success-model-explained/local-schools-local-decisions (accessed 28 July 2022).

—— 2022, *Accelerating top teacher numbers across NSW*.

NSW Parliament Legislative Council Portfolio Committee No. 3 – Education 2022, *Great Teachers, Great Schools: Lifting the Status of Teaching, Teacher Quality and Teacher Numbers in New South Wales, Report of the inquiry into teacher shortages in New South Wales*, Report no. 48.

NSW PC (NSW Productivity Commission) 2021, *Productivity Commission White Paper 2021 Rebooting the Economy*.

Oak National Academy 2022, *About us*, https://www.thenational.academy/about-us/who-we-are (accessed 7 December 2022).

OECD (Organisation for Economic Co-operation and Development) 2019a, *OECD Teachers' Professional Learning (TPL) Study: Design and Implementation Plan*, 11 April, OECD, https://www.oecd-ilibrary.org/education/a-flying-start_cf74e549-en (accessed 17 November 2022).

—— 2019b, *Results from TALIS 2018*.

—— 2010, *Improving Health and Social Cohesion through Education*, OECD Publishing, Paris.

—— 2011, *School autonomy and accountability: Are they related to student performance?*, PISA in Focus, OECD Publishing, Paris.

—— 2014, *TALIS 2013 Results: An International Perspective on Teaching and Learning*.

—— 2017a, *Student Questionnaire for PISA 2018*.

—— 2017b, 'Students' well-being: What it is and how it can be measured', *PISA 2015 Results (Volume III): Students' Well-Being*, OECD Publishing, Paris.

—— 2016, *Low-Performing Students: Why they are falling behind and how to help them succeed*. PISA. OECD Publishing, Paris.

—— 2018, *Effective Teacher Policies: Insights from PISA*, 11 June, OECD Publishing, Paris.

—— (Organisation for Economic Cooperation and Development) 2019c, 'PISA 2018 Well-being Framework', *PISA 2018 Assessment and Analytical Framework*, Paris.

—— 2019d, *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, Paris.

—— 2020, *PISA 2018 Technical Report: Chapter 4 Sample Design*.

—— 2021, *Education at a Glance 2021: OECD Indicators*, OECD Publishing, Paris.

—— 2022, *About PISA*, https://www.oecd.org/pisa/aboutpisa/ (accessed 25 August 2022).

Office of the Auditor General Western Australia 2022, *Delivering School Psychology Services*, Perth.

Office of the eSafety Commissioner 2022, *Who we are*, eSafety Commissioner, https://www.esafety.gov.au/about-us/who-we-are (accessed 31 August 2022).

O'Flaherty, A. 2022, 'Rising COVID case numbers leave Queensland schools struggling with staff shortages', *ABC News*, 23 March.

O'Hare, K., Hussain, A., Laurens, K.R., Hindmarsh, G., Carr, V.J., Tzoumakis, S., Harris, F. and Green, M.J. 2021, 'Self-reported mental health of children known to child protection services: an Australian population-based record linkage study', *European child & adolescent psychiatry*, Ahead of print.

ONDC (Office of the National Data Commissioner) 2022, *Introducing the DATA Scheme*.

Paul, L. 2021a, *Next Steps: Report of the Quality Initial Teacher Education Review*.

—— 2021b, *Quality Initial Teacher Education Review 2021 Discussion Paper*.

PC (Productivity Commission) 2012a, *Schools Workforce*, Research report, Canberra.

—— 2012b, *Schools workforce*, Productivity Commission, Canberra, A.C.T.

—— 2013, *On Efficiency and Effectiveness: Some Definitions*, Staff Research Note, Canberra.

—— 2016a, *Background paper 2: Contributors to Education Achievement - Indigenous and non-Indigenous primary school students*, Commission Research Paper.

—— 2016b, *National Education Evidence Base,* Report no. 80, Canberra.

—— 2017a, *Data Availability and Use*.

—— 2017b, *University Education*, Shifting the Dial: 5 year Productivity Review, Supporting Paper no. 7.

—— 2019a, *Review of the National Disability Agreement*, Study Report, Canberra.

—— 2019b, *The Demand Driven University System: A Mixed Report Card*, Commission Research Paper, Canberra.

—— 2020a, *Mental Health*, Report no. 95.

—— 2020b, *National Agreement for Skills and Workforce Development Review*, Study Report, Canberra.

—— 2021a, *Mental health and suicide prevention stocktake*.

—— 2021b, *Submission to the Quality Initial Teacher Education Review*, Canberra.

—— 2022a, *5-year Productivity Inquiry: From learning to growth*, Interim Report 5, Canberra, September.

—— 2022c, *Australian Government Productivity Commission - Performance Reporting Dashboard National School Reform Agreement*, https://performancedashboard.d61.io/education (accessed 4 July 2022).

—— 2022d, *Closing the Gap Information Repository*, https://www.pc.gov.au/closing-the-gap-data/dashboard/socioeconomic/outcome-area5 (accessed 4 July 2022).

Peacock, H., Prehn, J., Guerzoni, M., Aitken, W. and Anderson, C. 2020, 'Upholding heightened expectations of Indigenous children? Parents do, teachers do not', *TheAustralian Journal of Indigenous Education*, vol. 50.

Pearce, N., Cross, D., Epstein, M., Johnston, R. and Legge, E. 2019, *Strengthening School and System Capacity to Implement Effective Interventions to Support Student Behaviour and Wellbeing in Nsw Public Schools: An Evidence Review*, NSW Department of Education, Sydney.

Perfect, M.M., Turley, M.R., Carlson, J.S., Yohanna, J. and Saint Gilles, M.P. 2016, 'School-Related Outcomes of Traumatic Event Exposure and Traumatic Stress Symptoms in Students: A Systematic Review of Research from 1990 to 2015', *School Mental Health*, vol. 8, no. 1, pp. 7–43.

Pont, B. 2014, 'School Leadership: From Practice to Policy', *IJELM – International Journal of Educational Leadership & Management*, no. 1, pp. 4–28.

—— 2020, 'A Literature Review of School Leadership Policy Reforms', *European Journal of Education*, vol. 5, no. 1, pp. 154–168.

——, Nusche, D., Moorman, H. and Hopkins, D. 2008, *Improving School Leadership*, vol 1: Policy and Practice, OECD Publishing, Paris.

Prevention United 2019, *Building Victoria's capacity to prevent mental health conditions: Submission to the Royal Commission into Mental Health*.

Queensland Department of Education 2018, *Student Learning and Wellbeing Framework*, Brisbane.

—— 2022, *Curriculum into the Classroom*, text, Education, https://education.qld.gov.au/curriculum/stages-of-schooling/C2C (accessed 8 December 2022).

Raising Children Network 2021, *Children with disability: mental health & physical health*, https://raisingchildren.net.au/disability/mental-health-physical-health (accessed 20 December 2022).

Richter, D., Kunter, M., Klusmann, U., Lüdtke, O. and Baumert, J. 2011, 'Professional development across the teaching career: Teachers' uptake of formal and informal learning opportunities', *Teaching and Teacher Education*, vol. 27, no. 1, pp. 116–126.

Riley, P., See, S.-M., Marsh, H. and Dicke, T. 2021, *The Australian Principal Occupational Health, Safety and Wellbeing Survey (IPPE Report)*.

Rivkin, S., Hanushek, E. and Kain, J. 2005, 'Teachers, Schools, and Academic Achievement', *Econometrica*, vol. 73, no. 2, pp. 417–458.

Rose, T. and McGowan, M. 2022, '"A perfect storm": government forecasts shortfall of 1,700 teachers in NSW', *The Guardian*, 15 March.

Royal Commission into Victoria's Mental Health System 2021, *Final Report Volume 2: Collaboration to support good mental health and wellbeing*, Melbourne.

Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability 2021a, *Public hearing 7: Barriers experienced by students with disability in accessing and obtaining a safe, quality and inclusive school education and consequent life course impacts*, Brisbane.

—— 2021b, *Students with disability face serious barriers to accessing safe, quality and inclusive education*, Media release, 17 November.

SA Department for Education 2022, *Phonics screening check for student understanding of letters and sounds*, education.sa.gov.au, https://www.education.sa.gov.au/parents-and-families/curriculum-and-learning/literacy-and-numeracy/phonics-screening-check-student-understanding-letters-and-sounds (accessed 7 December 2022).

SA DfE (South Australian Department for Education) 2021a, *Department for Education Strategic Plan – Towards 2028*, Adelaide.

—— 2021b, *Wellbeing for Learning and Life*, Adelaide.

—— 2022a, *About the wellbeing and engagement collection*, https://www.education.sa.gov.au/department/research-and-statistics/statistics-and-data/wellbeing-and-engagement-collection-survey/about-wellbeing-and-engagement-collection (accessed 19 August 2022).

—— 2022b, *Wellbeing and Engagement Collection 2022: All SA students*, Adelaide.

Sackville, R., Galbally, R. and Mason, A. 2021, *Royal Commission into violence, abuse, neglect and exploitation of people with disability. Public Hearing 7 - Barriers experienced by students with disability in accessing and obtaining a safe, quality and inclusive school education and consequent life course impacts*.

Santamaría, L.J. and Santamaría, A.P. 2016, 'Toward Culturally Sustaining Leadership: Innovation beyond "School Improvement" Promoting Equity in Diverse Contexts', *Education Sciences*, vol. 6, no. 4, pp. 1–8.

Santiago, P. 2002, *Teacher Demand and Supply: Improving Teaching Quality and Addressing Teacher Shortages*, OECD Publishing, Paris.

Santoro, N. and Reid, J.-A. 2006, '"All things to all people": Indigenous teachers in the Australian teaching profession', *European Journal of Teacher Education*, vol. 29, no. 3, pp. 287–303.

Sarra, C. 2014, 'Beyond victims: The challenge of leadership', *2014 Griffith Review Annual Lecture*.

——, Spillman, D., Jackson, C., Davis, J. and Bray, J. 2018, 'High-expectations relationships: A foundation for enacting high expectations in all Australian schools', *The Australian Journal of Indigenous Education*, vol. 49, no. 1, pp. 32–45.

Save the Children 2022, *The True Cost of Covid-19: A Generation Left Behind*.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2022a, *Report on Government Services*

2022 - Part B Child Care Education and Training, Productivity Commission, Canberra.

—— (Steering Committee for the Review of Government Service Provision) 2022b, *Report on Government Services 2022 - Part E Health*, Productivity Commission, Canberra.

See, S.-M., Kidson, P., Marsh, H. and Dickie, T. 2022, *The Australian Principal Occupational Health, Safety and Wellbeing Survey 2021 Data*, Institute for Positive Psychology and Education.

Shah, C., Richardson, P. and Watt, H. 2020, *Teaching 'out of field' in STEM subjects in Australia: Evidence from PISA 2015*, GLO Discussion Paper Series 511, Global Labor Organization.

Sharples, J., Webster, R. and Blatchford, P. 2018, *Making Best Use of Teaching Assistants: Guidance Report*, Education Endowment Foundation, London.

Silburn, S., Nutton, G., Arney, F. and Moss, B. 2011, *The first 5 years: starting early*, Topical paper commissioned for the public consultations on the Northern Territory Early Childhood Plan, Northern Territory Government, Darwin.

Smyrk, K. and Moon, S. 2022, 'Students forced back to remote learning as COVID and flu cases increase', *ABC News*, 4 June.

Sonnemann, J. and Goss, P. 2018, *The Commonwealth's role in improving schools*, Grattan Institute.

Spillane, J.P., Halverson, R. and Diamond, J.B. 2001, 'Investigating School Leadership Practice: A Distributed Perspective', *Educational Researcher*, vol. 30, no. 3, pp. 23–28.

Steiner, D., Magee, J. and Jensen, B. 2018, *What we teach matters: How quality curriculum improves student outcomes*, Learning First.

Stokes, L., Hudson-Sharp, N., Dorsett, R., Rolfe, H., Anders, J., George, A., Buzzeo, J. and Munro-Lott, N. 2018, *Mathematical Reasoning: Evaluation report and executive summary*, London.

Sullivan, A., Tippett, N., Johnson, B. and Manolev, J. 2020, *Understanding Disproportionality and School Exclusions, School Exclusions Study Key Issues Paper No. 4.*, University of South Australia.

Tasmanian DECYP (Department for Education, Children and Young People) 2022, *Student Wellbeing and Engagement Survey 2022: All Tasmanian Government School Students*, Hobart.

Tasmanian DoE (Tasmanian Department of Education) 2018, *2018–2021 Child and Student Wellbeing Strategy*, Hobart.

—— 2022, *Annual Student Wellbeing and Engagement Survey*, https://www.education.tas.gov.au/about-us/projects/child-student-wellbeing/student-wellbeing-survey-3/ (accessed 31 August 2022).

—— 2021, *Student Wellbeing and Engagement Survey 2021: All Tasmanian Government School Students*, Hobart.

Taylor, J.A., Getty, S.R., Kowalski, S.M., Wilson, C.D., Carlson, J. and Van Scotter, P. 2015, 'An Efficacy Trial of Research-Based Curriculum Materials With Curriculum-Based Professional Development', American Educational Research Association, *American Educational Research Journal*, vol. 52, no. 5, pp. 984–1017.

TEMAG (Teacher Education Ministerial Advisory Group) 2014, *Action Now: Classroom Ready Teachers*, Canberra.

TFA (Teach For Australia) 2021, *Submission to the Quality Initial Teacher Education Review*.

—— 2022, *161 new TFA teachers step into Australian classrooms in 2022*.

The Centre for Adolescent Health 2018, *Student wellbeing, engagement and learning across the middle years*, Department of Education and Training, Canberra.

The Commonwealth of Australia 2021, *2021 Intergenerational Report*, Canberra.

The Education Hub (2018), *How to develop high expectations teaching*, High Impact Teaching.

The Smith Family 2016, *Improving The Educational Outcomes of Disadvantaged Young Australians: The Learning for Life Program*, Sydney.

—— 2018, *Attendance lifts achievement: Building the evidence base to improve student outcomes*, Sydney.

—— 2021, *Improving young Australians' literacy and numeracy: The catch-up learning program*, July.

Thomson, S., Bortoli, L.D., Underwood, C. and Schmid, M. 2019, *PISA 2018: Reporting Australia's Results. Volume I Student Performance*, Australian Council for Educational Research.

——, De Bortoli, L., Underwood, C. and Schmid, M. 2020, *PISA 2018: Reporting Australia's Results. Volume II Student and School Characteristics*, Australian Council for Educational Research.

—— and Hillman, K. 2019a, *TALIS 2018: Australian Report*, Australian Council for Educational Research.

—— and —— 2019b, *The Teaching and Learning International Survey 2018: Australian Report Volume 1: Teachers and School Leaders as Lifelong Learners*, OECD Publishing, Paris.

—— and —— 2020, *The Teaching and Learning International Survey 2018: Australian Report Volume 2: Teachers and School Leaders as Valued Professionals*, Australian Council for Educational Research.

——, Wernert, N., Buckley, S., Rodrigues, S., O'Grady, E. and Schmid, M. 2021, *TIMSS 2019 Australia. Volume II: School and classroom contexts for learning*, 29 April, Australian Council for Educational Research.

Tobin, M. 2016, 'Childhood trauma: Developmental pathways and implications for the classroom', *Changing Minds: Discussions in Neuroscience, Psychology and Education, Australian Council for Educational Research*, no. 3.

Tomyn, A.J., Fuller Tyszkiewicz, M.D. and Norrish, J.M. 2014, 'The Psychometric Equivalence of the Personal Wellbeing Index School-Children for Indigenous and Non-Indigenous Australian Adolescents | SpringerLink', *Journal of Happiness Studies*, vol. 15, pp. 43–56.

Townsend, M., Robinson, L., Lewis, K., Wright, I., Cashmore, J. and Grenyer, B. 2020, *Educational Outcomes of Children and Young People in Out-of-Home Care in NSW. Pathways of Care Longitudinal Study: outcomes of Children and Young People in Out-of-Home Care*, Research Report Number 14, NSW Department of Communities and Justice.

Tucci, S. 2022, 'Spike in COVID-19 and flu outbreaks leave some schools having to return to remote learning', *ABC News*, 18 May.

Turner, A., Wilson, K. and Wilks, J. 2017, 'Aboriginal Community Engagement in Primary Schooling: Promoting Learning through a Cross-Cultural Lens', *Australian Journal of Teacher Education*, vol. 42, no. 11, pp. 96–116.

UK Department for Education 2021, *School Snapshot Panel: Findings from the July, September and December 2020 Surveys*, London.

—— 2022, *Curriculum Body: Full Business Case*, London.

Victorian DET (Victorian Department of Education and Training) 2021, *Victorian Teacher Supply and Demand Report 2020*.

—— 2022, *Data Collection and Surveys*, https://www2.education.vic.gov.au/pal/data-collection-surveys/guidance/attitudes-school-survey (accessed 19 August 2022).

Walsh, L., Gleeson, J., Cutler, B., Rickinson, M., Cirkony, C. and Salisbury, M. 2022, *What, Why, When and How: Australian Educators' Use of Research and Evidence in Schools*.

Weldon, P. 2018, 'Early career teacher attrition in Australia: evidence, definition, classification and measurement', *Australian Journal of Education*, vol. 62, no. 1, pp. 61–78.

—— and Ingvarson, L. 2016, *School Staff Workload Study: Final Report to the Australian Education Union – Victorian Branch*.

Weldon, P.R. 2016, *Out-of-field teaching in Australian secondary schools*, Policy Insights no. 6, Australian Council for Educational Research.

Wexler Eckman, E. 2006, 'Co-principals: Characteristics of Dual Leadership Teams', *Leadership and Policy in Schools*, vol. 5, no. 2, pp. 89–107.

Whiteford, C., Kelly, N. and Dawes, L. 2021, 'Why Become a Teacher? Exploring Motivations for Becoming Science and Mathematics Teachers in Australia', *Australian Journal of Teacher Education*, vol. 46, no. 3, pp. 1–19.

WHO (World Health Organisation) 2022, *Mental health: strengthening our response*, https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response (accessed 25 August 2022).

Wilkins, R., Vera-Toscano, E., Botha, F. and Dahmann, S.C. 2021, *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 19*, Melbourne Institute Applied Economic and Social Research.

Willis, J., Churchward, P., Bourke, T., Spooner-Lane, R., Crosswell, L., Spina, N., Saleh, A., Hazlewood, K., Cole, J., Fuller, A. and Morgan, A. 2022, *Highly Accomplished and Lead Teachers-New narratives of possibility: A white paper to promote discussion*.

Wilson, B. 2014, *A Share in the Future: Review of Indigenous Education in the Northern Territory*.

Worth, J., Lynch, S., Hillary, J., Rennie, C. and Andrade, J. 2018, *Teacher Workforce Dynamics in England*, National Foundation for Educational Research.

Wright, V. 2015, 'Is ATAR useful for predicting the Success of Australian Students in Initial Teacher Education?', *Australian Journal of Teacher Education*, vol. 40, no. 9.

Zubrick, S., Dudgeon, P., Gee, G., Glaskin, B., Kelly, K., Paradies, Y., Scrine, C. and Walker, R. 2010, 'Social Determinants of Aboriginal and Torres Strait Islander Social and Emotional Wellbeing', in Purdue, N., Dudgeon, P. and Walker, R. (eds), *Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice*, Commonwealth of Australia, Canberra, pp. 75–90.

Zubrick, S., Silburn, S., De Maio, J., Shepherd, C., Griffin, J., Dalby, R., Mitrou, F., Lawrence, D., Hayward, C., Pearson, G., Milroy, H., Milroy, J. and Cox, A. 2006, *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

——, ——, Lawrence, D., Mitrou, F., Dalby, R., Blair, E.M., Griffin, J., Milroy, H., De Maio, J., Cox, A. and Li, J. 2005, *The Western Australian Aboriginal Child Health Survey: The Social and Emotional Wellbeing of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.