



REVIEW TO INFORM A BETTER AND FAIRER EDUCATION SYSTEM - CONSULTATION PAPER



SUBMISSION TO:
THE EXPERT PANEL

AUGUST 2023

Submission to the Review to Inform a Better and Fairer Education System—Consultation Paper

The Academy of the Social Sciences in Australia (the Academy) is an independent, not-for-profit organisation that brings together the multidisciplinary expertise of our nation's leading thinkers to provide practical, evidence-based advice on important social issues facing society.

As the pre-eminent organisation in Australia representing excellence across the social science disciplines, we welcome the opportunity to respond to the Review to Inform a Better and Fairer Education System (the review)—Consultation Paper (the consultation paper).

Overview

Education is fundamental to Australia's economic and social prosperity. Australia is spending more on school-based education than at any point in history, but this is not translating into improved outcomes and enduring inequalities remain.

The Academy strongly supports the review, which provides a timely opportunity to identify the reforms needed to achieve the national aspirations set out in the *Alice Springs (Mparntwe) Education Declaration* and commitment to meeting Sustainable Development Goal 4: Quality Education.

This submission summarises and draws the Expert Panel's attention to two relevant reports: [Building education systems for equity and inclusion](#) and [State of the Social Sciences 2021](#). Together, these reports provide evidence-based insights, along with practical recommendations to deliver better and fairer educational outcomes. This submission also includes a focus on improving student mental health and wellbeing.

To discuss any matters raised in this submission please contact Andrea Verdich, Policy Director on 0438 218 352, or andrea.verdich@socialsciences.org.au.

We make seven recommendations:

Recommendation 1: Adopt the recommendations in *Building education systems for equity and inclusion*.

Recommendation 2: Ensure the school system provides the opportunity for every student to develop broad and deep knowledge across a range of curriculum areas, including the social sciences.

Recommendation 3: Invest in the Academy's new education program to provide high-quality, evidence-based curriculum aligned social science teaching resources for all Australian schools.

Recommendation 4: Improve the quality and accessibility of data about the school system, such as subject offerings and enrolments, staff education and development, and student performance, to support a better understanding of the sector.

Recommendation 5: Support schools to identify and access evidence-based universal interventions by developing a national list of validated programs and providing targeted funding for schools to access evidence-based supports.

Recommendation 6: Guarantee access to early intervention for all students by creating a psychologist to student ratio of 1:500 and supporting schools to undertake local service mapping.

Recommendation 7: Appropriately fund evidence-based youth mental health care services to connect with local schools and conduct 'in-reach' interventions.

Building education systems for equity and inclusion

Building education systems for equity and inclusion (appendix 1) is the final report from a two-day workshop, supported by the Academy. Participants from research, policy and practice came together to discuss ongoing social issues of equity, excellence, and inclusion within education systems. The report content directly relates to *lifting student outcomes, attracting and retaining teachers, data collection and transparency of and accountability for school funding*.

Key findings:

- The Australian Government is spending more on school-based education than at any point in history, but this is not translating into improved outcomes. How financial resources are distributed within the system is important. School funding policies should be designed with a focus on equitable distribution, consider the school's capacity to raise additional funds and acknowledge the loading of school, student, and community educational disadvantages.
- Multiple factors are contributing to the current teacher shortage, which is felt most significantly in hard-to-staff schools. Teacher attraction and retention initiatives must incorporate wraparound supports for housing costs (ownership and rental) and other cost of living pressures.
- There is limited evidence of governments directly consulting educators on policy changes and only 28 per cent of Australian teachers feel that their views are valued by policy makers. A formal body of elected representatives from all school sectors should be established to participate in policy decisions regarding the operations of schools and school systems.
- Improving the equity and inclusiveness of education is not possible without data and evidence. Data linkage (across national and state and territory datasets) should be prioritised to inform effective policy making, program design and research at a national scale.
- Australian education research has an impressive track record, despite being significantly under-represented in funding from the Australian Research Council. Increased investment in education research funding is required to deliver the scale and scope of data necessary to inform policy, matched with incentives to co-design projects with stakeholders.
- Workload issues and time to focus on the core business of teaching and learning is a significant matter for Australian educators. Existing systems and school structures

should be audited to remove administrative requirements that do not directly improve quality teaching.

The report makes eight recommendations related to these findings and we recommend the Expert Panel:

Recommendation 1: Adopt the recommendations in *Building education systems for equity and inclusion*.

The state of the social sciences in schools

The Alice Springs (Mparntwe) Education Declaration recognised that for the Australia education system to achieve equity and excellence every student must develop broad and deep knowledge across a range of curriculum areas. A high-quality education in the social sciences is critical to democratic participation and understanding the social systems that shape our lives.

The Academy's report *State of the Social Sciences 2021* involved broad consultation with stakeholders across schools, universities and public and private sector organisations to analyse the trends, challenges, and opportunities across the social sciences ecosystem. Section 2 (pp. 17-20) (appendix 2) examines the primary and secondary school system and the content directly relates to *lifting student outcomes and data collection*.

Key findings:

- There is a need for more comprehensive, publicly available data about the school system, such as subject offerings, student enrolments, teaching quality or student performance. For example, the National Assessment Program only tests a sample of students in one social sciences subject: Civics and Citizenship.
- The delivery of social sciences can vary significantly across schools and there is no guarantee that all Australians will leave school with the high-quality foundation in social sciences. In senior secondary many social science subjects are offered as electives only from year 9.
- School staffing models often result in teachers being asked to teach outside their expertise, as well as to change subjects' year-to-year. There is a notable lack of high-quality, evidence-based teaching and learning resources to support teachers and student outcomes in social science subject areas. The Academy is currently piloting an [education program](#) to produce evidence-based, curriculum aligned, modules and resources to support Australian secondary schools teach the social sciences.

Based on these findings we recommend the Expert Panel:

Recommendation 2: Ensure the school system provides the opportunity for every student to develop broad and deep knowledge across a range of curriculum areas, including the social sciences.

Recommendation 3: Invest in the Academy's new education program to provide high-quality, evidence-based curriculum aligned social science teaching resources for all Australian schools.

Recommendation 4: Improve the quality and accessibility of data about the school system, such as subject offerings and enrolments, staff education and development, and student performance, to support a better understanding of the sector.

Improving student mental health and wellbeing

The scale and complexity of mental health and wellbeing needs of young people can only be effectively addressed by a systems approach which involves schools, services, governments, and communities working together. The [Global Framework for Youth Mental Health](#), World Health Organization resources¹ and academic research² all describe the attributes of effective systems, and provide a practical blueprint for the role of schools within a well-functioning system.

Schools support students through both prevention and early intervention programs. Programs can be universal, involving all students, or targeted to students with specific mental health needs or vulnerabilities, including referral to specialist services. Across both universal programs and targeted support increased government funding and guidance is required to:

- **Implement evidence-based universal interventions.** Universal interventions aim to promote positive mental health and wellbeing. However, a growing body of research indicates they can have mixed outcomes for students, with some actively causing harm to those with a genuine need for expert professional care.³ Any risk of harm can lead to large effects in a system of over 4 million students. Schools must be supported to easily identify and access evidence-based universal interventions, which have been externally validated by experts. Consistent with the Royal Commission into Victoria's mental health system recommendations, further work is needed to provide a national list of evidence-based supports as well as targeted funding for schools to access validated programs.
- **Guarantee access to early intervention and targeted supports.** Given the large numbers of young people attending school and that half of all mental health conditions emerge by the age of 14, schools play a key role in early intervention. Depending on the context, this must include a minimum ratio of one school psychologist to 500 students and support to develop well-defined processes for the school to map and connect with local specialist care and digital mental health platforms. Strong referral pathways between schools and youth mental health services are needed to ensure that all students receive appropriate support when they need it. Recognising schools exist within a system of supports, dedicated youth mental health services should be appropriately funded and resourced to collaborate with local schools and deliver 'in-reach' interventions.

Recommendation 5: Support schools to identify and access evidence-based universal interventions by developing a national list of validated programs and provide targeted funding for schools to access evidence-based supports.

¹ World Health Organization (2023). [How school systems can improve health and well-being: topic brief: mental health](#).

² McGorry et. Al. (2022) [Designing and scaling up integrated youth mental health care](#) and McGorry and Mei (2023) [Youth mental health: A rising public health challenge](#).

³ Foulkes and Stringaris (2023). [Do no harm: can school mental health interventions cause iatrogenic harm?](#)

Recommendation 6: Guarantee access to early intervention for all students by creating a psychologist to student ratio of 1:500 and supporting schools to undertake local service mapping.

Recommendation 7: Appropriately fund evidence-based youth mental health care services to connect with local schools and conduct 'in-reach' interventions.



Building education systems for equity and inclusion

Academy of the
Social Sciences
in Australia
Workshop
11-12 July, 2022
Final Report

Project lead
Professor Scott Eacott
Gonski Institute for Education
UNSW Sydney

Sponsored by:



The Gonski Institute for Education acknowledges the traditional custodians of the land, sea country and waterways from across Australia.

We honour and pay respects to their Elders past, present and future.

Disclaimer

The opinions in this report reflect the views of the authors and do not necessarily reflect those of ASSA.

Participants

Professor Scott Eacott
Professor Eileen Baldry
Laureate Professor Jenny Gore
Professor Chris Pettit
Professor Suzanne Carrington
Dr Goran Lazendic
Dr Virginia Moller
Dr Rachel Perry
Dr Bala Soundararaj
Rebecca Birch
Cecilia Bradley
Zeina Chalich*
Mark Breckenridge
Elizabeth Goor
Alice Leung
Alex Ioannou
Matthew Johnson
Maura Manning
Andrew Pierpoint
Daniel Pinchas
Diane Robertson
Michael Sciffer

* Could not physically attend due to COVID restrictions.

Funding

The workshop from which this Report is based was funded through a grant from the Academy of the Social Sciences in Australia (ASSA).

Organisation

Gonski Institute for Education, UNSW Sydney
UNSW Sydney
Teachers and Teaching Research Centre, University of Newcastle
City Futures Research Centre, UNSW Sydney
Centre for Inclusive Education, QUT
Australian Council for Educational Research (ACER)
Steiner Education Australia
NSW AIS Evidence Institute
City Futures Research Centre, UNSW Sydney
Teacher, Independent School
Australasian Democratic Education Community
Principal, Catholic Education
Australian Secondary School Principals' Association
Montessori Australia
Head Teacher, Concord High School
Montessori Australia
Australian Special Education Leaders and Principals' Association
Catholic Education Parramatta
Australian Secondary School Principals' Association
Australian Institute for Teaching and School Leadership (AITSL)
Principal, NSW Department of Education
PhD Candidate, Murdoch University

The host and convenors

The workshop was hosted by the Gonski Institute for Education at UNSW Sydney. It was convened by Professor Scott Eacott (Gonski Institute for Education) and Professor Eileen Baldry (Deputy Vice Chancellor, Inclusion and Diversity) with administrative support from Sophia Harvey (Faculty of Arts, Design and Architecture Research Office).

Citation (APA 7th)

Eacott, S., et al., (2022). *Building education systems for equity and inclusion*. Sydney, NSW: Gonski Institute for Education.

Contents

Executive Summary	4
Intergenerational policy failure	5
Beyond the school gate	6
Voice of the profession	7
Data, evidence, research	8
Focus on teaching and learning	9
Summary	10
Building school education systems for equity and inclusion	12
The National Policy and Administrative Framework	13
Key policy levers	15
Intergenerational policy failure	19
Beyond the school gate	24
Voice for the profession	28
Data, evidence, and research	29
Focus on teaching and learning	32
Summary	34
Endnotes	35

Executive Summary



Education is charged with serving as a catalyst for more equitable and inclusive societies. It is at the forefront of social and political debate with constant reforms being proposed to improve outcomes – of all kinds. Governments under fiscal pressure and/or facing under-performance frequently deploy one-stop solutions (e.g., markets) without detailed plans for how exactly improvements will be achieved or at what costs. Existing evidence demonstrates that Australian school systems need to do something different to address stagnant or declining outcomes and enduring inequities.

Australian school systems behave as they are designed in law. From funding to governance, inequities are built into the current system. Choice, autonomy, and accountability have been central design features of Australian education. OECD analysis has shown that choice, autonomy, and accountability can explain large differences in student achievement across countries. This is achieved when reforms and initiatives are targeted at improving outcomes and monitoring the health of the system for delivering on desired outcomes.

School choice has not improved outcomes and instead led to many spillover effects in the distribution of students and schools. Autonomy has not led to significant differentiation in provision rather it has proliferated administrative work at the school-level compromising outcomes. Accountability requirements have not improved outcomes and, in many cases, taken educators away from high impact activities. Parallel policy solutions have not, and cannot, deliver the changes desired in Australian education. Stagnant or declining outcomes and enduring disparity gaps for equity groups are evidence of intergenerational policy failure.

What is required are models offering the basis for more principled ways of prioritising the competing demands of public investment on education with specific attention to equitable and inclusive outcomes. Only then will it be possible to achieve the aspirational targets of government, systems, and the community and not simply leave them to chance. Drawing on the standard three policy levers (choice, autonomy, accountability), a model of school provision is:

$$EIEA = (SC_{g_{sea}} + SA_{f_{se}} + PA_{ao_{si}}) * QT$$

Where EIEA is equitable and inclusive education in Australia, SC is school choice across geolocation _g and socio-educational (dis) advantage _{sea}, SA is school autonomy and particularly over fiscal _f, staffing _s, and educational _e matters, PA is public accountability linked to academic outcomes _{ao} and social impact _{si}, and it is all moderated by the Quality of Teaching (QT).

The above model provides a testable alternative to one-stop solutions and a means to analyse which trade-offs are most important for the delivery of equitable and inclusive education at scale. Being testable and data-driven, the model is particularly attractive when many claims for equity and inclusion do not yield actionable insights or unambiguous answers. Based on analysis of existing policy levers, the model is sensitive to the Australian context and sufficiently robust to deliver principled policy decisions aimed at equity and inclusion. It can also address enduring issues for education in Australia such as intergenerational policy failure, the influence of factors beyond the school gate, an absence of voice for the profession, the role of data, evidence and research, and the need to re-centre a focus on teaching and learning.

Intergenerational policy failure



Education is fundamental to national and individual economic and social prosperity. While the Australian Government is spending more on education than at any point in history, \$70.6B in the last financial year, disparity gaps endure for various equity groups on a range of outcomes. Needs based funding tied to the implementation of evidence-based reforms have been distorted courtesy of the unique policy architecture of Australian federalism. School systems have limited financial resources with which to pursue their objectives and the design of school funding policies plays a key role in ensuring that resources are directed to where they can make the most difference.

Recommendation 1: Total government (Commonwealth and State and Territory) funding to schools must be based on equitable distribution factoring in the capacity of the school to raise other funds, and the loading of school, student, and community educational (dis)advantage.

The policy architecture of Australian federalism means there is neither a national system nor a state/territory system of school-based education. Common critiques of federalism focus on overlap in responsibilities and duplication. Achieving uniformity is difficult, time consuming, and frequently limited to the lowest common denominator. Education is a complex policy domain whose actions impact well beyond state or territory borders. Currently, no jurisdiction wants to be the first to admit there are problems meaning systems can deteriorate substantially before action is taken. Asserting jurisdiction independence and sovereignty surrenders some of the strengths of federalism and removes important failsafe mechanisms targeting overall health of the system.

Recommendation 2: Systemic (Commonwealth and State and Territory) oversight needs to focus on the overall health of the education system with reforms and initiatives targeting inequities in the inputs, throughputs, and outputs of schooling using evidence-based interventions.

A significant policy problem for education is the current teacher shortage. Substantial attention has been directed at Initial Teacher Education programs, and the attraction and retention of educators. Less focus has been granted to affordability of housing for teachers. With housing (ownership and rental) costs rising, servicing commitments on a teachers' salary can be difficult – particularly in major cities. The ability to live near the place where one works, or the drivability or commuting infrastructure means that workforce planning needs to take a multi-dimensional approach built on more than just raising the public profile of the profession.

Recommendation 3: Workforce planning programs need to be expanded to address the supply of housing (both rental and ownership pathways) and non-housing mechanisms (e.g., transport subsidies and income supplements) to reduce cost of living pressures on educators.

Beyond the school gate



Australian Early Development Census (AEDC) data indicates that 22 per cent of children in the first year of formal schooling are vulnerable in at least one domain (e.g., physical, social, emotional, language, and communication), and 11 per cent in two. Early data indicates that the AEDC is a predictor of NAPLAN performance nine years later and with 8.1 per cent of early childhood providers operating with a staffing waiver due to a lack of qualified staff, early intervention is a difficult task.

School-based education exhibits many layers of segregation and stratification. The distribution of students from socio-educational disadvantage or requiring adjustment due to disability are not evenly distributed between sectors (government, catholic, and independent). Peer effects can influence outcomes as much as individual socio-economic status. Cultural context has a large effect (between 33 and 50 per cent) on student performance, and the further a school is located from major cities the lower level of student outcomes. Failure to control for segregation and stratification makes it impossible to identify the drivers of school improvement in different locations and better design interventions aimed at equity and inclusion.

***Recommendation 4:
Education reforms represent a whole of government (Commonwealth and State and Territory and across Departments) approach tied to building the necessary infrastructure with explicit accountability for improved outcomes within timeframes.***

Voice of the profession



The education workforce is frequently charged with responsibility for dealing with many of society's ills. Education is seen as 'a' if not 'the' solution to most social issues and the result is that schools are constantly being asked to do more without having anything removed. Many of the decisions to add things to schooling take place without any engagement or consultation with educators – not education bureaucracies but the educators who work in schools. The result is frequent changes in curriculum documents, additional mandatory training programs, shifting accreditation requirements, updated and expansive administrative requirements, all with negligible impact on student outcomes. This not just intensified teachers' work but de-democratising the profession. TALIS data indicates that only 28.7 per cent of Australian teachers feel that their views are valued by policy makers. With declining educator well-being and in the context of a teacher shortage, it is timely to establish a forum for representatives from the profession to have a voice in decisions regarding the form, objectives, targets, and outcomes of schooling as articulated in the national agenda.

Recommendation 5. The Australian and state and territory governments establish a formal body where elected representatives from all school sectors can participate in decision-making regarding policy impacting on the operations of schools and school systems.

Data, evidence, research



Improving the equity and inclusiveness of education is not possible without data and evidence. However, you cannot improve that which you do not measure and monitor. An effective school education system needs sufficient data points and appropriate data linkage to understand how well it is performing and robust evidence to identify priority areas for planning, intervention, and policy. While the Measurement Framework for Schooling in Australia details nationally agreed performance indicators, inconsistencies across states and territories datasets means that crucial insights for informing policy at a national level are being lost. Data linkage is an urgent task for understanding the relationships between multiple factors and their impact on education and social outcomes to inform effective policy making, program design and research at a national scale.

Systems and schools that embed data-driven evaluation as a core professional responsibility have a greater impact on student outcomes. This has led to schools increasingly being asked to provide evidence of their impact. At the same time, despite an impressive track record, education research is under-funded (<\$9M p.a. from the Australian Research Council). Despite the establishment of the Australian Education Research Organisation (AERO) seeking to position Australian educators at the forefront of education research, without increases in total funding available, it is unlikely that research of the scale and scope necessary to effectively inform policy can be conducted. A promising avenue for increasing the quality of evidence and data use in schools and systems is co-design. However, it requires strategic leadership and matching incentives (including funding mechanisms) to better enable a systemic approach to research use, knowledge translation and breaking down boundaries between stakeholders.

Recommendation 6: Governments (Australian and state and territory) prioritise data linkage capabilities to enable evidence-informed policy decisions and aid researchers and systems in their efforts to improve education outcomes of all Australians.

Recommendation 7: Education research funding needs to be expanded to address the scale and scope of data necessary to inform policy with matching incentives to integrate stakeholders in the design and conduct of projects.

Focus on teaching and learning



Pedagogical reform is a low-cost high-return approach to addressing distortions in a school system. Australian research (e.g., Quality Teaching Rounds) has demonstrated that targeted and tailored interventions can positively impact student outcomes and teacher well-being. Yet, 76 per cent of teachers describe their workload as unmanageable. Australian schools have more instructional hours (828) than the OECD average (713), with teachers engaged in far more administration and school management than higher performing systems (e.g., Finland, Estonia). Attempts to recognise quality teaching through accreditation have received little uptake with only 0.33 per cent of the workforce certified at Highly Accomplished or Lead. Addressing equity and inclusion requires attention to how systems are designed to focus on the instructional core of schooling and making sure that resources (human, physical, and financial) are targeted towards achieving the highest quality of teaching in every classroom.

Recommendation 8: Audit existing system and school structures and remove any administrative requirements on schools and staff that do not directly improve their capacity to deliver high quality instruction.

Summary

As the world re-sets to life under pandemic, the internal tensions for differentiation and external pressures for standardisation on education policy have never been greater. With increasing costs for public services at the same time as government revenue and household incomes falling, issues of educational equity, inclusion and excellence are amplified. The pressure to consolidate resources and pursue cost efficiencies will be felt most significantly by the poorest and most marginalised children and communities throughout the country. The stakes are high. Education is critical to human welfare, especially in times of rapid economic and social change. Schools are linked to greater social cohesion, a sense of community, better health outcomes, reductions in crime, employment, and population development.


Ensuring that funding and oversight focuses on the health of the system, with wraparound services supporting the workforce to have a voice and the necessary resources for high quality instruction give Australian school systems the best chance of delivering equitable and inclusive outcomes for all.



A tentative empirical model

$$EIEA = SC_{g\ se a} + SA_{f\ s\ e} + PA_{a\ o\ s\ i}$$

- Where *EIEA* is equitable and inclusive education in Australia, *SC* is school choice across geolocation, and socio-educational (dis)advantage, *SA* is school autonomy and particularly over fiscal, staffing, and educational matters, and *PA* is public accountability linked to academic outcomes and social impact.



SYDNEY

Gonski Institute for Education

gie.unsw.edu.au



Building school education systems for equity and inclusion

Schooling in Australia aims to develop successful lifelong learners, confident and creative individuals, and active and informed members of the community so they can transition into further study and/or work and successful lives. To meet this vision, Australian school education systems seek to engage all students, promote their participation, and deliver high-quality teaching of a world-class curriculum.

Aligning with the goals articulated in the Alice Springs (Mparntwe) Education Declaration¹ and the National School Reform Agreement (NSRA)² the Australian Government and State and Territory governments aim to meet this educational vision in an equitable and efficient manner.

The National Policy and Administrative Framework

Australia has a unique education policy architecture. Constitutionally, education is the responsibility of State and Territory governments. They have oversight of the delivery and regulation of schooling to all children of school age in their jurisdiction. State and Territory governments provide most of the funding for schools as determined in their respective legislative frameworks. This includes determining curricula, registering schools, regulating school activities, direct administration of government schools, and support for non-government schools consistent with the conditions outlined by their respective registration authorities.

The Australian Government and State and Territory governments work together to progress and implement national policy priorities such as a national curriculum, national statistics and reporting, national testing, and teaching standards.

This work is achieved through³:

- the Commonwealth Department of Education⁴ contributes to Australia's economic prosperity and social wellbeing by creating opportunities and driving better outcomes through access to quality education and learning.

- the Education Ministers Meeting⁵ is a forum for collaboration and decision-making on early childhood education and care, school education, higher education, and international education. Its members include all State and Territory government education ministers, and the New Zealand education minister, and is chaired by the Commonwealth education minister
- The Australian Education Senior Officials Committee (AESOC)⁶ is the primary subcommittee of senior officials supporting the Education Ministers Meeting.
- The School Policy Group⁷ reports to and provides high-level strategic policy advice to the AESOC on all school education components of the Education Council (Education Ministers Meeting) strategic reform framework and on any national education agreement. There is a matching Early Childhood Policy Group.
- The National School Resourcing Board, established in 2017 under s.128 of the Australian Education Act (Cth) 2013, to provide greater independent oversight of, and advice regarding Commonwealth funding to Australian schools.

The agenda is captured in:

- The National School Reform Agreement (NSRA) is a joint agreement between the Commonwealth, States and Territories to lift student outcomes across Australian schools.⁸ The NSRA sets out national policy initiatives that all parties have agreed to implement across the life of the agreement.
- Bilateral agreements, required for each State and Territory by the Commonwealth, setting out state-specific actions to improve student outcomes. These set out minimum State and Territory funding contribution requirements as a condition of receiving Commonwealth school funding.
- The annual Report on Government Services (RoGS) by the Productivity Commission which provides information on the equity, effectiveness, and efficiency of government services in Australia.

Support in executing the agenda is undertaken by:

- Australian Institute for Teaching and School Leadership (AITSL)⁹, a Commonwealth company formed to provide national leadership for the Commonwealth, State and Territory governments in promoting excellence in the profession. It has three focus areas: initial teacher education, quality teaching, and school leadership.
- Australian Curriculum, Assessment and Reporting Authority (ACARA)¹⁰, established under Section 5 of the Australian Curriculum, Assessment and Reporting Authority Act (Cth) 2008, to improve the quality and consistency of school education through a national curriculum, national assessment, data collection and performance reporting. ACARA is responsible for the National Measurement Framework for Schooling in Australia.
- Australian Education Research Organisation (AERO)¹¹, established as a direct result of the 2019-2023 National School Reform Agreement. Formally incorporated in April 2021 and a ministerial-owned company, AERO is governed by an independent board and jointly funded by the Commonwealth and State and Territory Governments.
- Education Services Australia (ESA)¹², a ministerial not-for-profit company committed to improving outcomes by developing, sharing and deploying nationally owned technical data and assessment systems, digital teaching and learning resources, tools and services, and information and communication technology services.

Key policy levers

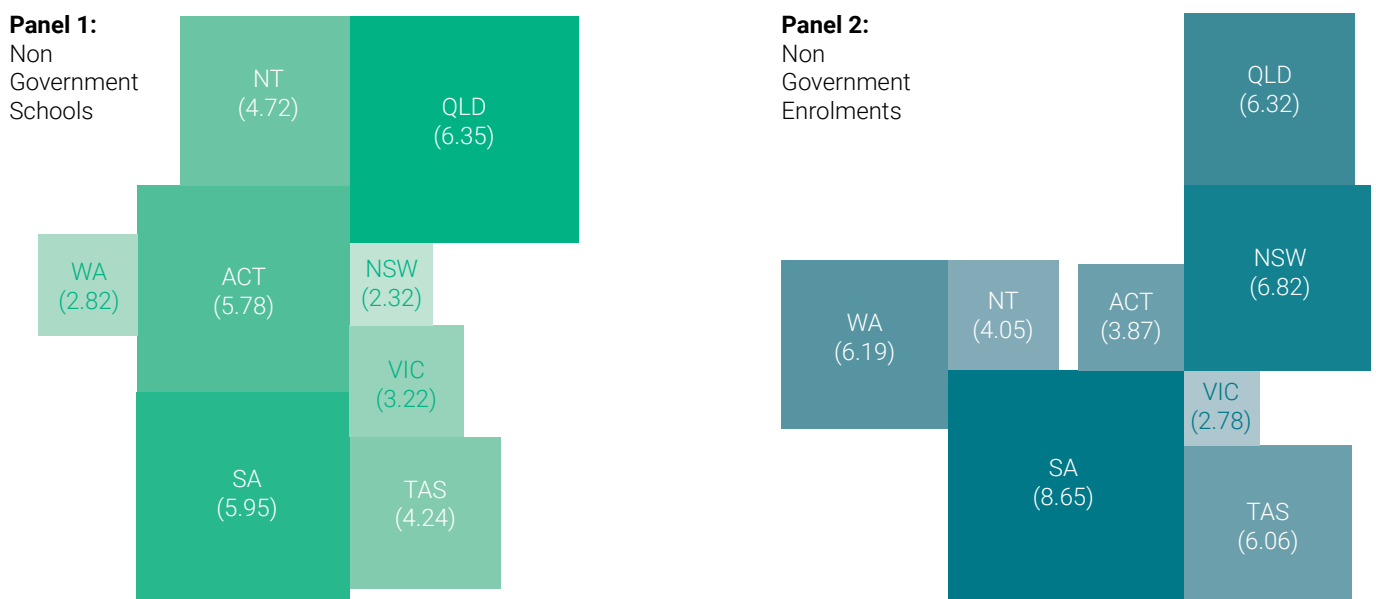
Choice, autonomy, and accountability have been central policy levers for governments seeking to improve outcomes from school-based education. As design features of education systems throughout the world for the past few decades, OECD analysis has shown that choice, autonomy, and accountability can explain large differences in student achievement across countries.¹³ This is achieved when reforms and initiatives are targeted at improving outcomes and monitoring the health of the system for delivering on desired outcomes.

School Choice

Differentiation in provision has been embedded in Australian school-based education since its inception. Between-school segregation along social, economic and academic lines is pronounced,¹⁴ and there are high levels of choice, privatisation, and competition.¹⁵ Too often though, discussions about education default to the poisonous debate of public against private schooling¹⁶ rather than how do we need to organise education to get desired outcomes.

Principal data indicates that 94.4 per cent work in schools competing with others for enrolments (OECD average is 76.9).¹⁷ Reforms in the 1990s are frequently cited as the genesis of a proliferation of non-government schools in Australia.¹⁸ However, analysis of Australian Bureau of Statistics (ABS) Schools data going back to 1956 shows that the expansion of non-government schools and enrolments began in 1977 and using standard forecasting models, the expansion since 1996 (abolishment of the New Schools Policy) has been below lower what would have been expected.¹⁹ Nevertheless, the non-government sector has increased its market share of schools and enrolments in every state and territory since 1996 (see Figure 1).

Figure 1. Change (%) in non-government sector (schools and enrolment) market share, 1996-2021



Growth in the non-government sector has not been experienced equally among the diverse range of providers. For example, since 2008 Montessori (34.6 per cent) and Steiner (42.2 per cent) schools have grown at a rate greater than the aggregate independent sector (32.1 sector). At the same time, Catholic schools in major cities have lost 1.61 per cent market share, the equivalent of 47,197 students. The growth of niche providers like Steiner and Montessori, among others, is reflective of family desires for differentiation of provision, and changes in Australian Government funding allowing more independent schools to enter the low fee – high subsidy space traditionally dominated by the Catholic sector.

Choice has been and remains unevenly experienced based on geolocation and socio-economic status.²⁰ Using ABS Statistical Area 2 (2016) level data, government schools are present in 97.2 per cent of all SA2 throughout Australia. In contrast, 58.2 have a Catholic school, and 44.4 have an independent school. Of the total spread of SA2, only 25.7 (n=594) have a government, Catholic, and independent school. The more rural or remote the community the less likely they are to have choice in provision.

School Autonomy

On an international scale, autonomy-based reforms have been used by governments to allow schools to differentiate educational provision for the purpose of improved outcomes. Autonomy has been a key reform agenda throughout Australian states and territories since at least the 1970s.²¹ Recent research has highlighted significant differences in principals' sense of autonomy depending on their jurisdiction and sector.²²

OECD research stresses that greater localised control (as a proxy for autonomy) over curriculum and assessment can support equity, while autonomy based on competition and choice can lead to greater segregation and have 'adverse consequences for equity in learning opportunities and outcomes'.²³

In the Australian context, there is a national curriculum and suite of standardised tests, reducing the autonomy of schools. However, there are multiple alternative curriculum frameworks assessed as equivalent to the national curriculum – the International Baccalaureate Primary Years Program (PYP) and Middle Years Program (MYP), Australian Steiner Curriculum Framework, and Montessori National Curriculum Framework.²⁴ These are not necessarily discrete curriculum frameworks, as they still need to demonstrate equivalence to the national curriculum.

Increasing autonomy at the school-level holds a common-sense appeal for improving education. The idea of localised decision-making should enable greater context-sensitive provision. However, as highlighted in the 2018 Gonski Report, while autonomy over the right matters can improve outcomes, there is also a risk that autonomy can add to the administrative workload of school-based staff as previously centralised tasks are devolved to the school-level.²⁵

OECD TALIS data indicates that Australian primary principals spend only 14.7 per cent of their time on curriculum and teaching-related tasks and meetings, and lower secondary principals even less at 11.2 per cent.²⁶ To this point, there has been no empirically established pathway between autonomy and improved instructional leadership in schools.²⁷ Current initiatives trialling the employment of non-teaching staff to assist schools with administrative tasks do little to address the proliferation of non-teaching and learning related activities. If school autonomy is to improve outcomes, it needs to be focused on areas of operations with the greatest impact on student outcomes.

School Accountability

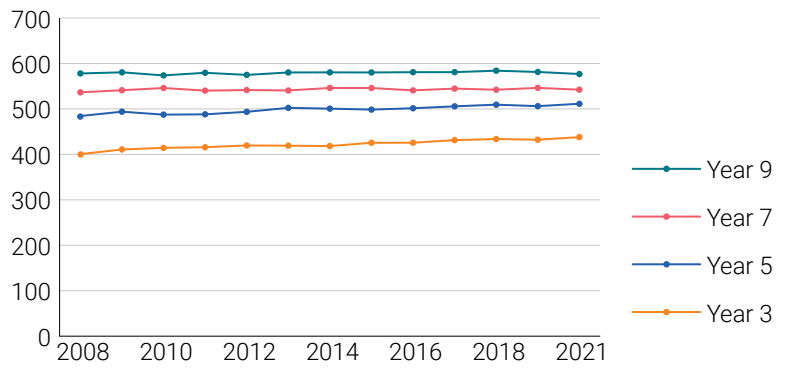
Despite increasing the quantity of information available on school outcomes through the MySchool website,²⁸ NAPLAN data on a national level has remained relatively stable (see Figure 2). Analysis conducted by the Australian Education Research Organisation (AERO) notes that 4 per cent of Year 7 students are achieving below the national minimum standard, and a further 13 per cent are at risk performing at the minimum standard. This increases to almost 9 and 19 per cent respectively by year 9.²⁹

Increased public availability of school outcomes (e.g., NAPLAN, senior secondary school completion and certification) has done little to improve outcomes. It has led to a cascading effect of greater quantities of data being generated in schools to track and monitor student progress. In addition to adding to school leaders' and teacher workload, there is little control of the quality of the data, its analysis, or its impact on improving outcomes. Connecting reforms to activities that not just inform but impact outcomes is necessary.

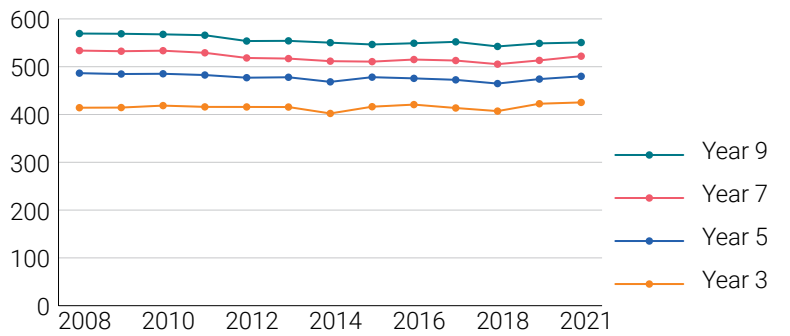
There are many issues at play regarding accountability and schooling. Some research has indicated that families often choose schools based on absolute achievement rather than their value-added.³⁰ This has implications for how families and schools engage with public accountability. At the same time, there is great diversity in what families want from schools. While many, if not all schools, make claims to developing non-academic outcomes, there is few that provide any data or evidence on whether they deliver on these social impacts.

Figure 2.
Average NAPLAN score
(Australia),
Year 3, 5, 7 & 9, 2008-2021

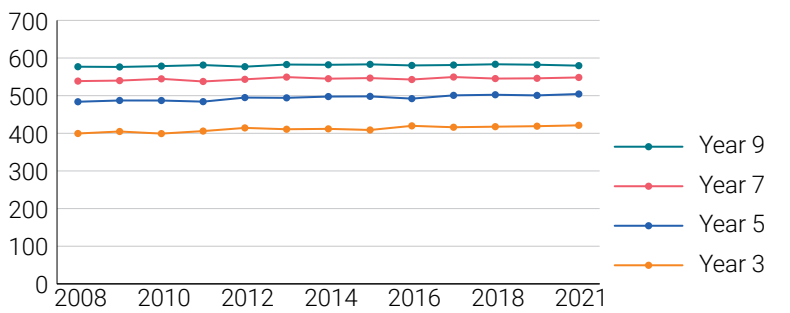
Panel 1: Reading



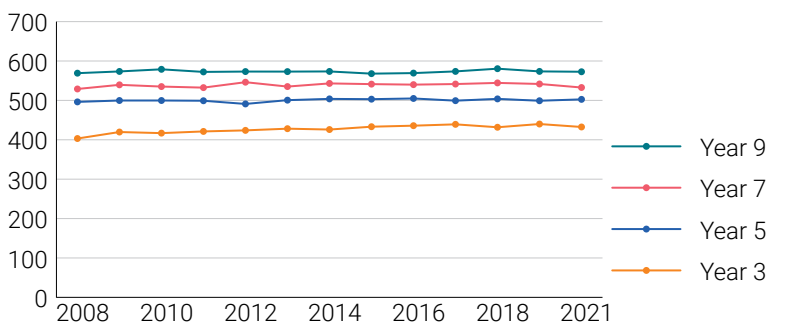
Panel 2: Writing



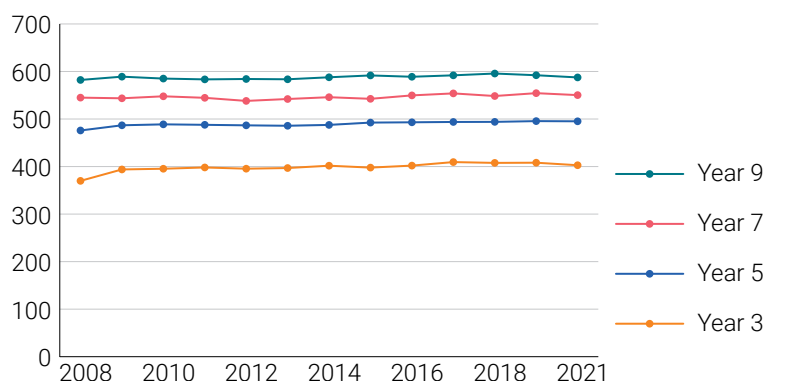
Panel 3: Spelling



Panel 4: Grammar and Punctuation



Panel 5: Numeracy



Summary

Improving the performance of the Australian school education system is of vital importance for national prosperity.³¹ School choice has not improved outcomes and when coupled with the unique architecture of Australian education has led to many spillover effects in the distribution of students and schools. School autonomy has not led to significant differentiation in provision and instead amplified administrative work at the school-level compromising outcomes. Narrow and cascading accountability requirements have not improved outcomes and, in many cases, taken educators away from high impact activities. One stop policy solution (e.g., choice, autonomy, accountability) and an absence of details on how exactly they will improve outcomes have not, and cannot, deliver the changes desired in Australian education.

Delivering equitable and inclusive outcomes requires an integrated approach and an empirical model as a basis of threshold questions for potential of reforms. To meet this requirement, a proposed empirical model for equitable and inclusive education in Australia is:

$$EIEA = SC_{g\ sea} + SA_{f\ s\ e} + PA_{ao\ si}$$

Where EIEA is equitable and inclusive education in Australia, SC is school choice across geolocation _g and socio-educational (dis)advantage _{sea}, SA is school autonomy and particularly over fiscal _f, staffing _s, and educational _e matters, and PA is public accountability linked to academic outcomes _{ao} and social impact _{si}. Empirical models provide a testable alternative to one-stop solutions and a means to analyse which trade-offs are most important for the delivery of equitable and inclusive education. Being testable and data-driven, empirical models are particularly attractive when theory (of all varieties) does not yield actionable insights or unambiguous answers. Based on analysis of existing policy levers, the above model is sensitive to the Australian context and sufficiently robust to deliver principled policy decisions aimed at equity and inclusion.

Intergenerational policy failure

Education is fundamental to national and individual economic and social prosperity. Based on 2019 OECD data, Australia (3.3 per cent) spends more than the OECD average (3.1 per cent) of Gross Domestic Profit (GDP) on primary to post-secondary non-tertiary / tertiary education.³² The Australian Government is spending more on school-based education than at any point in history. Figure 3 displays the recurrent funding from Australian and State and Territory Government for the last ten reporting periods.

The growth in funding represented in Figure 3 is 37.24 per cent over the last decade (\$51,463,182 to \$70,627,325). Over the same period, the number students enrolled in Australian schools has grown by 14.49 per cent, from 3,510,875 to 4,019,739. Put simply, growth in funding is exceeding growth in sector size, but this is not translating into improved outcomes.

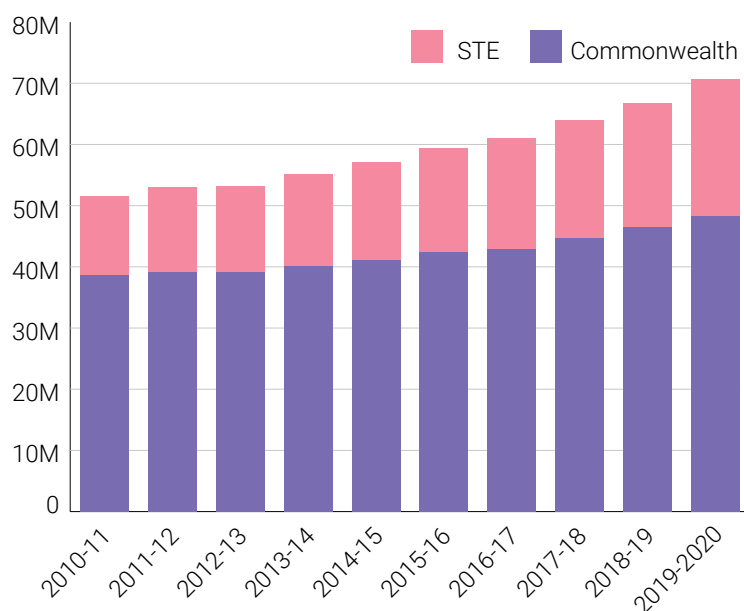
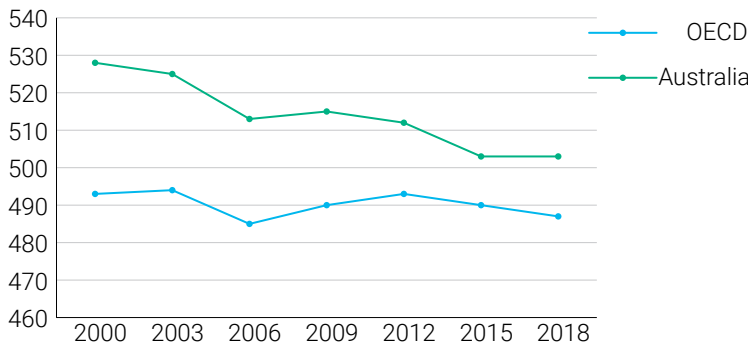
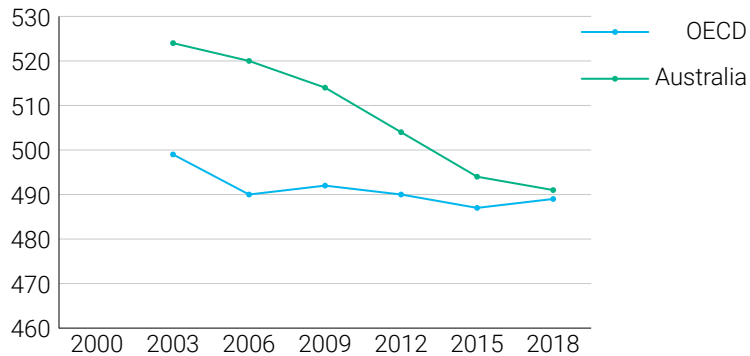


Figure 3. Real Australian, State and Territory Government recurrent expenditure, 2019-2020 dollars (source: Productivity Commission, Report on Government Services 2022)³³

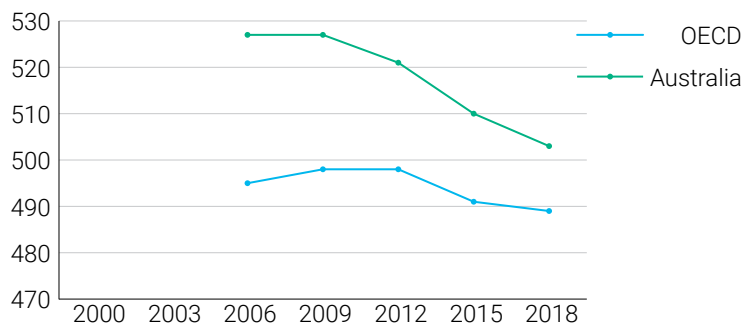
Panel 1: Reading



Panel 2: Mathematics



Panel 3: Science



Panel 4: Average Ranking across 3 tests

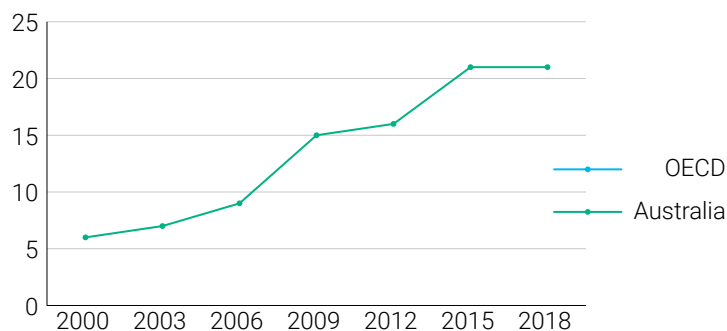


Figure 4. Australia's (–) performance in PISA reading, mathematics, and science against OECD average (–) 2000-2018

At the turn of the century Australia was considered a leading provider of quality school-based education.³⁴ Increases in funding have not necessarily guaranteed stable or improved outcomes³⁵ and since 2000, Australian school-based education has displayed a worrying trend.³⁶ Figure 4 displays the decline in PISA scores. The most recent data (2018) is statistically significantly below its benchmark of 2000 for reading (difference = -26 [5.6], $p < .001$), 2003 for mathematics (difference = -33 [4.0], $p < .001$), and 2006 for science (difference = -24 [4.5], $p < .001$). While reading and science remain above OECD average, 2018 mathematics results were comparable with the OECD average (491 – 489). For those with oversight of the provision of education nationally, this is a major problem.

While an appropriate level of funding is necessary to sustain an education system, it is how the financial resources are distributed within the system that matter when it comes to improving outcomes. The OECD notes:

School systems have limited financial resources with which to pursue their objectives and the design of school funding policies plays a key role in ensuring that resources are directed to where they can make the most difference.³⁷

Since 2018 the Australian Government has distributed funding according to need and tied to the implementation of evidence-based quality reforms. Building on the Gonski reviews³⁸, central to existing funding arrangements is the 'Schooling Resource Standard' (SRS).³⁹ The SRS is constituted through a base amount for every student (in 2022, \$12,462 for primary and \$15,660 for secondary) with a further four student loadings (disability, Aboriginal and Torres Strait Islander, socio-educational disadvantage, and low English proficiency) and two school-level loadings (size and location) designed to provide additional funding and support for disadvantaged schools and their priority cohorts.⁴⁰ Those schools with current funding levels below SRS (primarily government schools) will transition to the target by 2023, and those currently funded over their target Commonwealth share will transition to it by 2029 at the latest.

Despite increasing funding, national and international performance indicators demonstrate that Australia is still not achieving equitable and inclusive education at scale. The failure of the Close the Gap strategy and the systemic nature of Aboriginal student underachievement⁴¹ and those from other equity groups, indicates a critical need for a new approach. Frequent policy changes and shifts in agenda based on election cycles, amplified by the unique policy and administrative architecture of federalism have created inequities throughout school-based education. To address this issue requires attention and nuance to how funds are distributed within and across sectors in the pursuit of equity above all else. Based on this context it is proposed:

Recommendation 1: Total government (Commonwealth and State and Territory) funding to schools must be based on equitable distribution factoring in the capacity of the school to raise other funds, and the loading of school, student, and community educational (dis)advantage.



Australia is recognised as a nation dominated by policy incoherence and reform hyperactivity.⁴² It has a distinctive environment where ideals of social justice and equity are sought within an environment of globalisation and competitive capitalist economics.⁴³ The cause of this situation is frequently attributed to the policy architecture of Australian federalism. The complexity of state and territory governments having constitutional responsibility for education and the key funding role of the Australian Government means we have neither a national system nor a state/territory system of school-based education.

Common critiques of federalism focus on overlap in responsibilities (e.g., funding of schools) and duplication as state and territory groups replicate national policies and initiatives (e.g., professional standards, curriculum). This imposes artificial divisions in a complex policy domain whose actions impact well beyond state or territory borders. There are reduced opportunities for engagement, surrendering some of the strengths of a federal system of government and the removal of important failsafe mechanisms, as each jurisdiction seeks to assert its independence and sovereignty. Achieving uniformity across eight jurisdictions is difficult, time consuming, and often reduced to the lowest common denominator.

The concurrency of Australian school education policy and oversight means that many education debates are at the fringes and based on small changes rather than more holistic reforms. By focusing on the small (and often local), there is a proliferation of initiatives too often tending to symptoms rather than causes of inequities. Unlike public health or the social services, the idea of de-implementation have not taken hold in education.⁴⁴ However the proliferation of initiatives mean blame is often focused on the small initiatives rather than the root cause of failure to bring about change and improvements in outcomes.

Federalism while often the target of issues in education also offers opportunities. Currently, no jurisdiction wants to be the first to admit there are problems or issues (even when large). This means systems can deteriorate substantially before action is taken (e.g., the attraction and retention of teachers or school leaders).⁴⁵ There is an opportunity for systemic oversight of the national school education provision with focus not on the performance of individual schools or even state and territory systems but a holistic approach to the health of the system at scale. Attention to, and action through evidence informed reforms and initiatives targeting the inputs, throughputs, and outputs of schooling nationally.

Recommendation 2: Systemic (federal and state / territory) oversight needs to focus on the overall health of the education system with reforms and initiatives targeting inequities in the inputs, throughputs, and outputs of schooling using evidence-based interventions.

The greatest within school factor impacting on student outcomes is the quality of teaching. A significant policy problem that has emerged nationally, and internationally, is a shortage of teachers. Multiple factors contribute to the existing shortage, but it is felt most significantly in hard-to-staff schools such as those located in rural and remote areas and socio-educationally disadvantaged areas. Put simply, our most needy students are the most likely to struggle to have a qualified and impactful educator in their classroom.

Substantial attention has been focused on Initial Teacher Education. Almost annual reviews have been undertaken focusing on the content of programs, entry standards, the literacy and numeracy skills of entrants, the days of school-based placements, among others. Fast track programs such as *Teach for Australia*⁴⁶ have been introduced, however the former one-year Graduate Diploma in Education (DipEd) which targeted career changers has been replaced (due to accreditation requirements) by the two-year Master of Teaching (MTeach). While it is possible to truncate the MTeach into one-and-a-half-years, the content replicates the 'education' half of a traditional under-graduate double degree (e.g., Bachelor of Teaching / Bachelor of Social Science). Two years to retrain is less attractive to career changers, who are often foregoing income while retraining. When combined with constant attacks on the quality of ITE programs

and their graduates,⁴⁷ from both within and beyond education, there is little being done to address the attractiveness of teaching as a profession.⁴⁸

An under-examined issue for the attractiveness of teaching as a profession is the viability of servicing costs of living in major cities. By the very nature, cities are densely populated and with that comes the need for schools. Looking at the median dwelling price nationally of \$752,110 (as at 30 June 2022), and much higher in major cities (e.g., Sydney = \$1,110,660; Melbourne = \$798,198)⁴⁹; there are difficulties building sufficient capital and servicing mortgages on a teacher salary (e.g., in NSW commencing at \$73,737⁵⁰).⁵¹ Affordability of housing for teachers is an international issue,⁵² however in Australia policies and projects to support key workers accessing housing are limited and sporadic.⁵³ This is partially an outcome of the unique policy architecture of Australian education, but when combined with ongoing attacks on the profession, and existing teacher shortages, the ability to live near the place where one works, or the drivability or commuting infrastructure means that workforce planning needs to take a multi-dimensional approach built on more than just raising the public profile of the profession.

Recommendation 3: Workforce planning programs need to be expanded to address the supply of housing (both rental and ownership pathways) and non-housing mechanisms (e.g., transport subsidies and income supplements) to reduce cost of living pressures on educators.

Beyond the school gate

Since the release of the Coleman Report in the USA,⁵⁴ there has been considerable questioning of how much the quality of schooling really matters, in comparison to outside of school factors, for student outcomes. In many cases this has led to focus on what can be controlled within the school (e.g., the quality of teaching). Germinal work by John Hattie indicates 50 per cent of variance in outcomes is attributed to outside of school factors.⁵⁵ While less easy to control for, improving the outcomes of schooling requires some attention to matters outside of schools.

The Australian Early Development Census (AEDC), conducted every 3 years (commencing 2012) conducted in the first year of formal schooling, provides information across five developmental areas (physical, social, emotional, language, and communication) with identification of students as on-track, at risk and vulnerable. Based on recent iterations of the AEDC (2015, 2018, 2021), 22 per cent of Australian children are vulnerable in at least one domain, and 11 per cent in two.⁵⁶ Early data indicates that the AEDC is a predictor of NAPLAN performance nine years later.⁵⁷ Improving the outcomes of schooling early intervention for equity groups, and this is made more difficult given the early childhood sector suffers similar workforce issues to schools, with current data indicating that 8.1 per cent of providers are operating with a staffing waiver due to their inability to find suitably qualified staff.⁵⁸

This situation is likely to get worse in the coming years with initiatives targeting increased access to early childhood education for families.

A focus on what takes place prior to school does not take away from the need to address inequities in the organisation of schooling. There are many layers of segregation and stratification embedded in the existing structure of Australian school-based education.⁵⁹ These can lead to inequities in access and attainment. While substantial attention is directed at funding, this can often cover up the disparities within and across schools.


The further a school is located from a major city the lower the levels of student outcomes. Figure 5 shows the average 2021 NAPLAN results in Reading, Writing, and Numeracy for Years 3, 5, 7 and 9 based on Australian Statistical Geographic Standard (ASGS) categories of major cities, inner regional, outer regional, remote, and very remote. Using major cities as zero, the figure displays the outcomes gap and how distance from the metropolitan centres impacts on outcomes.

Research from the Gonski Institute for Education (GIE) has demonstrated that if the human capital gap between urban and non-urban Australia was closed, Australia's GDP could be increased by 3.3 per cent or \$56B.⁶⁰ This is larger than the contribution of the entire Australian tourism industry, and one would need to quadruple the size of the Australian beef industry to achieve the same economic improvement. Schools are a major part of closing the gap between metropolitan and regional, rural, and remote outcomes. But it will not be achieved through more of the same.

A Randomised Control Trial (RCT) conducted in regional NSW by the Economics of Education Knowledge Hub at UNSW Sydney showed the large effect of cultural context on performance in standardised reading tests.⁶¹ Significantly, this RCT demonstrated that cultural context represents 33 per cent of the rural-urban gap and 50 per cent of the Indigenous – Non-Indigenous gap. In controlling for cultural context, it is possible to identify the drivers of school improvement in different locations and better design interventions aimed at equity and inclusion.



Figure 5. Difference from Major Cities mean score on NAPLAN (Reading, Writing & Numeracy) Year 3, 5, 7 & 9 by geolocation, 2021



RoGS data indicates that students with greater levels of socio-educational disadvantage are not evenly distributed between sectors (government, Catholic and independent). Across all jurisdictions and over time, the non-government sector has enrolled approximately 40 per cent of the load of the bottom quartile of socio-educational advantage compared to government schools. Nationally, government schools have 30.8 per cent of their enrolments from the bottom quartile compared to 12.6 per cent in the non-government sector.

Similarly, the distribution of students who receive an educational adjustment due to disability as a proportion of all enrolled students is not evenly distributed. At an aggregate level, the government (20.8), Catholic (19.1), and independent (19.6) sectors have similar totals. However, drawing from the Nationally Consistent Collection of Data on School Students with Disability (NCCD) categories of extensive, substantial, supplementary, and support with quality differentiated teaching practice⁶² there are distinctions across the sectors. Of their aggregate total, the government sector has 27.4 per cent classified as 'extensive' or 'substantial'. This is compared to 20.9 per cent for the Catholic and 16.8 for the independent sector.

For the independent sector, 42.9 per cent of their student only require quality differentiated teaching practice (32.7 for government and 27.2 for Catholic sectors). While caution is to be exercised in these comparisons given some inconsistencies in reporting across jurisdictions, based on available data it appears that government schools educate a higher percentage of high needs students.

International and Australian research has shown that a large proportion of the negative effects of outside of school factors are amplified through the organisation of schooling at scale. Differences in the social composition, culture and climate of a school can enhance or constrain what students bring to school.⁶³ Peer effects, such as school-level socio-economic status, can influence outcomes as much as individual student socio-economic status. Recent analysis has shown that low SES students are twice as likely to achieve minimum benchmarks in a high SES school than a low SES school and that the concentration of disadvantaged students into low SES schools multiplies the effects of social disadvantage.⁶⁴ Among English-speaking countries, Australia has the second highest school socio-economic effects.⁶⁵

Education provides important social outcomes for communities. Health, social cohesion, reduced crime, heightened economic activity are among the impacts of education. Creating the conditions for the greatest number to benefit from education has been an enduring project. Decades of higher education policies and initiatives have aimed to expand university access for equity groups.⁶⁶ However, the proportion of university students from under-represented backgrounds has barely shifted. Considerable public investment has not delivered. Since 2010, the Australian Government has invested close to \$1.5B in higher education equity programs yet the proportion of students from under-represented backgrounds has barely shifted (see Figure 6).

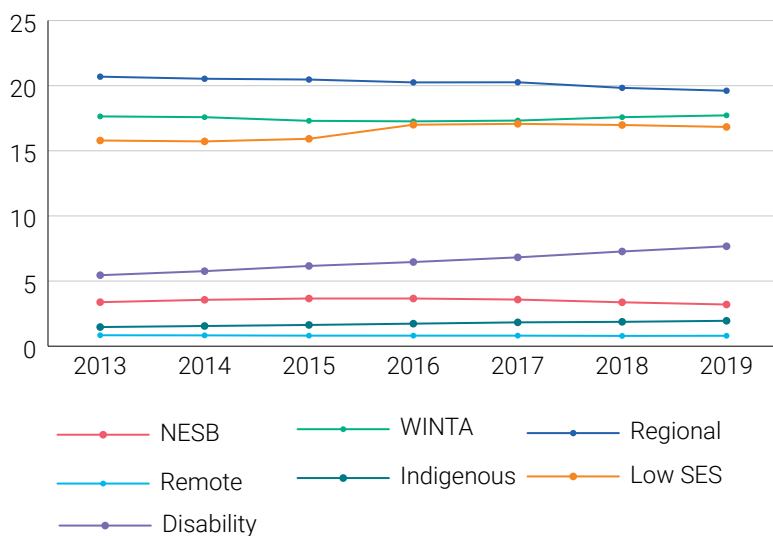


Figure 6. Participation (all students) per cent, equity groups, 2013-2019. [Source: <https://www.ncsehe.edu.au/national-data/>]⁶⁷

Tertiary education enables people to keep pace with evolving technologies and the changing nature of work. Ensuring equitable access to higher education and inclusive supports and systems once students enrol will prevent the risk of groups falling behind the rest of the country and world. Reductions in government funding, shifts in student profile,⁶⁸ and casualisation of the workforce among others,⁶⁹ are significantly altering traditional ideas of university study in Australia. As with early childhood education, and the organisation of schooling, equitable and inclusive access requires a suite of wraparound services and reforms to improve access and attainment. This would require a co-ordinated response across Australian and state and territory governments aimed at improving outcomes. Without such changes, claims of aspirations for greater equity and inclusion are little more than tokenism.⁷⁰

Recommendation 4:
Education reforms represent a whole of government (Australian and state and territory and across Departments) approach tied to building the necessary infrastructure with explicit accountability for improved outcomes within timeframes.

Voice for the profession

Schools are often charged with responsibility for dealing with many of society's ills. Education is seen as 'a' if not 'the' solution to most social issues and the result is that schools are constantly being asked to do more without having anything removed. De-implementation is rarely exercised in education. Most significantly, many of the decisions to add things to schooling take place without any engagement or consultation with educators. This consultation is not about governments engaging with education bureaucracies (e.g., those increasingly filled with public servants and not necessarily those with school-based experience), but the educators who work in schools with students and communities or their elected representatives.

Frequent changes in curriculum documents, additional mandatory training programs, shifting accreditation requirements, updated and expansive administrative requirements, all with negligible impact on student outcomes have not just intensified teachers' work but de-democratising the profession.⁷¹ There is little if any evidence that changes in the system are the result of consultation with those working in schools. OECD TALIS data indicates that only 28.7 per cent of Australian teachers feel that their views are valued by policy makers.⁷² This perception of limited educator voice in policy comes at the same time as declining teacher well-being⁷³ and in the context of substantial teacher shortages.⁷⁴

The loss of educator voice is experienced at many levels in the administrative framework of Australian school education. Currently neither Independent Schools Australia (ISA) or the National Catholic Education Commission (NCEC) have direct representation beyond the level of School Policy Group (SPG).⁷⁵ There is a belief, whether based on real action or perception, that state and territory departments and Ministers are strongly biased towards the government sector. The implication being that non-government schools, those catering for approximately one third of students, have no direct input into the decisions made at AESOC or the Education Ministers Meeting where decisions regarding the form, objectives, targets, and outcomes of schooling as articulated in the NRSA are decided.

With a change of government and the NSRA currently under review,⁷⁶ it is timely to establish a forum for representatives from the profession to undertake a 'National Conversation on the Role of Education'. This is a proposal for an educator voice to government. A means for educators (those working in schools not the bureaucracies) to provide advice on policies and input on matters that are important for the organisation of schooling, specifically working conditions, well-being, and ultimately student outcomes. Such a forum could utilise existing parliamentary infrastructure like the Parliamentary Friends of Education⁷⁷ to raise the voice of the profession to guide policy decisions.

Recommendation 5. The Australian and state and territory governments establish a formal body where elected representatives from all school sectors can participate in decision-making regarding policy impacting on the operations of schools and school systems.


Data, evidence, and research

Improving the equity and inclusiveness of education is not possible without data and evidence. However, you cannot improve that which you do not measure and monitor. An effective school education system needs sufficient data points and appropriate data linkage to understand how well it is performing and robust evidence to identify priority areas for planning, intervention, and policy.

Currently, the *Measurement Framework for Schooling in Australia*⁷⁸ details the nationally agreed (at Education Council) key performance indicators for schooling. Reflecting the *Alice Springs (Mparntwe) Education Declaration*, the Measurement Framework sets out the data to be included in the *National Report on Schooling*. Some jurisdictions have created supplementary measurement indicators and inconsistencies across states and territories datasets means that crucial insights for informing policy at a national level are being lost. Data linkage is an urgent task for improving equity and inclusion through quality data and evidence at a national scale.

Data linkage is a technique that connects pieces of information from multiple sources to create a new dataset. The result is a more comprehensive picture of how different factors (e.g., person, family, place, event) interrelate. There has been a long history of data linkage in Australia,⁷⁹ but creating at scale linkages across jurisdictions has been problematic. Previous attempts at introducing a Unique Student Identifier to enable data linkage and tracking has been stalled due to complex legal and privacy matters within and across jurisdictions.⁸⁰ However, understanding the relationships between multiple factors and their impact on education and social outcomes over an extended period is necessary for effective policy making, program design, and research.

Recommendation 6:
Governments (Australian and state and territory) prioritise data linkage capabilities to enable evidence-informed policy decisions and aid researchers and systems in their efforts to improve education outcomes of all Australians.



Systems and schools that embed data-driven evaluation as a core professional responsibility have a greater impact on student outcomes.⁸¹ This has led to schools increasingly being asked to provide evidence of their impact.⁸² The cascading effect is individual teachers being asked to generate substantial data on a regular basis to track and monitor student progress. However, school leaders and teachers rarely have formal training in data science,⁸³ meaning there is a disconnect between what educators are asked to do and what they are trained to do. This creates issues for not just workload, but the quality of data generated and used (see Box 1).

Box 1. The Q Project

A five-year partnership between Monash University and the Paul Ramsey Foundation, the Q Project's goal is 'to understand and improve high-quality use of research evidence in Australian schools in order to enhance the quality of teaching'.⁸⁴ Working in close collaboration with policy-makers, school leaders, teachers, evidence brokers, researchers and other key stakeholders the project focuses on the quality of evidence and the quality of its use as a professional learning challenge.

An initial framework has been developed based on two core components (appropriate research evidence, and thoughtful engagement and implementation), three individual enablers (skillsets, mindsets, and relationships), three organisational enablers (leadership, culture, and infrastructure), and systemic influence.⁸⁵



Research is not a preferred form of evidence for Australian educators.⁸⁶ There is however, an impressive track record of Australian education research,⁸⁷ despite it being significantly under-represented in funding from the Australian Research Council – attracting less than \$9M annually across all schemes over the past decade and with success rates below the national average.⁸⁸ This is considerably different to Canada, where education research has much higher success rates through the Social Sciences and Humanities Research Council.⁸⁹ Therefore, while AERO has been established to position Australia's educators at the forefront of education research, without increases in total funding available, it is unlikely that research of the scale and scope necessary to effectively inform policy can be conducted. What is required is robust research demonstrating improved outcomes (without compromising existing performance), stakeholder buy-in, and scalability. This work needs to be sensitive to context and beyond any immediate political influence or timelines.

A promising avenue for increasing the quality of evidence and data use in schools and systems is co-design.⁹⁰ An example is the *Building alternative indicators for schooling* project led by Professor Scott Eacott at UNSW Sydney. This involves a school (or schools) developing a suite of indicators based on their purpose and then systematically building data points to evidence the extent to which it is delivering on its purpose. Apart from generating evidence of non-academic outcomes, the work focuses on capacity building of staff and building data infrastructure. Co-design holds potential for breaking down boundaries between stakeholders but requires strategic leadership and matching incentives (including funding mechanisms) to better enable a systemic approach to research use and knowledge translation.

Recommendation 7:
Education research funding needs to be expanded to address the scale and scope of data necessary to inform policy with matching incentives to integrate stakeholders in the design and conduct of projects.

Focus on teaching and learning

Pedagogical reform is a low-cost high-return approach to addressing distortions in a school system.⁹¹ Analysis of world leading school systems has demonstrated that they focus on getting the right people to become teachers, develop them into effective instructors, and ensure that the system is able to deliver the high-quality instruction to every child.⁹² Substantial attention nationally has been directed at initial teacher education, with many reviews undertaken in recent decades.⁹³ A much used catch cry is that the quality of an education system cannot exceed the quality of its teachers.⁹⁴ However, in focusing on individual teachers less attention is granted to the quality of teaching and the conditions in which educators work.

Teaching and learning are the core business of schools. Building education systems for equity and inclusion requires attention to how structures support the pedagogical work of teachers. That is, we need to build systems and schools to focus on the instructional core of schooling and makes sure resources (human, physical, and financial) are targeted towards achieving the highest quality of instruction in every classroom. Without doing so, it will be impossible to reduce inequities. Enhancing the capacity of the system for quality teaching will take a re-calibration of professional learning (see Box 2), career progression, and workload conditions.

Box 2. Building capacity for quality teaching in Australian schools

Funded by the Paul Ramsay Foundation (\$17.2M) and partnering with the NSW Department of Education, this initiative seeks to build teachers' capacity to improve the quality of teaching and student outcomes by scaling up the empirically tested Quality Teaching Rounds (QTR) approach to teacher development.

QTR is a ground-breaking approach to teacher professional development, with demonstrated impact on quality of teaching, teacher morale and school culture.⁹⁵ It empowers teachers to enrich student learning through a collaborative, teacher-driven framework that enables participants to analyse and improve their practice.⁹⁶ The approach applies across all subjects and year levels and builds the confidence and capacity of teachers at all career stages.⁹⁷

To date, more than 1,200 schools have engaged with the QTR, and there has been the establishment of the *Quality Teaching Academy*.⁹⁸ The professional learning through the Academy is not just evidence informed but has been subjected to rigorous evaluation in large-scale students in schools. Participation in QTR has been demonstrated to increase student outcomes by as much as 25 per cent above a control group.⁹⁹

Recognising and rewarding quality teaching has proven difficult. Levels of higher accreditation among the teacher workforce have not received significant uptake throughout Australia. Data from AITSL indicates that 185 teachers were nationally certified at Highly Accomplished (n=135) / Lead (n=50) in 2021.¹⁰⁰ This brings the total of nationally certified teachers to 1,025 (High Accomplished = 712; Lead = 313) since 2008. The latest ACARA school profile dataset indicates there are 307,507 (full-time equivalent) teaching positions in Australian schools. With 1,025 accredited at higher levels, that represents 0.33 per cent of the workforce. One criticism is that the process of accreditation is time consuming for candidates with little return on that investment.¹⁰¹ Of those teachers accredited at HALT, 42 per cent indicate that they do not have sufficient time and opportunity to lead, initiate or plan professional or collaborative learning activities post-certification.¹⁰²

Workload issues and time to focus on teaching and learning is a significant matter for Australian educators. In a recent survey, 76 per cent of teachers described their workload as unmanageable, with long working hours (including weekends and holidays) and with impacts on families and personal lives.¹⁰³ It is worth noting that Australian schools have far more annual instructional hours (828) than the OECD average (713), and other frequent comparators such as Finland (589), and Estonia (609).¹⁰⁴ The weekly instructional hours of Australia teachers (19.9) is not too different from the OECD average (20.6) nor that of Finland (20.7) and Estonia (20.9). There are considerable differences in the time spent on general administrative work (Aus=4.1; OECD=2.7; Fin=1.1; Est=1.8) and participating in school management (Aus=2.4; OECD=1.4; Fin=0.3; Est=0.6). Australian educators are spending more time on non-teaching and learning related activities. The quality of teaching is the most impactful within-school factor for improving outcomes. Achieving greater equity and inclusiveness in Australian schools is dependent on freeing educators up from non-teaching and learning activities and building the necessary supports to focus their work on the quality of instruction.

Recommendation 8: Audit existing system and school structures and remove any administrative requirements on schools and staff that do not directly improve their capacity to deliver high quality instruction.

Summary

Education is charged with serving as a catalyst for more equitable and inclusive societies. It is at the forefront of social and political debate with constant reforms being proposed to improve outcomes – of all kinds. Designing systems balancing standard policy levers of choice, autonomy, and accountability is more difficult than it appears. Governments under fiscal pressure and/or facing under-performance frequently deploy one-stop solutions (e.g., markets) without detailed plans for how exactly improvements will be achieved or at what costs. Existing evidence demonstrates that Australian school systems need to do something different to address stagnant (e.g., NAPLAN) or declining (e.g., PISA) outcomes and enduring inequities.

An empirical model to achieve greater equity and inclusion through school provision is:

$$EIEA = (SCg_{sea} + SAf_{se} + PA_{ao si}) * QT$$

Where EIEA is equitable and inclusive education in Australia, SC is school choice across geolocation _g and socio-educational (dis)advantage _{sea}, SA is school autonomy and particularly over fiscal _f, staffing _s, and educational _e matters, PA is public accountability linked to academic outcomes _{ao} and social impact _{si}, and it is all moderated by the Quality of Teaching (QT).

Australian school systems behave as they are designed in law. The above model offers the basis for a more principled way of prioritising the competing demands of public investment on education. Ensuring that funding and oversight focuses on the health of the system, with wraparound services supporting the workforce to have a voice and resources for high quality instruction it is possible to achieve the aspirational targets of government, systems, and the community, and not simply leave it to chance.

Endnotes

- 1 See: <https://www.dese.gov.au/alice-springs-mparntwe-education-declaration>
- 2 See: <https://www.dese.gov.au/quality-schools-package/national-school-reform-agreement>
- 3 This structure is in a state of flux following the federal election, and the Administrative Arrangements Order issued on 23 June 2022, <https://www.pmc.gov.au/sites/default/files/publications/administrative-arrangements-order-23-June-2022.pdf>
- 4 <https://www.dese.gov.au/>
- 5 <https://www.dese.gov.au/education-ministers-meeting>
- 6 See: <https://www.directory.gov.au/portfolios/education-skills-and-employment/australian-education-senior-officials-committee-aesoc>
- 7 <https://www.directory.gov.au/portfolios/education-skills-and-employment/schools-policy-group>
- 8 <https://www.dese.gov.au/quality-schools-package/national-school-reform-agreement>
- 9 <https://www.aitsl.edu.au/>
- 10 <https://acara.edu.au/>
- 11 <https://www.edresearch.edu.au/>
- 12 <https://www.esa.edu.au/>
- 13 Wößmann, L., et al. (2007), "School Accountability, Autonomy, Choice, and the Level of Student Achievement: International Evidence from PISA 2003", *OECD Education Working Papers*, No. 13, OECD Publishing, Paris, <https://doi.org/10.1787/246402531617>.
- 14 Maire, Q. (2021). *Credential market: Mass schooling, academic power and the international baccalaureate diploma*. Cham: Springer.
- 15 Perry, L. B., & Southwell, L. (2014). Access to academic curriculum in Australian secondary schools: a case study of a highly marketised education system. *Journal of Education Policy*, 29(4), 467-485. doi:10.1080/02680939.2013.846414
- 16 Thompson, G., Hogan, A., & Rahimi, M. (2019). Private funding in Australian public schools: a problem of equity. *The Australian Educational Researcher*, 46(5), 893-910. doi:10.1007/s13384-019-00319-1
- 17 OECD (2019), *Balancing School Choice and Equity: An International Perspective Based on Pisa, PISA*, OECD Publishing, Paris, <https://doi.org/10.1787/2592c974-en>.
- 18 Connors, L., & McMorrow, J. (2015). *Imperatives in school funding: equity, sustainability and achievement*. Camberwell, Vic: Australian Council for Educational Research.
- 19 Eacott, S. (2022). The effect of school choice reforms on the provision of schools and enrolments in Australia. Working Paper.
- 20 Using ACARA ICSEA as a proxy for socio-economic status, SES is not necessarily negatively correlated with school choice. However, it is to be noted that common SES scales (including SEIFA, IRSD, ICSEA among others) are all designed to include 'education'. Therefore, analysis by these categories will evidence disadvantage based on education. To read more on this as a methodological issue read about 'endogeneity'. For example: Geweke, J. (2018). Endogeneity and Exogeneity. In: *The New Palgrave Dictionary of Economics*. Palgrave Macmillan, London. https://doi.org/10.1057/978-1-349-95189-5_118
- 21 MacDonald, K., Keddie, A., Blackmore, J., Mahoney, C., Wilkinson, J., Gobby, B., Niesche, R. & Eacott, S. (2021). School autonomy reform and social justice: a policy overview of Australian public education (1970s to present). *Australian Educational Researcher*. doi:10.1007/s13384-021-00482-4

- 22 Heffernan, A., & Pierpoint, A. (2020). *Autonomy, Accountability, and Principals' Work: An Australian Study*. Department of Education, Skills and Employment (Australia). <https://app.education.nsw.gov.au/serap/Download/DownloadResearchAsset?id=218>
- 23 Schleicher, A. (2014), *Equity, Excellence and Inclusiveness in Education: Policy Lessons from Around the World, International Summit on the Teaching Profession*. OECD Publishing, Paris, <https://doi.org/10.1787/9789264214033-en>.
- 24 See: <https://www.acara.edu.au/curriculum/alternative-curriculum-recognition/recognition-register>
- 25 Gonski, D., Arcus, T., Boston, K., Gould, V., Johnson, W., O'Brien, L., . . . Roberts, M. (2018). *Through growth to achievement: Report of the review to achieve educational excellence in Australian schools*. Canberra, ACT: Commonwealth of Australia. <https://www.dese.gov.au/quality-schools-package/resources/through-growth-achievement-report-review-achieve-educational-excellence-australian-schools>
- 26 Thomson, S. & Hillman, K. (2019). *The Teaching and Learning International Survey 2018. Australian Report Volume 1: Teachers and School Leaders as Lifelong Learners*. Australian Council for Educational Research. <https://research.acer.edu.au/cgi/viewcontent.cgi?article=1006&context=talis>
- 27 Eacott, S., Niesche, R., Keddie, A., Blackmore, J., Wilkinson, J., Gobby, B. & MacDonald, K. (2022). *Autonomy, Instructional Leadership and Improving Outcomes – The LSLD Reforms in NSW, Australia. Leadership and Policy in Schools*, DOI: 10.1080/15700763.2022.2081212
- 28 <https://www.myschool.edu.au/>
- 29 See: https://www.pc.gov.au/__data/assets/pdf_file/0017/341090/sub006-school-agreement.pdf
- 30 MacLeod, W. B., & Urquiola, M. (2019). Is Education Consumption or Investment? Implications for School Competition. *Annual Review of Economics*, 11(1), 563-589. doi:10.1146/annurev-economics-080218-030402
- 31 Deloitte Access Economics (2016). *The economic impact of improving schooling quality*. Canberra: Australian Government Department of Education and Training. <https://www.dese.gov.au/integrated-data-research/resources/economic-impact-improving-school-quality>
- 32 See: <https://data.oecd.org/eduresource/public-spending-on-education.htm>
- 33 See: <https://www.pc.gov.au/research/ongoing/report-on-government-services/2022/child-care-education-and-training/school-education>
- 34 Welch, A. R. (2011). PISA performance and Australian education: myths and realities. *Revista Española de Educación Comparada*, 18, 89-124.
- 35 For example, see: Hanushek E. (1997). The productivity collapse in schools. In W. Fowler (Ed.), *Developments in School Finance* (pp. 183-195). Washington, DC: National Center for Education Statistics.
- 36 Thomson, S. (2021). Australia: PISA Australia— Excellence and Equity? In N. Crato (Ed.), *Improving a Country's Education: PISA 2018 Results in 10 Countries* (pp. 25-47). Cham: Springer International Publishing.
- 37 OECD (2017), *The Funding of School Education: Connecting Resources and Learning*, OECD Reviews of School Resources, OECD Publishing, Paris, <https://doi.org/10.1787/9789264276147-en>.
- 38 Gonski, D., Boston, K., Greiner, K., Lawrence, C., Scales, B., & Tannock, P. (2011). *Review of funding for schooling. Final Report*. Retrieved from <http://www.deewr.gov.au/Schooling/ReviewofFunding/Documents/Review-of-Funding-for-Schooling-Final-Report-Dec-2011.pdf> and Gonski et al. (2018).

- 39 See: <https://www.dese.gov.au/quality-schools-package/fact-sheets/what-schooling-resource-standard-and-how-does-it-work>
- 40 See: <https://www.dese.gov.au/quality-schools-package/fact-sheets/what-schooling-resource-standard-and-how-does-it-work>
- 41 See: <https://link.springer.com/journal/13384/volumes-and-issues/46-2> and <https://www.tandfonline.com/toc/capj20/49/1>
- 42 Ball, S. J. (2019). Australian education policy – a case of global education reform hyperactivity. *Journal of Education Policy*, 34(6), 747-747. doi:10.1080/02680939.2019.1668651
- 43 Savage, G. C. (2011). When worlds collide: excellent and equitable learning communities? Australia's 'social capitalist' paradox? *Journal of Education Policy*, 26(1), 33-59. doi:10.1080/02680939.2010.493229
- 44 McKay, V. R., Morshed, A. B., Brownson, R. C., Proctor, E. K., & Prusaczyk, B. (2018). Letting Go: Conceptualizing Intervention De-implementation in Public Health and Social Service Settings. *American Journal of Community Psychology*, 62(1-2), 189–202. <https://doi.org/10.1002/ajcp.12258>
- 45 Heffernan, A. & Pierpoint, A. (2022). *Attracting and retaining Australia's principals*. Australian Secondary Principals' Association.
- 46 See: <https://teachforaustralia.org/>
- 47 Mockler, N. (2022). *Constructing teacher identities: How the print media define and represent teachers and their work*. Bloomsbury. <https://www.bloomsbury.com/au/constructing-teacher-identities-9781350129252/>
- 48 See: <https://theconversation.com/no-wonder-no-one-wants-to-be-a-teacher-world-first-study-looks-at-65-000-news-articles-about-australian-teachers-186210>
- 49 See: <https://propertyupdate.com.au/the-latest-median-property-prices-in-australias-major-cities/>
- 50 See: www.ircgazette.justice.nsw.gov.au/irc/ircgazette.nsf/LUPublications/F6E0BE5A54FC5840CA2588020021569F?OpenDocument
- 51 Gilbert, C., Nasreen, Z., and Gurrán, N. (2021) Housing key workers: scoping challenges, aspirations, and policy responses for Australian cities, AHURI Final Report No. 355, Australian Housing and Urban Research Institute Limited, Melbourne, <https://www.ahuri.edu.au/research/final-reports/355>.
- 52 See: <https://www.brookings.edu/blog/the-avenue/2019/06/20/too-many-teachers-cant-afford-to-live-near-their-schools/>,
- 53 Gilbert et al., (2021).
- 54 Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfield, F. D., & York, R. L. (1966). *Equality of educational opportunity*. Washington, DC: US Government Printing Office.
- 55 Hattie, J.A.C. (2003). Teachers Make a Difference, What is the research evidence? https://research.acer.edu.au/research_conference_2003/4
- 56 See: <https://www.aedc.gov.au/data-explorer/>
- 57 Brinkman, S., Gregory, T. & Braunack-Mayer, L. (2015). The AEDC predicts NAPLAN results nine years later. Presentation at the AEDC National Conference. <https://www.aedc.gov.au/resources/detail/the-aedc-predicts-naplan-results-nine-years-later>
- 58 See: <https://www.acecqa.gov.au/>
- 59 Greenwell, T. & Bonnor, C. (2022). *Waiting for Gonski: How Australia failed its schools*. UNSW Press.
- 60 Holden, R., & Zhang, J. (2018). *The economic impact of improving regional, rural & remote education in Australia: Closing the human capital gap*. Retrieved from https://education.arts.unsw.edu.au/media/EDUCFile/Gonski_Institute_Report_Cost_of_Education_Gap.pdf
- 61 Dobrescu, I., Holden, R., Motta, A., Piccoli, A., Roberts, P. & Walker, S. (2021). Cultural context in standardized tests. Working Paper. Economics of Education Knowledge Hub. <http://www.edhub.unsw.edu.au/projects/cultural-context-in-education>

- 62 See: www.schooldisabilitydatapl.edu.au/data-collection-steps/step-2--what-is-the-category-of-adjustment
- 63 Sciffer, M.G. & Perry, L.B. (2022). Excellence for all students: opportunities and contexts. Paper presented at the *Building education systems for equity and inclusion* (11-12 July, Gonski Institute for Education, UNSW Sydney).
- 64 Sciffer & Perry (2022), p. 5
- 65 Sciffer, M.G., Perry, L.B. & McConney, A. (2022). Does school socioeconomic composition matter more in some countries than others, and if so, why?. *Comparative Education*, 58(1), 37-51, DOI: 10.1080/03050068.2021.2013045
- 66 Patfield, S., Gore, J. & Weaver, N. (2022). On 'being first': the case for first-generation status in Australian higher education equity policy. *Australian Educational Researcher*, 49, 23-41. <https://doi.org/10.1007/s13384-020-00428-2>
- 67 See: <https://www.ncsehe.edu.au/national-data/>
- 68 See: <https://www.universitiesaustralia.edu.au/stats-publications/student-stats/>
- 69 See: <https://www.universitiesaustralia.edu.au/stats-publications/staff-stats/>
- 70 Littleton, E. (2022). *At the crossroads: what is the post-COVID future of Australia's public universities?* : Centre for Future Work. <https://apo.org.au/node/317516>
- 71 Gavin, M., McGrath-Champ, S., Wilson, R., Fitzgerald, S., & Stacey, M. (2021). Teacher workload in Australia: National reports on intensification and its threats to democracy. In S. Riddle, A. Heffernan & D. Bright (Eds.), *New Perspectives on Education for Democracy* (pp. 110-123). Routledge. <https://doi.org/10.4324/9781003145806>
- 72 See Table 47 from Annex C, Chapter 5 Tables: Empower teachers and school leaders; TALIS 2018 Results (Volume II), OECD 2020.
- 73 Collie, R.J. (2021). A multilevel examination of teachers' occupational commitment: the roles of job resources and disruptive student behavior. *Social Psychology of Education*, 24, 387-411. <https://doi.org/10.1007/s11218-021-09617-y>
- 74 See: <https://www.aitsl.edu.au/research/australian-teacher-workforce-data>
- 75 See: https://www.pc.gov.au/__data/assets/pdf_file/0003/342732/sub044-school-agreement.pdf
- 76 See: <https://www.pc.gov.au/inquiries/current/school-agreement/make-submission#lodge>
- 77 See: https://www.aph.gov.au/About_Parliament/Parliamentary_Friendship
- 78 See: <https://www.acara.edu.au/reporting/measurement-framework-for-schooling-in-Australia>
- 79 Smith, M., Flack, F. (2021). Data Linkage in Australia: The First 50 Years. *International Journal of Environmental Research and Public Health*, 18(21), doi: 10.3390/ijerph182111339.
- 80 See: https://www.pc.gov.au/__data/assets/pdf_file/0017/341090/sub006-school-agreement.pdf
- 81 Hattie, J.A.C., Masters, D., & Birch, K. (2015). *Visible learning into action: International case studies of impact*. Routledge.
- 82 Hattie, J. (2015). High-Impact Leadership. *Educational Leadership*, 72(5), 36-40.
- 83 Alonzo, D., Leverett, J. & Obsioma, E. (2021). Leading an Assessment Reform: Ensuring a Whole-School Approach for Decision-Making. *Frontiers in Education*, 6:631857. doi: 10.3389/educ.2021.631857
- 84 See: <https://www.monash.edu/education/research/projects/qproject/about>
- 85 Rickinson, M., Cirkony, C., Walsh, L., Gleeson, J., Cutler, B. & Salisbury, M. (2022). A framework for understanding the quality of evidence use in education. *Educational Research*, 64(2), 133-158, DOI: 10.1080/00131881.2022.2054452

- 86 See: https://bridges.monash.edu/articles/report/What_why_when_and_how_Australian_educators_use_of_research_in_schools/17192990/1
- 87 See: <https://www.aare.edu.au/blog/?p=12420>
- 88 Sullivan, A. & Tippet, N. (2022). ARC funding in FoR Code 13: Education (June 2022). A factsheet prepared for the Australian Education Research Leaders' Summit (Adelaide, South Australia).
- 89 See: <https://www.sshrc-crsh.gc.ca/home-accueil-eng.aspx>
- 90 OECD. (2022). *Who Cares about Using Education Research in Policy and Practice?: Strengthening Research Engagement, Educational Research and Innovation*. OECD Publishing, Paris, <https://doi.org/10.1787/d7ff793d-en>.
- 91 Kremer, M., & Holla, A. (2009). Improving Education in the Developing World: What Have We Learned from Randomized Evaluations? *Annual Review of Economics*, 1(1), 513-542. doi:10.1146/annurev.economics.050708.143323
- 92 Barber, M. & Mourshed, M. (2007). How the world's best-performing school systems come out on top. London: McKinsey & Company; Mourshed, M., Chijioke, C. & Barber, M. (2010). *How the world's most improved school systems keep getting better*. London: McKinsey & Company.
- 93 See: <https://www.dese.gov.au/quality-initial-teacher-education-review/resources/next-steps-report-quality-initial-teacher-education-review>
- 94 OECD (2018), *Effective Teacher Policies: Insights from PISA*. PISA, OECD Publishing. <http://dx.doi.org/10.1787/9789264301603-en>
- 95 Gore, J. M., Miller, A., Fray, L., Harris, J., & Prieto, E. (2021). Improving student achievement through professional development: Results from a randomised controlled trial of Quality Teaching Rounds. *Teaching and Teacher Education*, 101, 103297. doi: <https://doi.org/10.1016/j.tate.2021.103297>
- 96 Gore, J. & Rosser, B. (2022). Beyond content-focused professional development: powerful professional learning through genuine learning communities across grades and subjects. *Professional Development in Education*, 48(2), 218-232, DOI: 10.1080/19415257.2020.1725904
- 97 Gore, J., & Rickards, B. (2021). Rejuvenating experienced teachers through Quality Teaching Rounds professional development. *Journal of Educational Change*, 22(3), 335-354. doi:10.1007/s10833-020-09386-z
- 98 See: <https://qtacademy.edu.au/>
- 99 Gore, J., Miller, A., Fray, L., Harris, J., & Prieto, E. (2021). Improving student achievement through professional development: Results from a randomised controlled trial of Quality Teaching Rounds. *Teaching and Teacher Education*, 101, Article 103297. <https://doi.org/10.1016/j.tate.2021.103297>
- 100 See: <https://www.aitsl.edu.au/docs/default-source/certification/certification-snapshot-2022.pdf>
- 101 Willis, J., Churchward, P., Crosswell, L., Spooner-Lane, R., Wise, J., & Jessen, S. (2022). Recognising the impact of highly accomplished and lead teachers. *The Australian Educational Researcher*, 49(4), 691-709. doi:10.1007/s13384-021-00453-9
- 102 See: https://www.aitsl.edu.au/docs/default-source/research-evidence/spotlight/halt.pdf?sfvrsn=13b7fe3c_8
- 103 Heffernan, A., Longmuir, F., Bright, D., & Kim, M. (2019). *Perceptions of Teachers and Teaching in Australia*. Monash University. <https://www.monash.edu/thank-your-teacher/docs/Perceptions-of-Teachers-and-Teaching-in-Australia-report-Nov-2019.pdf>
- 104 OECD (2022), Teaching hours (indicator). doi: 10.1787/af23ce9b-en (Accessed on 10 August 2022)



CONTACT:

**University of New South Wales
Gonski Institute for Education
Professor Scott Eacott**

unsw.edu.au | CRICOS Provider Code: 00098G
gie.unsw.edu.au/ | gonski@unsw.edu.au
s.eacott@unsw.edu.au

Schools

A rich, high-quality social science education at school is fundamental to ensure that individuals understand and are able to participate meaningfully in a democratic society. For some students, the social science education received in school will be their only formal encounter with these subject areas. It is therefore vital that schools provide the best possible learning experience for students to gain knowledge, skills and passion for social science subjects.

In the Australian Curriculum, the social sciences are taught alongside humanities subjects, under the title *Humanities and Social Sciences*, or HASS. From the beginning of school to Year 2, students are taught History and Geography; Civics and Citizenship are added in Year 3; and Economics and Business in Year 5. From Year 10, social science subjects in the Australian Curriculum change to Ancient History, Modern History, and Geography, but states have authority to set their own curriculum, so the offerings of core and elective subjects in social science vary significantly across states and individual schools.

This section examines the state of social science teaching in primary and secondary education: what is going well, where we're lagging, and the questions to address next.

“ **Teacher quality is the single most important in-school factor influencing student achievement.** ”

John Hattie (2009) in *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement*.

SCHOOLS SCORECARD

		+	-	×	✓
VALUE	Quality and relevance of social science school education	–	<ul style="list-style-type: none"> Lack of high-quality, publicly available data about the Australian school system, such as subject offerings, student enrolments, teaching quality or student performance. 	<ul style="list-style-type: none"> Low student performance in the National Assessment Program Civics and Citizenship tests (NAP-CC). Students and families sceptical about social science career prospects. 	<ul style="list-style-type: none"> Revamped messages to students and parents about employment prospects and relevance of careers in the social sciences. Ensure high-quality teaching resources are available in all schools across Australia.
CAPABILITY	Teaching workforce and infrastructure	–	<ul style="list-style-type: none"> School staffing models often result in teachers being asked to teach outside their expertise (out-of-field), as well as to change subjects year-to-year. 	<ul style="list-style-type: none"> Insufficient incentives for teachers and schools to invest in, and develop subject-area expertise in social science. 	<ul style="list-style-type: none"> Build incentives for schools to support the development of teachers' subject expertise. Improve the quality and accessibility of data about the Australian school system, to support a better understanding of the sector.
EQUITY	Accessibility, diversity and fairness	–	–	<ul style="list-style-type: none"> Stakeholder concerns that social science subject offering and enrolments are declining in senior secondary (further research required to verify these concerns). 	<ul style="list-style-type: none"> Develop a school ecosystem that prepares all young Australians to live prosperous lives, as free, democratic citizens.

VALUE

A high-quality school education in social science is critical for:

- **Democracy.** A strong knowledge base in history, political science, economics, law and ethics is fundamental to develop students' appreciation for the democratic freedoms and principles we enjoy in Australia, and to cultivate critical perspectives when it comes to exercising their rights and casting their vote in elections.
- **Individual and social prosperity.** Social science skills in communication, psychology, management, personal finance, or public health, equip students to lead prosperous, fulfilling, and balanced lifestyles, and to cultivate a positive legacy for others and society, regardless of which career they choose after graduation.
- **Appreciating education**, in general. Anyone who is aware of the former two benefits, becomes privy to the transformative potential of education and, consequently, a long-life champion for excellence and equity in Australia's education systems.

How good is the social science education delivered at school? Australia's testing system, the National Assessment Program (NAP), offers only a limited window into the quality of social science education: it only tests one subject, Civics and Citizenship, and is not applied over the whole population of students (only a sample). Considering that, what NAP tests are showing is that student performance in Civics and Citizenship is consistently low. The latest round, in 2019, saw only 53% of year 6 students, and 38% of year 10s achieving proficiency. A definite red flag for value.

CAPABILITY

Data about the school teaching workforce is spread across different agencies in states and territories, and not publicly available, so an understanding of its current state is limited.

Consulted stakeholders expressed concern that social science teaching is being negatively impacted by a number of issues (**Figure 8**):

- **School staffing practices**, such as assigning teachers to subjects they have little or no expertise in (asked to teach 'out-of-field'), or changing assigned subjects year-to-year.

FIGURE 8. What does it take to develop subject-expert teachers?

From consulted stakeholders

TEACHERS
<ul style="list-style-type: none"> • Personal interest in teaching a social science subject area. • School incentives and support to undertake professional development (e.g., career progression).
SCHOOLS
<ul style="list-style-type: none"> • Government support and incentives for schools to invest in teacher training. • School staffing models that support matching teachers' expertise with assigned subjects. • Student appetite for social science subjects (influenced by parents, industry, government). • Local availability of qualified teachers. • Availability of, and access to adequate professional development opportunities.
GOVERNMENT
<ul style="list-style-type: none"> • Teacher education guidelines and quality assurance appropriately incorporate subject expertise. • School funding policy is conducive to the development of subject-matter expert school teachers. • Development of partnership arrangements with discipline-specific teacher education providers.

FIGURE 9. Public spending in primary and secondary education

Source: OECD 2021



- **Lack of support or incentives for teachers and schools to invest in subject-matter expertise.** In Australia, teachers are required to complete at least 100 hours of professional development every 5 years, but there is no requirement or incentive to undertake subject-specific education.
- **Lack of stable and adequate funding for professional development providers.** Teacher associations, which could provide subject-specific training, often struggle to secure stable and adequate funding to offer subject-specific professional development programs on a continuous basis.
- **Unintended consequences of a (well-meant) emphasis on STEM skills.** In preparation for the technological turn of the century, the Australian Government, as well as some industry sectors (e.g., mining), have made significant investments to improve the quality of STEM education in schools over the years, for example, through incentives to STEM teaching or the development of high-quality classroom resources. The social sciences sector has not benefited from the same effort or resources, and the divide is growing and showing. "The increased emphasis on STEM does not have a neutral impact on the humanities and social sciences. Schools are a balancing act, limited by budget, timetable and space. When you make space for one thing, it has to come off somewhere else."

EQUITY

In the context of this snapshot, Equity is interpreted as the degree to which a good education in social science is available to *all* Australians, regardless of location, ethnicity or socio-economic circumstance.

While Australian schools have adopted the Australian Curriculum (up to 80% of teaching time is devoted to the national curriculum), the delivery of social science content can vary significantly across schools. In other words, current school policies and administration are failing to guarantee *all* Australians will leave school with a high-quality foundation in social science. The issues include:

- **Unequal offering of social science subjects across schools**, particularly in senior secondary. "In [State], many schools are offering HASS subjects from Year 9 as electives, meaning many students do not do any history, civics, or geography past Year 8".

The combination of these factors is reportedly leading to a decline in both the number of social science subjects offered by schools to students, and the number of students choosing to study them, specifically at a senior secondary level (this issue is further explored in **Losing ground in senior secondary**).

The question, to be clear, is not whether a push for STEM in schools is right or not (it is). Instead, it is about whether our education system is giving *all* students access to a balanced, high-quality education, and the long-term individual and collective benefits that come with it.

As per other aspects of the school education system reported, better data is needed to confirm and adequately understand these trends.

PRIORITIES FOR ACTION

- **Revamp messaging about social science opportunities**, to improve student and parent confidence about employment prospects in social science fields and their continued relevance in a technology-enabled world. All stakeholders in the ecosystem have a stake in ensuring social science talent is well nurtured at this stage of the education pipeline.
- **Ensure high-quality social science teaching and resources are available** in all schools across Australia, supported by the right level of infrastructure, investment and incentives at the state and school levels.
- **Develop a school ecosystem that equips young people to live prosperous, fulfilling lives, and to responsibly exercise their rights and freedoms as democratic citizens.** As the new curriculum rolls out in 2022, the sector should look for opportunities to boost student participation and performance in social science subjects, particularly at the secondary level.
- **Improve the quality and accessibility of data about the Australian school system, such as subject offerings and enrolments, staff education and development, and student performance**, to support a better understanding of the sector. ■

“ The truth is that ‘well-educated people’ or ‘well-read people’ is generally used [...] to denote those with a grasp of politics, economics, history, arts and culture, literature, philosophy. Studying the humanities is also associated with achieving leadership roles in subsequent careers. If the school students with a grasp of these things are primarily emerging from independent schools, the likelihood of [other] students achieving success in their careers and being promoted is reduced, extending inequity.

Representative, state-level school teachers’ association.

Losing ground in senior secondary

In senior secondary, the Australian Curriculum shrinks to a few subjects, and schools have significant discretion to decide which courses to offer to students each year.

Unfortunately, consulted stakeholders agree that there is a decline in the proportion of social science subjects available to students in senior secondary, as a result of factors such as those outlined in **Figure 10**. Data on student enrolments are not publicly available for individual subjects, so the exact extent of the problem cannot be measured at present.

The influence of parents in subject choice appears to be particularly strong, with stakeholders observing that, while students may be interested in continuing their social science education, some parents direct their children to choose class subjects that have more obvious employment connections.

Stakeholders described the current environment around senior secondary electives as a *marketplace*, with teachers having to convince students, parents and schools of the merits of enrolling in social science subjects or maintaining them in the timetable.

This situation makes it difficult for students with talent or a disposition for the social sciences to pursue their interests in senior secondary and, for the remaining students, to gain a basic understanding of social science knowledge and skills.

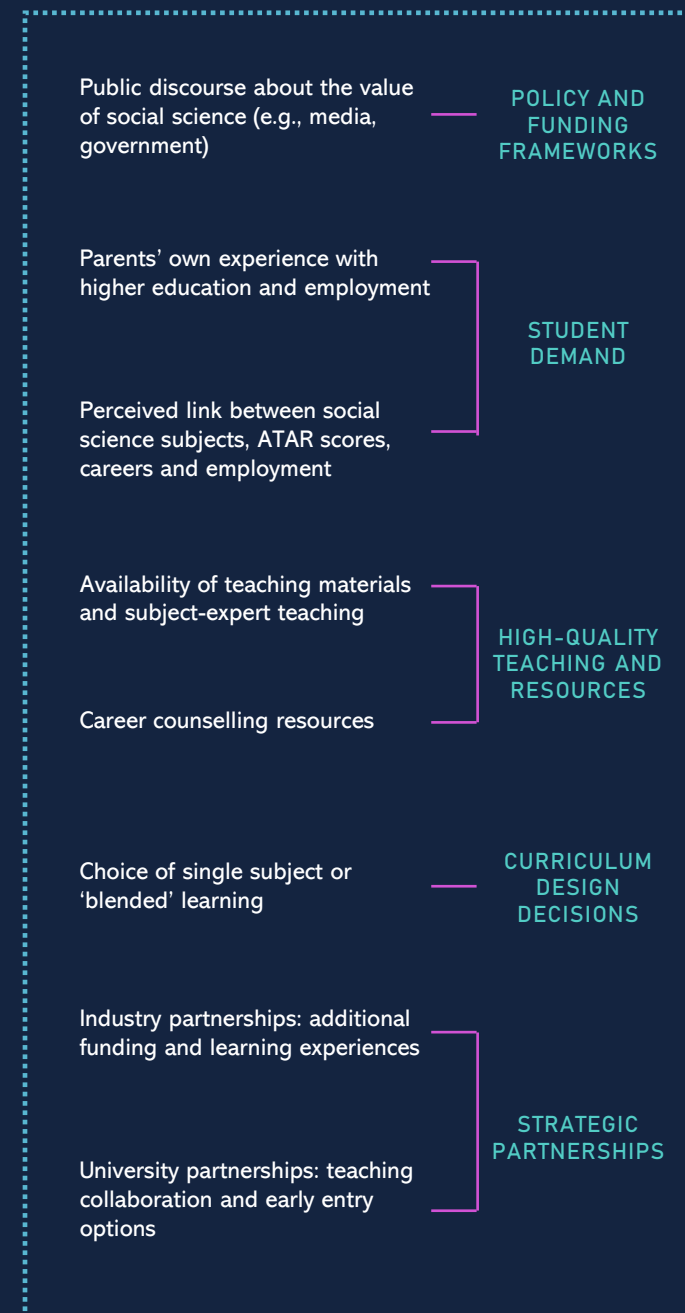
“Every student, every Australian decides whether or not they're interested in the social sciences at school”, was the reminder from one of our stakeholders. With schools as the first step in the educational pipeline, reclaiming ground in senior secondary is key. ■

“ **What we're hearing from social science teachers right now, is that they have students who want to take their [social science] subject into senior year levels, and parents who are saying 'no'.** ”

Director, Teaching Association.



FIGURE 10. Factors influencing the availability and quality of social science elective subjects in senior secondary
From consulted stakeholders



With big industry supporting STEM in schools, how will we level the field for social science and other areas?

Stakeholders report that STEM learning areas are often supported with high-quality teaching and career counselling resources as a result of ongoing investment by mining and other big industry entities interested in encouraging students to pursue STEM in higher education. The lack of similar resources for other areas inevitably makes them look less attractive and relevant in the future employment market. If the social sciences, arts and humanities step up, big industry will have inadvertently played a part in increasing the standard of teaching and career resources in schools, for the benefit of all students.

Re-examining 'blended' learning

The social sciences have increasingly been offered in a blended or 'integrated' format, often in conjunction with the humanities. While convenient, this does not always result in improved learning outcomes. Consulted stakeholders insisted that effective delivery of mixed-area subjects works best when:

- Delivered by a teaching team with appropriate expertise in each individual subject.
- Each subject is clearly distinguishable.

Emerging university-school partnership models

- Early entry into undergraduate social science programs (e.g., from Year 11).
- Universities collaborating with teachers' associations to support professional learning for school teachers, in their discipline.
- Alternative admission pathways (non-ATAR) into social science disciplines (e.g., essay, interview).