



RESEARCH REPORT SNAPSHOT



Dollars and Sense: Time for smart reform of Australian school funding

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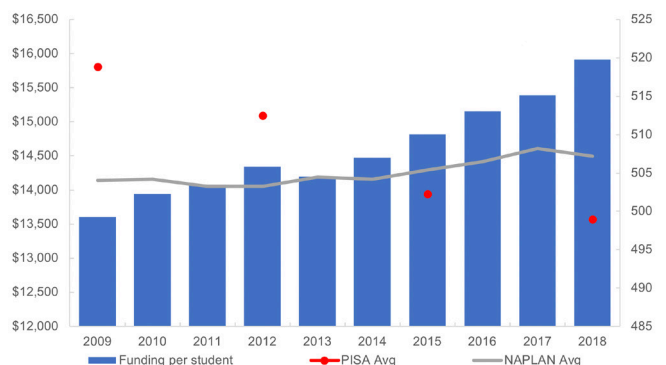
Australia is among the highest-spending countries on schooling in the world. Yet the educational return on this investment — for parents, taxpayers, employers, and students — has deteriorated.

- Australia has continued to increase funding, despite international research long showing little to no relationship between resourcing and achievement.
- This research paper reviews the state of school funding in Australia, bringing together research from international comparisons, Australian school-level data, international research literature, and policy documents. It considers how and why the persistent increases in school funding in Australia have failed to improve educational outcomes.

Student achievement has declined despite funding increases

- More than \$61 billion of public funding is spent on schooling each year in Australia. The average public funding per student is just under \$16,000 — a 17 per cent real increase since 2009. It's a myth that funding has been cut — even the rate of increase in funding is growing.
- Australia's international performance in PISA testing has been "steadily negative" according to the OECD, and in domestic testing, overall achievement in NAPLAN has remained flat.

Per student funding (\$A2018, LHS) and student achievement (PISA and NAPLAN, RHS), 2009 to 2018 (all school sectors).

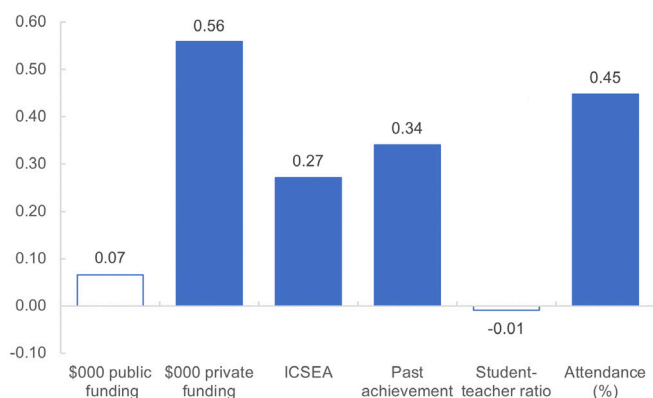


- International comparisons show a lack of funding can't be blamed for Australia's educational decline. There are high-performing countries (such as Estonia, Poland, New Zealand, Ireland, Hong Kong, Canada, Japan, and Taiwan) that spend around 24 per cent less per student over the course of a student's typical time in the school system.

More funding hasn't improved student achievement

- Analysis of school-level data (all primary government schools in Australia) shows the expensive Gonski funding model has not resulted in higher student achievement.
- There is no statistical relationship between increased public funding and student achievement. If two schools with comparable cohorts of students, but different funding levels, are randomly selected, those schools' students would perform roughly the same on average.
- Student achievement in Year 5 NAPLAN is mostly explained by other in-school and out-of-school factors.
 - The best predictors of student achievement in year 5 are students' past achievement (year 3) and their socio-educational background (as indicated by the Index of Community Socio-Educational Advantage (ICSEA)).
 - The attendance rate (the average proportion of days that students attend school) and the level of funding voluntarily paid by parents are also statistically significant, but relatively weak in terms of their effect size.

Statistical association between key variables and student achievement in Year 5 NAPLAN, government schools, 2010-2018.



Australian education isn't underfunded. It's been directed to the wrong priorities

- Expensive policy approaches, such as reductions to class sizes and increases to across-the-board teacher salaries, which have been tried for decades, haven't delivered educational benefits.

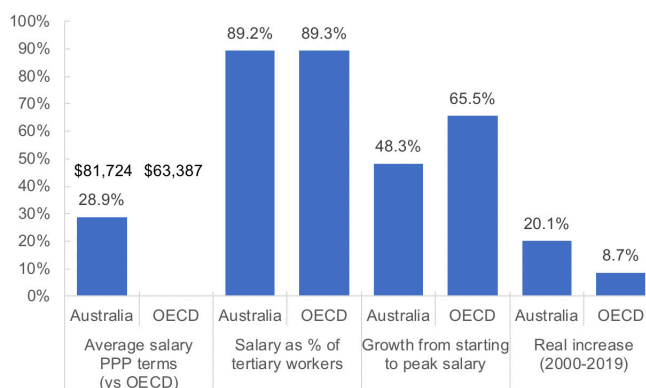
Relatively high average teacher salaries are expensive and haven't improved outcomes

Australian teachers' salaries are:

- Relatively high compared to other countries;
- Relatively high compared with other tertiary-educated workers (particularly for women);
- Increasing more than twice as quickly as the OECD average;

- Very flat over time — peaking early in their careers;
- Mostly based on central determination in awards;
- Not related to performance, but to years of service and credentials.

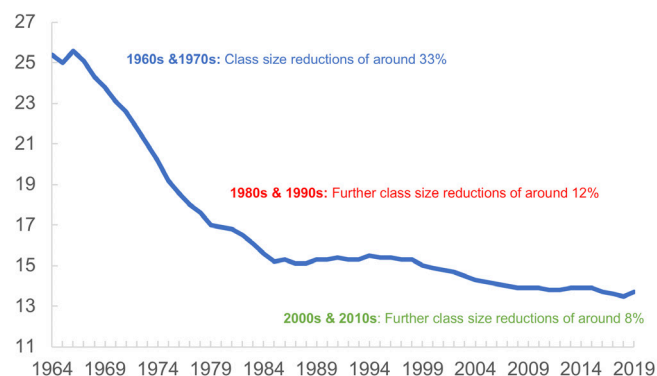
International comparison of Australian and OECD teacher salary metrics.



Class size reductions are an expensive and ineffective education policy lever

- Class sizes (as approximated by student-teacher ratios) have effectively halved since the 1960s, which has been responsible for much of the additional cost of schooling.

Student-teacher ratio in Australian schools (all sectors and types), 1964 to 2019.



- There is no evidence that smaller classes lead to better learning of students. In fact, the OECD now indicates students in larger classes outperform those in smaller classes, on average.
- Modestly increasing class size by just one student could save around \$360 per student (or around \$1.4 billion). This saving could be used to compensate financial incentives for high-performing teachers — meaning a better investment in teachers' capacity rather than simply increasing teacher numbers.

Addressing wider inequities through additional school funding is a costly and blunt instrument

- There is no evidence that recent efforts to expand 'needs-based' funding are properly targeted in a way that will achieve the objective of reducing educational disadvantage and lift education outcomes.
- The school funding formula approach is too broadly applied to genuinely meet the needs of disadvantaged students.

We must make better investment in our teachers

- The most significant financial investment the education system makes is in its teachers.
- The only way to sustainably improve education outcomes is to further develop the capacity of teachers. Boosting the quality of teaching is by far the best way to improve students' educational outcomes. For resourcing to improve student achievement, the school funding approach should specifically support incentives for high performance of teachers.
- The relatively flat structure and inflexibility make it harder to retain high-ability teachers.
- Approaches to boost the quality of the teaching workforce should focus on increasing, rather than decreasing, the supply of potential teachers. More competition for teaching positions will lift standards.
 - Expanding access to teaching can be provided with more flexible pathways to become a teacher, supported by on-the-job training.
 - More flexible, demand-based salaries — based on subject area shortages, hard-to-service areas, and having specialist skills — will better meet needs of the teaching workforce.
- Confused approaches to teacher workforce development, and additional credentialisation have harmed, rather than helped, the status of the teaching profession.
- Policymakers have let teachers and school leaders down by failing to provide the necessary tools for performance management practices needed to build capacity and providing a supportive incentive structure.
 - Current approaches to recognise effective teachers are not working.
 - There are few opportunities for genuine performance management in schools — with limited independent classroom observations, performance monitoring, and feedback.
 - Teachers' performance appraisals rarely result in rewards or development opportunities — with school leaders unable to recognise high performers.
 - Poor performance management is a key reason teachers leave the profession.
 - Teachers report that underperformance is regularly tolerated and goes unaddressed — with school leaders unable to dismiss underperformers.
 - School leaders would benefit from more discretion with performance management, rather than working within bureaucratic.

Improving the approach to school funding could turn things around

- Rather than the amount of funding, the approach itself may be responsible for poor educational outcomes and failing to align incentives toward higher performance.
- Australia's school funding approach is:
 - Based on a flawed methodology;
 - highly centralised;
 - overly complex, opaque, and indirect;
 - input-based rather than outcomes-based; and
 - not designed to promote school choice and competition.

Funding should be more outcomes-based and less inputs-based — with performance-based funding approaches

- The input-based approach means funding is based on who comes to a school (number of students and their demographics) rather than what happens at a school. A more outcomes-based approach reorients funding based on activity and the quality of education that schools deliver. This includes funding that directly ties to individual or school indicators for performance.
- Performance-based pay is shown to increase teachers' motivation, increase parents' confidence in schools, improve productivity, improve teaching methods and teachers' responsiveness to students' learning needs.
- Research shows several design features can make performance incentives effective in practice:
 - being supported by broader professional development practices (though including financial incentives is effective on its own, even without the benefit of further performance management);
 - when multiple measures of performance are used (including, but not exclusively, student achievement);
 - where the incentive payments are relatively high (at or above a 7.5 per cent bonus);
 - where duration is longer (more than 3 years);
 - and especially beneficial when attached to achievement scores in mathematics.
 - Focussed on individual performance, rather than school-based performance.

The funding formula methodology is fundamentally flawed

- Australia's various school systems are funded through increasingly complex formulas, but the underlying methodology is based on flawed premises. It's based on the past funding of relatively high-achieving schools, not the efficient cost of providing quality education.
- A technical and independent evaluation of both the evidence supporting the Gonski review and the effectiveness of subsequent funding increases should be delegated to the National School Resourcing Board. Current oversight is limited to compliance with legislation, rather than the quality of spending and education delivered.

Accountability of school funding must be improved by being more transparent and market-based

- School funding is indirect and not transparent to parents and taxpayers. It would be better if funding were provided directly to households through means-tested vouchers, rather than going through systems that redistribute funding and result in poor alignment between funding and student needs.
- School decision-making is highly centralised, limiting school-level autonomy and accountability. There is scope for deregulating school spending decisions in Australia, which will improve efficiency, and result in better outcomes for students. There should be more meaningful ways for parents to support schools in decision-making, such as through school governing boards and other school types (like charter schools) that empower local decision-making and less bureaucracy.
- Market-based accountability through choice and competition can more efficiently allocated resources. Research shows more competition increases school performance, and transparent reporting of school outcomes is related to higher student achievement. School choice actually reduces, rather than increases, inequity in education. There are several policy options available to expand school choice alternatives — such as bursaries for students in low income households to use at non-government schools.

Author

Glenn Fahey is a Research Fellow in Education Policy, with a particular focus on education finance and accountability. He is formerly a consultant at the OECD's Centre for Educational Research and Innovation. He has published academic articles at *Public Administration Quarterly*, *Policy and Politics*, and *Public Finance and Management*, as well as the *OECD Education Working Paper Series*.