

Productivity Commission Draft Report on the National Education Evidence Base – NSW GOVERNMENT SUPPLEMENTARY SUBMISSION

1. The importance of increased investment

NSW endorses the principle that utilising data and evidence to identify and then apply the most effective programs, policies and teaching practices is essential to see gains in educational outcomes. Real improvement and reform also require appropriate levels of investment.

- 1.1 NSW agrees that data is key to identifying and targeting educational need with greater accuracy and sophistication. Continued investment is also a necessary precondition to real educational improvement and reform.
- 1.2 NSW notes that the Productivity Commission has not undertaken any research into the potential for investment in education to improve student outcomes. Investment that lifts low performance, reverses under-performance and improves outcomes for all students, as envisioned in Australia's various goals for schooling¹ is vital to the nation's future.
- 1.3 The report claims that despite substantial increases in education expenditure over past decades, national and international assessments of student achievement in Australia show little improvement. However the report only covers a time period where 1.5 per cent of the additional needs-based Gonski funding arrangements had been allocated.
- 1.4 In this context, NSW notes that improvements in education systems require a period of time to be visible through better outcomes. For example the McKinsey report, *How the world's most improved school systems keep getting better* (2010) cites a minimum of six years for significant improvements to be achieved across a system.

The methodology and rationale for articulating a 24 per cent increase in government funding between 2004-05 and 2013-14 in the report is contested.

- 1.5 The report's analysis of investment against outcomes depends on PISA 2012 data that predates the Gonski funding arrangements. Before Gonski, funding increases were not needs-based. For government schools, real growth over the period 2004-05 to 2013-14 was only 0.65 per cent per annum per student.²

¹ Ministerial Council on Education, Employment and Youth Affairs, *Melbourne Declaration on Educational Goals for Young Australians*, December 2008

² Productivity Commission Report on Government Services expenditure data excluding user cost of capital, depreciation, payroll tax and school transport costs (Source: ABS 5518.0.55.001), deflated using Wage Price Index – NSW Department of Education

- 1.6 Under half (10 per cent) of the 24 per cent increase in government funding between 2004-05 and 2013-14 was population growth, where an increase in the number of students for all sectors was behind more government spending.
- 1.7 The remaining 14 per cent growth over this period (or growth per student) is 1.5 per cent per annum, which includes significant changes in education delivery with cost impacts such as technology, increasing family and community expectations around retention to year 12, individualised support for students, and greater inclusion and higher expectations for students with special needs.
- 1.8 This 1.5 per cent per annum also includes items not related to educational resources for individual students - user cost of capital, depreciation, payroll tax and school transport.

A balanced perspective necessitates consideration of research that supports positive outcomes that come with investment in education.

- 1.9 There is significant evidence that money does matter and that better school resources can meaningfully improve the long-run outcomes of recently educated children.
- 1.10 The US National Bureau of Economic Research's 2015 study³ indicates that funding increases have large effects on outcomes which included years of education, graduation rates, future income and probability of not living in poverty. Effects were particularly noteworthy for low socio-economic status students. Overall, students showed more positive outcomes the longer they were exposed to the increased funding. Additional funding was demonstrated to take time to have an effect but it changed the trajectory of student outcomes.
- 1.11 These results are not restricted to the US and studies with similarly robust methodologies have supported these findings in contexts such as United Kingdom⁴ and Shanghai.⁵

In order to improve educational outcomes, NSW advocates for funding that is evidence based and targets reforms demonstrated to lift student performance.⁶

- 1.12 NSW points to the potential for an evidence base to support a more sophisticated approach to targeting education need. Better data and evidence support the targeting of resources to areas that improve outcomes for students.
- 1.13 The National Education Agreement provides a needs based and sector blind funding model that directs additional investment to the schools and students with the highest level of need.
- 1.14 At the state level, the NSW Resource Allocation Model fairly distributes funding on the basis of need to public schools in NSW. Non-government schools are also funded according to the National Education Reform Agreement methodology.

³ Jackson, C, Johnson, R, Persico, C, 2015, *The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms*, US National Bureau of Economic Research Working Paper No. 20847.

⁴ Holmlund, H, McNally S, Viarengo, M, 2009, *Does money matter for schools?*, Centre for the Economics of Education, London School of Economics.

⁵ Liang, X.; Kidwai, H.; and Zhang, M. 2016, *How Shanghai Does It: Insights and Lessons from the Highest-Ranking Education System in the World*, World Bank Group.

⁶ Centre for Education Statistics and Evaluation, *What works best: Evidence-based practices to help improve NSW student performance*, NSW Department of Education, 2015.

- 1.15 This investment is targeted at schools based on the profile of their students' needs, and includes individually targeted funding for moderate to high level disability or support needs and new arrivals/refugees, and equity loadings per child for Aboriginality, low socio-economic background, low level disability and English language proficiency. This is in addition to a funding base that reflects the level of educational support required in a school community.
- 1.16 The use of this funding is supported by a range of systemic reforms that enable schools to invest in activities that are supported by evidence. By way of example, NSW has undertaken substantial change across the teaching lifecycle through the Great Teaching Inspired Learning reforms.
- 1.17 Other significant reforms include providing more authority at the school level to facilitate decision-making on factors that lift educational outcomes and better use of data to provide evidence of what works.

2. Alignment with current NSW policy and practice

The findings and key recommendations are largely consistent with current policy and practice in NSW.

- 2.1 NSW notes that the direction of many current and previous reforms in NSW are canvassed in the draft report. Notably, the report recognised the importance of assessing non-cognitive skills, student wellbeing and student engagement, as the Department of Education has done since 2013 through the *Tell Them From Me* student survey.
- 2.2 The draft report highlights the importance of an impartial body to evaluate existing programs in a rigorous way, perform exploratory analysis, and translate evidence in an accessible fashion. The NSW Centre for Education Statistics and Evaluation (CESE) has consistently done this since its creation in 2012. Through CESE, NSW is leading practice in: value-added methodology, data sharing and linkage, large-scale evaluations and the embedding of evaluative thinking in school planning and reporting to effect change.
- 2.3 NSW non-government school systems and representative bodies also have significant research and evaluation capacity which is applied directly to school improvement initiatives. The Catholic Education Commission and Association of Independent Schools in NSW have significant data analysis, research translation and evaluation experience. Recently the NSW Association of Independent Schools established an Education Research Council to improve the uptake of evidence based practices.
- 2.4 The draft report highlights the value of accurate assessments of student ability at the start of school. The Department's Best Start Kindergarten assessment, undertaken by all students starting in NSW government schools since 2011, is an exemplar of such an initiative.
- 2.5 Increasing the use of value-added models is advocated. These have been routinely reported to NSW government schools since 2014. The new approach to school planning, reporting and accountability in NSW government schools utilises value-added measures.
- 2.6 Additionally the Department has investigated the practices of high performing schools, through its 2015 *High value-add schools: Key drivers of school improvement* and findings have shaped educational initiatives. For example the positives associated with the use of data in teaching has influenced the development of the

Business Intelligence tool which consolidates data from many sources, presents information in easy to read formats and facilitates data analysis.

- 2.7 The department also translates the complexities of educational research into accessible advice for how schools can improve practice, through publications such as *What works best*, the *What works best reflection guide*; and the School Excellence Framework and supporting *Evidence guide for school excellence*.

3. A national approach

Any national approach to developing the education evidence base should be minimal in approach, acknowledge existing jurisdictional expertise and have its design, governance and function endorsed by Education Council. (Relates to info requests: 4.1 and 8.1)

- 3.1 NSW does not believe that the case has sufficiently been made for the establishment of a national body. However, given the importance of better developing and using evidence, the case for such a body should be explored.
- 3.2 Any proposals put forward on the creation of a new national body as a result of this inquiry, including its design, structure and governance, should be progressed through Education Ministers at the COAG Education Council.
- 3.3 It is the NSW view that if a national body were to be established, the functions that could add value from a national perspective include coordination, standard setting, data linkage and dissemination of research (such as a 'clearing house' model of information sharing). Such a body could also formulate, via state and territory consensus, national research priorities.
- 3.4 The option of utilising an existing, nationally focussed body and process should also be canvassed. The options of a federated approach could also be considered to minimise duplication of research and resourcing efforts at Commonwealth, state and territory levels.
- 3.5 Any national approach will need to acknowledge jurisdictional and sector expertise and reflect that undertaking research and evidence translation at the state level is more likely to lead to improvements in schools and the classroom as they are much more proximate.
- 3.6 As educational programs usually differ substantially in their implementation between jurisdictions, a single research program at the national level is unlikely to provide insights that would most impact the reality of what occurs in the classroom.
- 3.7 A national body's ability to influence practice on the ground, in schools, is severely constrained in comparison with jurisdictions operating as education providers. For example states are well placed to undertake research and analysis, with a role for the Commonwealth in developing accountabilities for the use of quality research and evaluation outcomes in systems and schools. NSW CESE has four years' experience with large-scale evaluations and possesses the bottom-up capability-building needed to translate evidence into practice. A national institution would not, and could never have this reach into schools.
- 3.8 Existing mechanisms within the educational architecture, such as the Data Strategy Group (DSG), already have a remit to ensure data coverage, quality and consistency. The DSG is a working group under the Australian Education Senior Officials Committee with responsibility for developing a research plan, improving the evidence base and progressing greater data linkages through the life course to better understand education outcomes for all Australians.

- 3.9 The DSG has provided advice about the value proposition associated with a persistent identifier for students, and is keen to ensure a strong business case that clearly identifies benefits for schools and parents. The DSG is well placed to continue to advance the data sharing and evidence development agendas.
- 3.10 Using the DSG or creating a similar national working group is therefore an option that should be considered.
- 3.11 NSW re-iterates the need to carefully assess the costs and benefits of data that is genuinely required at the national level. The primary concern of any new assessment should be its validity. The benefits of national consistency of data will need to be weighed against the costs of moving from existing collections.
- 3.12 As regards sample data collections, while appropriate in some cases, these have limited functionality, for example for purposes such as creating value-added measures. NSW is also not convinced that a case has cogently been made for creating a centralised online meta-data repository. Models of metadata sharing and inventory management currently implemented by the states may provide better value.

4. Privacy

Privacy protocols and approvals governing the use of data need to be robust, rigorous and workable as failure to sufficiently safeguard personal information represents a key risk. (Relates to info requests: 5.1 and 5.2)

- 4.1 Developing a common, cross-jurisdictional approach to the protection of personal information represents a significant, practical challenge to developing a national education evidence base.
- 4.2 NSW has sought to balance policy objectives to protect personal information and enable research and evaluation in sectors including education and health through recent amendments to the *Privacy and Personal Information Act 1988* (the PPIP Act). This legislative reform is driving an increased availability of data to inform research and evaluation. The NSW legislative framework is conducive to sharing of education data without the need to compromise existing protections on privacy.
- 4.3 The report tends to oversimplify amendments to privacy legislation in some jurisdictions. New South Wales could not support any approach that may dilute existing protections for privacy and personal information as set out in the New South Wales legislation.
- 4.4 Additionally, given the risks and sensitivity associated with data in the schools and early childhood sectors, there will be need to explore more sophisticated de-identification techniques. De-identifying data is not as simple as removing names, dates of birth and addresses as specified on p.119 of the draft report.
- 4.5 The draft report has a tendency to conflate information provision to researchers with other uses of personal information, for example publishing data on a website. NSW points to how data provision for research and in the public interest should be subject to a different standard than providing data to be published on a website.

5. Opportunities for data improvement

Significant opportunities for data improvement exist outside of the proposals framed in the draft report.

- 5.1 Opportunity still exists for a more strategic focus to be applied to the collection and management of early childhood data, with data gaps and inconsistencies between jurisdictions impeding the understanding of the effect of early childhood education on educational outcomes for children.
- 5.2 A focused, national understanding of the purpose of early childhood data collection that then addresses the known deficiencies across states and the national level would provide more meaningful data that would help to better understand the effectiveness of different early childhood education settings.
- 5.3 Governments, and ultimately students, would benefit from improved linkage between data sets on early childhood education and schooling.
- 5.4 NSW supports consideration of the introduction of a unique student identifier (USI), noting the work that is underway under the auspices of the DSG. Potentially leveraging the implementation of a USI in the national vocational education and training sector, would significantly improve the researchers' capacity to understand and analyse student movement and achievement.