



# NSW GOVERNMENT SUBMISSION

Productivity Commission Inquiry into the national education  
evidence base

## 1. Benefits of a national education evidence base

A national education evidence base will:

- benefit national education objectives spanning early childhood, schooling, post school, skills and training
  - inform needs-based funding and target reforms shown to lift student performance.
- 1.1 Developing a comprehensive national evidence base is important to ensuring policy interventions lead to improved educational outcomes. A national education evidence base should tell us what works, drive good practice, inform future policy and research directions and funding decisions.
  - 1.2 NSW welcomes the Productivity Commission's work to further develop a national education evidence base. This represents a significant opportunity to build on existing data initiatives aligned with the objective of maximising transparency and utility of information. These include the introduction of a national Unique Student Identifier (USI) for vocational education and training and the Nationally Consistent Collection of Data for school students with a disability.
  - 1.3 Drawing upon an expanding evidence base over time presents a real opportunity to realise better education outcomes that can lift productivity and economic prosperity into the future.
  - 1.4 The National Education Agreement identifies five outcomes to achieve the objective of 'all Australian school students acquire the knowledge and skills to participate effectively in society and employment in a globalised economy'. These outcomes include traditional measures, such as 'meeting basic literacy and numeracy standards'. Other outcomes aim to 'reduce the educational disadvantage of children'.
  - 1.5 To achieve this more complex and ambitious set of outcomes requires data and evidence to be built and linked to other measures of disadvantage and outcomes outside school to develop evidence on effective, whole child interventions.
  - 1.6 Accurate data into the educational needs of individual students and the school communities in which they reside will:
    - enhance decisions on the appropriate level of funding needed for schools and systems
    - support measures that are meaningful at both national and local level.
  - 1.7 The identification and targeting of educational need based on robust evidence is complex but crucial to supporting all students to reach success.
  - 1.8 Australia has the best chance of improving educational outcomes if funding is evidence based and targets reforms that are shown to lift student performance.

## 2. What comprises a national education evidence base?

A national education evidence base should comprise data on education outcomes, student characteristics, education workforce, and other data from outside the education system. Inclusion of both qualitative and quantitative evidence will be critical to building a comprehensive collection of education evidence.

- 2.1 The Commission should adopt a broad approach in defining what comprises a national education evidence base. Broadening the composition of the evidence base is important as the Commission has been asked to make recommendations on a comprehensive and long term evidence base, to inform policy development now and in the future. It should have sufficient depth and breadth to support knowledge and understanding of both the education sector as a whole and specific groups within it.
- 2.2 Quantitative data is only one aspect of a national education evidence base. As well as data, inputs of evidence include, but are not limited to, qualitative evidence, surveys, evaluation

and controlled trials. The development of a truly comprehensive national evidence base is dependent upon the inclusion of a wide spectrum of data.

- 2.3 There is also need for national education objectives to go beyond traditional indicators such as academic performance. Demonstrated links between broader, non-cognitive indicators such as individual wellbeing and engagement and educational outcomes point to the importance of a focus on the whole child commitment.
- 2.4 The significance of the whole child to education policy was emphasised in the Melbourne Declaration on Education Goals for Young Australians when it stated:  
*Schools play a vital role in promoting the intellectual, physical, social, emotional, moral, spiritual and aesthetic development and wellbeing of young Australians, and in ensuring the nation's ongoing economic prosperity and social cohesion.*<sup>1</sup>
- 2.5 Student wellbeing is important for two reasons: first, the recognition schooling is about wellbeing of the whole child rather than just academic outcomes and, second, students who have higher levels of wellbeing tend to have better cognitive outcomes at school.
- 2.6 The focus on the whole child, rather than just their cognitive development as measured by educational achievement, has gained policy significance over the last decade.<sup>2</sup> Both research and education practice have recognised the significance of student wellbeing and the interdependent, and reciprocal, relationship between wellbeing and learning. Evidence shows that students with high levels of wellbeing are more likely to have:
  - higher academic achievement and complete Year 12
  - better mental health
  - a more pro-social, responsible and lawful lifestyle.<sup>3</sup>
- 2.7 The ability to quantify the impact of engagement, wellbeing and teaching practices on student performance represents an enhanced level of systematic information to inform school level policies and practices.

### 3. Minimising costs

The potential costs associated with the design, development, implementation and maintenance of a national education evidence base must be carefully weighed. In order to balance the benefits and costs a clear understanding will be required of the information and data needed at a national level to drive education outcomes. This will involve:

- leveraging existing data sets and national data initiatives to avoid duplication and minimise reporting obligations and costs
- reconciling and balancing state and territory needs and responsibilities for state-level data sets.

#### Avoiding duplication and leveraging existing data sets

- 3.1 A clear differentiation between these different levels of responsibility will enable data collection to be prioritised in accordance with issues of shared national importance. This is an important means to ensure a balance is maintained between the opportunity to extract the greatest value from the education evidence base model and minimisation of costs.

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<sup>1</sup> Ministerial Council on Education, Employment, Training and Youth Affairs (2008) *Melbourne Declaration on Educational Goals for Young Australians*. Ministerial Council on Education, Employment, Training and Youth Affairs: Melbourne.

<sup>2</sup> Social Policy Research Centre (2010) *Conceptualisation of social and emotional wellbeing for children and young people, and policy implications*. A research report prepared for the Australian Research Alliance for Children and Youth, and the Australian Institute of Health and Welfare: Sydney.

<sup>3</sup> Australian Catholic University and Erebus International (2008) *Scoping study into approaches to student wellbeing: Literature review*. Report to the Department of Education, Employment and Workplace Relations.

- 3.2 Duplication of data collection should be avoided, noting the significant expenses involved in collecting, capturing, processing, managing, reporting and storing. Where data is captured and held is determined in accordance with constitutional responsibilities for education, early childhood, health and post school education, training and employment. It will be important to understand what data is held across governments, school systems, early childhood providers and other agencies.
- 3.3 Through its deliberations the Commission should focus on ways to minimise these costs and duplication by adopting a pragmatic approach to streamlining collections, distributed ownership, leveraging existing collections and the role of standards. The Commission should also identify where the greatest scope for benefit can be realised over the short, medium and long term.

#### Reporting obligations

- 3.4 The impact of reporting obligations should be taken into account. Expanding the depth and breadth of data reported will be costly. The means balancing the benefits against increased costs and reporting obligations will be critical. This may be a particular concern for early childhood education providers and schools that are not well equipped or resourced to undertake such activities given that their primary responsibility is the delivery of quality education and care.
- 3.5 A pragmatic and workable solution is required that seeks to minimise costs, both for Commonwealth, state and territory governments, but also across the early childhood and school systems. Without adequate investment in capability, there are also risks some of the contemplated benefits associated with implementing a national education evidence base will not be fully realised.

## 4. Opportunities

A national education evidence base offers a strategic opportunity to harness the range of data sets within and beyond education to promote better understanding of:

- longer term outcomes and education achievements of programs and interventions that begin early in life
- evaluating the impact of investment during the early years.

#### Enhancing consistency and linkages

- 4.1 A national education evidence base can usefully inform state, territory and federal government consideration of resource allocation and policy and program design and evaluation. National data sets of broad measures that are comparable and consistent over time will provide governments with a better means of measuring progress toward nationally agreed education objectives.
- 4.2 Opportunities will also arise to enhance the value of existing data via better linkages between data sets held at national and state level. Driving increased consistency and harmonisation, where feasible and appropriate, would enhance the value of existing datasets and reduce costs incurred in linking data over time.
- 4.3 The adoption of a well-considered and carefully designed model for a national education evidence base will promote better linkages and cooperation between early childhood, school and post school, health, welfare and socio-economic data sets, and may provide an avenue to address the fragmentation and lack of consistency which currently exists between collections.
- 4.4 A national education evidence base will also provide greater line of sight for school leadership teams, teachers and students around performance and the factors that influence student outcomes. This may drive improvements around student performance.

## Addressing early childhood

- 4.5 There is a growing body of evidence pointing to the importance of simplifying access to early childhood education.<sup>4</sup> Early childhood education is important to subsequent development including successful transition to schooling and school educational outcomes.<sup>5</sup> Formerly a singular policy emphasis on 'care' demonstrably risked downplaying the sector's significant educational benefits.<sup>6</sup>
- 4.6 There is need for a more strategic focus on collections around early childhood data with a view to integrating and supporting transitions with the school sector. Maximising data linkage will better target system accountability and measure the impact of quality programs at both the individual and system level.
- 4.7 Compared to the schools sector, data collection in early childhood is relatively fragmented and underdeveloped.<sup>7</sup> Policy and practice in the sector has historically lacked focus and integration and this has led to gaps and inconsistencies in early childhood data collections.
- 4.8 Gaps in assessing the effectiveness of different early childhood contexts and service delivery models serve to impede a clear understanding of how these influence educational outcomes over time.
- 4.9 Different reporting protocols have been adopted across levels of government in part driven by different purposes for collecting data and the absence of common widely recognised definitions across sectors and levels of government.
- 4.10 For instance, all jurisdictions collect some level of data on children from disadvantaged families, but for different purposes. The absence of a universally agreed definition of disadvantage means that NSW and the Commonwealth have adopted definitional measures on the basis of:
  - health care card holders (NSW)
  - geographical location based on national Socio-Economic Indexes for Areas (SEIFA) scores (Commonwealth).
- 4.11 Data inconsistency is an impediment to comprehensive understanding and signals the need for better data linkage between data sets leading to better analysis and evidence based decisions.
- 4.12 Addressing and overcoming such issues is a significant challenge but over the long term increased consistency and potentially common standards could drive better comparability and consistency.

## Longitudinal data

- 4.13 The national model will provide a new and strategic opportunity to advocate for the development of more longitudinal data across the educational trajectory. Longitudinal studies conducted in other sectors, such as health, have been shown to be a valuable resource for decision makers. For the education sector, longitudinal data would benefit public policy development and facilitate evidence based information for stakeholders and the community. Better longitudinal and linked data will also assist in building evidence on the link between schooling and eventual workforce participation and productivity.
- 4.14 Relative to the USA and UK, Australia has made very little use of longitudinal data. Improving use would make an important contribution to assessing the relative significance of different

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<sup>4</sup> Baxter, J. (2013) *Child care participation and maternal employment trends in Australia*, Melbourne: Australian Institute of Family Studies.

<sup>5</sup> Hall, J. Syla, K., Sammons, P., Melhuish, E., Siraj-Blatchford, P., and Taggart, B (2013) 'Can preschool protect young children's cognitive and social development? Variation by center quality and duration of attendance', *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice*, 24:2, 155-176.

<sup>6</sup> Warren, D. and Haisken-DeNew (2013) *Early Bird Catches the Worm: The Causal Impact of Pre-school Participation and Teacher Qualifications on Year 3 National NAPLAN Cognitive Tests*, [http://melbourneinstitute.com/downloads/conferences/LEW2013/LEW2013\\_papers/WarrenDiana\\_LEW2013.pdf](http://melbourneinstitute.com/downloads/conferences/LEW2013/LEW2013_papers/WarrenDiana_LEW2013.pdf).

<sup>7</sup> National Information Agreement on Early Childhood Education and Care.

influences on observed outcomes, and identifying sensitive windows of development when the return on investment from policy intervention can be very high.

#### Linkages across data sets

- 4.15 Governments will benefit from Commonwealth resourcing of a national education evidence base of comparable and consistent evidence to assess progress toward nationally agreed education objectives. A national evidence base also provides the potential to examine traditionally under-represented areas in comparable contexts nationally, such as remote schools.
- 4.16 The range of data sets and collections at national and state levels, with distributed ownership, contain information relating to early childhood, education, vocational education and training, health, welfare and socio-economic status.
- 4.17 There may be merit in further exploring opportunities for linkages across data sets within and beyond education, such as child health. Work has previously been undertaken to examine opportunities to link these data sets, however further progressing this work is prohibited by costs. There is benefit in the Productivity Commission examining this question and making recommendations for a workable solution, taking into account an appropriate balance between potential benefits and likely costs. A solution could help to build an evidence base and generate new learnings and insights around how socio-economic status interrelates with early childhood development and can have life-long consequences, including for education outcomes.<sup>8</sup>

#### Unique Student Identifier

- 4.18 The opportunity to enhance the dynamic richness and value of data held within and across multiple data sets may be enabled through the introduction of a USI for the school sector.
- 4.19 A national USI will significantly improve the capacity of researchers to undertake better analysis, and make better comparisons, via complex data matching processes and data linkages.
- 4.20 Ultimately a USI will serve as a tool for understanding and improving student outcomes and for better meeting students' needs.
- 4.21 A USI has already been implemented nationally in the vocational education and training (VET) sector. This came as a result of a Council of Australian Governments (COAG) agreement in April 2012 to implement the USI to enable students to obtain a complete record of their VET enrolments and achievements from a single source. Information obtained from the USI can assist governments to develop policy initiatives and evidence-based programs.

#### Building evidence through research, analysis and evaluation

- 4.22 Bodies focused on research and evaluation have an important role to play in the national education evidence base model. There is value in states and territories having organisations with self-directed research capability, such as the NSW Centre for Education Statistics and Evaluation (CESE).
- 4.23 Bodies such as CESE can turn data into knowledge, harvesting existing data sources and consolidating responsibility for evaluation, statistics, data analysis and reporting. This creates new opportunities to generate new insights and perspectives. This can lead to tangible measures to improve teaching and learning across all areas of education – early childhood, schooling, training and skills and higher education. Importantly, teachers are able to find out what works in different situations and make choices about effective practices for use in their classrooms.
- 4.24 Collaboration is a key element to the operation of CESE, which works actively with partner organisations and NSW government departments such as Health and Family and

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<sup>8</sup> See e.g. US research by David Cutler and A. Lleras-Muney, *Education and Health: evaluating theories and evidence*, National Poverty Centre, University of Michigan.  
[http://www.npc.umich.edu/publications/policy\\_briefs/brief9/](http://www.npc.umich.edu/publications/policy_briefs/brief9/)

Community Services to make effective use of available data to improve education outcomes and student outcomes more broadly.

- 4.25 Similarly the sharing and dissemination of knowledge and collaboration across jurisdictions to connect research and classroom practice will be key to extracting enduring value from the national education evidence base. The success of a national education evidence base will be ultimately contingent on a culture of collaboration, a shared vision and open communication. These will inform and enable innovative solutions to enhancing educational outcomes across sectors, systems and jurisdictional boundaries.

