Attachment 2

LEARNERSFIRST

Submission by Tasmanian Government

Productivity Commission Inquiry into the Education Evidence Base

May 2016

Tasmanian Government

1. INTRODUCTION

The Tasmanian Government welcomes the opportunity to provide a response to the Productivity Commission's public inquiry into the Education Evidence Base.

As acknowledged in part 3 of the terms of reference for this inquiry, a considerable amount of effort has been involved across all jurisdictions in not only collecting and collating data relating to education, but into developing, analysing and reporting it in a way that is easily accessible and usable for governments, schools, related organisations and other agencies. Within jurisdictions there is a high level of expertise in collecting, administering and reporting data; all states have business units (of varying sizes) to provide timely and accurate data for use for stakeholders, including organisations conducting appropriate and significant research projects both at a state and a federal level. Tasmania supports the framework outlined in figure 1, p.9 as a means of utilising the current national evidence base, which is already well established, to 'improve educational outcomes' (p.6). This framework describes the current purposes and procedures that the Department of Education in Tasmania uses to track and monitor progress, develop data sets to assess and analyse the efficiency and effectiveness of educational programs and manage the data reporting to inform decision-making. As well as providing information for mandated reporting, Tasmania's education evidence base is used for a range of purposes described in the document, including real time data collected to inform and support school and individual teacher decision-making and data used to inform statewide policy.

This inquiry process presents an opportunity for the Australian Government, along with states, territories and other agencies and departments charged with collecting and analysing data, to establish effective ways of working together to support policy development, educational research and decision-making that focuses on the best interests of students and leads to improved educational outcomes at individual, system and national level.

School education is a fundamental responsibility of states and territories. In addressing this responsibility, Tasmania, along with other jurisdictions, has developed datasets which are rich and of a high quality. As outlined above, a key purpose of this data collection is to enable school improvement to achieve improved outcomes for all students. While acknowledging that educational research at both national and jurisdictional levels is important in contributing to school improvement, the high quality data currently available from jurisdictions would be suitable for educational research purposes.

Two major projects undertaken in the Government education sector within the last five years in Tasmania are examples of how strategic use of data can provide high quality information. The first of these continues to inform policy/strategic decision-making at government level. The second is putting real time, appropriate data into schools to enable school leaders and teachers to make informed decisions around programs, practices and both individual and cohorts of students.

2. Tasmanian example - data sharing/data linkage between DOE Tasmania and the Australian Bureau of Statistics

In 2013 the Tasmanian Department of Education was approached by the Australian Bureau of Statistics (ABS) to support a collaborative study between the two organisations. This study was to be an initiative of a new unit led by the ABS, Transforming Education and Training Information in Australia (TETIA - http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4211.0main+features60October+2013).

The ABS proposal was to trial data linkage studies using a range of Tasmanian education and training data. The purpose was to develop a study to test the quality of different data linkage methodologies and provide preliminary statistical analysis. Data sources included a range of areas (Early childhood education, school enrolment data, NAPLAN data Australian Early Development Index and Vocational Education and Training data). The final study, *Factors influencing early childhood development in Tasmania',* was released in October 2015. (http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4261.6Main+Features102006-2013)

The study combined DOE and Tasmanian Government-held data (preschool participation, proportion of developmentally vulnerable children by characteristics, physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, communication and general knowledge) with ABS statistical data (parental labour force, highest parental education, parental employment status, number of children in family, weekly household income, Socio-economic Index for Areas, remoteness). The results provided some insights into factors influencing early childhood development that have been reflected in recent policy development and decision-making. The Learning in Families Together (LIFT) programme is an example. The programme has goals around schools working with families to develop their confidence and skills to support their children's learning at home. The ABS study's conclusion has affirmed that appropriate elements of family engagement have been targeted in identifying that:

> When other factors were held constant, the regularity with which a child was read to (or encouraged in their reading) at home [and] parental engagement with a child's school, … all had strong and consistent relationships with their developmental vulnerability across all AEDC domains (P.15 *Factors influencing early childhood development in Tasmania).*

The report also pointed out the value of data linkage and data sharing in this format.

> This article has shown how integrated data, in particular socioeconomic information from the Census of Population and Housing and information about developmental vulnerability from the Australian Early Development Census, can add new and rich information to the education evidence base for policy and research. Integrating data

has the additional benefits of being less resource intensive than collecting new information through surveys or designed administrative collections as well as encouraging collaborative work and developing partnerships between the agencies involved in the work. (P.6 *Factors influencing early childhood development in Tasmania).*

The study provided a useful analysis of a range of student and household factors which had never been previously available and provided quality, rich information for policy purposes and both school and system practices. They also indicated that it was a way of enhancing the evidence base available for educational policy in Tasmania (and Australia) in a cost effective and efficient way without increasing the burden on teachers, students and parents. Participation in this trial study was facilitated by both organisations (DOE and ABS) working together to overcome impediments to implementing data linkage and data sharing processes. A useful outcome of the Commission's current inquiry would be the identification of impediments and challenges to data sharing and data linkage between jurisdictions and with external agencies.

3. Tasmanian example - ed*i.* Providing schools and teachers in the Tasmanian Department of Education with real-time data about <u>every</u> student to enhance learning and social outcomes

Ed*i* (Education Information) is an Australian-first, major educational initiative established in Tasmania designed to provide access for teachers, support staff, corporate and leadership staff to individual student and school data. Ed*i* is a portal which provides school and departmental staff with instant access to school and individual student data through the one entry place. It was launched in June 2014 after the start of initial planning in 2011, a development phase and a comprehensive trial phase in 2013. It is accessible to school staff anytime, anywhere and by any device (including phones). It provides data for individual students that is both historical and real time, allowing teachers not only to access longitudinal data right back to their initial school entry, but also to access up to date information about attendance, behaviour and academic results (ed*i* data is loaded from source systems every night). The portal has been recognised as an Australian leader, having won the 2015 Prime Minister's Award for Excellence in Public Sector Management for ed*i* and a merit award at the Australian iAwards in August 2015.

Ed*i* provides a single student record for each student, generating data to allow for quick and simple identification of individual student needs, as well as providing data-based information for school leaders and system leaders around performance at student, class, school, programme and system levels.

The portal has been consistently updated to address user feedback since its inception. Financial and Human Resource links and reports have been added to provide information for principals and an update at the beginning of term two this year has provided class portals (class dashboards) for all teachers which contain student records for easy access. Feedback from stakeholders is that the implementation and ongoing improvements to the

ed*i* portal have brought positive, authentic change to practices in schools, as well as benefit to the Department of Education as a whole through the capacity of the system to enable shaping of policy. The ability to access more data in real-time is leading to more cohesive, strategic thinking and interconnections between the business units within the Department as a whole. Use of systemic data provided through ed*i* is enabling both school and systemic improvement.

Data contained in ed*i* is currently only available about government schools and students. When a student transfers between government schools, leaders and teachers have immediate access to data about that student's history. Data is not available on students who enter the government sector from other Tasmanian sector schools or from interstate. Tasmania would welcome changes to improve accessibility to student records from other sectors and jurisdictions.

4. Scope of the inquiry (pp. 2-4)

Should the scope of the evidence base include data on children younger than 4 years old (or prior to the year before compulsory schooling begins)? If so, why, and should it cover all children, or only those attending early childhood education and care programs outside the home? (P3)

Tasmania believes that the scope of the terms of reference should include data on all children, not just those in early education and care programs prior to the year before compulsory schooling begins. As can be seen from the ABS/DoE study undertaken as a shared project (point 2) early data which includes information about health, welfare and family circumstances about children is vital to making informed decisions about learning programs and the specific needs and requirements of vulnerable children and families.

The education evidence base should include data on young people who leave school before the end of year 12 and also include data around students participating in VET programs from both public providers and private RTOs. It is also imperative that any education evidence base includes data on successful learners who have attained post-compulsory qualifications. The evidence base should also include data on University entrance and completion as it is understood that a comprehensive dataset already exists.

5. Issues and Opportunities – Data Sharing (pp.16-20)

Tasmania notes the acknowledgement in the terms of reference around the current challenges implicit in data sharing and data linkage. A key issue for education jurisdictions is the capacity to easily track families who move across sectors within a state and across states and territories. While this is a challenge for Tasmania, our situation is slightly less critical than for mainland jurisdictions where a change from one state education system to the next can occur in a small number of kilometres. In the current situation, individual schools can request data and information from the previous school of an interstate enrolment if the parent gives written permission to access this information. This is unwieldy and time-

consuming. The development of a clear framework around data sharing and linkage will provide support for jurisdictions with tracking student movement.

The work of the ABS is acknowledged in their efforts to engage with jurisdictions around data linkage projects and their efforts in developing an enduring database of education and socio-demographic information. A sustainable data linkage system such as that already operating in Western Australia is needed on a national basis. The Public Health Research Network (established 2009) described in the terms of reference (p.19) provides an excellent model to achieve a structure which maintains the data in separate jurisdictions but provides file transfer infrastructure to enable cross-jurisdictional linkage for educational institutions and access for approved researchers. If legislative barriers can be reduced and the time taken to develop data-sharing agreements lessened, there would be more appetite around and confidence in cross- jurisdictional use of data.

What are the costs and benefits of expanding the Unique Student Identifier nationally to students in school and early childhood education and care? (P 20)

The Unique Student Identifier (USI) is used in different states for purposes usually related to operational aspects of education. In considering whether it should be expanded nationally, discussion would be required to define a clear purpose. It is acknowledged the USI will be useful for NAPLAN Online from an operational viewpoint. There are currently other uses of a USI as identified in the paper which, while perhaps helping to contribute data for educational research, are in place for operational purposes (Box 6, P 17, Data linkage methods used to protect privacy). A USI is certainly not essential for good research outcomes. Quality research projects, which have been developed and progressed by the ABS with Tasmania and Queensland, demonstrate that fact.

6. Privacy (pp. 20-23)

Jurisdictions are currently addressing the impacts of privacy legislation on data sharing as part of preparation for the NAPLAN Online full implementation by 2019. The lack of uniformity of privacy legislation across states has certainly impacted upon the willingness of jurisdictions to participate in cross-jurisdictional research and projects which have the capacity to enhance educational outcomes. Through this inquiry, the review of national privacy arrangements would potentially remove some significant barriers for some jurisdictions. It should be noted that these barriers are often perceived rather than real. Tasmania would support 'plain English' interpretations of privacy legislation to assist decision makers.

Parents would be important stakeholders in any proposal to develop a national unique identifier for their child. In recent consultations on a review of the Education Act that is currently underway in Tasmania, parents and the wider community were clear they do not support the collection of data for its own sake but must understand how it will support the education of Tasmanian children.

7. Data comparability (pp. 23-26)

There are known data comparability issues in datasets and in the reporting from these datasets. The paper notes the significant data comparability issues in the early childhood education space. As noted in the paper (p.24) comparability issues are often not due to a difference in data standards but are due to the differences in education delivery as well as differences in the structure of populations being compared. While individual jurisdictions are usually aware of these issues other users of published data may not be, which can lead to misleading reporting.

The difference in school starting age in Tasmania as compared to other jurisdictions is an example of how education delivery can affect data comparability. Tasmania's minimum starting age, at 5 years, is the oldest for any jurisdiction. This affects Tasmania's results in a range of national reporting contexts, including the annual Report on Government Services (ROGS). For example, the Program for International Student Assessment (PISA) assesses fifteen year olds around reading, numeracy and science once every three years. A significant proportion of Tasmania fifteen year old students are in year 9, unlike those in other jurisdictions who are mainly in year 10 and have experienced a broader range of learning experiences through their extra year of access to education. This disadvantages Tasmanian students in terms of their outcomes on these international assessments.

Another example of comparability issues that are often glossed over in the push to publish data is the Year 12 completion rates published in the Report on Government Services. There are significant caveats noted for this data yet a chart juxtaposing the rates for states and territories is provided (Fig 4.38, ROGS 2016). A national rate is also computed even though the caveats are such that the validity of the calculation is questionable. If the debate on education is to be informed by quality evidence then it is essential that the evidence provided in public reporting is sound.

8. Other issues

The use of datasets to inform policy development and measure educational outcomes requires that appropriate datasets exist, and where they do exist, they are used within any limits outlined by the data custodian. If not, then the data, information or analysis of outcomes might not produce high-quality evidence that can be used with confidence. For example, in the following brief case study around National Partnership Universal Access annual payments, the Australian Government measures jurisdictional performance using ABS Indigenous census data. Financial penalties are imposed of the Performance Indicator target is missed by 1% (or, in Tasmania's case, as little as six students). This may amount to the withholding of significant amounts of funding.

One of the Closing the Gap measures is to measure pre-school participation in the year before full-time schooling (generally 4 year old children).

This measure is sourced from the National Partnership Agreement on Universal Access to Early Childhood Education – 2016 and 2017 (NP-UAECE), namely PI 2 - Access to quality program:

- *The proportion of children enrolled in the year before full-time school in quality early childhood education programme(s), for Indigenous children, and vulnerable and disadvantaged children.*

The data to measure the Indigenous population is sourced from the ABS publication Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 2001 to 2026 (3238.0) released on 30 April 2014.

The ABS clearly notes in their explanatory notes the limits of the datasets:

"Single year of age population estimates for Aboriginal and Torres Strait Islander peoples for 30 June 2011 should be used with caution. The estimates are subject to errors that cannot be comprehensively adjusted for within the population estimates compilation process, given the limited ability to estimate Census undercount by Indigenous status and other demographic characteristics.

Features present in single year of age Census counts may be likely to appear in population estimates even after adjustments for undercount and other factors have been applied. The ABS recommends that five year age groups should be used in preference to single year of age data wherever possible, particularly for states and territories with relatively small Aboriginal and Torres Strait Islander populations."

One option could be that a single, consistent set of protocols be established for consideration when using data to develop performance indicator specifications to measure educational outcomes, in particular where financial penalties are possible. The use of these protocols could strengthen high-quality decision making and inform users of any limitations.

9. Conclusion

Tasmania is supportive of improvements being made to the way education data and information are shared between jurisdictions, sectors and agencies. Any identified changes should occur after extensive consultation with all stakeholders who currently hold or maintain education databases (including those with information on the education workforce) or have access to relevant statistical data from outside the education system. It is pleasing that there is a clear intention to prioritise data improvement work nationally. However, it is vital that the agenda for change remains focused on creating improvements in student achievement and outcomes.

All levels of government have a keen interest in all uses of data (both operational and research); however, each level has different priorities. In Tasmania (as in a number of other states) there has been a strong focus on providing teachers and schools with the data they need to improve interventions which will ultimately improve the performance of our education system. While the push to focus on a national data collection for policy and research purposes is understandable, this push has the capacity to create tension around

prioritising finite resources and capacity to undertake what are complex data improvements. Tasmania would be very reluctant to embrace a national agenda where there was a risk that resources may be diverted from our current, very successful data systems aimed at improving the performance of schools.

The health models outlined are good examples of effective data linkage and sharing. Jurisdictions and other national bodies (such as the Australian Bureau of Statistics) are already working collaboratively due to the mutual trust that exists. However, until there is a commitment to a collaborative approach, which might require additional funding for jurisdictions to support major data initiatives, there is a strong chance that improvements will be problematic.

Tasmania would not support a new national body either as a clearing-house or data repository. Our preferred model would be the establishment of a national strategy with the brief to demystify, simplify and improve current arrangements around data governance, sharing, usage and management. There are currently bodies which are well placed to support data linkage and sharing between jurisdictions and with external agencies. For example, the Education Council provides an appropriate forum and high level governance with representation from all jurisdictions. Part of the scope of Education Council responsibility outlined in the 2014 terms of reference (http://www.educationcouncil.edu.au/) would seem to fit the requirements of the terms of reference for this inquiry.

> "…the Council aims to ensure that integrated Australian education systems seamlessly promote high achievement for all students regardless of circumstances. The Council will further collaborate to develop a research plan, and improve the evidence base, to inform policy development and priorities, and progress greater linkages of data through the life course to better understand education outcomes and productivity for all Australians."

COAG has determined that the Education Council has sufficient authority to reach agreement on national collaborative action and to direct jurisdictional work around legislative change and negotiation around agreements and protocols. Indeed, one of the key working parties (the Data Strategy Group) established under the Australian Education Senior Officials Committee (AESOC) has terms of reference to support Education Council in this function as part of its scope of responsibility:

"… DSG will provide advice to AESOC regarding:

- EC's national data priorities and the strategies to pursue these priorities, including directing data-related aspects of the EC work plan
- Opportunities to optimise efficiencies with respect to data-related matters that fall outside the existing national education architecture with a view to minimising duplication"

The Tasmanian Government looks forward to further participation in the inquiry before the final report is developed for the Australian Government.