



Our Ref: 2016/26006

Ms Yvette Goss National Education Evidence Base Productivity Commission Locked Bag 2, Collins Street East PO MELBOURNE VIC 8003

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Dear Ms Goss

SUBMISSION: PRODUCTIVITY COMMISSION INQUIRY INTO THE NATIONAL EDUCATION EVIDENCE BASE

Please find attached a submission from the School Curriculum and Standards Authority to the Productivity Commission Inquiry Into The National Education Evidence Base.

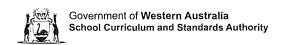
Please refer any quieries regarding this submission to Vanessa Peters

Yours sincerely

ALLAN BLAGAICH CHIEF EXECUTIVE OFFICER

20 May 2016

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Submission to National Education Evidence Base Productivity Commission Issues Paper

From

School Curriculum and Standards Authority

Introductory comments

The School Curriculum and Standards Authority (the Authority) is the organisation established under the *School Curriculum and Standards Authority Act, 1997* that determines school curriculum, assessment, reporting and certification in Western Australia.

The Authority has responsibility for a range of curriculum, assessment, reporting and certification matters that broadly fall under the 'evidence base' of education outcomes in Western Australia.

The functions of the Authority are:

- · to establish an outline of curriculum and assessment in schools
- to issue guidelines for the development of courses and the assessment of student achievement in those courses
- to develop courses, or to cause courses to be developed, in accordance with the guidelines above
- to evaluate and, where appropriate, accredit courses developed by the Authority or other persons in accordance with the guidelines
- to recognise either wholly or in part or with modification:
 - o courses
 - the assessment of student achievement
 - o the standards of student achievement that apply to that assessment that are:
 - the subject of agreements or arrangements made between the State and the Commonwealth (whether or not those agreements or arrangements involve another State or a Territory) or
 - otherwise considered appropriate by the Authority
- to determine courses:
 - o recognised or accredited by the Authority
 - o otherwise considered by the Authority to be appropriate

in which students may be assessed, or caused to be assessed, by the Authority, whether for the purposes of certification or otherwise

- to establish the minimum requirements for graduation from secondary school and for the issue of a certificate of student achievement
- for the purposes of graduation from secondary school and the issue of a certificate of student achievement, to maintain a register of student achievements in courses and activities that are considered by the Authority to be relevant to those purposes and are:
 - o recognised or accredited by the Authority or by bodies other than the Authority

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- o otherwise considered by the Authority to be appropriate for those purposes
- to evaluate and if appropriate recognise, for the purposes of certification or otherwise, the achievement of students, whether that achievement is attained in the State or elsewhere
- to establish the standards of student achievement and other requirements that apply to the assessment of student achievement made, or caused to be made, by the Authority
- to determine the eligibility of students and other people in relation to assessments made, or caused to be made, by the Authority
- to assess student achievement, or cause student achievement to be assessed, at the times determined by the Authority
- to provide, at the times and in the manner determined by the Authority, the results of, and reports on, the assessment of student achievement made, caused to be made or recognised by the Authority to governing bodies, principals of schools, students and parents of students
- to the extent determined by the Authority, to provide for the comparability of assessments of student achievement in the compulsory education period that are made, caused to be made or recognised by the Authority
- to consult with universities, and persons and bodies having functions relating to vocational education
 and training, with respect to standards of student achievement and other requirements and procedures
 for admission to university and vocational education and training, and to review from time to time the
 effects of those standards, requirements and procedures
- to provide information to universities, and persons and bodies having functions relating to vocational education and training, on the achievement of students seeking admission to university or to vocational education and training
- to establish, determine the criteria for, and administer exhibitions and awards to be granted in recognition of student achievement.

The Authority's has defined roles across Years K-10; Years 11 and 12; and across all years.

Year K-10 roles:

- Provide the mandated curriculum and achievement standards for all Western Australian schools the Western Australian Curriculum and Assessment Outline (the Outline). This includes:
 - o Kindergarten Curriculum Guidelines
 - o Pre-primary to Year 10 (P-10) syllabuses containing core content
 - P-10 standards of student achievement in each learning area
 - mandated policy for reporting student achievement
 - . o annotated student work samples exemplifying performance
- Undertake moderation of assessment and grading to ensure comparability of reporting of student achievement in P-10.

Year 11-12 roles:

- Establish requirements for the Western Australian Certificate of Education (WACE). This includes:
 - o courses organised into Year 11 and Year 12 syllabuses
 - o standards of student achievement for each course
 - o mandated policies for assessment, grading and reporting student achievement
 - o moderation of grades for courses
- Set and mark Year 12 external course examinations
- Set and moderate externally set tasks for Year 12 General and Foundation courses (from 2016)
- Award the WACE and grant exhibitions and awards.

Roles across K-12, for all students:

- Record student participation in schooling (currently Year 8–12) and achievement (currently Year 11–12)
- Certify student achievement (senior secondary)
- Administer standardised tests, including National Assessment Program Literacy and Numeracy (NAPLAN); administer NAP sample tests; and administer the Online Literacy and Numeracy Assessment (OLNA)
- Accredit curriculum and courses
- Provide reports on standards of student achievement in Western Australian schools.

While the Authority's roles involve the collection of data that might fall within the gamut of data sets being considered by this inquiry, e.g. collection of demographic and enrolment data and student achievement data, the Authority's remit does not allow for supporting increased availability of such data sets, to public or private sectors.

The Authority already provides access by individual Year 12 students to examination level data about themselves, e.g. examination timetables and examination results, and data sets that schools can also access; however, the privacy, confidentiality and security of such data sets are matters which are legislated within the *School Curriculum and Standards Authority Act, 1997* and are therefore issues beyond the Authority's remit to comment on, in the context of this inquiry. In the broader context, it is well known that providing students with access to detailed feedback about their performance and achievement has a major positive impact on their academic improvement.

As a general principle, the Authority supports the identification of benefits that may arise from the increased provision of data about 'educational outcomes'; however, it may be difficult to identify the evidence of the benefits of increasing access to such data in light of the complex technical, administrative, legislative, social, political and privacy issues that would need to be considered, by this inquiry. It is unlikely this Authority could provide material evidence of such benefits, in the timeframe available for submissions to this inquiry. In light of the risk that the weight of these complexities might limit what the inquiry is able to achieve, the Authority recommends consideration be given to expanding the use of data sets about educational outcomes (with de-identified data) that are already in the public domain, e.g. the *My School* website data.

At a broad level, the Authority notes that its remit as the lead jurisdictional agency for the development of school curriculum, assessment, reporting and certification in Western Australia, carries direct responsibilities that impact on the improvement of educational outcomes in Western Australia. The history of educational reform at a national level in this country is replete with examples where national initiatives have had limited impact in jurisdictions where there has been limited implementation. The Authority recommends consideration of the Australasian Curriculum, Assessment and Certification Authorities (ACACA) being the national body for chief executives of the statutory bodies in the Australian states and territories and in New Zealand, responsible for certificates of senior secondary education, to provide advice regarding the collection of data, at a jurisdictional level, especially with regard to consistency and stability of data collected, that might be directly or indirectly linked to the improvement of educational outcomes.

While the Authority notes increased provision of curated educational resources to support the Australian curriculum, e.g. the *Scootle* resources, in addition to the links to curriculum resources provided across the Authority's K–10 website (through the *Outline*) and Year 11 and 12 website, resources that access educational 'Big Data' in this country, e.g. that link *Scootle* resources to related resources provided at the system and sector level in Western Australia.

The Authority notes the access to comprehensive national assessment data, through the National Assessment Program (NAP) website at: http://www.nap.edu.au/. The NAP remit enables it to provide measures through which governments, education authorities and schools can determine whether young Australians are meeting important educational outcomes. The NAP website also carries links to NAPLAN results (at: http://reports.acara.edu.au/) that provide comprehensive data on NAPLAN results, participation

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rates, participation categories, state relativities, time series and cohort gains. Data searches are customisable across NAPLAN results from 2008 to 2015. Through the Australian Curriculum Assessment and Reporting Authority (ACARA), application can be made to the ACARA Data Access Program at: http://www.acara.edu.au/acara_data_access_application_process.html, for access by third parties to data arising from the NAP, or other national assessments agreed by ministers, that have not been released in the public domain. The site provides comprehensive information about policies, protocols and procedures that specify the conditions under which full data sets will be accessible to third parties.

Questions

Responses are provided to questions that are relevant to the remit of the Authority.

Chapter 1 – What has the Commission been asked to do? Scope of the inquiry – page 3

Dot point 1

Does this interpretation of the scope of the terms of reference accord with yours?

Response:

The Authority currently collects participation and achievement data on students in Years 11 and 12 but intends on extending data collection to include students from Pre-primary to Year 10 as per the *School Curriculum and Standards Authority Act, 1997.* The Authority supports the terms of reference for early childhood education that are provided in the *Melbourne Declaration on the Education Goals for Young Australians* at:

http://www.curriculum.edu.au/verve/ resources/National Declaration on the Educational Goals for Young Australians.pdf and notes that the scope of the terms of reference of the Commission have been aligned towards these goals.

Dot point 2

In particular, 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?

Response:

The Authority does not collect demographic, participation or achievement data for children younger than four years of age. Children can commence Kindergarten in Western Australia when they are 4 years old by 30 June; however, Kindergarten is not a compulsory year of schooling in Western Australia. Children start Pre-primary, the first compulsory year of schooling when they are 5 years old by 30 June. The Authority notes the varied provision of day care facilities across Western Australia, some of which would be able to provide demographic and other data related to educational outcomes. Among day care providers there are likely to be inconsistencies in the accuracy and reliability of data sets. Data collected may also be qualitative, rather than quantitative, and will depend on the efficacy of parent interviews and factors such as background bias of interviewers and/or data collectors.

Dot point 3

Should the evidence base include data on young people who have left school before completing Year 12, or who do not attend school for other reasons (for example, home schooled children)?

Response:

The Authority supports the collection of educational data that includes destination information about students who leave school prior to completing Year 12.

The compulsory education period in Western Australia is from the beginning of the year in which the child reaches the age of 6 years and 6 months; and until:

- the end of the year in which the child reaches the age of 17 years and 6 months;
- the child satisfies the minimum requirements for graduation from secondary school established under the *Curriculum Council Act, 1997*; or
- the child reaches the age of 18, whichever happens first.

A *Notice of arrangement* is an approval for a child to participate in an alternative combination of activities that equate to full-time participation in schooling. It applies to children in the final years of the compulsory education period (in the birth date range of the typical Year 11 and 12 student).

The Authority maintains a database of students who have approval for a *Notice of arrangement*. With a proportion of young people (in the 15–19 age range) engaging in VET programmes for employment, it is important to know what these students are doing (outside of formal school attendance) as they may return to formal schooling. Collecting destination data for all students minimises risks of gaps in data continuity during a student's progress through education and schooling.

Chapter 2 – Objectives and framework Determinants of education outcomes – page 7

Dot point 1

Does your understanding of the terms 'education data' and 'education evidence base' accord with the definitions presented here? If not, how would you describe these concepts and their relationship?

Response:

The Authority supports the understandings and conceptualisations of 'education data' provided by the NAP (see above) and 'educational outcomes' as outlined in the *Melbourne Declaration on the Education Goals for Young Australians*. These important national initiatives provide frameworks that have the imprimatur of national consensus among education ministers across Australia.

Dot point 2

Do you agree that the objective of a national education evidence base should be to improve education outcomes? Are there other objectives that should be included?

Response:

The Authority supports the objective of a national education evidence base being the improvement of education outcomes and as such the Authority has ensured that the implementation of the 2015–16 Western Australian Certificate of Western Australia (WACE) reforms are consistent with the national goals set out in the *Melbourne Declaration on the Education Goals for Young Australians*. While there may be benefits from such a base in regard to improved quality of life, increased productivity and better opportunities for all Australians, unless such outcomes are applicable to a large percentage of the population and testing instruments are able to measure such data efficiently, they may be beyond the practical scope of this inquiry.

Dot point 3

What education outcomes do you see as relevant? For example, outcomes in traditional academic domains (such as literacy and numeracy), outcomes in non-cognitive domains (such as communication and interpersonal skills).

Response:

The Authority supports the collection of data in traditional domains, such as those outlined in the issues paper. For example, the Authority has a particular interest in measuring performance in literacy and numeracy of students as they progress through senior secondary schooling. The Authority has implemented achievement standards for literacy and numeracy as a requirement for the attainment of the WACE. To achieve a WACE, students in Western Australia are required to demonstrate the minimum standard of

literacy and numeracy either through the achievement of Band 8 or higher in any of the three components of reading, writing and numeracy in their Year 9 NAPLAN or through the Online Literacy and Numeracy Assessment.

The Authority agrees that it would be considerably more difficult to develop testing instruments that would assess non-cognitive domains. It would also be difficult (but possibly not impossible) to provide link items that would equate cognitive and non-cognitive test items, for the purposes of constructing a measurement scale, that had reliability and validity.

Dot point 4

What education outcomes do you see as beyond the scope of this inquiry?

Response:

The Authority notes the availability of nationally consistent data, relating to education outcomes, such as NAP and NAPLAN data. In light of the complexities of gathering data beyond the scope of these initiatives, the Authority supports the focus on the traditional domains such as those outlined above. The gathering of evidence of strategies that improve NAPLAN results would also be supported.

Dot point 5

Can all relevant education outcomes be measured? What approaches can be used in accounting for outcomes that may be difficult to measure?

Response:

The Authority agrees that not all educational outcomes can be easily measured. Further, traits that are used as broad indicators of 'ability', for example, are often latent and rely on clear understandings of the operational manifestations of those characteristics, in order to be measured, i.e. they are able to be placed on an ordered scale. The Authority though, is not implying that new approaches should be discounted and recommends an open view to different approaches being used for outcomes that may be difficult to measure.

Chapter 2 – Objectives and framework What are the associated costs and benefits? – page 13

Dot point 1

What data should be collected nationally?

Response:

The Authority supports the collection of data in areas that are reflected in the *Melbourne Declaration on the Education Goals for Young Australians*, e.g. NAPLAN, Trends in International Mathematics and Science Study (TIMSS), Programme for International Student Assessment (PISA) and Progress in International Reading Literacy Study (PIRLS). Such data sets are supported across states and territories and should be accurate, valid, reliable, timely (i.e. they must be available quickly and able to be gathered frequently), relevant, free from bias, complete, reflect known limitations, aligned with other relevant data sources, representative, efficiently curated and owned/managed. The Authority also supports the collection of data within the remit of the National Centre for Vocational Education Research (NCVER) that draws on the commitment of Ministers for Training across Australia in 2013 to better understand the total VET picture through mandatory reporting of VET activity from all providers from January 2014.

The collection of data about the educational achievement of Indigenous students is important to support the development of policies and implementation of programs and strategies to improve learning outcomes.

Dot point 2

How would these data support the objective of improving educational outcomes?

Response:

The Authority supports the remit of NAP to provide measures through which governments, education authorities, schools and the community can determine whether young Australians are meeting education outcomes that ensure Australians have the knowledge, understandings, skills and values necessary to provide for a productive and rewarding life, for citizens in an educated, just and open society.

Dot point 3

What characteristics should the data possess in order to support the processes of monitoring progress, evaluating policies and programs and/or informing policy development?

Response:

The Authority supports the collection of data that is representative of the (Australian) population from which they are drawn and which have the following characteristics:

- accurate
- valid
- reliable
- timely (i.e. they must be available quickly and able to be gathered frequently)
- relevant
- free from bias
- complete
- reflect known limitations
- aligned with other relevant data sources
- representative
- efficiently curated and owned/managed.

Dot point 4

Which aspects of administrative datasets are likely to be most useful to inform policy development?

Response:

The Authority supports the subgroups identified by ACARA for the purposes of analysing NAPLAN data, to inform policy development:

- age
- gender
- indigenous status
- language background other than English (LBOTE)
- geolocation
- indigenous by geolocation
- non-indigenous by geolocation
- parental education
- parental occupation
- Index of Community Socio-Educational Advantage (ICSEA) (for schools)
- school sector (for schools).

The Authority also notes the collection of information regarding 'special provisions' and 'adjustments' requested by schools, e.g. to address a student's learning disability or special need/s, in order to participate in NAPLAN; however, such information may only provide broad indicators of 'disability'.

Dot point 5

What additional research or policy activity would be enabled by this data collection?

Response:

The Authority supports data linkage from other government agencies, (e.g. Department of Housing, Aboriginal Housing, Health, Aboriginal Health Services, Juvenile Justice) that would enable research into the influence of factors such as medical conditions, the prevalence of teenage birth mothers, juvenile justice, and other relevant factors on education outcomes.

Dot point 6

Who would use this data and who is the beneficiary of any additional activity?

Response:

The Authority supports the centralised control and full-time management of data linkage in order that policy solutions can be identified that provide benefit/s across the community. The Authority is a contributor to Data Linkage Western Australia, a collaboration between the University of Western Australia, Department of Health Western Australia and a range of data providers that provides a system that links Western Australia's core population health data sets with data collections from other agencies. Researchers apply to obtain access to these linked data collections.

Dot point 7

What costs are associated with collecting and administering the data?

Response:

Costs associated with data collection and administration by the Authority as part of its core activities are built into the Authority's annual budget. The Authority has a data storage and collection system that has been designed to collect and store specific data deemed necessary for the Authority to perform its regulatory functions. Any variation from these datasets would require approval and subsidiary funding.

Dot point 8

What costs and benefits fall on the broader community?

Response:

See responses above for Dot point 7 and Dot point 6.

Chapter 4 – Issues and opportunities Data sharing – page 20

Dot point 1

Which datasets (from the both education and non-education sectors) would be of highest priority to include in the development of an enduring educational database? What are the existing and prospective barriers to the facilitation of data linkage in education data?

Response:

The Authority supports the collection of data (with datasets relating to measurable education outcomes) with linkage to agencies from non-education sectors. The Authority also supports data linkage of education data across agencies within the remit of the *Melbourne Declaration on the Education Goals for Young Australians*.

It would be expected that data providers from both the education and non-education sectors would be consulted extensively to identify high priority datasets to include in the development of an enduring educational database. The nationally consistent datasets already identified would be a reasonable starting point to prioritise. Further datasets could be identified through collaborative workshops and activities across agencies.

Among the barriers to the facilitation of data linkage in education data are:

- the lack of current agreements between systems and sector within the state for the sharing of data between them
- the lack of agreements between jurisdictions for the sharing of data
- the incompleteness and changing nature of data, particularly in regards to student background details over time. Typically this information is captured on enrolment, with no compulsion for parents to provide information in every field. Unless the information is updated at regular intervals it is quite likely to be incorrect by the time the student exits a particular school
- the likelihood of students changing their identity as Indigenous over their years of schooling.

Dot point 2

What are the main challenges and impediments to implementing data linkage in the education sector? Are these challenges and impediments different from other sectors? If yes, how?

Response:

The Authority notes that the Acts governing agencies that collect and manage education data in Western Australia may need to be changed to allow data sharing. Without such changes, some agencies may be unable to participate in dataset sharing activities and hence will affect data linkage activities over a range of data associated with education outcomes. State privacy acts and government standards will also impact on data sharing and national and individual state and territory privacy legislation will need to be carefully considered.

Dot point 3

Have the frameworks developed to improve cooperation in education data linkage been effective in delivering essential, accurate, reliable, timely and nationally consistent education information? If not, why? **Response:**

The Authority notes that in the case of NAPLAN, data linkage has ensured essential, accurate, reliable, timely and nationally consistent education information is able to be delivered to relevant agencies across Australia. There is a national commitment to improving the timeliness of the delivery of NAPLAN data. ACARA is researching this, in the trials of NAPLAN Online that are currently taking place in a number of jurisdictions across Australia.

Western Australia through the Department of Health Western Australia and the Telethon Kids Institute has convened the Data Linkage Strategic Directions Group to provide a forum for high-level strategic discussion around Western Australia's data linkage capacity, operational model, governance, and funding, in order to ensure the continued effectiveness and success of the Western Australian Data Linkage System into the future. The Authority is a participating member of this group.

Dot point 4

How could governance and/or institutional arrangements impacting on data collection and access be streamlined or otherwise improved to enable better cooperation among stakeholders for the delivery of education information?

Response:

The Authority notes the successful frameworks for collaborative research and data sharing that have been developed through Data Linkage Western Australia and the Telethon Kids Institute whose researchers work with external researchers, health services and consumers to ensure research is closely related to appropriate outcomes for children. The interconnectedness of the Institute's focus areas provide a model that attracts research/data collaboration across a broad range of disciplines.

Dot point 6

What lessons can be learnt from previous data linkage efforts, in the education and other sectors (e.g. health care, social services) and from other countries?

Response:

Activities and experiences from Data Linkage Western Australia could provide valuable information on the successful implementation of data linkage activities and their impact on research and policy formulation.

Dot point 9

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

Response:

The Authority supports in principle the expansion in the use of the Unique Student Identifier nationally to students in school and early childhood education and care.

The allocation of a unique student identifier would enable the registration record of every student to be linked to the enrolment, demographic and achievement records for each student.

This student record for every school-aged child in Australia would follow them through their schooling, supporting student tracking (regardless of name changes), providing smoother transitions and seamless provision of vital student data as they move between schools regardless of the school system or sector or state or territory.

The implementation of a unique student identifier has cost implications for states and territories since, either a dedicated, electronic, identity management and storage system would be required or states and territories would need to make adjustments to their current data management infrastructure.

Chapter 4 – Issues and opportunities Privacy – page 23

Dot point 1

Do legislative provisions governing privacy and confidentiality of education data unnecessarily delay or otherwise limit the ability to draw effectively on that data?

Response:

Currently, the School Curriculum and Standards Authority Act, 1997 imposes restrictions on how student data collected by the Authority can be used. The Authority is in the process of amending the Act through legislative processes to allow it to have more flexibility in the way it can share data.

Dot point 2

If yes, is the delay caused by the legislation itself or by the flexibility it provides to data custodians and other stakeholders through interpretation?

Response:

See previous response.

Dot point 3

Can these legislative provisions be modified in a way that better balances confidentiality with utility? If yes, how?

Response:

See previous response.

Chapter 4 – Issues and opportunities Technology – page 29

Dot point 1

What are the main barriers to the greater adoption of technology (including mobile devices) to improve the quality and/or timeliness of data collection, processing and use?

Response

Cost and access to appropriate advice are the main barriers for schools.

The Authority collects student registration, demographic, participation and performance data directly from schools. The electronic transfer of this information ranges from the manual upload of .CSV (comma delimited) files or by direct link from school database systems provided by the Western Australian Department of Education in public schools or by software suppliers in Catholic Education and some independent schools. Some schools do not have the resources or expertise to enhance their technologies and hence the Authority's database management system has to allow for this wide range of data transfer technology. The Authority's current student records management system is over ten years old and is need of an update. An update would provide new and easier solutions for schools in their provision of data to the Authority and improve the quality and timeliness of data collection, processing and use.

Dot point 2

How can these barriers be best overcome?

Response

Targeted funding to schools, especially schools with a low ICSEA.

Chapter 5 – Institutions, data governance and prioritising reform What data governance arrangements might work best? – page 33

Dot point 1

What institutions should be assigned responsibility for, and be held accountable for, the different aspects of the national education data resource? Are new institutions needed?

Response

The Authority supports assigning of responsibility for national education data to jurisdictional lead agencies that have broad legislative responsibility for educational outcomes in their jurisdictions.

Under such powers, lead agencies would be accountable for data resources collected in the performance of their roles, under their legislative responsibilities.

'New institutions' would need to be able to function under appropriate legislative arrangements (difficult).

'New data sharing arrangements', that could be supported under existing legislative arrangements, e.g. under NAP, may be less problematic.

As a general principle, duplication of data collection should be avoided wherever practicable.