

National Education Evidence Base

Inquiry

May 2016



Introduction

The Australian Curriculum, Assessment and Reporting Authority (ACARA) was created to improve the educational outcomes of all young Australians through the provision of world-class curriculum, assessment and reporting programs. It is established under the [Australian Curriculum, Assessment and Reporting Authority Act 2008 \(Cth\)](#) and performs its functions and exercises its powers in accordance with its Charter, which is set by the COAG Education Council.

Under the ACARA Act, ACARA's functions include: developing and administer a national school curriculum; developing and administering national assessments; collecting, managing and analysing student assessment data and other data relating to schools and comparative school performance; facilitating information sharing arrangements between Australian government bodies in relation to school data; and publishing information relating to school education, including information relating to comparative school performance. ACARA is authorised to collect and use personal information in association with its legislative functions.

ACARA's governance arrangements reflect its status as a national authority in an area, school education, for which states and territories have constitutional responsibility. ACARA is funded 50:50 by the Commonwealth and states/territories, it has an expert board made up of state, territory and federal ministerial nominees as well as nominees from the Catholic and independent school sectors, and is directed by and reports to the COAG Education Council.

ACARA operates in alignment with the objectives of the [Melbourne Declaration on Educational Goals for Young Australians](#), agreed by Education Ministers in December 2008.

The following are key components to ACARA's work:

Curriculum:

We take a national approach to education through developing and monitoring a robust and comprehensive [national curriculum](#).

Assessment:

We manage the [national assessment program](#) – the national tests students sit in school – including NAPLAN and NAP Sample Assessments. We are undertaking a range of research and development activities to effectively and fairly deliver NAPLAN tests in an online environment from 2017 with all schools on line by 2019. These national assessments provide data not only about student performance but also about acquisition of knowledge and skills assessed. This is a source of crucial evidence for evaluating and monitoring student progress and the implementation of Australian Curriculum and other educational initiatives and policies.

Data collection and reporting:

We provide and apply a comprehensive and reliable national measurement framework and facilitate the access to and use and dissemination of data for research and policy development in accordance with agreed protocols

We are responsible for collecting and publishing information on [My School](#) about the performance and resources of more than 9,500 schools around the country. We publish a range of reports, including reports relating to the [National Assessment Program](#) and the [National Report on Schooling in Australia \(ANR\)](#).

Collaboration and Leadership

We closely collaborate with jurisdictions, the non-government education sector and relevant stakeholders in pursuing the national education agenda. We provide effective national leadership in curriculum development, educational assessment and national reporting.

Scope

ACARA supports the proposed scope of the Inquiry. Key to making progress in this area is achieving a shared view that education data can and should inform what happens in classrooms as well as system, state and territory and national policy. A strong evidence base can enhance the learning opportunities of students, instructional effectiveness and desired outcomes of schooling.

The interests of students, wherever they attend school in Australia, are well served by a robust education evidence base and efficient and effective use of education data to support reform and improvement. There are clear benefits in collecting, using and reporting data appropriately at a national level, in addition to state and territory level, so long as privacy and ownership issues are properly addressed. Under such circumstances the national interest aligns with the interests of states and territories.

Determinants of education outcomes

ACARA is comfortable with the definitions provided and agrees that the objective of a national education evidence base should be to improve education outcomes for Australian students.

ACARA believes that, consistent with the Melbourne Declaration on Educational Goals for Young Australians, education outcomes should be interpreted broadly, rather than just in traditional academic domains such as literacy and numeracy. Literacy and numeracy are critical skills that young Australians must develop to be able to participate in and contribute to our community. However, these skills are not the only skills that matter, nor the only ones that should be measured. ACARA is currently working to expand the scope of the sample National Assessment Program (NAP) to address a number of general capabilities within the Australian Curriculum through the relevant learning areas. Some of the general capabilities, such as literacy and numeracy and ICT capability, are already assessed under the NAP, ACARA is seeking to also address critical and creative thinking, ethical understanding, intercultural understanding and personal and social capability. The NAP sample assessments have the advantage over full cohort assessments of not requiring a major investment to administer, nor do they unduly burden schools or students. In the non-cognitive domain, ACARA is working with states and territories and other stakeholders to better measure student wellbeing and engagement because of their dual role as both an enhancer of student learning and a key outcome of schooling.

ACARA has in recent years focused on gain data collected through NAPLAN in addition to school achievement. ACARA believes that this focus is beneficial in that it highlights that while there are strong correlations between education determinants such as levels of socio-educational advantage and outcomes, a focus on gain enables insights into the things that schools and school systems can do to improve outcomes for their students.

The richer the data, the better we are able to understand what schools have done to improve outcomes.

What data are needed?

ACARA believes an expansive approach is best when considering whether all relevant education outcomes can be measured (both formally and informally) and, relevantly, on what basis (full cohort or sample) and how they should be reported and to whom. As mentioned above, ACARA is currently working with states and territories and other stakeholders on conceptualising measures of engagement and well-being. Data of these nature have been collected at state/territory level, and appear to provide useful information for policy makers, schools, researchers and in some instances parents. Nationally consistent student well-being and engagement data, particularly if linked to other data sets, would be a welcome addition to national data.

Entry to schooling (or Year 1) data, which are collected variably across jurisdictions, would be valuable at a national level, particularly if it were possible to link these data to other national collections.

Reliable, valid and timely data from formative assessments, once these assessments have been developed and made available through the national online assessment platform, could very usefully inform both classroom practice and our understanding of links between teaching practices and outcomes. Results from these assessments would not need to be published at the school level.

On the other end of schooling, ACARA is also working with stakeholders for more uniform collection and reporting of senior secondary outcomes. Finally, to ensure all students are well served, including our most vulnerable, ACARA has been directed by the Education Council to explore the publication of data related to Students with Disability, using data from the Nationally Consistent Collection of Data (NCCD) system.

What data characteristics are desirable?

Desirable characteristics vary by the data – not all data need be collected from the full cohort of students and collection should be only as frequent as it is necessary, given the costs often associated with data collection as well as the burden upon schools. Other considerations include: the technical quality of the data; uniformity of the data; timeliness and intended audiences and purposes.

Sample assessments can provide valuable national and jurisdiction level information which can inform policy decisions. Accessibility to researchers, and capacity to link data, are both moderated by privacy considerations. The extent to which data can be collected efficiently and without imposing a burden on schools and to which data can be de-identified in ways that maintain the value of the underlying data, will inform judgments in these areas.

The key to maximising the value of data from assessments under the National Assessment Program, including NAPLAN, sample assessments and international sample assessments (PISA, TIMSS, etc.) is the ability to link the data sets. The availability of unique student identifiers (with proper privacy protections) or, at least, a nationally consistent approach to student identity management, will greatly facilitate data linking.

What are the associated costs and benefits?

Data should be collected nationally where they reflect important broad educational determinants and outcomes that can be collected accurately and in a consistent,

coherent and efficient manner. These data should be useable for correlational and time-series research to describe and understand the relationships between determinants and outcomes and to evaluate education policies and programs, and inform policy. Accurate data (often student level) need to be available in a timely manner at the right level of granularity and collected consistently over time to enable this. However, maintaining time series data for the sake of historical consistency, when superior measures have been identified, can sometimes be a barrier to improving understanding of educational determinants and outcomes.

What do we have?

Under table 1 (p.14) in the issues paper the reference to the National Assessment Program (NAP) sample program should make clear that NAP sample Science only relates to Year 6 (not Year 10). The other two NAP sample programs include both Year 6 and Year 10. In the same table (p.15), the description of the National Data Collection should include socio-educational advantage rather than socio-economic background.

Data sharing

Data sharing is a key enabler of the benefits of having a national evidence base – providing for access to data by a range of government agencies as well as researchers. An enduring readily accessible educational database would be valuable, and amongst other elements such a database should include NAP, student background, school profile and other information. The key obstacles to achieving this are state/territory and Commonwealth privacy requirements (given that these data points would potentially enable re-identification of individual students, even if data are de-identified), as well as concerns by data owners which may extend beyond privacy to loss of control of data about their jurisdiction. Decisions about sharing and access to de-identified personal information are often made in the absence of certainty around the application of privacy legislation, leading to conservative decision making.

ACARA would support exploration of establishing an exception under the Privacy Act relating to education data research that is equivalent to section 95 of the Act for health data, subject to appropriate checks and balances being put into place.

The proposed Australian Longitudinal Learning Database offers some benefits, but given limitations on access to data once held by the Australian Bureau of Statistics (ABS), this is not an ideal option. A partial alternative might be the longitudinal NAPLAN data store, although as currently envisaged it is limited to NAPLAN and associated data. Governance arrangements around this are still being discussed. A unique student identifier for primary and secondary school students (and potentially extending into early childhood care) would also be supported by ACARA. This would potentially allow for the connection of various administrative and research data sets, where appropriate and valuable.

In relation to ACARA's data, ACARA has published Data Access Protocols (approved by the Ministerial Council in 2012, subsequently updated and endorsed by senior education officials in 2015) which regulate access to ACARA's data. Under the initial Data Access Protocols, ACARA sought assurance from those requesting data that the use envisaged would be of benefit to schools and/or the Australian community. In the more recent iteration of the Protocols, ACARA has moved to a harm minimisation approach, generally only refusing requests where there are privacy limitations or there is a likely harm to schools or the Australian community.

Under the current Protocols and this cultural shift, ACARA readily provides aggregated data sets upon request, with formal agreements used to mitigate risk of misuse of data (for example, creation of league tables). The data access program works on a precedent basis, with published and non-sensitive data released to most applicants, and sensitive and non-published data released in accordance with decisions made by ACARA's Research and Data Committee – which includes representation from government and non-government school sectors, researchers and ACARA personnel. These measures have enabled numerous researchers, government agencies and in some instances, commercial entities, to utilise data to better understand the relationship between educational inputs and outputs, to innovate in relation to government services and provide better offerings to consumers.

Data comparability

There are data sets that, even if not linkable, would be much more valuable if available at student unit level – this would get around some comparability issues. This includes, for example, attendance data. Some data are available in some states and territories but not others, for example post school destination survey data and data about explained versus unexplained absences. These variations are often related to cost (to establish a new collection, or new collection system) and not readily remedied. Nationally consistent collections would be invaluable.

Data capture, processing and management

ACARA anticipates a range of benefits from the transition to online delivery from 2017 including more targeted assessment, more valid measurement of the Australian Curriculum and faster turnaround of results to schools and parents.¹

Technology

ACARA recognises the potential benefits of adopting technology to improve the collection, processing and use of data.

Examples of this include work by ACARA to adapt the format of the annual national report on schooling to expedite release i.e. by allowing public access to the various national data sets for schooling through a data portal. ACARA has already taken advantage of this approach to speed up the publication and sharing of NAPLAN preliminary results in collaboration with states and territories. ACARA and its federal, state and territory partners are currently taking up the opportunity presented by the shift to online assessment.

The COAG Education Council has agreed that school readiness costs associated with NAPLAN online should be met by school authorities. The Australian Government has invested significantly in the online assessment platform being developed by Education Services Australia Ltd. A variety of solutions are being implemented to enable schools to participate in NAPLAN online in instances where there are issues

¹ ACARA does not agree with the methodologies of the studies by Wyn and colleagues cited in the issues paper. The National Assessment Program – Literacy and Numeracy does not involve 'high stakes' testing for students, and appropriate support from adults in schools and the community, to help students to understand the tests in context, should remedy any undue stress. This is likely to be a much more effective support for students than adjustment of language in test items.

with limited devices and/or difficulty with access to the internet. For example, the expanded 'window' for testing will allow schools more flexibility in scheduling and accommodates schools which have fewer devices than students.

Analytic and research capability

ACARA is aware of considerable duplication in the use and reporting of data, for example, NAPLAN data are reported on through ACARA's NAPLAN reports, the *Annual National Report on Schooling in Australia* and *My School* website, as well as the Productivity Commission's Report on Government Services, Prime Minister and Cabinet's Closing the Gap reports, and elsewhere. However, this is entirely consistent with the principle of collect once, report many times.

In comparison with the scale and sophistication of health research in Australia, there is limited funding within the education sector for in-depth research and analysis of data, despite the substantial investment by governments, parents and others in school education. Exploration of avenues to build stronger links between existing institutions – universities, education departments, school and curriculum and teacher standards authorities – and fund collaborative work would be well worthwhile.

Based on research commissioned by ACARA in 2014, 'In general, parents appreciate having a range of information about schools available in a central online location as provided by *My School*. *My School* is a starting point for parents who are in the process of selecting a school for their child or children. It is also used by some parents to monitor the progress of a specific school over time. *My School* is one of many sources of information considered by parents and is not commonly used as the sole input for decision making' (2015).

The research noted that *My School* provides parents with one avenue through which to engage with their children's education but found little evidence that it is directly assisting parents to engage with the school community – for example, using *My School* information specifically as a starting point for discussions with teachers or other parents. Anecdotally, ACARA is aware of instances of these sorts of uses of data by parents to engage with schools, but they may not be widespread – and seemingly were not when the research was undertaken in the second half of 2014. Since this research, however, ACARA has taken a number of steps to increase the accessibility of *My School*, including reviewing text on the website for readability. Delays in the availability of data on *My School* (between NAPLAN testing in May and *My School* release in March of the subsequent year) may also play a role here. ACARA will investigate ways to bring forward releases of data, in conjunction with earlier availability of data with online administration of NAPLAN. ACARA sees value in expanding the range of data sets published in *My School* to present a more comprehensive (less test-centric) picture of school inputs and outcomes and will work with federal, state and territory authorities and other stakeholders to add value to the *My School* data set.

What data governance arrangements might work best?

ACARA's view is that the institutional arrangements around education data are broadly appropriate, and that no new institutions are required, nor new data functions added to existing organisations. However, to meet national interest and realise the benefits of a robust education evidence base and efficient and effective use of education data, governance arrangements around data need to be clear and contribute to efficient and effective access and use of data. Greater clarity in governance and custodianship would leverage a national approach that operates to

the benefit of all key stakeholders, enabling an effective and transparent process around collecting, sharing and application of data.

Priorities

In summary, ACARA sees the following actions as important components in adding true value to the national education agenda:

- The collection of data from school entry through to school leaving – to ensure the educational path of students is well-informed and continuously improved
- The efficient and effective provision of national data needed for all governments, systems, schools and researchers to develop informed policies, decisions, and undertake analyses - to ensure there is a continued focus on gain/improvement
- A range of reporting formats used at different levels and for different purposes e.g. school level to support program improvement, national and state/territory level to guide policymaking and public reporting of school-level data for transparency, accountability and parental and community engagement.

To support these actions, ACARA recommends:

- The implementation of a unique student identifier (from, at a minimum, school entry to school leaving), or a nationally consistent approach to student identity management, to facilitate data linking
- A clear governance structure that allows for national custodianship of data and the efficient and reliable processes around the maintenance of national data
- Exploration of legislative options to provide greater certainty around use and sharing of student level data for research purposes