

Australian Government Productivity Commission

Inquiry into the National Education Evidence Base

Northern Territory Government submission

June 2016

Executive summary

The Northern Territory Government welcomes the opportunity to provide a submission to the Productivity Commission Inquiry into the National Education Evidence Base. The inquiry provides a timely opportunity to reflect on the national education evidence base and the challenges associated with sourcing and reporting comprehensive and consistent data to underpin and inform policy development and educational outcomes for children.

The Northern Territory's submission covers three key areas considered important to the development of the national education evidence base: the strategic collection of education data; governance of national data systems; and the capacity of all education systems to contribute and engage at an appropriate level.

As detailed below, the Northern Territory considers there are opportunities to take a more strategic approach to data reform and development of the national education evidence base. Opportunities include the development of a National Data Strategy and National Data Agreement between school sectors and jurisdictions, to provide a strong and coherent national reform direction. National approaches should also focus on capacity building and ensuring the efficacy of data. Alongside this, strengthening research standards and practice in the education sector will support continued development of a high quality evidence base.

Strategic collection of education data

A vast amount of education-related data is currently collected by states, territories and education systems, however not all this data is currently used to inform teaching practice and/or system and policy development. Despite considerable resources dedicated to data collection and analysis in recent years, there remains significant scope to improve data quality, access, efficacy and relevance for end users.

In considering further development of the national evidence base for school and early childhood education, there is a need to consider what such an evidence base will be used for, how it will be governed and accessed, and its strategic objectives. Lack of a collective understanding and definition of national data priorities means that, in many cases, national data projects are guided by or responsive to a range of education policies and strategies (such as in the areas of school attendance or workforce development) without an overarching data-specific framework.

There is a need to consider and identify specific national data priorities, aligned with national policies and strategies, including consideration of any new data or linkage required, while being cognisant of the differing requirements and circumstances of systems and jurisdictions.

Northern Territory context

There are a number of unique contextual factors that influence student achievement and data quality, and the development of a robust evidence base in the Northern Territory.

The Northern Territory has one of the most socio-economically disadvantaged and geographically dispersed populations in Australia. Australian Early Development Census (AEDC) results for 2015 continue to show high levels of vulnerability among children in the Northern Territory, with 37 per cent of children developmentally vulnerable on one or more domains, compared with 22 per cent nationally.

In 2015, the average Index of Community Socio-Educational Advantage (ICSEA) scores for Northern Territory Government schools was 758 compared to the national average of 1000. Around 44 per cent of Northern Territory school students live in remote or very remote communities, compared to 2 per cent nationally, with a clear correlation between levels of remoteness and low student attendance. Additionally, over one third of students speak English as a second language — the highest percentage in the country.

This unique context results in significant challenges for the Northern Territory in further developing the education evidence base including:

- development of a robust evidence base that is applicable to local contexts, due to small student numbers and highly mobile student populations in remote areas
- accessibility and analysis of data to inform education policies, programs and curriculum focused on the diverse learner needs of students in the Northern Territory.

The Northern Territory has found that national assessments and data collections are unable to accurately measure progress for very disadvantaged students. Building on John Hattie's 'Visible Learning' approach to measuring the effects of teaching and focusing on student progress rather than achievement, the Northern Territory Department of Education has implemented Progressive Achievement Tests (PAT) in order to develop a more accurate data picture of student learning in disadvantaged communities.

Case study: PAT testing in the Northern Territory

The Northern Territory has a significant number of small remote schools with high student mobility and low attendance. For many remote students, achieving NAPLAN year level norms is out of reach, resulting in an inaccurate measure of achievement and low student engagement in national tests. This makes collecting quality achievement data for the very remote Indigenous cohort difficult, as matched sample sizes are very small and data collected is volatile.

In 2015, the Northern Territory introduced PAT testing across all Northern Territory government schools, which allows testing at each year level twice per year, as well as targeted test levels — aligning tests with student ability rather than year level. This has resulted in more students being tested, more students matched for gain measurement, and a bigger sample size to measure long-term trends.

PAT testing allows teachers to measure student progress and adjust their practice to meet student need. Teachers, parents and schools have ready access to the test results, which enables detailed conversations with parents about students' learning needs. PAT testing will also allow the department to progressively build a reliable and accurate measure of student achievement and progress for the highly disadvantaged student population.

Recommendation

In considering the information required to further develop a comprehensive, national evidence base, the Northern Territory recommends the development of a national data strategy through the Council of Australian Governments (COAG) Education Council.

A national data strategy would identify strategic goals and outline clear priorities for education data reform and analysis across jurisdictions, while retaining the flexibility to for local and system level requirements and priorities to be met. A national strategy would also reduce overlap and focus investment in this area.

Data reforms that benefit end users — schools, teachers, parents/carers and the community — should be given priority under a national strategy, as a way to ensure data collections support teaching practice and improved educational outcomes within the classroom.

Governance

Clear governance arrangements around data collection, analysis and reporting are vital to their impact and usability. Many of the current challenges and barriers to developing a national education evidence base stem from the lack of clear national governance arrangements between jurisdictions and education systems.

National data collections

The Northern Territory Department of Education participates in a number of national data collections throughout the year, including supplying data to the Australian Bureau of Statistics, the Productivity Commission and the Australian Curriculum, Assessment and Reporting Authority (ACARA). In reviewing the effectiveness of national data holdings there is a need to consider the current scope, definitions, business rules, timeframes, reporting purposes of existing national data collections.

Data provided to national data collection authorities is often similar in nature; however the business rules surrounding both the initial data capture and final reporting of data can vary greatly. This places a large administrative burden on jurisdictions, and can result in published data varying dependent on the publisher. For example, published figures on school funding differ between the Productivity Commission's annual Report on Government Services Report and ACARA's MySchool website. These variances also affect the consistency of data to support analysis and policy development, as well as end-user accessibility and transparency — particularly for the community.

Data Strategy Group

The Data Strategy Group (DSG) is a working group of the Australian Education Senior Officials Committee (AESOC) comprising senior officials from all jurisdictions and the non-government

education sector responsible for data strategy. DSG's Terms of Reference include a strategic and advisory role regarding the national education evidence base; however in practice national data governance arrangements are fragmented and overlapping, and DSG's work plan is focused on technical issues rather than strategic objectives.

For example, DSG advances projects such as the National Schools Interoperability Program and developing nationally consistent processes for data sharing. However, NAPLAN data, a key plank in the national evidence base, is managed and published by ACARA. DSG and ACARA both report to Ministers via AESOC as required. As such, no single body has a detailed understanding of, or strategic vision for, national education data in its entirety.

Additionally, due to this fragmented approach and lack of national direction, the work of DSG is often reactive rather than strategic; responding to the data requirements of a range of education and social policies. A national data strategy would enable DSG to strategically respond to requests in line with agreed priorities.

Quality

In developing a national data strategy and a more strategic approach to national data reform, research standards and investment in education research should be considered. The nature of education research and its quality can be variable and there are no well-established quality standards or procedures. In particular, there is limited high-quality evidence regarding education interventions and their effectiveness and impact on students' educational outcomes in different Australian contexts.

In reviewing research standards, consideration could be given to establishing a national expert body for the education sector, such as the health sector's National Health and Medical Research Council. An expert body could provide research standards, strategic direction and co-ordinated investment in quality education and early childhood data collection and research, and support the analysis of data and research into educational practice. This role potentially could be fulfilled by an existing education body.

Improvement of research standards in line with other sectors, involvement of professional organisations and adequate funding of quality research could be defined and included under a national strategy. A national expert body could evaluate the purpose of data collection and research to ensure alignment with national strategy, and ensure that end users are consulted and engaged in scoping and trialling projects aimed to support them.

Data sharing and linkage

The sharing of data across agencies and sectors, and the addition of complementary non-education data, is a current focus for the Northern Territory. One of the key data linkage projects being progressed is the Child Development and Education Research Partnership project, led by Menzies School of Health Research, which has linked early childhood, health, and student education outcomes data to enable analysis of population level outcomes, and inform future program design and implementation.

Although data linkage is an important step in effectively using data sets already collected to analyse student outcomes and factors which may affect outcomes, there are also a number of limitations and risks associated with this approach.

These include privacy and data usage issues (particularly when linking data across different jurisdictions), custodianship, access, future use and legislative barriers. The next step in progressing data linkage is determining nationally consistent arrangements and processes to address these issues.

Case study: Trans-Border Attendance Strategy

An example of the challenges faced in sharing educational data between sectors and jurisdictions is the Trans-Border Attendance Strategy. The strategy was funded by Education Council to enable the sharing of enrolment information for highly mobile students across the state borders of South Australia, Western Australia and the Northern Territory.

The project initially enjoyed considerable interest from other jurisdictions wanting to be involved, however the project was hampered by issues with uptake and usability of the data platform by schools. These issues were compounded by legislative barriers in some jurisdictions in relation to the sharing of data. Expansion of the strategy has been halted and ongoing participation of existing jurisdictions remains uncertain.

Along with the legislative issues that can arise in sharing data between jurisdictions and school sectors, this project highlights the importance of ensuring data projects of this kind designed to be valuable and accessible for schools.

Recommendation

The Northern Territory recommends development of a national data agreement that:

- details national data capture and reporting business rules
- clarifies and streamlines national governance and reporting arrangements
- links to other key human service data platforms to further encourage meaningful, joined-up information and evidence on end-users, communities, and trends
- outlines requirements and/or reforms to enable national data sharing and linkage activities between school sectors and jurisdictions.

The Northern Territory also recommends investigation into the development of a national expert body on educational research and data that could address research standards and quality issues from a consultative and strategic position. This expert body could act as a research clearinghouse, utilising the expertise of and engaging with professional associations and research institutions.

Capacity

A national education evidence base is only as useful as the quality of data it contains and its accessibility to end users. The capacity and capability of all education systems to keep pace with the evolving demands and technologies required to contribute effectively to a national evidence base need to be considered.

In addition, a clear understanding of who is using the data and for what purpose, and the best way to present data to support end user requirements, is a vital aspect of any national evidence base.

There is variable capacity within current data collections to accurately measure what needs to be measured (that is, student learning growth, not only achievement). The data needs of systems and jurisdictions vary, as does capacity to keep pace with developments in technology. At a national level there needs to be a clear focus and articulated rationale regarding technological requirements, what will be measured, and what will not be measured, as continual additions to data collections is unsustainable.

Recommendation

Given the significant amount of system performance and population-level data already being reported at the national level, the Northern Territory recommends that medium-term data collection and reform focuses on delivering benefits to schools, teaching and learning.

As part of the proposed national data strategy, jurisdictions and systems should also consider how analytical capacity for systems and schools can be further developed at the national level to support teaching and learning outcomes.

Conclusion

The Northern Territory supports greater strategic focus on the national education evidence base, to strengthen data practice and techniques to support policy and decision making. This can be achieved through the development of a national data strategy and agreement to define priorities and processes, alongside the strengthening of research standards within the education sector. National data reform priorities should focus on capacity building across systems, as well as those which will deliver the greatest benefits to schools and support effective teaching and learning practice.

The Northern Territory Government looks forward to a continued dialogue with the Australian Government, states, territories and other school sectors regarding further development of the national education and early childhood evidence base.