National School Reform Agreement Review

Submission on the interim report

October 2022

The Productivity Commission Review of the National School Reform Agreement - Interim Report canvasses many of the persistent challenges facing the Australian education system and suggests a range of reforms to meet the ambitions from the Alice Springs (Mparntwe) Declaration. The next National School Reform Agreement (NSRA) is an opportunity to focus national resources and effort on the reforms most likely to improve students' educational outcomes.

How have the national reforms fared?

AERO is one of the National Policy Initiatives from the current NSRA that has been delivered. AERO is, however, just beginning its work and can only achieve success with the buy-in and support of the Australian education community.

Figure 2.2 of the interim report describes potential barriers to AERO's effective operation on both the supply side (limiting the ability to generate evidence) and the demand side (limiting uptake of evidence).

On the supply side, in order to conduct rigorous research, AERO requires access to data, services and schools that are managed by jurisdictions. AERO is working with jurisdictions to negotiate such access. To date, in the case of data, access has been slowed by the need to ensure appropriate and mutually agreed governance arrangements are in place, and in the case of access to services and schools, by the ongoing impacts of the COVID-19 pandemic and workforce shortages. As these issues are resolved, AERO trusts that access will be provided such that AERO's research can proceed.

The conduct of research across multiple jurisdictions and sectors requires separate approval by each individual system. While this process has been improved by the advent of the National Application Form for school-based research, differences in requirements for approval among different systems, and in the individual feedback they provide on research applications, act as an impediment to, and significantly slow down, national research, for both AERO

and other researchers. AERO is working with jurisdictions and sectors to identify opportunities to streamline these processes.

A national commitment to facilitating AERO's conduct of research would be welcome.

On the demand side, AERO continues to build its profile in the education community, taking care to ensure that its work is associated with trust, credibility and high quality.

For educators, teachers and early childhood service and school leaders, AERO's resources are most likely to be effective when they are supported by, and complementary to, the efforts of other stakeholders, particularly jurisdictions and systems. This is why AERO is particularly focused on engaging stakeholders in the work it undertakes. AERO is looking for opportunities to make our work more easily adaptable by system stakeholders for incorporation into their own programs, policies and professional learning, and for distribution to their educator audiences in ways that enhance coherence in the advice that educators, teachers and leaders receive.

As an example of this, educators need access to quality-assured, evidence-informed resources that are aligned to curriculum and support effective teaching and learning. The daily challenge of locating or developing such resources contributes to unnecessary duplication of effort, immense burden of teachers, and uncertain quality, as described in a recent Grattan report[1]. A comprehensive suite of sequential, aligned, high quality teaching and learning resources, delivered through intuitive technology that supports monitoring of student learning progress, could fulfill the incomplete promise of the Online Formative Assessment Initiative. Such a suite of lessons and content would equip Australia with a freely accessible national asset that ensures continuity of learning for students when there is disruption to classroom routines caused by pandemics, floods or other catastrophes, student illness or teacher shortages. This effort could build on existing content that resides within jurisdictions, under the scrutiny of independent quality assurance.

For policymakers, AERO is aware there is an appetite for evidence to inform decision-making, but that this evidence is not always available in practice. One area in which considerable investments are being made with an inadequate evidence-base is education technology. In recent research, Loble describes the scale of these investments, and the potential of advanced, adaptive tools to support student learning, teaching and system functions, including in relation to challenges identified in the interim report[2]. Rigorous evaluation of the features which make such technology effective, and evidence-based quality assurance of education content, would be wise prior to their implementation at scale.

These are examples of work that AERO would be well placed to undertake. Involving AERO would affirm a national commitment to making the most of AERO as Australia's national education evidence institute.

What should be the focus of the next agreement?

AERO believes that the next NSRA should focus on a small number of reforms to achieve the most impact.

In determining which of the options suggested in the interim report are best suited to an NSRA, AERO suggests prioritising reforms where:

- there is evidence of a persistent challenge that is common across Australian schools and systems, *and*

- there is evidence that a particular reform can be expected to make a significant contribution to the resolution of that problem, *and*

- the leverage of national agreement will enhance, rather than hamper, what jurisdictions can do by themselves.

Of the options suggested in the interim report, AERO believes the following have the strongest case for support:

- an expert career teaching path that builds on the highly accomplished and lead teacher (HALT) system, and

- targeted interventions to support students who are significantly behind in their learning.

AERO recommends that any selected reform's implementation features be designed with reference to what the existing evidence says about how to maximise that reform's positive effect. Where flexibility is allowed in implementation, rigorous, cross-jurisdictional and cross-sector evaluation should be a condition of funding, ensuring that new knowledge can be generated about the implementation features associated with the greatest outcomes and that the effectiveness of the reform can be enhanced over time.

AERO also suggests work towards data collection on the use of evidence-based teaching practices and on student wellbeing be included in a revised National Measurement Framework (NMF).

Improving teaching

Encouraging highly effective teachers and maximising their value

AERO supports the interim report's recommendation that HALT accreditation be streamlined, and HALTs trained and deployed to lift the quality of teaching. This aligns with the recommendation in AERO's initial submission to create an expert career path for teachers centred on instructional specialist and master teacher roles.

AERO notes that this reform would:

- Respond to two persistent challenges in Australian education: the need to provide a more appealing career path to attract and retain outstanding teachers, and the need to utilise more effective methods of professional learning, such as in-school observation and coaching.

- Reflect evidence that expert career paths can make teaching a more attractive career for high achievers, with recent studies finding that increases in the top end of the teacher pay scale increase the likelihood of high achievers pursuing teaching as a career[3].

- Reflect evidence that teaching quality can be improved through investment in better teacher professional learning[4], and that instructional coaching is an effective form of professional learning, with the difference between those with and those without instructional coaching being equivalent to the difference between novice teachers and teachers with 5 to 10 years of experience[5]. It has been estimated that a career path in which expert teachers are performing instructional coaching roles could boost the learning of Australian students by 18 months by the time they turn 15[6].

- Lend itself well to an NSRA, given the national nature of the teacher labour market.

In terms of implementation, AERO agrees with the interim report that any reform towards an expert career teaching path should build on the success of the existing HALT system. However, it should be noted that the current descriptors in the Australian Professional Standards for Teachers (APST) are not specific enough about the knowledge and skills that should be demonstrated in order to successfully perform instructional specialists and master teacher roles. This could be overcome either by setting HALT accreditation as a pre-requisite for participation in a subsequent application process for these roles using more detailed selection criteria, or by revising the APST such that they were fit-for-purpose as selection criteria for these roles.

Using this system, the NSRA could further contribute to achieving a more equitable distribution of quality teaching by requiring that the more highly remunerated positions for outstanding teachers be primarily situated in schools serving disadvantaged communities.

The interim report suggests that the Quality Teaching Rounds (QTR) model has 'significant positive effects on teaching quality and student academic achievement' and could be an accessible complement or alternative to the establishment of instructional specialist and master teacher roles. AERO notes that evidence from Gore[7] found that while QTR delivered improved student outcomes when the QTR was run by trained researchers, there was no statistical difference in student outcomes when 'trainers' (i.e. competitively selected QTR advisers with recent school experience) were used. This suggests that QTR may be more difficult than proposed by the interim report to implement with the fidelity required to achieve outcomes.

Understanding what happens in the classroom

While the evidence is clear about which teaching practices are most effective in supporting student learning, there is currently little evidence on how widely or faithfully these practices are used in Australian classrooms. AERO's own investigations have shown that some jurisdictions and sectors across Australia use tools such as school improvement models, surveys and frameworks to better understand the use of evidence in schools. However, few systems and sectors regularly measure use of such practices[8].

The interim report suggests that 'AERO and others could help advance the education evidence frontier in providing insights into the teaching strategies deployed in Australian classrooms and their effectiveness'. AERO agrees that the new NSRA should include the development of measurement instruments to monitor and report on the use of evidence-based practice in schools, and that this work could be incorporated into a revised National Measurement Framework (NMF). Insights from this data can help teachers, school leaders and policymakers better plan to improve teaching and learning. AERO would be pleased to play a role in this work.

Some instruments already exist to measure the use of different teaching practices (e.g. PISA student surveys), but most of these have been developed for research purposes, or to support general reflections on practice. Few such tools have been rigorously tested to confirm they are valid, reliable and fit for the purpose of system-level data collection and reporting.

An instrument or set of instruments is required which can measure both the frequency of use of evidence-based teaching practices and assess the quality of the use of these practices. These instruments could use either teacher self-report or observation of practice.

Self-report surveys are typically the most cost-effective means of collecting data from a large sample of teachers. However, self-report responses may not be entirely accurate. We know that surveys on the use of evidence-based practices may provide different data depending on whether the teacher was surveyed about their own practice, or their students were surveyed about the teaching practice they received. Self-report responses are subject to social desirability and

recall bias, and teachers may report using a particular evidence-based practice when in fact they use it infrequently or only use some strategies. Also, it can be difficult for an individual to accurately assess the quality of their own practice. That is self-reported use of an evidence-based practice may not always correlate with effective learning. Consequently, we are currently independently validating our own survey of teachers' use of evidence-based practices and scoping development of a complementary student survey to enable triangulation of data.

AERO has published draft rubrics designed to support teachers to implement evidence-based practices effectively[9]. The rubrics, which are also being independently validated, provide a shared language for describing two evidence-based practices: formative assessment and explicit instruction. While these rubrics were originally designed for teacher self-reflection rather than measurement, AERO is considering further developing them as either self-report or observational measurement tools. Given the strength of the evidence-base supporting the effectiveness of these two practices, measuring their use could be seen as a proxy for the use of other evidence-based practices.

Such measurement instruments could be available for use by teachers, schools or systems themselves in considering and evaluating their own practice and improvement efforts.

Tackling a lack of equity in student outcomes

Targeted interventions for students significantly behind in their learning

AERO supports the interim report's interest in intensive, targeted support for students who have fallen behind, and would encourage this to be transformed into a recommendation in the final report. AERO notes that this reform would:

- Respond to the persistent challenge that most Australian students who are identified as achieving below the national minimum standard are not being effectively supported to achieve above the standard over the course of their subsequent schooling.

- Reflect evidence that targeted interventions are effective in accelerating the learning of these students[10].

- Lend itself well to an NSRA, given a significant amount is known about how to make targeted interventions successful, there is an opportunity to fill remaining knowledge gaps by trialling modified implementation approaches, and national data is already available to identify and monitor the progress of students in this cohort.

In terms of implementation, research states that targeted interventions should be delivered to small groups of students (e.g. 2-5), at frequent intervals (e.g. 3 times per week), for a limited period of length and duration (e.g. up to 60 minutes per session, for a duration of 6-12 weeks)[11]. The research notes that the quality of the teaching is also important, as are clear learning objectives, and the intervention should be additional to, but explicitly linked with, normal classes, with teachers monitoring progress[12].

There are gaps in the evidence base on the differences between the effectiveness of online interventions versus face-to-face interventions, or similarly in-school versus off-site face-to-face interventions. There may be opportunities for technology to be a useful supplementary tool in targeted interventions, such as via intelligent tutoring systems, which mirror the process of individualised tuition by providing diagnostic assessments at the beginning of a unit to gauge understanding, providing individualised exercises and feedback at each stage of each task[13]. This could assist in reducing costs, but the effectiveness of such methods with low performing students has not yet been established.

AERO would suggest that any national reform based on ensuring low performing students receive targeted interventions allow jurisdictions flexibility in implementation features where the evidence is not yet clear, but include a commitment to rigorous evaluation, such that jurisdictions can learn from each other about how to make the reform more effective over time.

This reform would explicitly target low performance, which is not the same as equity. As the interim report notes, the majority of low performing students do not belong to priority equity cohorts as identified by the NMF, and the majority of students who do belong to priority equity cohorts are not low performing and

indeed, many are high performing. Yet the over-representation of priority equity cohorts in the category of low performing students (19% of the student population, but 42% of students below the national minimum standard) means that uniformly improving the performance of the latter group will also have a positive effect on equity, with a disproportionate benefit accruing to priority equity groups.

Addressing poor student wellbeing

Components of student wellbeing (such as sense of belonging) are associated with improved learning outcomes (such as better literacy and numeracy scores)[14]. However, there is limited available data about the pathways through which wellbeing components impact learning and development. For example, a higher sense of belonging may not directly improve learning outcomes, but may lead to better engagement in class, which may lead to better learning outcomes.

It is important to recognise that the relationship between wellbeing and learning is reciprocal[15]. Learning has been found to have a positive effect on subjective wellbeing, and better language and cognitive skills upon school entry are associated with lower levels of sadness and worries later in Year 6[16]. Improving teaching and learning, in and of itself, is an important measure that can lead to better wellbeing outcomes.

Research shows that many wellbeing interventions are not backed by high-quality evidence[17]. Initiatives like Be You, Victoria's School Mental Health Menu and a recent research review of evidence-based mental health and wellbeing programs for schools by NSW[18] are providing better guidance about the evidence-based programs to support student wellbeing and mental health. However, not enough is known about effective practices that target student wellbeing.

The lack of a clearer evidence-base around how to improve student wellbeing means that any NSRA commitment to do so would have to be exploratory rather than prescriptive: it could require jurisdictions to invest new money in wellbeing initiatives, but allow them to experiment with how that money is invested, and include an evaluation component such that all jurisdictions, and others, can learn about the effectiveness of different initiatives. However, this objective is already being partly fulfilled. Most jurisdictions have already announced significant new investments in student wellbeing initiatives over recent years, without the need for an NSRA to require them to do so. While there is no doubt that student wellbeing is vitally important and represents a particular challenge in Australian education, the lack of a clearer evidence-base on how to improve it and the extent of recent new investments suggests the leverage of the NSRA may be better suited to targeting other problems at this time.

What would make sense to do jointly, potentially through an NSRA, is work towards common or comparable evaluations of initiatives aimed at improving student wellbeing. This would require agreed, common forms of measuring student wellbeing.

Wellbeing is a broad concept and can include a wide range of different components. Differences in the conceptualisation and implementation of wellbeing measures means jurisdiction-based measures are not always directly comparable. There has been increasing national collaboration to understand and share insights from individual state and territory measures, such as through the

National Student Wellbeing Project, established by the Education Council in 2019; and AERO's own Wellbeing Project Advisory Group, which brings together key student wellbeing policymakers from across Australia. It will be important that any measure of student wellbeing focus on the components of wellbeing that:

- have the greatest influence on learning, and
- are within a school's ability to influence.

Otherwise, the measurement of wellbeing may become an additional burden on schools, without providing useful insights to drive changes in practice and policy.

AERO is working to analyse large-scale datasets to identify the components of student wellbeing that meet these criteria. We are currently negotiating access to appropriate datasets with jurisdictions. Our work could inform any effort to measure student wellbeing and evaluate initiatives to improve it that form part of the NSRA.

How might intergovernmental co-operation need to adapt?

The next NSRA should focus on a small number of key reforms that are well supported by evidence. The NSRA should require all parties to commit to design features of those reforms that have been identified in the research as necessary for the reform to be successful, while providing states and territories flexibility around elements of the reform where there is currently no established evidence base. For example, intensive learning support may be operationalised differently, with some states or territories relying more on virtual tutoring for remote and online students.

This increased level of flexibility should be accompanied by increased accountability, as outlined by the interim report, but also by a requirement to allow robust, cross-jurisdictional evaluations of any reforms that are introduced. This would allow information to be collected about the relative effectiveness of variations in the implementation of the agreed reforms across jurisdictions, such that our understanding of how to maximise the effectiveness of those reforms continues to improve over time.

The National Measurement Framework

AERO agrees with the interim report findings that the NMF is not appropriate for measuring progress on NSRA outcomes. AERO believes the NMF needs to be a more coherent suite of measures designed to give insight into progress towards Australian education's longer-term aims. For instance, given that a stated aim of the Alice Springs (Mparntwe) Declaration is to improve equity, the NMF needs to capture factors of disadvantage, such as English language proficiency, so that we can monitor the impact that any reforms are having on equity at a national level.

The imminent review of the NMF should examine the current governance and processes for developing, agreeing and implementing the framework, including considering whether independent oversight could resolve any potential issues associated with ACARA's role holding responsibility both for the NMF and the main measures it (currently) relies upon. An example of this concept in practice is the NSW Bureau of Health Information. The NSW Bureau of Health Information is a board-governed statutory health corporation that sits alongside the NSW Ministry of Health and other pillar organisations, to produce independent reports and information about the performance of the healthcare system in NSW. It uses advanced data analytics, data visualisation and communications to deliver reports and information products that describe key aspects of healthcare performance for a range of audiences in ways that align with the priorities of consumer, healthcare and policy audiences. This information is provided to strengthen accountability and support system-wide and local improvements in patients' healthcare experiences and outcomes. Public reporting of this information enhances transparency and understanding of healthcare performance for consumers and local communities[19].

Erratum

AERO would like to correct an error in its first submission to the Review of the National School Reform Agreement, where AERO stated that all states and territories collect data on English Language Proficiency based on the national English as an Additional Language or Dialect (EAL/D) progressions. While all states and territories do collect data on English language proficiency, ACARA's EAL/D progressions are not always the reference point. Some states and territories refer to other measures of EAL/D student English language proficiency. For example, Queensland uses the Bandscales State School measure which includes extensive development work on the proficiency trajectories of Aboriginal and Torres Strait Islander EAL/D learners[20].

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