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Strengthening a research-rich teaching profession: an Australian study

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ABSTRACT

This paper reports on the background, context, design, and findings of a collaborative research project designed to develop a future roadmap for strengthening an Australian research-rich and self-improving education system. Building on the BERA-RSA Inquiry into the role of research in the teaching profession in the UK (Furlong, 2013), the Australian Teacher Education Association (ATEA), Australian Association for Research in Education (AARE) and Australian Council of Deans of Education (ACDE) initiated a national study across education systems and jurisdictions to identify ideas, issues, challenges and opportunities to strengthen teacher education and education policy development through research. The mixed-method study, inclusive of focus groups and an on-line survey collected data from pre-service teachers, teachers, academics and leaders across schools, universities and education departments. A set of recommendations highlight the need for research literacies to be embedded at all stages of a teachers’ career and that the profession would benefit from professional learning strategies where teachers are positioned as both critical and discerning consumers and active producers of research. The importance of teachers being able to respond to data within their own set of contextual factors was a key message.

The background to the study: creating the conditions for a mature education profession?

Teacher education, whether pre-service or in-service, is experiencing an unparalleled level of attention from politicians and policy makers alike in many OECD countries. One of the driving factors for this increased scrutiny has been the introduction of global education league tables drawn from international comparison data, such as the Programme for International Student Assessment (PISA). With such international competition, teachers are increasingly viewed as instrumental to a country’s economic prosperity, productivity and social cohesion (Furlong, 2013). As a consequence, teacher education is represented as ‘the most direct and effective way of raising educational quality’ (Darling-Hammond, 2005).

As a result, education systems and universities are under intense pressure, with continued calls to focus and raise the ‘professionalism’ and quality of teachers and teacher
education, and this purpose being progressed through accountability and standardisation measures. In the Australian context, following the lead of other OECD Countries, such as England and the US, a wave of such policy reforms have been evident in the past decade (White, 2016). In Australia this policy context has included: the introductions of a Literacy and Numeracy Test for Initial Teacher Education (LANTITE) as a prerequisite for graduation; a national approach to the accreditation of pre-service teacher education programs; new entry requirements for entry into initial teacher education programs that take into account non-academic credentials; the replacement of the one-year Postgraduate Diploma in Education with a two year Masters of Teaching qualification; new stages of career progression with attached standards; and the introduction of an education teacher performance assessment for all graduates.

These reforms have resulted from recommendations from the Teacher Education Ministerial Advisory Group (TEMAG) in their Action Now: Classroom ready teachers report that focused on increased measures of ‘quality’. As an example the report states:

The evidence is clear: enhancing the capability of teachers is vital to raising the overall quality of Australia’s school system and lifting student outcomes. Action to improve the quality of teachers in Australian schools must begin when they are first prepared for the profession. (Teacher Education Ministerial Advisory Group (TEMAG), 2014 p. viii)

With such reforms there is the potential, as Sachs (2016, p. 424) explains, for a performance culture to emerge, often premised on increased accountability and enacted through standards regimes, which can create the conditions for a more conservative and risk-averse teaching profession. Alternatively Sachs has previously called for reforms to promote a ‘mature’ and ‘activist form of professionalism’ (2003) to emerge based on trust, collaboration and autonomy. She (2016) outlines two important dimensions underpinning what she describes as a mature profession:

Firstly teachers possess skills as producers and consumers of research; second, members of the profession must establish trust among and between various stakeholders and constituencies and be prepared to take risks in shifting boundaries that can act as impediments to change. (p. 422)

How to build such a ‘mature’ and ‘activist’ profession within the context of increased accountability reforms was the backdrop for the two-year Australian Study: Strengthening a research-rich teaching profession reported in this paper. The project took its impetus from a similar inquiry into the state of research in teacher education across the United Kingdom. The Research and the Teaching Profession: Building the capacity for a self-improving education system inquiry was commissioned by the British Educational Research Association (BERA) and Royal Society for the Arts (RSA). The report developed from the inquiry envisaged the future required for a repositioning of teacher professionalism. The report noted:

In a new environment of self-improving education systems teachers will need to become research literate and have opportunities for research and inquiry. This requires that schools and colleges become research-rich environments in which to work. It also requires that teacher researchers and the wider research community work in partnership rather than in separate and sometimes competing universes. (BERA-RSA, 2014, p. 5)
The *Strengthening a research-rich teaching profession* project used the findings from the inquiry to stimulate a conversation and overarching question into what conditions would best promote a ‘self-improving’ and ‘research-rich’ teaching profession in the Australian context. A collaborative and systems approach was adopted when conceptualising and developing the study’s design. The project was steered with the support of a reference group. The reference group was inclusive of the thirteen national representatives of a diverse range of national professional associations, such as peak Principal associations across the three sectors (public, Independent and Catholic) and stages of schooling (early childhood, primary and secondary), as well as peak teacher and university union associations and peak Aboriginal and Torres Strait Islander professional networks. The inclusion of the national professional bodies representing teachers, leaders and higher education acknowledged that the current policy context surrounding teacher education in Australia is clearly one that calls for greater alignment across all components and stages of pre-service teacher education and the continuing professional learning of teachers and educators. The study also recognised that to have a self-improving model there is a need for greater knowledge mobilisation and transfer across and between sectors in order to strengthen the links between research, policy and practice in education.

By supporting alignment, or connectedness, the approach was also consistent with recommendations from TEMAG calling for an ‘integrated system’ where ‘higher education providers, school systems and schools work together to achieve strong graduate and student outcomes’ (2014, p. vii) and we would add educators in settings other than school, such as early childhood education centres or vocational education. The review further noted the importance of identifying innovations and practices that have a demonstrable impact on student learning and the need for sharing these innovations and practices nationally. The purpose of the study reported in this paper was thus to develop future-focused recommendations and suggestions at the level of a connected education system that would enable such innovations and practices in Australia to flourish. These overarching aims, principles and strategy underpinned all elements of the design of the study. Before delving into the study and its findings and recommendations, it is important to take a closer look at how the BERA-RSA Inquiry stimulated the study and how the Australian study diverged from the original impetus.

**Building from the BERA-RSA report**

Given the global policy context, and how closely Australia often follows UK policy (see for example Mayer, 2014; White, 2016) this project found its inspiration and catalyst in the findings of the BERA-RSA Inquiry and its series of published papers. Presidents at the time of the Australian Teacher Education Association (ATEA) and the Australian Association for Research in Education (AARE) came together with authors from the Inquiry to discuss how a similar project might be conceptualised in the Australian context and what lessons might be learnt from one study to the other.

The *Strengthening a research-rich teaching profession* study further built from the BERA-RSA Inquiry in other ways. First, a similar objective to investigate the needs and practices of education professionals throughout their career lifecycle was established. As Tatto and Furlong (2015) note:
The overall objective of this Inquiry was to understand the contribution that research can make to teachers’ professional learning over the course of their career, from initial teacher education to continuing professional development, and to explore the potential benefits for students’ learning processes and outcomes. (Tatto & Furlong, 2015, p. 147)

Second, the *Strengthening a research-rich teaching profession* study drew from the Inquiry’s inclusive definition of research and as such defined research as any deliberate investigation that is carried out with a view to learning more about a particular educational issue, including:

All elements of research engagement and activity at all levels related to teaching: i.e. including (but not limited to) teachers as consumers of research, teachers’ institutions’ and systems’ capacity to systematically enquire into their own policies and practices, teacher educators as researchers, and research-informed teacher education programs. (BERA-RSA, 2014, p. 40)

And finally, drawing from the idea of building a ‘self-improving’ education system the position was taken that teachers, academics and system leaders would ideally have control of a number of research practices as both consumers and producers of knowledge: reading, assessing, analysing and manipulating data; talking in public or workplace groups about research; sharing insights about knowledge transfer within and across sites; and extrapolating research insights and terminology from the national level and into local contexts. As a result, it was critical to investigate deeply the nature of current engagement, *in* and *with* research, to reveal any obstacles or barriers to participation and to hear from a broad range of stakeholders about their ideas to better promote a research-rich profession and their professional learning needs to do so. In the next section, we outline the data gathering process involved in the study.

**The Australian study**

In keeping with the goals and framing discussed in the previous section, the overall objective of the *Strengthening a research-rich teaching profession* study was to understand the contribution that research currently makes to the education profession and to explore the challenges, untapped opportunities and recommendations for the future. The study was framed as a collaborative endeavour that required a ‘systems’ approach’. As such, while originally the project was initiated by the two Presidents of ATEA and AARE at the time, it was recognised as important for the study to be inclusive of the leadership across the three national research and professional associations representing teacher education and educational research and thus the membership of the study was expanded to include the Australian Council of Deans of Education (ACDE). Equal representation from the three bodies was ensured as the research team was formed (n = 6), and equal funding provided.

Unlike the BERA-RSA project which was a commissioned Inquiry, the *Strengthening a research-rich teaching profession* team identified the importance of the study as a piece of research *about* research. An ethics protocol was submitted to one university and received reciprocal approval from each of the universities involved in conducting the study. The team engaged a research assistant/project manager, with funds managed by the institution having primary research ethics committee responsibility and hence also acting as the employer of the project manager.
Ensuring a national voice from the profession was also a key design feature of the study and as such a reference group as noted earlier was formed drawing from representatives across the thirteen national education professional associations. Each association was invited to nominate a key representative who attended various meetings over the life of the project to provide invaluable advice at key stages of the project, in particular informing the design of the research, responding to preliminary findings, being involved in an iterative process of consultation and engagement, and peer review of the final report during a final workshop.

Key participants were drawn from across three main components of the education profession as well as different career lifecycle stages. These participant groups were: pre-service teachers and teacher/educators which included early childhood educators and classroom teachers (primary and secondary schools); teacher educators and education academics and leaders (for example Deans and Heads of Schools) who were employed in Faculties and Schools of Education; and systems leaders which included those employed in various education systems from across Catholic and Independent and State Departments of Education, as well as school principals.

Data collection occurred in two stages. Stage one of the study involved gathering data from various state-based jurisdictions as an attempt to include a number of voices and perspectives from diverse contexts. In Australia, various States (6) and Territories (2) have jurisdiction over Education portfolios although there has also been a national education agenda. A total of seven workshops with twenty one roundtables with representatives from all stakeholder groups were held. A total of 72 participants attended workshops in Brisbane and Toowoomba (Queensland), Adelaide (South Australia), Perth (Western Australia), Darwin (Northern Territory), Sydney (New South Wales) and Launceston (Tasmania). There were four central questions consistent with the aims of the study asked of the workshop participants, namely:

- How do education professionals encounter research in their professional life?
- What are the barriers to participation and engagement with research for education professionals?
- What unrealised opportunities are there for participation and engagement with research for education professionals?
- What are the recommendations of education professionals for overcoming these barriers and realising these opportunities?

Analysis of field notes taken at these workshops provided the basis for the design of the national on-line survey instrument administered in stage two. The survey design process involved rigorous consultation with the reference group members as well as trialling and discussion within the research team.

The national survey was administered via peak representative bodies to their members and networks but survey responses themselves were anonymous to the research team. The survey was designed to gain the perspectives of a wider group of participants to inform recommendations made in the reporting and dissemination phase. The survey (see White et al., 2018) consisted of three sections. In the first section a number of demographic details were collected. In the second section participants were presented with twenty-three statements about research and asked to indicate their level of agreement...
(from $1 = $\text{low agreement}$ to $5 = $\text{high agreement}$). In the third section of the survey, participants were asked to rank their top three recommendations from a list of ten recommendations drafted from data collected during the Roundtable Workshops.

Finally, participants were provided with the opportunity to provide open-ended comments or recommendations for policy and practice. The survey was administered using Qualtrics online survey software and was open to participants for four weeks. A total of 389 participants completed the entire survey. While over 500 participants engaged with the survey, it was decided to include only those who had given permission for their survey to be analysed by fully completing all aspects of the survey. Table 1 indicates the details of participants across the two data collection phases.

Sixty-seven per cent of all survey respondents reported working in a metropolitan location, with 21% in a regional location, 6% in a rural location, 3% in a remote location and the remaining 3% in other or unspecified locations. Data from the workshops and survey were analysed to identify themes for discussion, and these were tested during various opportunities for discussion with the reference group and funding bodies. A clear limitation of the study is that it is not representative and provides a snapshot of a point in time across a broad range of participants. In the rest of this paper we will explore a number of emergent themes from the data and while we do not claim that this is a representative study, they provide a useful framework for further discussion, debate and research. It is interesting to note that, while the BERA-RSA Inquiry was an inspiration and catalyst for the study and as described there were differences in its design and approach, there are also similarities in their findings and links back to the BERA-RSA Inquiry are made throughout the discussion of the key themes that emerged.

**Key themes**

The data collected through the mixed-method survey, including the qualitative comments, are analysed for the purposes of this paper. Three central themes emerged from this analysis: the value, accessibility and status of research; research literacy/ies; and becoming discerning consumers of research.

**The value, accessibility and status of research**

The study suggested that engagement with and the value of research is high across Australia’s education systems, a message that was confirmed in discussions with the reference group. All participant groups reported specific examples of research engagement at the workshops. For example, all stakeholders reported that they actively engage in reading research and sought out research-informed conferences and presentations. Perhaps unsurprisingly, teachers and system leaders were more likely to access research from publicly accessible websites and social media platforms and criticised the pay-walls of publishing groups and universities. Others lamented the

| Table 1. Details of participants across the two data collection phases. |
|---------------------------------------------------------------|
| Preservice teacher/teacher/educator | Academic/teacher educator | System leader | Total |
|--------------------------------------|---------------------------|---------------|-------|
| Roundtable workshops                 | 12                        | 32            | 28    | 72    |
| Survey                               | 155                       | 136           | 98    | 389   |
increasing commercialisation of research. Figure 1 demonstrates the high number of survey respondents that agreed or strongly agreed that research in Australian education contexts is too often linked to commercial products to be used by teachers and educators in classrooms. This finding needs to be further interrogated to find better ways in which research findings can be publicly accessible, context specific, user friendly and freely utilised.

Some participants were also particularly critical of academics who produced research primarily for other academics and did not provide access to their research in ways that spoke to a wider public and professional audience. This is consistent with other research that highlighted the need for researchers to produce research using a range of genres and platforms (White, 2016). Teachers themselves were keen to engage with research production and systems leaders identified a need for teachers to be more highly valued for their research insights and contributions. As one survey respondent stated:

Departments need to value teachers with research degrees and encourage schools to use this expertise. Schools need to be encouraged to engage with research outside of accountability discourses and be assisted to identify opportunities to engage in research that is in partnerships with universities addressing specific school needs. Academic researchers need to move beyond writing for other academics if they want teachers at large to be consumers of their work. (Systems leader, open-ended survey response)

Again, perhaps unsurprisingly, university-based participants were more likely to be engaged with research, both as consumers and producers of research, whereas school-based and systems-based participants were more likely to report being consumers of research. However, teachers and system leaders argued for teachers and educators to be more involved as active producers of research and identified mechanisms that could facilitate this.

Research done by teachers needs to be valued, prioritised and seen as part of teacher workload meaning teachers undertaking research need to be given time, a platform to share, and support from the school. (Teacher, open-ended survey response)
Likewise:

Build school leader capability to lead research engaged schools, so the right conditions are in place to enable practitioner engagement in/with research. (Systems leader, open-ended survey response)

Survey participants based in regional and rural settings were more likely to express concern that research translation did not meet their particular needs; these participants called for more locally responsive research approaches. As exemplified by one workshop participant, *Evaluations are city-centric.* (Teacher, Roundtable Workshop). This was especially the case for teachers working with Aboriginal and Torres Strait Islander communities and in other culturally diverse locations. Teachers in these contexts noted that much research was Euro-centric, English language-centric, and metropolitan-centric. The study team interpreted these responses as suggesting that research findings, or policy up-take of the same, that do not take contexts into account can be perceived as irrelevant and culturally inappropriate:

Research needs to look at language learning, move away from a top-down view. This denies language learning for these communities. Denial of children’s home language as soon as they enter education. (Teacher, Roundtable Workshop)

System leaders in regional, rural and remote settings shared similar concerns, but also spoke about the constraints of limited funding, shifting policy goalposts, casualisation of the workforce, questionable robustness of existing data, and costs of attending conferences and building research networks.

Differences across the stakeholders were also identified about a number of persistent research debates, including the value of qualitative and quantitative research, differences between engaging in research and ‘being researched’, different understandings about the value of various research approaches (for example, action research, clinical trials), uncritical acceptance of particular kinds of evidence, under-valuing of teacher/educator research and knowledges, and the complex research environment within education as a field including issues related to trust, ethics, values and authority.

**Research literacy/ies**

While it is generally agreed that no education system can afford not to be informed by data and evidence from robust research, in this study there were lively debates about what is meant by terms such as ‘data’ and ‘evidence’ and what constitutes reliable and relevant research. Respondents particularly expressed issues with the speed of policy churn that did not best enable an opportunity for close data analysis ideas and implementation and reflection to be bedded down. As one participant explained:

There’s plenty of good data collected but it doesn’t always get translated and consolidated into improving practice before the next big thing takes root. (Academic/Teacher educator, open-ended survey response)

There was a general agreement from the study participants in keeping with the BERA-RSA Inquiry ‘about the positive impact that a research literate and research engaged profession is likely to have on learner outcomes’ (BERA-RSA, 2014, p. 6), and that one purpose of
enhancing research capacity is to help practitioners better understand and advocate for their jurisdictions, communities and classrooms. A further insight from this project is that, although ‘research’ per se is not generally factored into teaching workload times, teachers and educators already use a wide variety of research literacies. Research literacies is a term used to define the extent to which teachers and educators have capacity as knowledge producers and their familiarity ‘with a range of research methods, with the latest research findings and with the implications of this research for their day-to-day practice, for education policy and practice more broadly’ (BERA-RSA Report, BERA-RSA, 2014, p. 40).

Drawing on the concept of research literacies then, in this study being ‘research literate’ was defined as including examples of diverse practices of research consumption, which ranged across professional newsletters and blogs, peer-reviewed papers, research studies, scanning ‘big data’ and engaging with social media. However, a key recommendation from the data indicates that if the education profession is to shift from being ‘data-rich’ to ‘research-rich’, then all participants will require new kinds of research literacies. As one teacher pointed out:

[We need] more training in how to interpret data particularly statistics, as unless you are a statistician, inferences made from data can be inaccurate. (Teacher, open-ended survey response)

The findings suggest that for this to be true, teachers, both new and established, require support to enhance the extent to which they are research literate. Analysis also confirmed that many teachers and educators consider research as central to their professional work. This is consistent with policy research conducted in the United Kingdom. Geoff Whitty, for example, commented:

Then, at classroom level, there are examples of how teachers undertaking classroom action research have changed their practice in response to their own research and their exposure to a wider research literature (e.g. Torrance & Pryor, 2001). This is particularly important for the development of teaching as a research-based profession. (Whitty, 2006, p. 169)

It is here that we are drawn again to a consistent finding with the BERA-RSA (2014) Inquiry report that highlighted an issue related to having too much data and not enough opportunity for teachers and educators to be powerful and ‘agentive’ users of their own data. There were consistencies with the Australian study and the BERA-RSA Inquiry into the over-use of data. As the Inquiry expressed, the participants involved reported they:

Are deeply concerned by the emergence of an environment, often narrowly data-driven, that appears to militate against teachers’ engagement in more open forms of research and enquiry. (BERA-RSA Report, 2014, p. 11)

Likewise in this research study it was revealed that classroom teachers were frustrated at a lack of opportunity to translate data in and for their own contexts. Rather than seeing classrooms, teachers and educators as the ‘end users’ of research, a more productive framing is suggested, whereby professionals are seen as partners-in-research. The concept of research literacies is predicated on the importance of ongoing professional learning, where teachers and educators, teacher educators and education researchers, and system leaders know how to identify problems related to their practice, and to students’ learning and education more generally, and who can harness skills and knowledge to investigate solutions and implement change. Within such a scenario, where ‘to be
research literate is to “get” research – to understand why it is important and what might be learnt from it, and to maintain a sense of critical appreciation and healthy scepticism throughout’ (BERA-RSA, 2014, p. 40), it is more likely that the quality of education and teaching can be enhanced and student learning can be supported. As one systems leader in the study reported here observed:

Data is not research, it’s a part of research and schools are confused by this. (Systems leader, open-ended survey response)

Comments made in the survey also demonstrated the way in which different groups of participants emphasised the importance of having a diverse range of research-engaged strategies, rather than a one size-fits-all approach:

I think pre-service teachers need more support to be enquirers more so than researchers. When you use the word ‘research’ people think of high-level thesis kinds of research. The term enquiry is more accurate to the types of research teachers undertake in the classroom setting. (Primary/Secondary Teacher, open-ended survey response)

This is an interesting insight highlighting the need for a research taxonomy and one that needs to be conceptualised as appropriate for different capacities and practices relevant to different contexts, times and professionals.

**Becoming discerning consumers of research**

Building a research-rich environment means that teachers and educators ideally become discerning consumers of research as well as enabling them to undertake their own research and evaluate and respond to the findings of that research. Teachers, educators and leaders need more opportunities to critically engage with research in context. This suggests that a systematic approach is vital in providing opportunities for teachers and educators to critically engage as consumers or readers of research across diverse research outputs and approaches, as well as engagement in research in their own practice and in partnership with researchers in larger projects.

The reciprocal benefits for researchers who are able to work in partnership with educators in education contexts are also recognised. Teachers identified that engaging with data is an important part of their daily work activity but indicated that they desired more meaningful conversations about data, rather than simply complying with ‘reporting models’ demanded by ‘outsiders’ about their results. Teachers also wanted to analyse and interpret data beyond the scope of what is provided currently as part of national testing initiatives.

The research also pointed to the need for a greater focus on building capacity for the profession from within the profession, rather than relying on the commercialisation of research or on a small number of external experts engaged to tell teachers what their student data might mean. This requires partnerships between leaders, educators and researchers, and a conscious move to shift from thinking about researchers and educators as having differing interests. Researchers, educators and leaders are all part of education as a system and all have a focus on quality education for all.
Teachers want to learn but need time to plan, collect data, analyse the data, discuss and respond to findings in a collaborative team. (Primary/Secondary Teacher, open-ended survey response)

Overall, the findings suggest a desire to equip teachers and educators with the analytical, research and interpretative skills and dispositions to produce their own knowledge about effective practices in their classroom, school and community.

It is important that teachers in schools are encouraged and more importantly, given the opportunities to be involved in research. (Teacher, open-ended survey response)

**Ways forward and ideas from practice**

The study revealed a number of recommendations and suggestions for the ‘system’ to consider. Positioning ‘agentive’ teachers to both determine their own place in the world and prepare their students for living in such a world requires teachers who: are research literate in that they continue with their own learning; know how to identify problems related to their practice, their students’ learning and education more generally; and can think beyond the ‘accepted wisdom’ to pose new questions about these problems and to harness a set of skills and capabilities that enables them to implement change. Within such a scenario, it is more likely that the quality of teacher education and teaching can be enhanced. As Ling (2017, p. 570) states:

Rather than lamenting the fact that the role of teacher education and indeed of the University in a world of super complexity is now radically changed, it is perhaps even more exciting to be a part of this era as it has unbounded possibilities, unknown unknowns, space for risk and experimentation, permission to be uncertain and insecure, and contains the awkward spaces in which we can find some of those unknown unknowns.

As a way forward for the profession as a whole, the study pointed to three significant enablers in building research-rich systems. First, education systems must ensure educators, teachers and teacher educators are discerning consumers of research; secondly, all teachers and educators should be enabled, through support from system leaders and education academics, including teacher educators, to undertake their own forms of systematic enquiry and evaluate and respond to the findings of their research in context; and thirdly, the importance of incentivising research-led partnerships within and across education systems. A brief outline of each is now provided.

**Building research literacies**

Our analysis revealed that teachers, educators and leaders need more opportunities to critically engage with research in context. This suggests that a systematic approach is vital in providing opportunities for teachers and educators to critically engage as consumers or readers of research across diverse research outputs and approaches, as well as engagement in research in their own practice and in partnership with researchers in larger projects. The reciprocal benefits for researchers who are able to work in partnership with educators in education contexts are also recognised. Teachers identified that engaging with data is an important part of their research activity but indicated that they desired more meaningful conversations about data, rather than simply complying with
‘reporting models’ demanded by ‘outsiders’ about outcomes and assessment results. Teachers also wanted to analyse and interpret data beyond the scope of what is provided currently as part of national testing initiatives. Examples of this from across the stakeholder groups included:

- Develop and disseminate a continuum of research literacy practices across all stages of education careers, from pre-service education into early career employment, and aligned with the stages of career development such as Highly Accomplished and Lead Teacher.
- Position the Highly Accomplished and Lead Teacher roles as responsible for mentoring others and building research capacity within schools and early childhood services, and across centre/school-university partnerships.
- Utilise current policy moves for research engagement and impact to ensure that university researchers are incentivised for practices that encourage authentic, reciprocal research partnerships with schools.

**Mobilising and diversifying a research-informed and research-engaged workforce**

Creating an integrated and research-rich profession requires building and mobilising a workforce that can move in and across the system. Competing roles and pressures erode the capacity of the education workforce. It is timely to explore new and hybrid approaches to workplace roles that might better support research-rich education systems. In considering how this might be achieved, findings suggest the following priority actions to enhance research-rich systems:

- Develop participatory research initiatives sensitive to local social contexts.
- Encourage universities and professional associations to find ways for those working in schools and systems to have more open access to academic research to inform practice.
- Encourage various workplaces to systematically recognise and reflect in workload and role descriptions the time and knowledge required to build authentic, reciprocal relationships.

**Incentivise research-led partnerships within and across education systems**

Participants in the research told us that frequent education policy changes make it more challenging to embed and sustain research-informed practices. Partnerships that are sustainable enable new kinds of professional learning to occur between teachers/educators and academic researchers, and also help in the creation of new, more powerful kinds of knowledge to inform teaching and schooling. Digital technologies can support diverse models of engagement, noting that they also present new challenges for systems and practitioners: to stay abreast of the pace of change; to face an often bewildering selection of decisions and an ever-increasing array of information; and, for those responsible for maintaining websites, to be ever vigilant about currency and avoid the ‘page not found’ syndrome prevalent in the digital era. Responses to this recommendation could include, for example:
- Foster and incentivise school-led practitioner enquiry/action research projects, as one part of research engagement.
- Teachers/educators and academics to be further incentivised to research and publish together, with professional associations facilitating publishing opportunities and access to research reports for teachers and educators.
- Universities to further recognise partnership work beyond professional experience to include research partnership endeavours as part of policy reform.

**Conclusion**

The *Strengthening a research-rich teaching profession* study confirmed that Australia has an exceptionally well educated and aspirational education workforce. Data indicated that across the three stakeholder groups, the profession values research and is eager to access and participate in research-led and research-informed practice at all levels. The study cautioned against defining research too narrowly, within the challenges of a rapidly changing world. New approaches and strategies are called for. The study found consistency with Whitty’s assertion that:

> Some research therefore needs to ask different sorts of questions, including why something works and, equally important, why it works in some contexts and not in others. And anyway, the professional literacy of teachers surely involves more than purely instrumental knowledge. It is therefore appropriate that a research-based profession should be informed by research that questions prevailing assumptions - and considers such questions as whether an activity is a worthwhile endeavour in the first place and what constitutes socially-just schooling (Gale & Densmore, 2003). (Whitty, 2006, p.162)

Self-improving education systems require teachers, educators, academics and system leaders who know how to engage in a variety of research practices with each other. This type of collaboration was also suggested by TEMAG, and should involve ‘much stronger relationships between schools and colleges, and between practitioners in schools and colleges and those in the wider research community’. This connected, joined up approach is outlined in the Alliance report (2018) which notes:

> The overall picture is one of education professionals who aspire to inform teaching and learning at all levels through a variety of forms of systematic enquiry. The data point to a profession with a strong desire to do the best for students, a recognition of the importance of context, and a willingness to be a part of a scholarly community. At the same time, participants identified considerable barriers to research consumption, engagement and participation, as well as strategies that could be employed by system leaders to overcome or mitigate some of these barriers. (White et al., 2018, p. 24)

This study highlights a future focused roadmap on how across systems within Australia we can build a research-rich teaching profession and strengthen collectively a profession that, as Sachs (2016) notes, ‘engages in systematic inquiry, develops strategies to constantly improve and be innovative in their practice and to share that practice is a good starting point’ (p. 424). The recommendations and suggestions from the study are not meant as a directive; they are offered to all engaged in education to explore and discuss and consider which part they can play in following the signposts provided. It appears from the data that there is much enthusiasm from within the profession to be actively engaged
at all levels with research in its most inclusive definition. The timing is right for the next waves of research to be initiated building from this foundational work.

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**Notes on contributors**

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