Enhancing the educational research-practice nexus

The Research in Education Network of Australian educational jurisdictions supports the role of research in improving the wellbeing, educational and child development outcomes of children and young people. The transformative potential of education research requires an understanding of the relationship between educational research and practice: in particular what the relationship is and how it might be strengthened.

The relationship between research and practice can be strengthened by the adoption of a user-centric approach to research that involves engaging with end users (for example, principals and teachers), building capacity of both researchers (for example, university academics) and end users, tailoring communication strategies and monitoring and evaluating practitioner uptake of research. Partnerships between researchers and practitioners are an ideal way to strengthen the relationship between research and practice.

In this paper we present the following efforts made to strengthen the relationship between research and practice:

- The development of a user-centric model to research translation throughout the research cycle in Queensland
- A project to better understand how practitioners use research to inform innovative practice in New South Wales
- The Understanding School Engagement in Research Project in Catholic Education, Melbourne, that aims to better understand and meet the needs of schools in regard to their engagement in research projects, and engagement with research findings and evidence
- Supporting practitioner research and fostering links between the academy and schools via the AISNSW School Based Research Projects
- Partnerships between a government education system and education researchers in Victoria.
- Considering what education could learn from wider debates about the research-practice nexus other public policy areas

These efforts involve different combinations of:

- partnerships between researchers and schools or systems. Some partnerships are initiated by the researchers and others by the schools and systems.
- practitioner engagement with research literature to inform their practice.

Both activities take place in the “connecting web” between research and practice. (Figgis, Zubrick, A., & Alderson, 2000, p. 324) Research partnerships are two-way relationships and may inform practice more directly.
The development of a user-centric model to research translation throughout the research cycle

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A common quandary of researchers and educators/policy makers is the disparity in language and purpose of these diverse groups. There appears to be a divide between the academic role of researchers, who have a significant and essential responsibility to add to the body of research knowledge and are encouraged by their institutions to publish in high standing journals, and the role of educators and policy makers, tasked with implementing evidence-based initiatives but often unaware or unable to interpret this evidence. This research-practice nexus is not unique to education (Head, 2009), but the stakes are arguably higher given that a primary public purpose of education is to develop active, competent and productive citizens (Reid, Cranston, Keating, & Mulford, 2011) with the skills to contribute to society, including as the next generation of researchers, educators, and policy makers. An efficient and effective education system is dependent on the translation of research into practice, and yet education systems worldwide struggle with identifying the most effective processes to facilitate this translation.

The importance of research translation is of greatest significance in instances when practitioners – school personnel – are the research participants themselves. Sometimes one of the few benefits (and quite often the only benefit) to school staff from their involvement in a research project is that they receive some sort of feedback on the results of the research. However, a common complaint from school staff is that they are repeatedly asked to participate in research, but rarely hear the outcomes of the study.

As a general ethical principle, researchers must provide participants with some form of feedback on the results of the work. Depending upon the nature of the research/data collection/data analysis, this may not be results specific to the individual participant, but at the very least it should be a timely and lay summary of the overall results. For most participant cohorts a copy of an academic paper will not be an appropriate way in which to provide them with this feedback.

The selected mechanism needs to be respectful, interpretable, not undermine the privacy of individuals, and not be a source of additional risk. In practice this means different project and participant groups may require different feedback mechanisms.

In the Queensland Department of Education and Training (DET), as with many other jurisdictions, we have been circumspectly reviewing our approach to the most appropriate and effective strategy for communication of research findings to enable translation. This is of particular imperative now, as DET commences its own $1 million research grant scheme, funding local projects of up to $100,000 per annum that demonstrate strong alignment with its research priorities. The translation of research outcomes into policy and practice are paramount to obtaining value for money from the grant scheme investment.

In identifying best practice, DET has recently adopted a framework espoused by the UK Department for International Development for guiding research uptake of funded projects (DFID, 2016)

This research uptake framework embeds translation throughout the research cycle (from initial research conceptualisation to reporting and monitoring post-research), and encourages a user-centric approach to translation and uptake. Research uptake is defined specifically by DFID as all ‘activities that facilitate and contribute to the use of research evidence by policy-makers, practitioners and other development actors’.
There are four categories of activity that DFID argue are essential for effective research uptake by end-users, and these are:

• **engaging with end-users** - identify end-users early in the research process and consider their interests and the type of engagement required to support uptake;

• **building capacity** - address gaps in translation skills of both producers and consumers of research;

• **tailoring communication strategies** - identify key messages, implications and expected benefits of research in line with end-user preferences; and

• **monitoring and evaluating uptake** - gather data that assesses the uptake of research findings and the extent to which the expected benefits are realised by end-users.

While DET is still in the early stages of adopting best practice research translation, some initial activities consistent with the DFID research uptake framework include:

• a new application system and research database is under development – the Queensland Education Research Inventory (QERI) – which will streamline the research application process and publish details of studies cleared to occur in Queensland state schools, including the findings of research as they become available;

• prospective researchers (through the Queensland research application) will be required to articulate their plans to engage with end-users and detail how their research findings will be communicated appropriately to stakeholders;

• end-user engagement is a new criteria for appraising research partnership proposals (ARC linkage proposals and grants);

• regular research forums involve co-presentations with researchers, policy officers, and practitioners and are web-conferenced to support broader dissemination;

• a new report of findings template has been developed for researchers to use when submitting their findings to DET. This template encourages non-technical language and the implications of research to be identified; and

• a communication plan for research is being developed, that will involve new web content.

• and a variety of approaches to communicating and disseminating research findings.
Research informing innovative practice in NSW

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The NSW Department of Education is conducting a research project to investigate innovative practices that are taking place in NSW government schools. Through a process of recommendations from departmental directorates, 14 practitioners (leaders and teachers) in schools and other educational institutions were identified and invited to an interview to discuss their innovative practice. The aim of this research is to document the types of successful innovative practices taking place in schools, how these practices have been informed by research findings, the kind of evidence used to identify success, and the potential for scaling. This section focuses on the findings relating to research and evaluation. The findings to date are that:

- Our 14 practitioners named 70 researchers or research organisations in total who informed their practice
- Amongst these 70, ten were organisations – such as the Buck Institute, Edutopia and Big Picture Australia

While most of our practitioners named education research as informing their practice, many of the practitioners also referred to research in psychology, business, philosophy and politics as informing their practice. For example Carol Dweck, a Stanford University psychologist, was named as informing the practice of five of our practitioners.

The education researchers on the professional reading lists of the practitioners we interviewed were highly varied. The works of these researchers have some common characteristics:

- The audience for the works is primarily teachers, and secondarily other researchers. (Our practitioners tend not to read academic journals)
- The works tend to be synthetic. The authors synthesise research of other researchers, to identify broad implications for practice
- The works, while practical, provide a balance of theory and practice – focussing on reasons for recommended practices
- The content is intellectually challenging
- The authors manage the tension between clarity of communication and sophistication of argument

Rickinson distinguishes between three uses of research:

- Instrumental: providing specific and immediately applicable technical solutions, and sees research as the main or only knowledge source to guide practice
- Conceptual: research is providing concepts which come to play a part in how practitioners define problems and research is one among several sources of knowledge upon which practitioners can draw… and
• Strategic: the application of research as a persuasive or political tool for legitimating a position or practice. (Rickinson, 2017 (forthcoming)) drawing on (Estabrooks, 2001)

Most of our respondents made conceptual use of research. Our practitioners looked at the ideas behind practice – there was a valuing of the “why”.

There was little evidence of instrumental use of research. Practice was never based on research – only ever informed by research. In addressing practical issues, practitioners would combine the (conceptual) knowledge provided by research with the tacit knowledge gathered through personal experience working in the school. Addressing practical issues drove the use of research, rather than research driving identification of practical issues.

Our practitioners never made selective use of research for strategic purposes.

In evaluating an innovative practice, practitioners relied on a range of feedback, both quantitative and qualitative from a range of sources (students, teachers, parents and the wider community). None of our practitioners relied on any one source of data – e.g. NAPLAN results – but considered data/feedback from a range of sources, in relation to each other. Our practitioners did not prioritise any one type of data over another type. The type of data used to evaluate an innovation depended on the nature of the innovation. It was always “fit to purpose”.

Lingard and Renshaw suggest that while researchers need to adopt a “pedagogical disposition”, teachers should adopt a “researcherly disposition”. (Lingard & Renshaw, 2010)

Each of our practitioners embodied a researcherly disposition. They were pragmatic intellectuals. We have no experts on combining disparate kinds of evidence. But doing so is at the heart of epistemology directed at establishing results we can use – the relationship between research and practice. Practitioners used philosophical investigation in assessing a range of considerations to inform their practice.
Understanding School Engagement in Research (USER) project: Catholic Education Melbourne

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Purpose
The Understanding School Engagement in Research (USER) project aims to help Catholic Education Melbourne (CEM) better understand and meet the needs of schools in regard to their engagement in research projects, and engagement with research findings and evidence. School feedback is critical for jurisdictions to continue to reflect on how we can effectively lead and participate in research that is in the best interests of students, staff, families, school communities and school systems.

Rationale
Schooling jurisdictions receive hundreds of applications per year from external researchers wishing to conduct research in schools. School feedback through the USER project will enable CEM (and other jurisdictions) to better understand what schools want and need in regard to their engagement in research projects, and enable us to make more informed decisions that maximise the benefit of school engagement in research.

Methodology
Feedback has been provided by 73 schools through a quantitative and qualitative online survey, focus groups and semi-structured interviews with one primary and one secondary school principal.

Some high level findings from schools

- Schools receive many requests to participate in research, but choose to participate in a small number (if at all). 47% schools receive 10 or more research requests per year, but only 55% say ‘yes’ to one or no research requests per year. On average, schools say ‘yes’ to one in five research requests per year.
- The number one reason for schools saying ‘yes’ to participating in research is if the project aligns with school priorities and is identified as an area of need in their school improvement plan.
- The number one reason for saying ‘no’ to participating in research is if the project demands too much effort and coordination, and time away from ‘core’ work.
- Common characteristics of ‘worthwhile’ research projects according to schools: aligns with school priorities; improves student learning (or at least a line of sight to this); findings/feedback is provided to the school; improves teacher capability and effectiveness.
- Common characteristics of ‘not-so-good’ research projects according to schools: too much time/demand on school; topic not relevant to schools or even education; implementation issues (ie research poorly conducted); no findings/feedback provided to the school.
- More schools value research and evidence than use it in practice. 80% schools ‘highly value’ keeping up-to-date with research and evidence, but only 34% ‘often’ use it in practice.
- Schools value research and evidence because: it provides a solid foundation for school improvement planning, decision making and future change; has the potential to strengthen teacher effectiveness and improve student learning; and can challenge traditionally held or popular views.
- Schools are using research and evidence in practice with their colleagues in school planning, professional learning, observation
and coaching, and when trialling new strategies in the classroom.

- Enablers for engaging with research and evidence: if it is school-specific evidence or at least seen as relevant to the school; presented in a user-friendly, accessible and visually engaging format; promoted and supported by leadership and part of the school culture; and promoted and supported by the system (ie CEM).

- Barriers to engaging with research and evidence: time, cost, motivation, physical space, timetable; teacher confidence to translate into classroom practice; lack of leadership support; and if evidence-informed practice is not part of the school culture.

- School staff access research and evidence mostly from within their school and from professional learning. They engage with research and evidence through interaction with their peers (eg dialogue, planning, professional learning, coaching), not usually by downloading and reading an article.

Next steps

The findings are being shared with universities and internal CEM staff to develop recommendations that will strengthen how CEM both leads and partners in research, and supports schools to engage in and with research.

At a minimum, CEM will review and update its Research in Schools policy and guidelines to ensure we are reviewing and approving research requests in line with what schools have told us through the USER project. CEM is also likely to develop a set of research priorities to help inform what research projects we invest in, and how universities can align their research with system and school priorities.
Supporting Practitioner Research: School Based Research Projects in AIS NSW

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The value of practitioner research in generating context-relevant knowledge and implementable research products, and encouraging an increase in research engagement and research to practice improvement is widely reported. Many advise that practitioner engagement can be improved by conducting and participating in research (for example Leat, Reid, & Lofthouse, 2015).

School Based Research Projects

In responding to research findings, in 2014 AISNSW instigated the Education Research Project to fund and support practitioners to undertake high-quality research in their schools. These school based research projects sought to contribute to capacity building, research engagement and research practice at the school level, whilst producing robust, rich research findings for the broader education community.

The projects provide opportunities for independent schools to undertake, access and utilise authentic educational research in their practice. Grounding education in evidence-based practice is an essential feature of assuring and enhancing educational excellence.

Each year schools are invited to apply for research projects which focus on areas of education that will ultimately impact student outcomes and make substantial contributions to new insights in and beyond the individual schools in which they are undertaken. Successful projects are supported by AISNSW for two years and are undertaken by practicing teachers and/or school leaders. Each project team is allied with an academic mentor and/or expert critical friend(s) specialising in some aspect of their topic of study. This structure supports practitioner researchers to produce high-quality, rigorous research whilst paying close attention to practitioner experience and perspective.

School based research projects are intended to impact policy and practice within the individual schools concerned, and in schools more broadly across all sectors of education. The results of each project must be of high-quality and publishable and suitable for presentation at education conferences.

A key feature of the school based research projects is the partnership with a specialist or academic mentor that is external to the school. The specialist/academic mentor may either be an expert consultant or from an approved institution including universities.

The key objectives of the school based research project initiative are to:

- positively influence teachers’ awareness, attitudes and interest in research activities
- address teachers’ research training needs and build their capacity to undertake research
- address the barriers and challenges teachers face in engaging with research and in more clearly adopting evidence-informed practices
- enhance teachers’ use of research evidence to inform and improve educational practices.

A small number of high-quality research projects are funded each year for the two year period. Funding is primarily used to provide time for research to be undertaken by educators from the school(s) in order to support increased research practice and literacy capability.

The relationship between the research project team and specialist mentor is an important one as they work closely throughout the project. As such, funding may be used to meet costs associated with this component of the project.

Educational researchers are often interested in large-scale research questions involving multiple teachers or schools, whereas classroom teachers are often looking to participate in or conduct informal research that is specific to their own classroom context and practice. Linking academics to practitioners in this way can support both parties.

AISNSW Research Associates also support individual project teams to successfully undertake projects. Project teams attend face-to-face School
Based Research Network Meetings each term. These are designed to provide structured opportunities for teams and mentors to network and share findings to support increased research capacity and literacy.

AISNSW holds an annual Education Research Symposium providing opportunities for delegates to examine the most contemporary research being undertaken in independent schools, and consider its impact on practice and outcomes. In addition to presentations from leading education researchers, each school based research project shares research findings and current progress.

School based research project teams are required to prepare and present both Interim and Final Reports at the Symposium as well as for wider dissemination in publishable form via the AISNSW website.

There are currently three cohorts involving 18 schools (over 16 projects) engaged in conducting school based research with AISNSW support. The variety of projects undertaken highlights the spectrum of valued research interests not only of these schools, but also of the education sector generally.
Research Partnerships – a model to access high impact research and analytics in DET Victoria

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The role of research in supporting policy and practice is more important than ever. Like all Australian educational jurisdictions, the Victorian Department of Education and Training (DET; the Department) is committed to evidence based policy development, program evaluation, and system improvement. DET is also committed to exploring different and innovative strategic responses that can improve the impact of its research and analytic activities. As such, DET employs a range of models to support research and analytics, ranging from short-term and discrete commissioned projects to longer-term, collaborative research projects such as the Research Partnerships (the Partnerships).

This paper details DET experience with the Partnerships.

Background to the Partnerships
In 2011, the Department established three multi-year partnerships with academic institutions to develop and build a high-quality evidence base, maximise sharing and use of data, and strengthen the use of evidence across the organisation. The Partnerships were developed as a new model of co-production between DET and the academic institutions in the design, development and production of research and analysis to inform key departmental strategic priorities.

There was a clear intent to develop and implement a longer-term program of analysis that would look at the interplay between departmental initiatives and reform agenda, develop a broader understanding of how the Department’s portfolios operate and how results are achieved. This longer-term focus would complement the Department’s more short-term, micro level studies that focus on individual initiatives or programs.

The Partnerships had both a retrospective and prospective approach that focused on three broad areas:

1. Data analysis: to understand patterns and variations in outcomes for children and young people and factors affecting these.
2. Evaluation of whether and how actions undertaken through the reform agenda and other state and national initiatives contribute to the Department’s outcomes, specifically: early childhood outcomes, and outcomes of schooling and health, safety and wellbeing.
3. Development and use of evidence about ‘what works’ to improve outcomes for all learner – what are effective interventions that the Department can use in the future?

There was also an explicit focus on capacity building and knowledge sharing activities across the Department. Examples of such activities included:
- Data quality improvement strategies.
- Training in analytical methods and networks of data analysts sharing practice.
- Data linkage training.
- Short courses and workshops on evaluation design and methods.
- Secondments/placements of the Department’s staff in partner organisations and vice versa.

Why a Partnership approach?
In developing the Partnerships, the Department was aiming to:
- Reduce ad hoc and duplicated research within the Department.
- Better utilise departmental datasets and link these to other state and national datasets.
- Conduct more effective evaluation of programs.
- Develop workforce capacity, skills and knowledge in research and analytics.
Better inform policy through strengthened research and analytics.

The Partnerships were seen as a model worth exploring and investing as they could provide:
- Greater flexibility to pursue complex and long-term research in important policy areas, instead of discrete, short-term commissioned projects.
- Opportunities to develop relationships that will improve oversight of research and analytics activity and improve capabilities within the Department.
- Opportunities to align the Department’s research and analytic commitments and datasets with other organisations that’s ongoing and continuous, allowing for flexibility.

Benefits of the Partnership approach
A review of the Partnerships, including surveys and stakeholder interviews, found that it took 12-18 months for the researchers to acquired substantial contextual knowledge of DET polices and a deep understanding of the extensive datasets to support high-level research and analytics. Benefits accrued under the Partnership model in the form of:
- Improved collective understanding and increased utility of data collected by DET - including tools to link and analyse DET and other national datasets.
- Access to important research capabilities in areas where DET capacity is constrained – particularly in econometric modeling and causal/predictive data analysis.
- Collaboration to support critical thinking about complex policy issues - including research into causality across education and other policy areas, such as health and human services.
- High credibility to research outcomes, which in turn adds weight to policy discussions and confidence in policy decisions.
- Research partners were able to contribute ideas and lines of enquiry that may not have been conceived otherwise.

Mutual benefits could be explored and realised – for example:
- Universities gain exposure to reform initiatives, policy priorities and programs – and datasets they would otherwise not have access to.
- DET gains access to research capacity – the funded and long-term nature of the relationship ensures that “DET has the University’s attention” and timely responses to requests for support.

Challenges of the Partnership approach
Stakeholders identified a number of challenges associated with the Partnership model, including:
- Funding required to sustain Partnerships can be substantial and over long periods of time.
- A significant investment is needed, up front, to ensure Research Partners understand policy priorities and requirements for research deliverables.
- Expectations about research activity and outcomes aren’t always aligned between Research Partners and DET. This leads to frustrations on both sides of the partnership. For example:
  - DET stakeholders expressed frustration about the time required to complete research activities and, at times, the effort required to translate research outputs to meet the need of departmental audiences.
  - Research partners expressed frustration about the time required to clear research findings through the Department’s authorising environment before they could be published.
- Formal research partnerships may be seen as a commitment to a small number of researchers, potentially at the expense of being able to access knowledge and expertise from other research organisations.
Enhancing the educational research-practice nexus: some issues for consideration

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Drawing on ideas from beyond education, this final section highlights four issues for consideration in relation to enhancing the research-practice nexus in education.

1. Who are we working with?

‘The new public social science requires subtle judgements about which publics are the key stakeholders in a “wicked problem” and no churlishness in engaging with whichever publics are necessary to understand, analyse and ameliorate it’ (Brewer, 2013, p. 161)

This first question is about reflecting on the kinds of players who are involved in initiatives to enhance the research-practice nexus in education. With their focus on practice, there is a risk that research-practice initiatives can focus exclusively on practitioners and overlook other potentially significant actors such as policy makers, community organisations, private sector groups and other mediators. In line with Brewer’s (2011) call to social scientists above, it is important to reflect critically on the extent to which research-practice initiatives in education can engage a range of different types of research users.

2. What are we focusing on?

‘Most research in the area [of evidence-based policy] studies the use of research evidence by policymakers not what knowledge or information policymakers use.’ (Oliver, Lorenc, & Innvaer, 2014, p. 6)

This second question highlights a need for honest reflection about the agendas that are driving our efforts to enhance the research-practice nexus.

3. How well do we understand?

‘[Certain] models of research use […] are more likely to help us when it comes to understanding how research actually gets used’ (Nutley et al. 2007: 319-20)

This next question concerns the degree to which research-practice initiatives take seriously the complexity of the relationship between research and practice. To what extent are they informed by empirical and conceptual insights into the dynamics and subtleties of practitioners’ engagement in and with research? Echoing Nutley et al. (2007), it is all too easy for research-practice connections to be seen as direct (rather than indirect), instrumental (rather than conceptual or strategic) and individual (rather than institutional). (Nutley, Walter, & Davies, 2007)

There is a place then for humility in the development of efforts to enhance the research-practice nexus - humility in relation to not only the complexity of practice but also the complexity of evidence use in practice.

4. What relationships are we developing?

‘Relational expertise … is in addition to one’s specialist expertise and involves the capacity to recognise the standpoint of the other and make what matters for oneself clear and understandable.’ (A. Edwards & Stamou, Forthcoming)

This final question draws attention to the relational dimensions of working at the research-practice
interface. It emphasises the need to think carefully about the nature of the relationships that are developing, the types of roles that different actors are playing and the kinds of expertise that are in use. Edwards’ (2010) work on ‘relational expertise’ provides a powerful reminder of the very particular skills and understandings that are needed for working productively at the boundaries between professional practices. To what extent are these capacities part of enhancing the research-practice nexus in education? (A Edwards, 2010)
References


