Q DATA INSIGHT

NOVEMBER 2020

EDUCATORS' SOURCES AND USES OF RESEARCH AND EVIDENCE

> "Proficient teachers use a range of data and evidence sources...to evaluate their teaching and adjust their programs to better meet student needs". (AITSL Professional Standards for Teachers, p. 7).

WHAT IS THE ISSUE?

To what extent do teachers and school leaders use a range of data, research and evidence in practice? How do they go about sourcing, assessing and using research in particular?

There is surprisingly little available Australian data regarding these topics. Monash Q Project is seeking to address these gaps by understanding the ways in which educators find and use research and evidence. We recently surveyed nearly 500 Australian educators to gain their early insights as to:

- (i)   what types and sources of evidence they use to inform their practice and why;
- (ii) how they assess different evidence types and sources; and
- (iii) how they use research in particular and why.

According to the Q Project's Quality Use of Research Evidence (QURE) Framework, using research evidence well is about 'thoughtful engagement with and implementation of appropriate research evidence'. It requires educators to identify and source research, assess it for credibility and relevance, and ensure that it is adapted and implemented to suit the issue, decision or practice context.

WHAT ARE THE FINDINGS?

1. Educators access research and evidence in varied ways and from a wide range of sources. Educators want to and do use research to inform their practice, however, research ranks lower in preference to other types of evidence used.

2. Educators are influenced to use evidence when it is perceived as credible and contextually relevant. Links to impact or improved student outcomes are also important.

3. Research, in particular, is used in a variety of ways, both directly and indirectly, as well as individually and collectively.

WHAT DOES THIS MEAN?

For Teachers

Improving teachers' understanding of where and why research is sourced may inspire them to: (i) expand the ways in which they go about finding, accessing and using research or different evidence types; (ii) be more willing to use research in practice; and (ii) better appreciate that research can complement the use of other types of evidence, as well as practical knowledge and experience, in practice.

For School Leaders

School leaders play important roles in helping teachers, staff and other colleagues access relevant research and adapt, interpret and use it for specific contexts. Understanding the rationale for different sources and uses of research and evidence can help school leaders to: (i) target school improvement initiatives that both increase and improve research use in particular; and (ii) focus on developing teachers' capacities and networks to assist in expanded identification and use of relevant research.

For System Leaders and Researchers

Educators access different evidence and research types from a variety of sources and in a variety of ways. Understanding these patterns of access, influence and use may help system leaders and researchers to: (i) improve the ways in which they communicate with educators; as well as (ii) tailor publications, reports and research findings so as to encourage increased and better use.

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Q PROJECT KEY FINDINGS

Varied Evidence Types and Sources Used

Findings suggest that educators access research and evidence in varied ways and from a wide range of sources. Open-text responses about information sources used in relation to an improvement initiative implemented in the last 12 months revealed respondents' varied evidence preferences. Nearly 100 different types of evidence and information were nominated, sourced from approximately 25 different channels including from: professional development events (14% representation); consultancy groups and media (13%); and government departments (13%).

Strong preferences for 'student data' (used 'always' or 'often' by 77% of respondents), 'policy and curriculum documents' (72%), and 'guidance from official bodies' (68%) were reported (see *Figure 1*). Relative to these sources, research-related sources were used less frequently, such as 'research disseminated from universities' (43%) and 'action research' (42%) (see *Figure 1*). Overall 70 per cent of respondents reported having used research in particular in the last 12 months, with levels of use differing by role (91% of school leaders; 61% of teachers; and 51% of other staff). There were no discernible patterns in research use based on respondents' qualifications or years of experience.
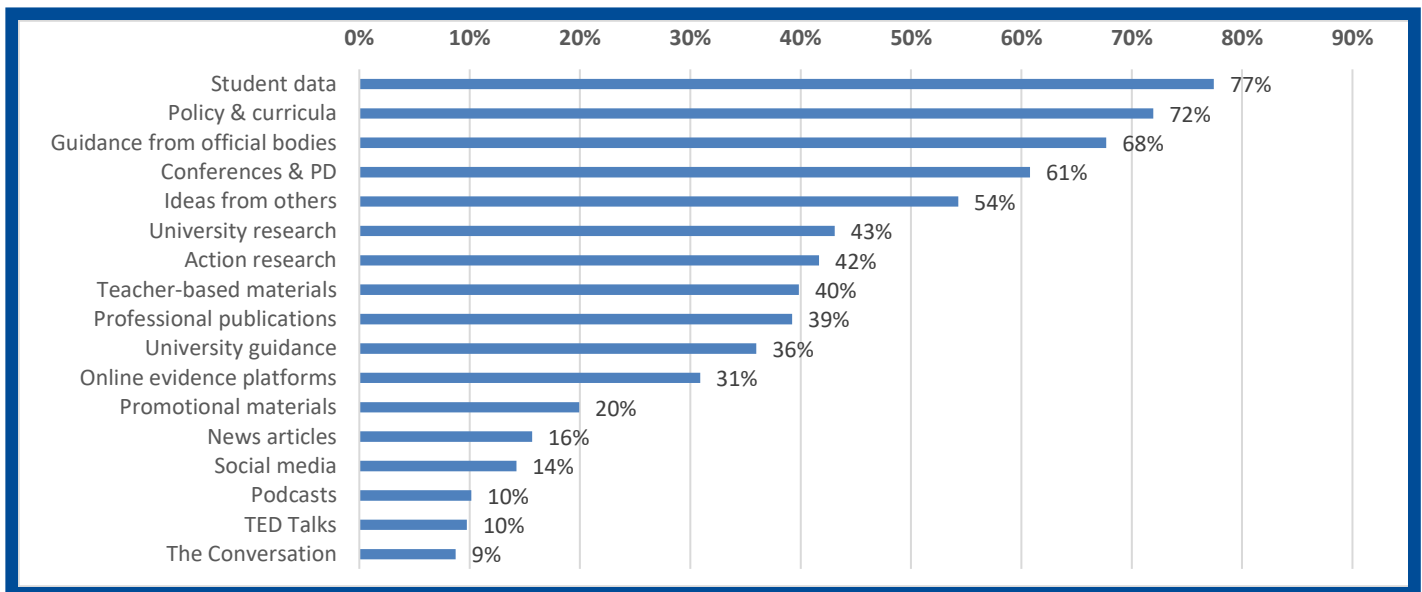

Figure 1: How often do educators consult information sources to help inform decisions? (n=492)

Clear Influences on Sources Used

> 💬 "Quality research use occurs when a strong rationale for the evidence framework and its potential impact on learning is provided".
> Literacy Specialist, Government Primary School, Victoria.

Whilst there appeared varied reasons for respondents using different research and evidence, three strong themes emerged. **Credibility of both the source and evidence type** was a key influencing factor. For example, respondents selected sources because they were 'backed by academic research' (39% ranked approach in top 3; equal 1st ranked influence). Evidence quality was also assessed with credibility in mind including: being 'backed by academic research' (64%; 1st ranked assessment approach); the 'perceived credibility of the source' (48%; 4th ranked); the 'perceived credibility of the author or producer' (42%; 5th ranked); and 'endorsement from professional or official bodies' (39%; 6th ranked).

Evidence of impact was another important consideration in deciding which sources to use. Respondents reported 'evidence of impact' as encouraging use (31% ranked influence in top 3; 8th ranked influence), and 'available evidence of impact' as important in assessing the quality of evidence (60%; 2nd ranked assessment approach).

Impact on student outcomes, assessment or learning were also strong themes in respondents' open-text responses (29% representation). When using research in particular, teachers, rather than school leaders, needed to be 'convinced' by the research before using it (29% ranked influence in top 3; 3rd ranked influence for teachers), which may be associated with the lower rates of use by teachers than leaders in the last 12 months.

Last, **contextual relevance** was also important to respondents. 'Alignment with school plans' was the equal highest ranked influence overall of evidence selection and use (39% ranked influence in top 3), with 37 per cent of respondents looking to ensure that evidence used was 'aligned with their teaching practices' (3rd ranked). Teachers especially looked to their school leaders to help them understand the schools' priorities and plans and align evidence and research use accordingly ('alignment with practice', 39% of teachers, 1st ranked; 'alignment with school plans', 32%, equal 5th ranked). Research in particular was used (see *Figure 2*) when it was 'directly applicable to the challenge or problem' (53%; 1st ranked influence), 'compatible with practice' (36%; 2nd ranked), or 'directly applicable to implementation of a program or initiative' (31%; 3rd ranked). Context and relevance were also strong themes of influence in open-text responses (17% representation).

> 💬 "The selected information sources were viewed as being credible and suitable for our context - we could adapt the ideas and suggestions to our own setting. This was seen as very important for use".
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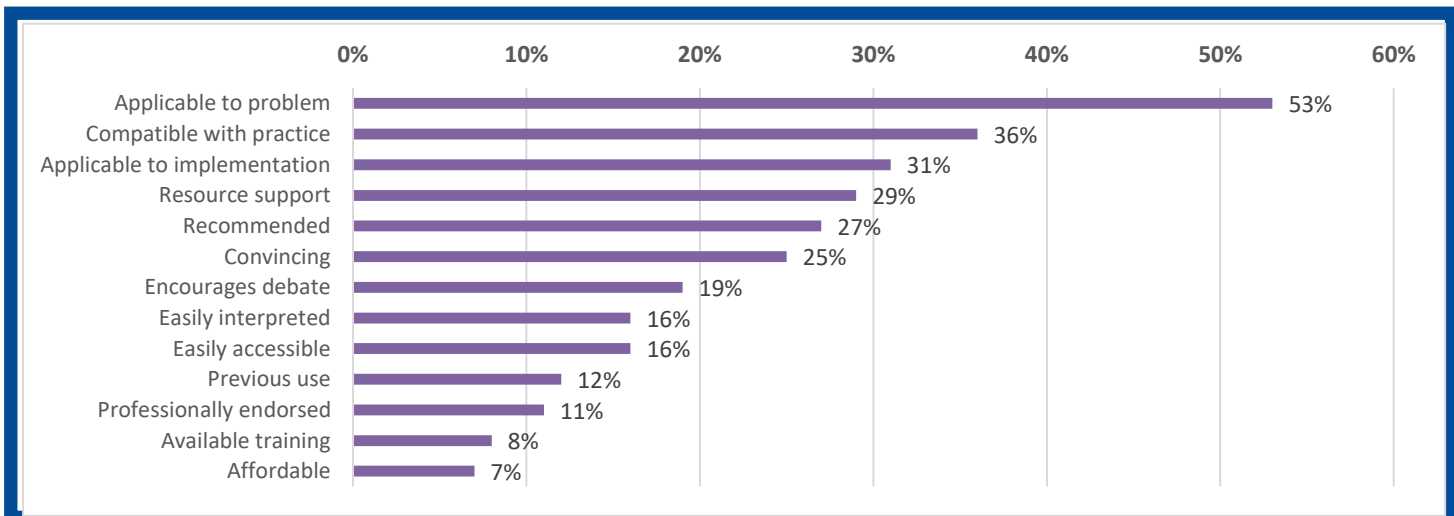> School Leader, Government Primary School, Queensland.

Figure 2: What influenced educators to use research evidence? (n=342)

Research is used directly and indirectly, as well as individually and collectively

When research use does happen in schools, it appears to involve a range of different processes (see *Figure 3*). Respondents reported research being used in direct instrumental ways (e.g., 'to design or plan a new program or initiative', 67% of respondents selected as 'used in last 12 months'), and in indirect conceptual ways (e.g., 'to better understand an issue or problem', 55%). There were also indications of research being used both individually (e.g., 'to improve my knowledge of a topic or subject', 72%; or 'to reflect on my own practice', 67%) and collectively with others (e.g., 'to discuss best practice with colleagues', 76%). Responses indicated some strong consistencies across teachers' and school leaders' uses (see *Figure 3*), particularly with regard to 'reflecting on practice' and 'knowledge improvement'. Leaders though showed stronger leanings towards more direct (e.g., to 'design or provide professional development') and persuasive (e.g., 'to get others to agree to my point of view') uses when compared with teachers, likely reflecting the differences in their roles and accountabilities. There were no discernible patterns of use based on respondents' qualifications or years of experience.

> 💬 "Quality use meant widely researching different studies and strategies specific to our initiative. We could then find commonalities which we consolidated for an improved approach to our action research project".
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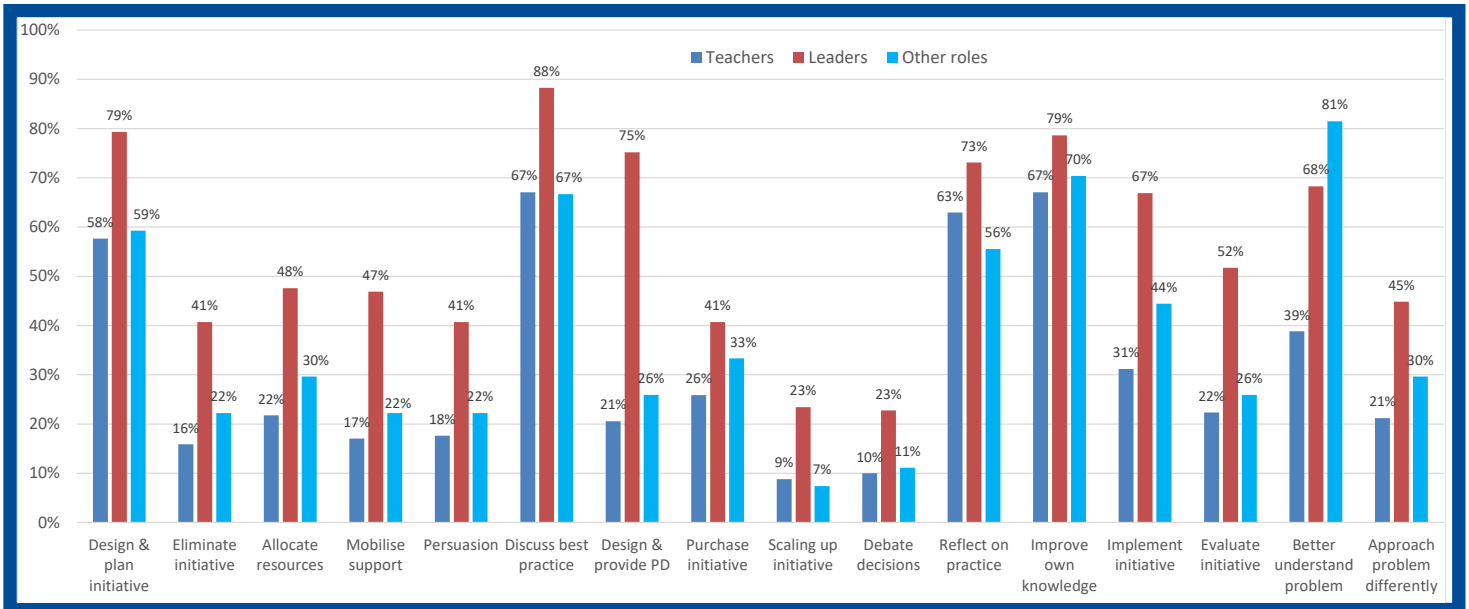> School Leader, Government Secondary School, New South Wales.

Figure 3: How do educators use research? (n=342)

IMPLICATIONS

These findings suggest that Australian educators use research, but there is scope for greater and improved use. How and why they use different research and evidence are important insights that can help inform teachers individually, school leaders and their communities, as well as researchers and system leaders as to how to expand and nuance their own practices.

In conclusion, we highlight several considerations.

For teachers: *What different sources and types of research would help expand my knowledge and assist my practice reflection?*

For leaders: *How can I change my leadership practice such that teachers and staff feel encouraged to engage with research more broadly?*

For others: *How can we tailor our communication processes and content to better reflect the ways in which our school communities find and use research?*

ABOUT Q

These considerations form part of the broader conversation regarding research use that Q Project is seeking to foster. We invite all educators to join us at:

🌐 https://www.monash.edu/education/research/projects/qproject

🐦 @MonashQProject

Access the Monash Q Project Quality Use of Research Evidence ***Framework Report*** and ***Discussion Paper.***