

A collaboration between:



MONASH Q PROJECT

What, why, when and how: Australian educators' use of research and evidence in schools

Q Survey Summary
01/2022
Monash University
January 2022

What, why, when and how Australian educators' use of research in schools

January 2022

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1. EXECUTIVE SUMMARY

The Q Project is a 5-year partnership between Monash University and the Paul Ramsay Foundation to improve the use of research in Australian schools. This summary report shares educators' insights into:

- **What** types of research and evidence they value;
- **Why** they access and use different research and evidence;
- **When** they use research and evidence; and
- **How** they access and then use research and evidence in practice.

This summary draws on quantitative findings from three Q Project surveys involving **1,725 Australian educators**, including:

- 492 educators from 414 schools across four Australian states (New South Wales [NSW], South Australia [SA], Victoria [VIC], and Queensland [QLD]), who completed an online survey between March - September 2020. The survey included 8 quantitative questions and focused on their perceptions and use of research in practice¹;
- 819 educators from schools² across all Australian states (NSW, SA, VIC, QLD, Northern Territory [NT], Western Australia [WA], Tasmania (TAS) and Australian Capital Territory [ACT]), who completed an online survey between May – July 2021. The survey included 20 core and 33 follow-on quantitative questions and focused on their attitudes and behaviours to sharing research; and
- 414 educators from schools³ across four Australian states (NSW, SA, VIC and QLD), who completed an online survey between August – September 2021. The survey included 20 core and 5 follow-on quantitative questions and focused on enablers of and barriers to using research in practice.

This summary report, and the work of the Monash Q Project more generally, come against a backdrop of growing expectations in Australia and internationally that schools and school systems will use research to inform their improvement efforts⁴. Within Australia, though, there have been surprisingly few studies that have examined if and how school staff are using research evidence in their work. The role and use of research in Australian schools is therefore not well understood, but this situation is beginning to change as new empirical studies have started to emerge⁵. The Q Project is part of such developments.

¹ Rickinson, Gleeson, Walsh, Cutler et al., (2021). *Research and evidence use in Australian schools: Survey, analysis and key findings*. Q Report 01/2021. Monash University. <https://doi.org/10.26180/14445663>

² School name not requested in survey.

³ 194 respondents did not disclose school name; 220 respondents disclosed school, of which there were 210 unique schools named.

⁴ For example: Australian Productivity Commission (2016). *National education evidence base: Report no. 80*. <https://www.pc.gov.au/inquiries/completed/education-evidence/report>; Nelson, J., & Campbell, C. (2019). Using evidence in education. In A. Boaz, H. Davies, A. Fraser, & S. Nutley (Eds.), *What works now? Evidence-informed policy and practice revisited*, (pp. 131-149). Policy Press; White, S., Down, B., Mills, M., Shore, S., & Woods, A. (2021). Strengthening a research-rich teaching profession: An Australian study. *Teaching Education*, 32(3), 338-352.

⁵ For example: Mills, M., Mockler, N., Stacey, M., & Taylor, B. (2021). Teachers' orientations to educational research and data in England and Australia: Implications for teacher professionalism. *Teaching Education*, 32(1), 77-98; Parker, B., Steele, T., Rose, V., & Taylor, D. (2020). *Getting evidence moving in schools (GEMS): Investigation paper*. Evidence for Learning. <https://evidenceforlearning.org.au/research-and-evaluation/investigations-and-insights/getting-evidence-moving-in-schools-gems/>.

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Key Findings

What

- **Research is not used often in practice.** It is **less preferred** than other evidence types such as student data, policy and curriculum documents and educators' own observations and action research.
- There is a preference for research and evidence sources that are **interactive and relational** (e.g., PD courses, in-person talks). These preferences can **influence educators to use research more often** in practice.
- There are preferences for research and evidence types that are **short in format** (e.g., ≤4-page reports), and ones that also present the research or evidence in its **original form** (e.g., original findings, methods and context). These preferences can **influence educators to use research more often** in practice.

Why

- Educators want research and evidence to be '**usable**'. Usable research or evidence is **contextually relevant, practical and convenient**.
- Concerns about a lack of practicality and convenience can **influence educators to use research less often** in practice.
- Usable research is also **perceived as credible**. Research that is academically backed and/or shows evidence of impact can **influence educators to use it more often** in practice.
- Educators believe that **skills to assess the usability of research** are critical development needs.

When

- Accessing research and evidence is a **regular task** for educators. The majority of educators use research at least every month. **Accessing new research regularly** is associated with **more frequent use of research**.
- When research is accessed and used, the majority of educators **spend less than 30 minutes at a time** on these tasks. These tasks are also mainly done **in educators' own time**.
- Educators who report **accessing research at home after school hours and/or on weekends** are **more likely to use research more often**.
- There are significant **concerns about having sufficient time to use research**. These concerns can influence the extent to which educators use research in practice.
- **Motivations to invest time in research use** influence the extent to which research is used in practice.
- There are **concerns that schools do not provide sufficient and/or structured time for research use**. Perceptions of available and sufficient time can **influence educators to use research more often** in practice.

How

- **Colleagues** are considered as **high-quality sources** of research or evidence. Colleagues are also viewed as potential **sources of practical and relevant research or evidence**.
- Educators are **more likely to trust research** coming from **colleagues, professional learning networks and school leaders** than they are if the research is coming from others (e.g., academics or universities, educational research organisations, government agencies).
- Research and evidence are used in varied ways. Most commonly, research is used in a **collaborative manner** (e.g., to discuss best practice, to share ideas with others) or for **personal development** (e.g., to inform practice, to improve knowledge).
- When sourcing research, **educators both read it immediately and/or save it to read later**. Just over half of what is saved is usually read at a later time. **Returning to read research** is associated with **educators using research more often** in practice.
- **Opportunities provided by schools for educators to collaborate** (e.g., through professional learning networks or communities, scheduled staff professional development meetings) can **influence educators to use research more often** in practice.

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Considerations for School and System Leaders

Overall, the findings suggest that if research use is going to increase and improve in educational practice, then the **research itself needs to be usable**, and its use needs to be **supported by sufficient time** and **opportunities for educators to collaborate**. Educators' believe that **skills to interpret and assess research for its usability** are critical development needs.

The Monash Q Project's [Quality Research Evidence Use \(QURE\) framework](#) for education⁶ helps to contextualise these findings in four ways:

- At the core of the QURE Framework is the need for research to be 'appropriate'. Educators' insights presented in this paper suggest that **appropriate research is practical, relevant, convenient and credible**;
- The framework specifies that **relationships** are a key enabling factor of quality research use, with **leaders** helping to support research use through facilitating **collaborative and trustworthy research use school cultures**. Educators' insights presented in this paper emphasise the importance of **colleagues and leaders as trusted, high-quality sources of research**. They also emphasise how **discussions, collaborations and professional learning opportunities** help educators to source, make sense of and use research in practice;
- The framework specifies that **skillsets** are also a key enabling factor of quality research use. Educators' insights presented in this paper emphasise the need for **research use skill development to be prioritised** by both school and system leaders; and
- The framework specifies that **infrastructure** is also a key enabler including the **provision of sufficient and structured time** for educators to engage with research. Educators' insights presented in this paper emphasise the need for schools to **prioritise research use and embed it in processes**. They also emphasise the importance of **time being made available** at school through professional learning sessions, team meetings and formal discussions to support research use.

These insights provide important cues for school and system leaders to consider.

For school leaders:

- Educators want to use research in practice and believe in its value⁷. They are prepared to and do utilise their own time to engage with research. Providing educators with **scheduled time during school hours**, particularly in **collaborative learning or discussion sessions**, may support their greater use, as well as encourage others to try using research for the first time. It may also ease the pressure educators feel to undertake critical educational tasks in their own time.
- Educators look to **leaders and colleagues** as key ways in which they find and access research. They also trust colleagues and leaders as high-quality sources. Ensuring that **research is brought into the school community** through leadership teams, librarians, professional learning communities or 'research leads', for example, will provide educators with **convenient access to practical, reliable and relevant research**.
- Educators want research that is **easy to take in and apply, speaks to classroom practice**, and is **relevant**. This does not mean that they necessarily want research summaries. They want to be able to **make sense of the original research**

⁶ Rickinson, M., Walsh, L., Cirkony, C., Salisbury, M., & Gleeson, J. (2020). *Quality use of research evidence framework*. Monash University. <https://doi.org/10.26180/14071508>

⁷ Rickinson, Gleeson, Walsh, Cutler et al., (2021). *Research and evidence use in Australian schools: Survey, analysis and key findings*. Q Report 01/2021. Monash University. <https://doi.org/10.26180/14445663>

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themselves⁸, and they believe investments in their skills to assess the quality, usability and relevance of research are critical for their improved use of research in practice. School leaders play an important role in making sure that **usable research is convenient for educators to access**, but also that educators' **research use skills are prioritised for development**.

For system leaders:

- Educators are clear in the forms of research that they believe are most usable. Very short summaries of research are not necessarily wanted by or helpful to educators. Educators want to interpret original research themselves as they assess its relevance to their context, but don't always have the confidence or skills to do this⁹. System-wide efforts are needed that focus on **supporting school leaders and teachers in accessing quality professional learning and resources that help to develop their research use skills**.
- At the same time, educators are providing clear messages to universities, research organisations and brokers in particular that for research to be usable, it needs to be **more practical, shorter in length and easier to take in and apply**. Support materials and resources, such as videos or podcasts, that allow educators to engage with the research in **other ways than reading alone** are helpful. Opportunities to **engage with researchers or 'experts'** through professional learning courses, conferences, in-school presentations or other discussions are also valued.
- Educators need **scheduled time during school hours** to engage properly with research. This challenge cannot be addressed at the school-level alone. System leaders need to consider **how access to research and time to engage with it can be improved for educators**. Linking research use more clearly to teaching standards and other educational improvement frameworks is also important to ensure it is prioritised within school operations.
- **Teachers and school leaders differ**, in some cases significantly, as to 'what, why, when and how' they engage with research. Believing that teachers and school leaders have the same needs, expectations and capacities regarding their research use may exacerbate existing divides or potentially alienate some educators from research use improvement endeavours. Understanding these nuances and tailoring professional learning, improvement interventions and support resources to the needs of different educator groups seem prudent ways forward.

Staying Connected with the Q Project

Share your experiences, participate in project activities, and stay up to date on news. To connect with us, please visit:



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[@MonashQProject](#)



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⁸ Rickinson, Gleeson, Walsh, Salisbury et al., (2021). *Using research well in Australian schools. Q Discussion Paper 02*. Monash University. <https://doi.org/10.26180/14783637>

⁹ Rickinson, Gleeson, Walsh, Cutler et al., (2021). *Research and evidence use in Australian schools: Survey, analysis and key findings. Q Report 01/2021*. Monash University. <https://doi.org/10.26180/14445663>

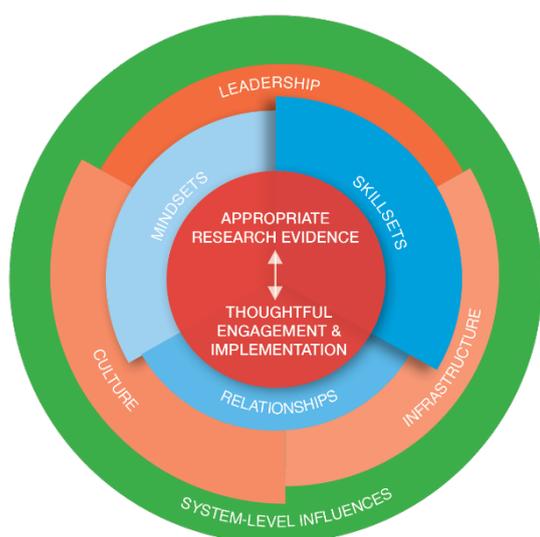
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2. ABOUT MONASH Q PROJECT

The Q Project is a 5-year partnership between Monash University and the Paul Ramsay Foundation to **understand and improve the quality use of research evidence in Australian schools**. It involves close collaboration with teachers, school leaders, policy-makers, researchers, research brokers and other key stakeholders across Australia.

Work to date has involved a systematic review and narrative synthesis of 112 relevant publications from health, social care, policy and education. The review and synthesis sought to explore if and how quality of evidence use had been defined and described within each of these sectors, in order to inform the development of a [Quality Research Evidence Use \(QURE\) framework](#)¹⁰ for education. *Figure 1* shows this framework and its enabling components, as well as Q's accompanying definition of quality use of research evidence in education.



Quality use of research evidence in education is:

the thoughtful engagement with and implementation of appropriate research evidence, supported by a blend of individual and organisational enabling components within a complex system.

It comprises:

- **Two core components** – appropriate research evidence, and thoughtful engagement and implementation;
- **Three individual enabling components** – skillsets, mindsets and relationships; and
- **Three organisational enabling components** – leadership, culture and infrastructure

Figure 1: QURE Framework

The Q Project's school-based research phase commenced in 2020, with a number of surveys and interviews having been conducted between March 2020 – October 2021. This report draws on quantitative findings from three Q Project surveys involving **1725 Australian educators** overall:

- **Survey 1:** Educators' perceptions and use of research in practice; 8 quantitative questions; 492 educators from 414 schools across four Australian states (NSW, SA, VIC, QLD);
- **Survey 2:** Educators' attitudes and behaviours to sharing research; 20 core and 33 follow-on quantitative questions; 819 educators from schools across all Australian states (NSW, SA, VIC, QLD, NT, WA, TAS, ACT); and
- **Survey 3:** Enablers of and barriers to educators' use of research in practice; 20 core and 5 follow-on quantitative questions; 414 educators from schools across four Australian states (NSW, SA, VIC, QLD).

¹⁰ Rickinson, M., Walsh, L., Cirkony, C., Salisbury, M., & Gleeson, J. (2020). *Quality use of research evidence framework*. Monash University. <https://doi.org/10.26180/14071508>

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The next sections outline a series of key findings that emerged from educators' responses regarding:

- **What** types of research and evidence they value;
- **Why** they access and use different research or evidence;
- **When** they use research and evidence; and
- **How** they access and then use research and evidence in practice.

3. WHAT TYPES OF RESEARCH AND EVIDENCE ARE VALUED?

Research is not used often in practice. It is less preferred than other types of evidence.

Overall, educators across all three surveys ($n=1,725$)¹¹ indicated that they **did not consult research often**, including 'research disseminated from universities' (36.7% consulted frequently) and 'university-based advice or guidance' (29.7%). Those in leadership positions indicated consulting these research-related types significantly more often than teachers (university-disseminated research, 57.3% vs 33.1%, $p < .001$; and university-based guidance 47.8% vs 26.8% $p < .001$ respectively).

From Survey 1 ($n=492$), educators indicated **stronger preferences for forms of professional information** such as 'student data' (77.4% consulted frequently, 1st selected overall), 'policy and curriculum documents' (72.0%, 2nd) and 'guidance from official bodies' (67.7%, 3rd).

From Survey 2 ($n=805$), educators were most likely to select 'student data' (76.5%, 1st selected overall), their 'own observations' (69.8%, 2nd), and 'action research' (55.9%, 4th) as high-quality evidence types for teaching practice. While educators indicated that, broadly, they saw 'quantitative research' (56.8%, 3rd) and 'qualitative research' (47.7%, 5th) as high-quality evidence, specific types of university research such as 'meta-analyses/reviews compiled by academics' (34.8%, 8th) and 'randomised controlled trials' (17.5%, 10th) were seen to be of lesser quality.

Interactive and relational sources of research and evidence are preferred.

In Survey 2 ($n=805$), educators were asked about which types and forms of evidence they found most useful in practice. The strongest pattern that emerged was that evidence was considered **most useful when it was interactive and relational** (see *Figure 2*, dark blue bars). Educators indicated that they most valued formats where there were opportunities to discuss, unpack and understand the evidence. These opportunities included evidence and research being presented at or accompanied by 'professional development courses' (62.9%, 1st selected format overall), 'in-person talks' (58.6%, 2nd), 'informal chats' (47.3%, 3rd), 'videos of talks' (42.4%, 4th), and 'conferences or seminars' (40.7%, 5th).

Interactive and relational formats can influence educators to use research more in practice. For example, those educators who valued or preferred 'videos of talks' and/or 'conferences or seminars' used university-disseminated research significantly more frequently than others (39.0% vs 31.5%, $p = .030$; and 39.6% vs 31.2%, $p = 0.16$ respectively).

¹¹ Each of the surveys contained core questions, with certain follow-on questions proposed depending on responses to the core questions. The resulting sample sizes for each question are noted throughout this report.

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Research and evidence presented in short, original formats are preferred.

From Survey 2 ($n=805$), educators indicated that the types of research and evidence that they preferred were presented in **short formats** (e.g., short reports) and in **original form** (e.g., original findings, methods and context) (see *Figure 2*, red/maroon bars). Educators indicated that they valued 'short reports (<4 pages)' (38.0%, 6th selected format overall), 'journal articles' (37.9%, 7th), and 'practice/how-to guides that were informed by research' (36.8%, 8th). Educators had **less preference for summarised research or evidence types**, such as 'book summaries' (25.6%, 13th) and '1-page summaries' (22.6%, 16th), as well as **research or evidence in longer formats**, such as 'books' (24.3%, 15th) and 'reports >10 pages' (6.6%, 20th).

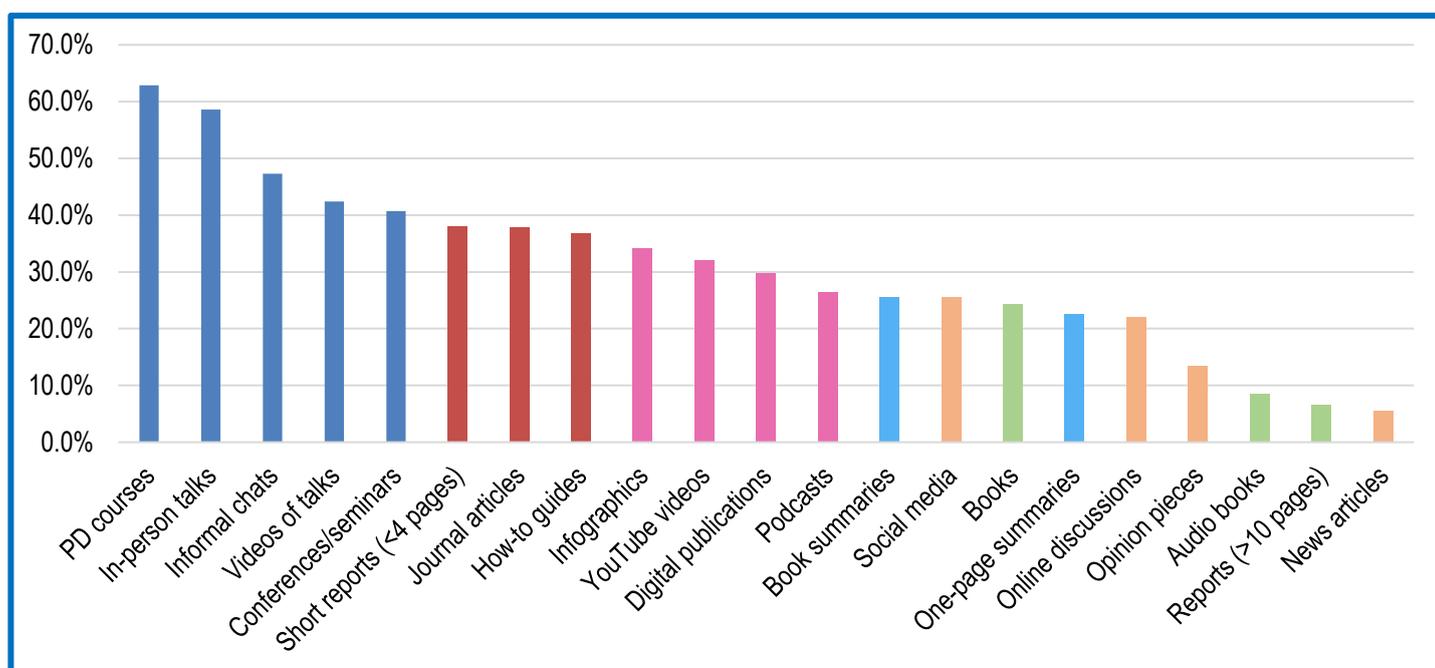


Figure 2: Educators' preferred forms of research

Key: Dark blue – Interactive and relational formats; Red/maroon – Short, original formats; Pink – Audio-visual formats; Light blue – Summarised formats; Gold – Online discussion or media formats; Light green – Extended formats (hardcopy or digital).

Short and/or original formats can influence educators to use research more in practice. For example, those educators who preferred 'short reports' and/or 'journal articles' used university-disseminated research significantly more often than others (43.5% vs 29.3%, $p < .001$; and 47.2% vs 27.0%, $p < .001$ respectively), as well as university-based guidance (31.7% vs 22.6%, $p = .005$; and 34.8% vs 20.8%, $p < .001$ respectively).

4. WHY IS RESEARCH OR EVIDENCE ACCESSED AND USED?

Research or evidence needs to be 'usable'. Usable means contextually relevant, practical, and convenient.

In Survey 1 ($n=492$), educators were asked to rank the reasons for accessing and using evidence. **Relevance to context and practice** was a key influence, with 'alignment with school plans' (33.1% ranked in top 3, 1st ranked influence overall) and 'alignment with

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practice' (28.5%, 3rd) highly ranked. **Convenience and familiarity of the source** were important but less so than relevance, with 'word of mouth recommendations' (24.4%, 6th), 'previous use' (23.8%, 7th), and 'ease of access' (21.3%, 8th) not as highly ranked. **Convenience and familiarity of the source** were significantly more important influences for teachers when compared with leaders, such as 'recommendations from others' (2nd ranked for teachers, $p < .001$), 'previous use' (4th ranked, $p = .012$) and 'ease of access' (equal 5th ranked, $p = .004$).

When using research in particular, educators indicated that they were influenced by similar factors. **Contextual relevance** was the most important influence, including the research being 'applicable to a challenge or problem' (52.9% ranked in top 3, 1st ranked influence overall), 'compatible with practice' (35.7%, 2nd), and 'applicable to implementation' (31.3%, 3rd).

From Survey 2 ($n=805$), educators indicated that the most important reason for using research or evidence was its **practicality and convenience of use**, especially whether the research or evidence was considered as 'practical' (selected by 65.0%, 1st selected overall) or 'easy to take in quickly' (63.7%, 2nd). Similar to Survey 1, educators in Survey 2 indicated that it also needed to be **relevant**, including 'easy to align with practice' (63.2%, 3rd) and 'relevant to needs/context' (51.2%, 5th), although this factor was considered slightly less important by this sample when compared with educators from Survey 1. Also similar to Survey 1, educators in Survey 2 did not select 'recommendations from others' (40.6%, 6th) or 'whether access was free' (36.0%, 7th) as often.

Whether or not research is perceived as 'usable' can act as a potential barrier to its use in practice. For example, from Survey 3 ($n=414$), many educators believed that **using research was not worthwhile because of practicality and convenience issues**. These issues included the research 'not always having a clear purpose' (47.8%), and/or 'being described in a way that I could not easily use or apply to practice' (36.0%). **Slightly lower rates of research use were reported by those educators who believed these issues were barriers when compared with those who did not**. For example, those educators believing research was 'described in ways that were not easily applicable' used university-disseminated research and university-based guidance less often than others (29.5% vs 37.0%; and 27.5% vs 31.7% respectively). Similar patterns were seen in relation to those educators who believed 'lacking a clear purpose' was a barrier to research use.

Skills, then, to assess the usability of research were considered as critical development needs by educators to help them use research better in practice. For example, from Survey 3 ($n=414$), a number of educators indicated that skills related to 'assessing research quality' (28.0% ranked in top 3 needs, equal 1st ranked need overall), 'assessing the usability of the research' (27.8%, 2nd), and 'assessing research for contextual relevance and fit' (25.8%, equal 3rd) were important.

Educators indicated that **research usability** and having **opportunities to discuss research or evidence** were connected. For example from Survey 2 ($n=805$), 'informal chats' with colleagues were chosen more often as a useful form of research or evidence by those who valued the 'practicality of the evidence' (54.1% valued vs 34.8% who did not value, $p < .001$), its 'relevance to context' (54.6% vs 39.7%, $p < .001$), how easily the evidence could be 'aligned with practice' (56.2% vs 32.1%, $p < .001$), as well as how 'easily it could be taken in' (54.0% vs 35.6%, $p < .001$). Similar patterns were seen in relation to those educators who chose 'in-person talks' as a useful form of research or evidence.

However, there are some issues related to **practicality or whether the research or evidence is easy to take in** that need to be considered when compiling/publishing short, original research and evidence. *Table 1* shows the relationship between educators' reasons for using certain research or evidence and whether or not different formats were considered usable by educators. It can be seen, for example, that while short reports were considered useful by educators who favoured evidence that is 'easy to apply', 'credible' and 'easy to take in', they were not necessarily valued more by educators who favoured practicality. Similarly, while journal articles

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were valued by those who favoured practicality, they were not seen as more useful by educators who valued evidence that is 'easy to take in'.

Table 1: Educators' preferences for certain formats of research

Format	Easy to apply	Credible	Practical	Easy to take in
PD courses	✓	✓	✓	✓
Conferences	✓	✓	✓	✓
How-to guides	✓	✓	✓	✓
Short reports	✓	✓	✗	✓
Journal articles	✓	✓	✓	✗
Book summaries	✓	✓	✗	✗
1-page summaries	✓	✓	✗	✗

Note: ✓ indicates that there was a statistically significant relationship between the selection of a specific format and the reasons for which research was considered useful ($p < .05$).

Research or evidence is more likely to be used when it is perceived as credible.

From Survey 1 ($n=492$), alongside contextual relevance, educators indicated that the **credibility of the evidence** was also a key influence, especially whether the evidence had 'academic backing' (31.5% ranked in top 3 influences, 2nd ranked influence overall) or was 'perceived as a credible source' (28.0%, 4th). When assessing evidence quality, credibility was again important, with the 'academic backing' of the evidence (54.5% ranked in top 3, 1st ranked assessment approach overall) or whether it showed 'evidence of impact' (49.2%, 2nd) as the highest ranked assessment approaches. Moreover, if an educator indicated that 'academic backing' or 'evidence of impact' were in their top three reasons for using a particular type of research or evidence, then they were significantly more likely to include that same aspect in their top three approaches to assessing quality ($p < .001$ for both).

Research that is academically backed and/or shows evidence of impact can influence educators to use it more in practice.

For example, those educators who indicated that 'academic backing' and/or 'evidence of impact' were in their top three reasons for using a particular type of research or evidence were significantly more likely to use university-disseminated research in practice than others (64.5% vs 33.2%, $p < .001$; and 52.5% vs 40.0%, $p = .020$ respectively), as well as university-based guidance (55.5% vs 27.0%, $p < .001$; and 44.3% vs 33.2%, $p = .030$ respectively).

From Survey 2 ($n=805$), the **credibility of the evidence** was also an important reason for accessing and using research or evidence (62.6%, 4th selected reason overall). Those educators who selected 'credibility' as an important influence for using research, were also significantly more likely to use university-disseminated research in practice than others (39.9% vs 25.9%, $p < .001$), as well as university-based guidance (29.2% vs 20.9%, $p = .010$).

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5. WHEN ARE RESEARCH AND EVIDENCE ACCESSED AND USED?

Accessing research or evidence is a regular task.

From Survey 2 ($n=819$), 41.5% of educators reported that they **accessed research or evidence at least on a weekly basis**. This pattern of weekly use was more prevalent amongst senior leaders (64.1%) as compared middle leaders (46.7%) and teachers (38.9%). A large number of educators (34.7%) reported that they **accessed research or evidence on a fortnightly-monthly basis**. This pattern of fortnightly to monthly use was more prevalent amongst teachers (38.0%) and middle leaders (36.7%) as compared with senior leaders (20.5%).

Regularity of access is associated with more frequent use of research. For example, those educators who reported accessing research or evidence at least on a weekly basis, were significantly more likely to frequently use university-disseminated research (44.7%) than those who accessed on a fortnightly-monthly basis (31.3%) or less often (19.5%, $\chi^2 = 36.530$, $df = 2$, $p < .001$). They were also significantly more likely to frequently use university-based guidance (35.9%) than those who accessed on a fortnightly-monthly basis (22.9%) or less often (11.8%, $\chi^2 = 39.441$, $df = 2$, $p < .001$).

Research is accessed and used in educators' own time.

From Survey 3 ($n=414$), nearly a third of all educators (32.6%) indicated that they **often or always engaged with research before the school year started** (29.6% of teachers, 50.0% of leaders, $p = .005$), with a quarter (25.1%) indicating that they often or always engaged with research **during term holidays** (22.5% of teachers, 37.5% of leaders, $p = .028$).

During the school term, nearly half of Survey 3 educators (44.7%) indicated that they often or always engaged with research (42.3% of teachers, 62.5% of leaders, $p = .008$). *Table 2* shows where, at what times and for what time period these educators engage with research during the school term.

Table 2: Times and locations where educators engage with research

Location	Before school	During school	After school	On weekends
At home	28.5%, and of these:	12.8%, and of these:	58.7%, and of these:	69.3%, and of these:
	41.5% < 15 mins	35.8% < 15 mins	18.5% < 15 mins	21.3% < 15 mins
	33.1% 15-30 mins	30.2% 15-30 mins	32.9% 15-30 mins	21.3% 15-30 mins
	16.9% 30-60 mins	26.4% 30-60 mins	25.9% 30-60 mins	25.4% 30-60 mins
	8.4% > 60 mins	7.6% > 60 mins	22.6% > 60 mins	32.0% > 60 mins
At school	38.9%, and of these:	81.4%, and of these:	44.9%, and of these:	5.1%, and of these:
	39.1% < 15 mins	23.1% < 15 mins	20.4% < 15 mins	47.6% < 15 mins
	36.0% 15-30 mins	35.0% 15-30 mins	35.5% 15-30 mins	9.5% 15-30 mins
	20.5% 30-60 mins	27.6% 30-60 mins	29.6% 30-60 mins	19.0% 30-60 mins
	4.4% > 60 mins	14.3% > 60 mins	14.5% > 60 mins	23.8% > 60 mins

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Table 2 shows that, in most cases during the school term, **educators are engaging with research in their own time and for less than 30 minutes at a time**. Even if research is being accessed and used at school and during school hours, the majority of educators are spending less than 30 minutes on these tasks. Educators appeared most likely to spend more than 30 minutes on engaging with research during their weekends and whilst at home. Of note, school leaders and teachers use their **own time** to engage with research in similar ways.

Using research at home in educators' own time is associated with more frequent use of research. For example, those educators who reported using research at home after school and/or at home on weekends, were significantly more likely to frequently use university-disseminated research (39.1% vs 27.5%, $p = .016$; and 39.0% vs 23.6%, $p = .002$ respectively) and university-based guidance (35.0% vs 23.4%, $p = .012$; and 34.8% vs 19.7%, $p = .002$ respectively) than those who did not access research at these times.

Finding time to use research is a challenge.

From Survey 1 ($n=492$), the majority of educators indicated **concerns about having or finding sufficient time to use research**. For example, 76.2% did not feel that they had 'adequate time to engage with research', and 76.0% found it difficult to 'keep up with new research'. Teachers were significantly more likely to experience time challenges when compared with school leaders ($p < .001$ 'adequate time'; and $p = .015$ 'difficult to keep up'). **Concerns about time can influence educators' use of research in practice.** For example, those educators who did not feel that they had 'sufficient time' used university-disseminated research (34.9%) and university-based guidance (29.6%) significantly less often when compared with those who believed that they had sufficient time (69.2% and 56.4% respectively, $p < .001$ for both).

From Survey 3 ($n=414$), while 46.1% of all educators wanted to 'invest time in research use', a **greater number believed that research use was not worthwhile** because of the 'significant time needed to access, read and put research into practice' (60.6%). **Motivations to invest time in research influence the extent to which research is used by educators.** For example, those educators who wanted to 'invest time in research use' used university-disseminated research and university-based guidance significantly more often than those who did not want to invest time (46.1% vs 24.2%, $p < .001$; and 39.8% vs 22.0%, $p < .001$ respectively). In contrast, those educators who believed that research was not worthwhile because of 'time needed' used university-disseminated research and university-based guidance less often than those who believed that use was worthwhile (30.7% vs 39.9%, ns ; and 29.5% vs 31.3%, ns respectively).

With regards to school support for research use, nearly half of all Survey 1 educators ($n=492$) **did not believe that their school 'made sufficient time available'** (44.9%), with teachers significantly more likely to hold this belief when compared with school leaders (50.9% for teachers, 30.8% for leaders, $p < .001$). **Perceptions of available time can influence educators' use of research in practice.** For example, those educators who did not believe that their school supported research use through making time available **used university-disseminated research and university-based guidance significantly less often** when compared with those who reported positive perceptions of sufficient time (32.6% vs 51.7%, $p < .001$; and 28.5% vs 42.1%, $p = .002$ respectively).

From Survey 3 ($n=414$), a significant number of educators **did not believe that their school often provided 'structured time dedicated to reading, discussing and understanding research'** (62.6%), with teachers slightly more likely to hold this belief (62.9%) when compared with school leaders (53.6%). Similar to Survey 1 educators, those Survey 3 educators who believed that their school did not provide structured time to use research used university-disseminated research and university-based guidance

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significantly less often than those who believed they had structured time (25.9% vs 48.4%, $p < .001$; and 23.9% vs 40.6%, $p < .001$ respectively).

6. HOW ARE RESEARCH AND EVIDENCE ACCESSED AND USED?

Colleagues are considered as high-quality sources of practical and relevant research or evidence.

From Survey 2 ($n=805$), educators considered their **'colleagues' to be the most high-quality source** of research or evidence (58.1%, 1st selected overall). Educators also indicated that they typically **received** evidence or research from **'school leaders'** (76.8%, 1st selected source overall), as well as **'colleagues'** (74.1%, 2nd). **'Formal professional learning networks'** were also considered as high-quality sources of research or evidence (51.9%, 3rd selected), with nearly half of all educators indicating that they typically received evidence or research from these networks (49.7%, 3rd). In contrast, *'informal professional learning networks'* were not considered as highly as a source of research or evidence (32.8%, 13th).

From Survey 3 ($n=414$), the majority of educators indicated that they were **more likely to trust research coming from 'colleagues'** (78.5% agreed or strongly agreed), **'professional learning networks'** (73.2%) and **'school leaders'** (69.6%) than they were if the research was coming from others, such as from 'academics or universities' (59.7%), 'educational research organisations' (58.9%) or 'government education departments' (54.1%).

Educators indicated that colleagues were also viewed as **potential sources of practical and relevant research and evidence**. For example in Survey 2 ($n=805$), educators who indicated that they considered colleagues as high-quality sources of evidence, were significantly more likely to value research that was 'practical' (71.8% valued vs 55.5% who did not value; $p < .001$) and 'relevant' (54.7% vs 46.3%; $p = .022$).

Research and evidence are used in varied ways.

From Survey 1 ($n=342^{12}$), educators indicated using research in a variety of ways. Most commonly, research was used in a **collaborative manner** to 'discuss best practice with colleagues' (76.0% indicated that they had used research in this way, 1st ranked use overall), or for **personal development**, including 'improving own knowledge of a topic' (72.2%, 2nd ranked) and 'reflecting on own practice' (67.1%, 3rd).

School leaders were significantly more likely than teachers to use research to 'discuss best practice' (88.3% vs 67.1%, $p < .001$). They were also significantly more likely than teachers to use research in **instrumental ways**, such as to 'design professional development' ($p < .001$) or 'design a new initiative' ($p < .001$), and in **persuasive ways**, such as to 'mobilise support for an important issue' ($p < .001$) or 'get others to agree with my point of view' ($p < .001$).

Similar to Survey 1 educators, Survey 2 educators ($n=819$) also indicated that when they came across research or evidence, they were most likely to use it for **personal development** (e.g., to 'inform their own practice', 63.5%, 1st selected overall) and **collaborating with others** (e.g., to 'share it with others', 49.6%, 3rd). Senior and middle leaders were significantly more likely to share research or evidence that they had found and accessed when compared with teachers ($\chi^2 = 13.984$, $df = 3$, $p = .003$).

¹² Respondents who indicated that they had not 'used research in the last 12 months' were not asked this question ($n = 150$).

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Over half of Survey 2 educators (53.9%, 2nd) indicated that they would 'save the research to read later'. For these educators, they indicated that on average, they actually read 55.9% of what was saved at a later date. There was a slight positive correlation¹³ between the percentage of research that was read at a later date and how often educators indicated using university-disseminated research ($\tau_b = .179, p < .001$) and university-based guidance ($\tau_b = .166, p < .001$) in practice.

Opportunities to collaborate supports research use.

From Survey 1 ($n=492$), the majority of educators believed that their school **supported research and evidence use through 'facilitating professional learning networks or communities'** where they could engage in **collaborative learning** (87.2% agreed or strongly agreed). **Opportunities to collaborate can influence educators use of research in practice.** For example, these same educators were significantly more likely to use university-disseminated research and university-based guidance than those who did not believe (45.0% vs 30.2%, $p = .029$; and 38.0% vs 22.2%, $p = .016$ respectively).

From Survey 3 ($n=414$), educators indicated **collaborating with colleagues often for several aspects of research use**, such as when 'finding and selecting research' (54.5% often or always collaborated), 'assessing research' (41.2%), 'adapting research' (44.6%) and 'implementing research' (52.6%). Educators also believed that their **schools utilised varied collaborative ways of discussing and using research**, including through 'scheduled staff professional development meetings/working sessions' (59.7% indicated often or always), 'meetings/discussions with visiting specialists or academics' (35.7%), 'scheduled team meetings' (35.5%), and 'informal meetings or discussions with colleagues' (25.1%).

These different types of collaboration can influence educators' use of research in practice. For example, as shown in *Table 3*, those educators who had opportunities to engage with research in 'scheduled staff professional development meetings/working sessions', 'meetings/discussions with visiting specialists or academics', 'scheduled team meetings', and 'informal meetings or discussions with colleagues' were significantly more likely to frequently use university-disseminated research and university-based guidance more often in practice than those who did not have such opportunities.

Table 3: Relationships between collaborative meetings and frequency of regular research use

Meeting type	PD meetings			Meetings with specialists			Team meetings			Informal meetings		
	Yes	No	p	Yes	No	p	Yes	No	p	Yes	No	p
University research	42.9%	21.6%	< .001	45.3%	28.2%	.001	46.9%	27.3%	< .001	52.9%	28.1%	< .001
University guidance	39.7%	16.2%	< .001	41.9%	23.7%	< .001	39.5%	25.1%	.004	42.3%	26.1%	.003

¹³ This measure of association was calculated using Kendall's coefficient of rank correlation tau-b (τ_b). See: Khamis, H. (2008). Measures of association: Which to choose? *Journal of Diagnostic Medical Sonography*, 24(3), 115-162.

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Appendix 1: Survey Samples

Sample	Survey 1		Survey 2		Survey 3*	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Sample Total	492		819		414	
State						
NSW	149	30.3	225	27.5	158	38.2
VIC	195	39.6	228	27.8	150	36.2
QLD	116	23.6	174	21.2	83	20.0
SA	32	6.5	62	7.6	23	5.6
NT	-	-	6	0.7	-	-
WA	-	-	87	10.6	-	-
TAS	-	-	27	3.3	-	-
ACT	-	-	10	1.2	-	-
Role						
Teacher	281	57.1	589	71.9	307	74.2
Middle leader	60	12.2	60	7.3	32	7.7
Senior leader	99	20.1	39	4.8	24	5.8
Other role	52	10.6	131	16.0	51	12.3

* The sample reported on here is a preliminary sample, with additional data collection for this survey planned for throughout 2022.

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Appendix 2: Survey Administration and Analysis

This report draws on quantitative findings from three Q Project surveys involving 1725 Australian educators overall:

- **Survey 1:** Educators' perceptions and use of research in practice; 8 quantitative questions; 492 educators from 414 schools across four Australian states (NSW, SA, VIC, QLD). Due to the impacts of COVID-19, there were two different samples participating in the survey:
 - Q Sample: Each participating Q school nominated two educators who were sent a personalised Monash-licensed Qualtrics online survey (182 in total). A 68.7% response rate was achieved, with 125 completed surveys.
 - ORU Sample: The Q Project engaged *The Online Research Unit* (ORU) to administer the survey to a panel of their own educators, with an achieved sample of 367 respondents.
- **Survey 2:** Educators' attitudes and behaviours to sharing research; 20 core and 33 follow-on quantitative questions; 819 educators from schools across all Australian states (NSW, SA, VIC, QLD, NT, WA, TAS, ACT). The Q Project engaged *Where To Research* (WTR) to administer the survey to a panel of their own educators.
- **Survey 3:** Enablers of and barriers to educators' use of research in practice; 20 core and 5 follow-on quantitative questions; 414 educators from schools across four Australian states (NSW, SA, VIC, QLD). The Q Project engaged WTR to administer this survey to a panel of their own educators. The sample reported on here is a preliminary sample, with additional data collection for this survey planned for throughout 2022.

The quantitative data were imported into IBM SPSS Statistics software (Version 27.0) and were analysed as follows:

- **Descriptive statistics:**
 - Likert-style questions were assigned numeric ratings of 1 (*Strongly Disagree*) to 5 (*Strongly Agree*), with negative-worded items reverse-coded (e.g., In Survey 1, 'I don't have adequate time to access and review research'). Percentage values reported are based on the summed number of respondents who responded to an item with 4 (*Agree*) or 5 (*Strongly Agree*), divided by the number of respondents who were asked the question to which the item belonged.
 - Ranking-style questions were analysed using assigned numeric ratings based on the position that a respondent ranked that item (in descending order) (e.g., In Survey 1, 'How do you assess the quality of information when deciding on approaches to improve student outcomes? [Please rank as many as apply, from most important to least important]'). Percentage values reported are based on the summed number of respondents who ranked an item 1st (1), 2nd (2) or 3rd (3), divided by the number of respondents who were asked the question to which the item belonged. This differs slightly from the analytic technique reported for Survey 1 in *Research and evidence use in Australian schools: Survey, analysis and key findings. Q Report 01/2021*¹⁴, which divided rankings by the number of respondents who ranked each item (numeric rating > 0). This analytical change was made to enable more meaningful comparisons between the three surveys, and as a result, marginally different percentages are reported here.
 - Dichotomous questions were analysed based on the number of respondents who selected an item (assigned a value

¹⁴ Rickinson, Gleeson, Walsh, Cutler et al., (2021). *Research and evidence use in Australian schools: Survey, analysis and key findings. Q Report 01/2021*. Monash University. <https://doi.org/10.26180/14445663>

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of 1) compared with the number who didn't select an item (assigned a value of 0) (e.g., In Survey 2, 'What are the main reasons you use certain evidence over others?' [Please select all that apply]). In most cases, respondents were able to select more than one item. Percentage values are reported based the summed number of respondents who selected that item, divided by the total number of respondents who were asked the question to which the item belonged.

- **Recoding data for inferential statistics:** To enable inferential statistical tests to be undertaken on the data, they were first recoded as follows:
 - Likert-style questions: Numeric responses of 4 or 5 (see above) were recoded as 1, while responses of 1, 2 or 3 were coded as 0.
 - Ranking-style questions: Numeric responses of 1, 2 or 3 (see above) were recoded as 1, while all other responses were coded as 0.

- **Inferential statistical tests:** Tests for statistically significant relationships, with significant values ($p < .05$) expected, included:
 - Fisher's exact tests¹⁵ were used to test relationships between responses to the recoded survey items and demographics variables with two levels (e.g., to compare response patterns between teachers and leaders) as well as between responses of two recoded survey items with two levels (e.g., in Survey 2, to test whether educators who selected 'credibility' as a reason for using certain evidence over others, were also more likely to select 'ease of application').
 - Chi-square tests¹⁶ were used to test relationships between recoded survey responses and demographics, or between two survey items, where at least one variable had more than two levels (e.g., in Survey 2, to test whether educators who accessed evidence more often were more likely to report regularly using university research in practice).
 - Kendall's coefficient of rank correlation tau-b (τ_b)¹⁷ was used to test the relationship between a continuous variable and an ordinal variable with a small number of levels (e.g., in Survey 2, to test whether there was a positive correlation between the percentage of research that was saved and read at a later date, and how often educators used research in practice).

¹⁵ Field, A. (2015). *Discovering statistics using IBM SPSS statistics*, 4th edition. Sage.

¹⁶ Field, A. (2015). *Discovering statistics using IBM SPSS statistics*, 4th edition. Sage.

¹⁷ Khamis, H. (2008). Measures of association: Which to choose? *Journal of Diagnostic Medical Sonography*, 24(3), 115-162.

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