Build professional knowledge



Worksheet

Searching for research

For educators, teachers and leaders

March 2024

This worksheet helps you to search for research evidence in academic databases, Google scholar and university library catalogues. It helps you to plan your search and record what you find. This worksheet is also available as an <u>editable Word document</u> so you can adapt it to your own purposes.

If you're an educator or teacher, using this worksheet can help you find research to inform your practice. The research you search for could be about a particular education policy, program or practice that you may be considering using in your school, service or classroom. If you're a leader, you can use this resource to support your team to engage with evidence as part of their ongoing professional development.

Related frameworks

Early Years Learning Framework V2.0

Principles: Critical reflection and ongoing professional learning.

National Quality Standards

Standard 7.2 Leadership: Effective leadership builds and promotes a positive organisational culture and professional learning community.

Australian Professional Standards for Teachers

Focus Area 6.2: Engage in professional learning and improve practice, which includes 'Plan for professional learning by accessing and critiquing relevant research' at the Highly Accomplished level.

Australian Professional Standards for Principals

Professional Practice 2: Developing self and others.

edresearch.edu.au 1 of 7

Ways to use this resource

- Personal professional learning to become more familiar with research.
- Professional learning in a group, such as a community of practice use the completed worksheets to identify research to discuss as a team.
- Keep the completed worksheet as a record of your search strategy, search results, and key
 information from your reading. Once you've refined your search strategy, re-run the search
 every few months to identify new research and update the completed worksheet accordingly.
- To reflect further on a piece of research you've found, use the Australian Education Research Organisation (AERO)'s Research Reflection Guide Worksheet.

Using the worksheet

Print or download this worksheet and work through each step. See the <u>last page</u> for definitions of key education evidence and research concepts used in this worksheet. For an overview of different types of research evidence and where to find it, see AERO's practice guides on <u>The Value of Research</u> and <u>Looking for Research Evidence</u>.



edresearch.edu.au 2 of 7

What is the question you're trying to answer?

or example: 'Is formative assessment effective for Year 10 maths students?')

1. Identify the key concepts you need to include in your search

Key concept 1	Key concept 2	Key concept 3	Key concept 4
Example: Formative assessment	Example: Year 10	Example: Maths	Example: Effectiveness

2. Think about synonyms, similar terms and alternative spellings for your search terms

You can try using narrower terms first (for example, 'Year 10') and then expanding to broader terms (for example, 'secondary school') if you don't find what you need.

Example:

Key concept 1	Key concept 2	Key concept 3	Key concept 4
Formative assessment	Year 10	Maths	Effectiveness
Assessment for learning	Secondary school	Math	Effects
	High school	Mathematics	Impact

Key concept 1	Key concept 2	Key concept 3	Key concept 4

edresearch.edu.au 3 of 7

3. Combine all your search terms using AND or OR

These are examples of Boolean operators and allow you to focus your search on results that will be most helpful.

How this works will depend on where you're searching – for example, Google Scholar isn't as good with Boolean operators as academic databases (Note: if you're using an academic library, it probably has its own guide to searching.)

Example: ('formative assessment' OR 'assessment for learning') AND ('secondary school' OR 'high school') AND ('maths' OR 'mathematics')

C I		
Search dilery:		
oca: c:: que: y	 	

4. Use your search query to search your chosen catalogue or database

5. Select relevant, quality research

Some useful websites you can use to search for academic and peer-reviewed research:

- Google Scholar is a search engine that can help you find academic research.
- The <u>Directory of Open Access Journals</u> provides a catalogue of reputable peer-reviewed open access journals (free, publicly available journals).
- <u>Campbell Collaboration</u> produces systematic reviews, evidence maps, plain language summaries and policy briefs in the social sciences, including education.
- · Campbell Systematic Reviews is a quality open access and peer-reviewed journal.
- University libraries are sometimes accessible to alumni of universities.

Academic research: Research that uses established, systematic methods to collect and analyse information to answer a particular question. Most academic research is conducted by universities or research institutes and published in academic journals, but you can also find research evidence in practitioner/trade journals, reports by government departments and agencies and other reputable organisations, in books and conference papers, as well as on websites.

Peer-reviewed research: Research that's been reviewed by experts in the field to ensure it is of a high standard – that is, that appropriate methods were used and that the conclusions are logical and well-supported by evidence. Reviewers also evaluate whether the findings are original and significant enough to be worth publishing.

Being published in a peer-reviewed academic journal is a good indicator of research quality, but this isn't a guarantee. You should still evaluate the rigour and relevance of a study yourself, regardless of where it was published. AERO's Research Reflection Guide can help you do this.

edresearch.edu.au 4 of 7

6. Record what you find here or in another document like a journal or spreadsheet

If you don't have time to read the full articles or reports now, scan the titles and abstracts to decide which ones you'd like to come back to and record them on this worksheet. Some databases also allow you to save your search results.

Title	URL or DOI (if available)

edresearch.edu.au 5 of 7

Worksheet: Searching for research

Practice resource for ECEC and schools

7. Record any useful or relevant information as you read

This might seem time-consuming, but it's easier to do that now than try to find information again later. Making a note of articles that aren't relevant can also be handy, so you don't waste time reading them again!

Title	Year published	Academic or non-academic content?	Type of research (For example, longitudinal, qualitative, randomised controlled trial, systematic review.)*	Main findings of the research (For example: What outcomes were measured? How much did they improve?)	Useful to me? (Yes/No/Maybe)

 $^{^{*}}$ See the <u>last page</u> for explanations of these concepts.

edresearch.edu.au 6 of 7

Key concepts

Concept	Definition
longitudinal studies	Longitudinal studies measure change over time. For example, to evaluate the effectiveness of a reading program, researchers might measure students' reading skills multiple times before, during and after a reading program. If the data shows that students' scores increased more rapidly while they were doing the program, it might seem reasonable to conclude that the program was effective. But, without a control group and random assignment, it's possible that a third variable caused the change. Perhaps introducing a new program energised the teacher and that contributed to better learning. Perhaps a different teacher taught the new program and it was actually the change in teacher that improved learning. Longitudinal designs are valuable for finding out how things change over time, but are not a replacement for experimental designs.
qualitative methods	Qualitative methods involve collecting and analysing non-numerical data, and may include observations, interviews, questionnaires, focus groups, and document and artifact analysis. Qualitative methods can be used to understand concepts, opinions or experiences, as well as to gather in-depth insights into a problem or generate new ideas.
randomised controlled trial (or RCT)	A randomised controlled trial is a trial of a particular approach that is set up in such a way that allows researchers to test its effects. In a randomised controlled trial, participants are randomly assigned to one of 2 groups: one receiving the approach that is being tested (the experimental group), and the other receiving an alternative approach or no approach (the comparison or control group). After the trial period, differences between the groups can be attributed to the approach being tested. Researchers, educators and teachers who use randomisation must take into account ethical concerns, such as whether it is ethical to withhold treatment or interventions from participants in the comparison group.
systematic review	A systematic review is an evidence-based (or 'objective') approach to a literature review. Systematic reviews answer a precise, clearly defined question to produce evidence to underpin a piece of research. A systematic review must explicitly outline: the methods for data collection, the methods for data extraction, the number of papers included in the review, and the methods for data analysis.

© CC BY 4.0, excluding image p2: AERO

AERO's work is made possible by the joint funding it receives from Commonwealth, state and territory governments.