LESSON 3

Find a Research Gap

Spot the missing piece your project could add.

About 90 min | Reading 25 min | Slides 60 min | Quiz 5 min

Learning objective. By the end you will be able to spot a gap in existing research and explain how your question could help fill it.

Key points

- A gap is a question nobody has fully answered yet.
- Check the “limitations” and “future research” sections: authors often name gaps for you.
- Small gaps count: a new place, age group or method is enough for a student project.

Learn

A research gap is a piece of the puzzle that nobody has filled in yet, or has only partly filled in. You can only see gaps after you know what is already there, so this step grows straight out of your literature review.

Gaps come in a few common shapes. A question may never have been studied. It may have been studied only with one group, place or age range. The research may be out of date. Studies may disagree with each other, or they may all use the same method when a different one could add something. A quick trick: read the introduction, the conclusion and any ‘limitations’ or ‘future research’ sections, because authors often name gaps for you.

For a student project the gap doesn’t have to be huge. Applying a known question to your own school, town or age group, or comparing two things nobody has compared, counts. Once you spot a gap, go back and sharpen your research question to target it. This back-and-forth is part of how research works.

Example

> Priya reads five studies on how phone bans affect classroom focus. She notices they all took place in middle schools in the US or UK, and several mention in their ‘limitations’ sections that older students weren’t studied. That’s her gap. She revises her question to: ‘How do high school students in India describe the effect of classroom phone rules on their focus?’ Her question is now new, small and doable.

Across disciplines

In the sciences a gap often means an untested variable or population. In the humanities it may be an overlooked text, perspective or interpretation. Social science gaps are often understudied groups, settings or methods.

Watch

Identify Themes and Gaps in Literature, Scribbr (3 min): youtube.com/watch?v=hMGdwIhiwzU

> **Takeaway.** Your research matters most when it adds a missing piece to what others have already found.

Try it: Gap hunt

Name: _____ Date: _____

1. Pick 2–3 sources from your literature review and skim their conclusion and limitations or future-research sections.

2. List anything the authors say is missing, along with any group, place, time or method they didn't cover.

3. Choose one gap that you could realistically investigate with your time and resources.

4. Rewrite your research question in one sentence so that it targets that gap.

Lesson 3 quiz

Circle one answer for each question. Pass mark: 4 of 5.

1. What is the main difference between summarising and synthesising sources in a literature review?

(A) Summary uses quotations; synthesis uses only paraphrase
(B) Synthesis groups sources by idea and shows how they relate
(C) Summary covers recent sources, while synthesis covers older ones
(D) Synthesis lists each study in the order it was published

2. A student studying local shop prices writes four sentences. Which one is synthesis rather than summary?

(A) Most studies we found use national data; few look at towns.
(B) Study B (2021) surveyed 150 shop owners across one large region.
(C) Study C reported that prices rose during the first year.
(D) Study A used government statistics collected every month.

3. A student studying a garden pest writes: "Nothing is known about how this pest affects tomatoes." Which rewrite is most defensible?

(A) Scientists have completely ignored this pest on tomatoes.
(B) This pest has never been studied on tomatoes in any setting.
(C) Most studies we found are lab-based; field data are scarce.
(D) Nobody knows how this pest affects tomato plants outdoors.

4. A student studying river pollution finds two studies that disagree about whether a clean-up worked. What should their literature review do?

(A) Report both findings and suggest why they might differ
(B) Leave out the study that does not fit the main pattern
(C) Choose the newer study, since newer work must be more accurate
(D) Average the two results into one combined conclusion

5. In the invented example, Noor realised she had not searched for studies on teenagers in libraries or study halls. What did she do?

(A) Kept her gap as written, because her matrix was already full
(B) Ran two more searches, added a survey and softened her wording
(C) Changed her gap to say that no one has studied teenagers and noise
(D) Dropped the gap and chose a completely new research topic

Further reading

- **Writing a Literature Review**, Purdue OWL, Purdue University. Shows how reviewing sources reveals unanswered questions and positions your project.
  https://owl.purdue.edu/owl/research_and_citation/conducting_research/writing_a_literature_review.html

- **The Literature Review**, USC Libraries, University of Southern California. Explains how a literature review exposes gaps and points toward needed research.
  https://libguides.usc.edu/writingguide/literaturereview
- **Identifying a Research Gap**, Indiana University Indianapolis Library. A short three-step method naming the article sections where gaps usually appear.
  https://iu.libguides.com/longDesc/researchGap