

Your First Literature Review

A step-by-step guide for students who have never done research before

Start here

This guide is for you if you have never done research before. You don't need to know any special words. We will explain each one as it comes up.

Most people feel lost the first time they read a research paper. That is normal, and it does not mean you are doing it wrong. Research papers are written for other researchers, so they are hard to read at first. It gets easier with practice.

HOW TO USE THIS GUIDE

- Read the first three sections once. They explain the basics.
- Then work through Steps 1 to 6 in order. Each step builds on the one before.
- Every step has the same parts: what you're doing, why it matters, try it yourself, then ask AI, then check.
- Keep a notebook or a document open. You will write short answers as you go.
- If you meet a word you don't know, look in the glossary at the end.

What is research?

Research is a careful way of finding something out. A researcher asks a question, collects information to answer it, and reports what they found. The information might come from surveys, interviews, experiments, or data such as app reviews or sales numbers.

What is a literature review? Before you start your own research, you need to know what other people have already found. In research, "the literature" just means everything already published on a topic. A literature review is reading that work and making sense of it.

Think of it like buying a new phone. Before you buy, you read reviews, compare models, and notice where reviewers disagree. You end up knowing what is good, what is bad, and what nobody has tested yet. A literature review does the same thing for a research topic.

Why it matters: it stops you repeating work that has already been done. It also shows you where the unanswered questions are. Those unanswered questions are where your own research can help.

What is a research paper?

A research paper is a report written by people who tried to find something out. It is published in a journal, which is like a magazine for researchers. Before it is published, other experts check it. This checking is called **peer review**.

Most papers have the same parts. The names can change a little, but the job of each part stays the same.

Part	What it tells you	In everyday words
Abstract	A short summary of the whole paper	"The paper in one paragraph"
Introduction	Why the topic matters and what question they asked	"Why we did this"
Literature review or background	What other researchers found before	"What we already knew"
Method	How they collected and studied their information	"How we found out"
Results or findings	What they found	"What we found"
Discussion	What the results mean	"What this means"
Limitations	The weak spots in their study	"What we couldn't do"
Conclusion	The main message	"The take-home point"
References	Every source they used	"Where our information came from"

Don't read a paper from start to finish. Read it in this order instead:

1. **Abstract.** Is this paper about my topic? If not, stop here.
2. **Conclusion.** What is the main message?
3. **Introduction.** What question were they asking?
4. **Results and discussion.** What did they find, and what does it mean?
5. **Method.** How did they find out? Read this last. It is often the hardest part.

It is fine to skip tables, graphs and statistics you don't understand on your first read. Focus on the main story first.

Using AI as a study buddy

AI tools such as Claude or ChatGPT can help you understand papers, but they can also make mistakes. Sometimes AI states things confidently that are not in the paper at all. It can even invent quotes, page numbers or whole papers that don't exist. So treat AI like a helpful classmate: useful to talk to, but always check their work.

Follow this rule for every step in this guide:

1. **You first.** Have a go yourself. Write a few short answers, even if you are unsure.
2. **Then AI.** Give the AI the paper and ask the question in the step.
3. **Then check.** Compare the AI's answer with yours. Open the paper and check at least two things the AI said.

Why "you first"? If AI does the thinking, you won't learn the skill. You will also have no way to tell when the AI is wrong. The learning happens when you compare your answer with the AI's and work out why they differ.

TIPS FOR ASKING AI

- Upload or paste the paper itself. Don't just give the title, or the AI may guess what it says.
- Tell the AI you are new to research and ask for simple words.
- Always ask it to show where in the paper each answer comes from.
- If the AI uses a word you don't know, ask: "What does that word mean? Explain it simply."
- Check your course rules about using AI in assessments.

Step 1: Find 3 to 5 papers

What you're doing: collecting a small set of papers about your topic.

Why it matters: you can't review what other people found until you find their work. Starting small keeps it manageable. You can always add more later.

TRY IT YOURSELF FIRST

1. Write your topic in one sentence. For example: "How students use AI to study."
2. Pull out 2 or 3 key words: *students, AI, studying*.
3. Think of other words people might use for the same thing: *university students, ChatGPT, learning*.
4. Type your key words into [Google Scholar](#) or your university library's search.
5. Read the titles. Open the abstract of any that look relevant.
6. Keep 3 to 5 papers that are clearly about your topic and that you can mostly follow.
7. For each paper, write down the title, the authors, the year, and one sentence on why you picked it.

TIPS

- Prefer papers from the last 10 years, unless your topic is older.
- If a paper is behind a paywall, log in through your university library. You usually get free access.
- A paper that has been cited many times is not always better, but it is often important.

THEN ASK AI

COPY THIS PROMPT

I'm a student new to research. My topic is: [your topic]. Suggest 10 different search words or phrases I could type into Google Scholar to find research papers on this. Explain in simple words why each one might help.

CHECK

- Use AI to help you **search**, not to **choose** papers for you. AI sometimes invents papers that don't exist.
- Only keep a paper if you have found it yourself and opened it.
- Never copy a reference from AI into your work without finding the real paper first.

Step 2: Read one paper with three questions

What you're doing: working out the basic story of one paper.

Why it matters: every paper, however complicated, is answering three simple questions. Once you can answer them, you understand the paper well enough to use it.

TRY IT YOURSELF FIRST

Pick one of your papers. Read it in the order from "What is a research paper?" above. Then write one or two sentences for each question:

Question	Where to look	Your answer
What did they want to find out?	Abstract, introduction	
How did they find out?	Abstract, method	
What did they find?	Abstract, results, conclusion	
Was anything surprising or unclear?	Results, discussion	

The last question matters more than it looks. Papers sometimes find things they didn't expect, then barely mention them at the end. These surprises are often where new research ideas come from.

THEN ASK AI

COPY THIS PROMPT

I'm new to research. Explain this paper in simple words by answering four questions: What did the researchers want to find out? How did they find out? What did they find? Did they find anything surprising or mixed that the conclusion doesn't talk about much? For each answer, tell me which section of the paper it comes from and quote a short sentence from that section.

CHECK

- Put the AI's answers next to yours. Where are they different? Who is right?
- Find two of the AI's quotes in the paper. Are they really there, word for word?
- If the AI found something you missed, go back and read that part yourself.

Step 3: Ask "how do they know?"

What you're doing: checking whether the paper's conclusion is properly backed up.

Why it matters: being published doesn't make a paper right about everything. Sometimes the conclusion says more than the study actually showed. Spotting this is one of the most useful research skills you can learn.

Think like a detective. A detective doesn't just accept what a witness says. They ask: how do you know that? What did you actually see?

TRY IT YOURSELF FIRST

Take the main finding from Step 2 and ask these questions:

- **Who or what did they study?** 10 people or 10,000? Students in one country or many countries?
- **What did they actually collect?** Did they measure what people *did*, or ask what people *said* they did? These are not the same.
- **Does the conclusion go further than the results?** For example, the results show two things happen together, but the conclusion says one *causes* the other.
- **What has to be true for their argument to work?** Write one thing the authors assume but don't prove.
- **What do the authors admit they couldn't do?** Look for a section called "Limitations".

An example of going too far: a study finds that students who use AI more get higher marks. The conclusion says "AI improves student marks". But maybe stronger students simply use AI more. The study shows the two go together. It does not show that one causes the other.

THEN ASK AI

COPY THIS PROMPT

I'm new to research. Look at the main conclusion of this paper. In simple words: (1) What evidence supports it? (2) Does the conclusion claim more than the evidence shows? (3) What does the argument assume without proving it? (4) What limitations do the authors admit? Quote the sentence from the paper for each point, or say "not stated" if the paper doesn't mention it.

CHECK

- Compare your list with the AI's. Did either of you miss something?
- Read the limitations section yourself. Did the AI describe it fairly?
- Be wary if the AI is very harsh or very positive. Ask it: "What is the strongest point in this paper's favour?"

Step 4: Put two papers side by side

What you're doing: comparing papers to see where they agree, where they disagree, and why.

Why it matters: a literature review is not a list of summaries, one paper after another. It explains how the papers fit together. Comparing is where that starts.

TRY IT YOURSELF FIRST

Pick two papers on a similar question. Fill in a table like this:

	Paper A	Paper B
What did they find?		
Who did they study?		
Where and when?		
How did they find out? (survey, interviews, data...)		
What does the key word mean in this paper?		

Then ask yourself:

- **Do they really disagree?** Sometimes papers look like they disagree but are answering different questions.
- **If they disagree, why might that be?** Different people, a different country, a different year, or a different way of finding out can all change the answer.
- **Do they use the same word to mean different things?** For example, "AI use" might mean *how often* students use AI in one paper and *what for* in another. Then their results can't be compared directly.

Follow a claim back to where it started. Papers often repeat each other: "Research shows that X." If several papers say this, pick one and find the original paper it cites. Check whether that paper actually says X, or something weaker or narrower. Claims can grow as they get passed along, like a game of whispers.

THEN ASK AI

COPY THIS PROMPT

I'm new to research. Compare these two papers. In simple words: (1) Do they reach different conclusions about the same thing, or are they asking different questions? (2) How are they different in who they studied, where, when, and how? (3) Do they define the key ideas the same way? (4) Which of these differences best explains any disagreement? Quote the relevant sentence from each paper.

CHECK

- Does the AI's table match yours? Check any row where you disagree.
- AI sometimes mixes up which paper said what. Check at least two quotes in each paper.
- Decide for yourself which explanation for the disagreement is most convincing, and why.

Step 5: Spot what's missing

What you're doing: finding a question that the papers you read have not answered yet. Researchers call this a **gap**.

Why it matters: your own research should add something new. A gap is where that new thing goes.

WHERE GAPS COME FROM

Look back at your notes from Steps 2 to 4. Gaps usually hide in five places:

- **Questions the papers raise but don't answer.** Look in the discussion and "future research" parts.
- **Surprises** that the authors noticed but didn't follow up.
- **People, places or times nobody has studied.** But only if there is a good reason the answer might be different there.
- **Disagreements** between papers that nobody has explained.
- **The "how" behind a finding.** A paper may show that two things are linked without showing *why*.

TRY IT YOURSELF FIRST

1. List 3 possible gaps, one sentence each.
2. For each one, write which paper (and which part of it) made you think of it.
3. Pick the one you find most interesting.
4. Now try to knock it down. Is there a paper that already answers it? Does it only look like a gap because papers use words differently? Would answering it actually tell us anything useful?
5. If it survives, great. If it only partly survives, make it smaller and more specific.

A warning about "nobody has studied this". Unless you have searched widely, you can't be sure a gap is real. Five papers is a start, not the whole story. Say "the papers I read did not look at..." rather than "nobody has ever looked at..."

THEN ASK AI

COPY THIS PROMPT

I'm new to research. Based on these papers, I think this question hasn't been answered yet: [your gap]. Please challenge it. Is there anything in these papers that already answers it? Is it based on a word being used in different ways? Would answering it actually matter, and to whom? Then suggest a smaller, more specific version of my gap.

CHECK

- Search Google Scholar for your gap in your own words. Has someone already done it?
- Ask your teacher or supervisor whether the gap makes sense. This is a normal and expected question.

Step 6: Write your own research question

What you're doing: turning your gap into one clear question that you could actually answer.

Why it matters: a good question tells you what information to collect and what to do with it. A vague question leads to a vague project.

WHAT MAKES A GOOD FIRST RESEARCH QUESTION

A good question is...	Too big	Better
Small enough to answer	"How does AI affect education?"	"How do first-year business students at my university use AI when preparing for exams?"
Clear about who	"How do people feel about AI?"	"How do first-year students feel about being allowed to use AI in assignments?"
Possible with your time and skills	"Does AI improve learning worldwide?"	"What do 10 students say helps or hurts their learning when they study with AI?"
Linked to what you read	A question no paper touches	A question that grows out of a gap from Step 5

TRY IT YOURSELF FIRST

1. Write your question in one sentence.
2. Write who or what you would study, and how you would get the information (for example, a short survey or a few interviews).
3. Write why the answer would matter, and to whom.
4. Imagine two different possible answers. Would each one teach us something? If one answer would be useless, rethink the question.

THEN ASK AI

COPY THIS PROMPT

I'm new to research and doing a small project over [time available]. My research question is: [your question]. In simple words: Is it small and clear enough? How could I collect information to answer it? Why might the answer matter? Then give me three search phrases I could use on Google Scholar to check whether someone has already answered this question.

CHECK

- Run the three searches yourself. If you find a paper that answers your question, that's good news: read it, then make your question build on it.
- Show your question to your teacher or supervisor before you start collecting information.

Glossary: research words in plain English

Word	What it means
Abstract	A short summary at the start of a paper
Assumption	Something the authors treat as true without proving it
Causes vs. related to	"Related" means two things happen together. "Causes" means one makes the other happen. Most studies can only show "related".
Cite, citation	Mentioning another paper as the source of an idea
Claim	Something the authors say is true
Concept	An idea a study is about, such as "trust" or "AI use"
Data	The information a study collects: answers, numbers, interview notes
Evidence	The information that backs up a claim
Finding	Something the study discovered
Gap	A question that research hasn't answered yet
Interview	Talking with people one by one and recording what they say
Journal	A publication, like a magazine, where research papers appear
Limitations	The weak spots of a study, often admitted by the authors
Literature	All the research already published on a topic
Literature review	Reading and making sense of what has already been found on a topic
Method	How the researchers found out: what they did, step by step
Participants	The people who took part in a study
Peer review	Other experts checking a paper before it is published
Research question	The one main question a study tries to answer
Sample	The people or things that were studied
Survey	A set of questions answered by many people, often online
Theory	An explanation of how or why something happens

Checklist

Tick these off as you go.

- ☐ I can explain what a literature review is in one sentence
- ☐ I know the parts of a paper and the order to read them
- ☐ I found 3 to 5 papers myself and noted why I picked each one
- ☐ For one paper, I answered: what did they want to find out, how did they find out, what did they find
- ☐ I checked whether that paper's conclusion goes further than its results
- ☐ I compared two papers side by side, including what their key words mean
- ☐ I followed one repeated claim back to its original source
- ☐ I listed 3 possible gaps and tried to knock down the best one
- ☐ I wrote one research question that is small, clear and possible
- ☐ For every step, I tried it myself first, then used AI, then checked the AI against the paper