Developing strong research questions

A good research question is essential to guide your research paper, project, or thesis. It pinpoints exactly what you want to find out and gives your work a clear focus and purpose. All research questions should be:

- Focused on a single problem or issue
- Researchable using primary and/or secondary sources
- Feasible to answer within the timeframe and practical constraints
- Specific enough to answer meaningfully
- Complex enough to develop the answer over the space of a paper or thesis

In starting a research paper or essay, you will usually write a single research question to guide your reading and thinking. The paper that you write is essentially an answer to that question. Sometimes you'll provide your own personal answer to the question. Sometimes you'll showcase how other researchers answer the question. And sometimes it will be a combination of both.

How to write a research question

The process of developing your research question follows several steps:

- Choose a broad topic
- Do some preliminary reading to find out about topical debates and issues
- Narrow down a specific niche that you want to focus on
- Identify a practical or theoretical research problem that you will address

When you have a clearly-defined problem, you need to formulate one or more questions. Think about exactly what you want to know and how answering this question will help resolve a problem. In other words, questions and problems are like two sides of the same coin.

Example research problem	Example research question
The teachers at school X do not have the skills to recognize or properly guide gifted children in the classroom.	What practical techniques can teachers at school X use to better identify and guide gifted children?

Types of research questions

Both qualitative and quantitative research requires research questions. The kind of question you use depends on what you want to find out about and the type of research you want to do. It will shape how you go about conducting your.

The table below shows some of the most common types of research questions. Bear in mind that some academic research questions will be more complex than these examples, often combining two or more types.

Research question type	Formulation
Comparative research	*What are the differences and similarities between X and Y and why are these differences important?*
Correlational research	*What is the relationship between variable X and variable Y?*
Exploratory research	*What are the main factors in X? What is the role of Y in Z?*
Explanatory research	*Does X have an effect on Y? What is the impact of Y on Z? What are the causes of X?*
Evaluation research	*What are the advantages and disadvantages of X? How well does Y work? How effective or desirable is Z?*
Action research	*How can X be achieved or improved?*

What makes a strong research question?

Writing questions isn't a difficult task in itself, but it can be hard to work out if you have a *good* research question. Research questions anchor your whole project, so it's important to spend some time refining them. The criteria below can help you evaluate the strength of your research question.

Focused and researchable

Criteria	Explanation
Focuses on a single topic and problem	Your central research question should follow from your research problem to keep your work focused. If you have multiple questions, they should all clearly relate to this central aim. Or consider narrowing things down to one smaller question.

Criteria	Explanation
Answerable using primary or secondary data	You must be able to find an answer by collecting quantitative and/or qualitative data, or by reading scholarly sources on the topic to develop an argument. If such data is impossible to access, you will have to rethink your question and ask something more concrete.
Does not ask for a subjective value judgement	Avoid subjective words like *good*, *bad*, *better* and *worse*, as these do not give clear criteria for answering the question. If your question is evaluating something, use terms with more measurable definitions. • Is X or Y a more effective policy? • How strong are X and Y policies at reducing rates of Z?
Does not ask *why*	*Why* questions are usually (though not always) too large to serve as good research questions. There are often so many possible causes that a research project cannot give a thorough answer. Try asking *what* or *how* questions instead. • How does X occur? • What are the main factors contributing to X? • How is X harmed by Y?

Feasible and specific

Criteria	Explanation
Answerable within practical constraints	Make sure you have enough time and resources to do the research required to answer the question. If you think you might struggle to gain access to enough data, consider narrowing down the question to be more specific.
Does not ask for a conclusive solution, policy, or course of action	Research is about informing, not instructing. Even if your project is focused on a practical problem, it should aim to improve understanding and suggest possibilities rather than asking for a ready-made solution. • What should the government do about low voter turnout? • What are the most effective communication strategies for increasing voter turnout among under-30s?

Complex and arguable

Criteria	Explanation
Cannot be answered with *yes* or *no*	Closed *yes*/*no* questions are too simple to work as good research questions — they don't provide enough scope for investigation and discussion. • Has there been an increase in homelessness in the UK in the past ten years? • How have economic and political factors affected patterns of homelessness in India over the last ten years?
Cannot be answered with easily found facts and figures	If you can answer the question through a Google search or by reading a single book or article, it is probably not complex enough. A good research question requires original data, synthesis of multiple sources, interpretation and/or argument to provide an answer.
Provides scope for debate and deliberation	The answer to the question should not just be a simple statement of fact: there needs to be space for you to discuss and interpret what you found. This is especially important in an essay or research paper, where the answer to your question often takes the form of an argumentative thesis statement.

Common Mistakes to Avoid When Writing a Research Paper

1. Lack of research before choosing a thesis statement or research question.

Sometimes, when stressed or busy, students will rush their selection of a subject for a paper. As a result, their focus and connection with the subject matter can suffer greatly, and, inevitably, this comes through in their writing. Conducting strong research and choosing a subject you feel you can connect to are important steps in writing a successful thesis statement, and ultimately a successful paper.

2. Lack of a strong thesis statement or question.

Once you select a subject, creating a strong thesis statement in the form of a question is the next step. This is a critical, foundational element for a successful paper. The thesis statement should be clear and express one main idea or line of inquiry. It should be about a topic that warrants further discussion. A good thesis statement is genuine, compelling, and makes the reader want to continue, especially by relating to something timely.

3. Failure to make appropriate connections between the thesis statement and supporting statements.

The structure of a research paper flows from the thesis statement to the supporting statements, which comprise the body of the paper. The best research papers are in effect a

sustained inquiry and a stimulating discussion of a well-defined topic. Your paper must transition effectively from your thesis statement to your supporting statement.

4. Lack of strong, relevant data to support statements.

All supporting statements in a paper should be backed up by relevant sources which substantiate the point of view put forward by the thesis statement. Your supporting statements and evidence should flesh out your original thesis statement and have a basis in strong, factual data that you cite and that the reader can easily verify.

5. Failure to properly cite sources.

Proper credit must be given for all data and references used within a paper. Specific requirements for doing so can vary depending upon the instructor. Whether you're working in MLA style or some other format, each style has specific parameters and guidelines for citing sources. Be sure to check with your instructor for specifics so that you can cite sources within the required guidelines.