

Research Paper Writing Process

Writing a research paper can feel overwhelming. Planning your process can feel even more so. This handout will walk through each step of the research process, identify key obstacles and tips for accomplishing each step, and help you set up your own system for writing a research paper.

Starting Out

Picking a topic can be difficult. There are many to choose from, and sometimes we don't know if a topic is too broad or too narrow for the purpose of our paper. It's normal if you're not completely sure about your topic when you're starting. Some people know what they want to write about immediately, while others figure out their topic by jumping into the writing process. It can be helpful to start out by reading your prompt to double-check that you understand your assignment guidelines. You can start by searching keywords relating to your topic through your library database, which will show you articles that you are able to access through your current institution. For example, if you're interested in the relationship between wildfires and global warming, "wildfires" and "global warming" are good keywords to start your search.

Reading and Note-Taking

Databases and sources often contain more information than you need, so when you start searching for sources, keep in mind that your goal is to narrow down your topic and to finalize your list of sources. Selecting, digesting, and organizing your sources will take time and energy, so having a system that helps you methodically navigate through these processes will help you keep track of your progress.

Keep in mind that reading, writing, and note-taking for your research paper are related processes. When you read a research paper, you internalize the structure of a research paper. Note-taking allows you to zoom in on the most relevant parts of the research papers you are reading. Putting your notes into an outline helps you create a plan for how you're going to write.

If you don't have a reading strategy set up for reading research papers, read our "[Reading Comprehension](#)" handout to come up with a plan for understanding key words and new information quickly. Afterward, read our "[How to Read a Research Paper](#)" handout to get some practice with practicing your reading strategies in the context of a research paper.

Selecting Your Sources

Make a list of possible sources and skim through them selectively to filter out the ones that are not relevant to your topic. It is not necessary for you to take a lengthy dive into all the articles in your initial list; doing so will take time away from helping you figure out what you want to write about. Keep in mind that your list of sources will inevitably change. You may realize some of

these papers are not relevant for your topic and omit them from your list, or you may realize you do not have enough sources and add more to your list.

Digesting Your Sources

Read only when you have decided on a list of sources for your paper, and take notes while you digest your sources. Research articles organize their information in a specific way, so you can focus on taking notes from certain sections to get the big picture and other related information. These notes will come in handy once you start planning and writing your research paper. A [synthesis matrix](#) or a [KWHL chart](#) can be used for this purpose.

Organizing your Sources

Keeping a list of your sources handy will allow you to avoid the time-wasting mistake of chasing down your citations once you start writing. Citation management software such as Paperpile, Zotero, or Refworks can help you compile a list of your sources. The library at your institution will usually have this type of software available for your use. You can organize and track your sources and citations by using a synthesis matrix as well.

Outlining and Writing

It's important to outline so you can plan how you want to organize your paper and where you want to insert the ideas of your sources. Outlining can help you figure out where you want to put your sources in the context of your paper as well as how you are going to quote or paraphrase your source. Remember to consult your prompt and any examples the professor provides for your assignment that can give you a model for the structure of your paper.

If you don't understand what a paper is saying, then you won't understand how to express its ideas on paper. This issue can lead to plagiarism. Knowing how to paraphrase allows you to critically think about what an idea is and to apply it to different contexts, which can help you as you start developing your own ideas and doing more of your own research. Our "[Essay Outline Template](#)" and "[Paraphrasing](#)" handouts can be consulted for further reference.

You usually have to go back and find more sources or get rid of some sources as you get a better picture of your topic, so it's important to update your sources and notes as needed.

Writing

Reading and writing are interconnected; the more you read, the better you will be at understanding the structure of a research paper. The more you write, the better you will be at creating research papers. Also, there isn't a set formula for writing a research paper, so you will find yourself transitioning between the stages of brainstorming, reading, writing, and outlining. Make sure you're focusing on one stage at a time. Otherwise, you can get overwhelmed. Revising at this stage can slow you down, and you may get self-conscious before you finish putting your ideas down. It's better to get all your ideas on paper first before you start revising.

Revising

It can feel painful to take a second look at your writing, especially if you are receiving feedback about your writing from others. Revising by yourself can feel more comfortable, but getting a second opinion on your writing can help you understand what your writing sounds like from the perspective of a reader. It can be hard to not take it personally when you receive feedback from others in the beginning, so it's good to focus on understanding what you were trying to say. As long as you focus on the process of making the intent of your paper clearer, it will be easier for you to figure out what others are seeing about what you are trying to say, and you will be able to figure out how to bridge the gap to ensure your intended meaning is clear. Feel free to seek advice from your local Writing Center tutor!

Here are strategies you can use on your own:

- Our “[Proofreading](#)” handout can help you do a qualitative analysis of grammar patterns to work on. Our Homegrown Handouts have explanations and exercises for working through them.
- To revise for cohesiveness, read “[Revising Your Paper](#)” for a plan to tackle this. “[Easy-to-Read Academic Papers and Essays](#)” provides essay-level guidance for cohesiveness, and “[Easy-to-Read Coherent Paragraphs](#)” provides guidance at the paragraph level. “[Reverse Outlining](#)” can help you map out your ideas after you’ve written your paper to ensure that all your ideas are coherent and connected.
- If you find that your sentences are too wordy or unclear, check out “[Easy-to-Read Sentences](#).” “[Revising for Clarity](#)” will also teach you some sentence-level editing strategies that you can use on your own.
- If you find that your word choice is awkward, read “[Academic Language](#)” and “[Meaningful Word and Punctuation Choices](#)” to get a sense of some conventions for word choice and usage.

Reflecting

After your final submission, reflecting on what strategies worked and didn't work for you can help improve your research writing process. Think about the following questions: *What worked in each step of your process? What didn't? What would you do differently next time?*

Activity: Research Paper Plan

This activity will give you a sense of your own expectations about your own writing process, and it will help you create a plan for writing research papers.

Optional: If you are in the process of writing a research paper, you can use this activity as a checklist. Collect all the material you have that relates to your research paper: the prompt, rubric, samples, sources, notes, and other materials. Use these guiding questions as you walk yourself

through each step of the process. What have I accomplished? What else do I need to accomplish? How do I want to accomplish it? How do I want to accomplish it? When do I want to accomplish it?

1. Choosing a Topic

- a. What has helped me choose a topic in the past? What things made it difficult for me to select a topic in the past? What strategies would I like to try?

2. Selecting, Digesting and Organizing Sources

- a. How do I look for sources? What strategies can help me select sources to keep?
- b. What reading strategies do I use to identify the main point of an article? What note-taking strategies can help me keep track of the main points of each source?
- c. How do I organize my sources? Does my system organize my source in a clear manner? Are there other systems that I can use to make my sources easy for me to locate?

3. Outlining and Writing

- a. How do I organize my notes, citations, and ideas? What outlining system can I use to help me keep track of what I'm planning to write about?
- b. What strategies and habits do you use to get into the rhythm of writing? What makes it difficult for me to get into that flow? What strategies would I like to try?

4. Revising

- a. What strategies have I found helpful for revising my papers? What strategies haven't helped? What strategies would I like to try?
- b. Who can provide me with feedback about my writing? How do I approach them for feedback?

References

Ingram, Laura., et al. "Writing a Literature Review and Using a Synthesis Matrix." NC

State University Writing and Speaking Tutorial Services.

case.fiu.edu/writingcenter/online-resources/_assets/synthesis-matrix-2.pdf.