
Learn the Research Process & Apply a Methodology

Learning outcome:

- ✓ The key elements of the research process
- ✓ A method for doing research

Purpose:

- Provides a structure for writing a research paper
- Controls plagiarism

Introduction:

There is a plethora of information, advice, instructions and products on the internet and in publications about how to do research. Many or even most do not combine the writing process with the research process. The following is a specific process that breaks down the research process to basic elements and applies a simple method that facilitates the writing process. There is a point in the research process when things feel very chaotic; however, if followed, this research process provides structure and discipline. The result is a well-documented, organized product that can be edited easily.

Review the research process steps:

1. Identify the research area. What is the assignment/project/purpose? This step is basic to any number of activities from a report for the boss to a 10-page academic paper, from buying a new home to writing a master's thesis.
2. Develop or conceptualize the research design. BLUF, make an outline. State the problem, formulate a working thesis (think subject-verb-object). Write the outline. This is the place where one decides the elements of the content and the order of the written document. What's the point? What needs to be discovered, addressed, imparted, or explained?
3. Identify the research resources needed and evaluate for credibility, bias, and relevancy. Consider the sources authority, purpose, publisher, and currency. Is peer-review important? For all of the resources, especially those which are not familiar, apply a criteria to each one. A well-known criteria is CRAAP: an acronym for Currency, Relevance, Authority, Accuracy, and Purpose. Google CRAAP for more detail.
4. Collect the data. This is the intellectual property step. Improper use of intellectual property, e.g., not documenting or giving credit, is theft. Documentation includes citation; which format is the mechanical part. Giving credit for using ideas or products is the plagiarism part. Sometimes as researchers we have ideas that we later find in the resources. Besides mitigating any potential plagiarism, citing the author and resource of an idea that we already have can be used to support or add credibility.
5. Process the results of the research. This is the analyzation step. Critical thinking is a complex process. Some topics, ideas and arguments are well-known and extensively explored. Our

analysis can include more than the existing and general knowledge. Put your ideas to work here. Identify relationships by compare and contrast. What's there and what's missing? Validate or invalidate the thesis.

6. Report the findings. Write it up.
7. The unspoken final step is edit. Have someone else read it aloud. Note where it doesn't make sense. Check the grammar, the syntax. Passive voice has a purpose, but is it your purpose?

Method:

1. Identify what you need to do.
2. Write the thesis and **MAKE AN OUTLINE**.
3. Identify the resources. Either as each is identified or all at once, document the resource(s) like this: **MAKE A BIBLIOGRAPHY** in the chosen CITATION SYTLE, e.g., APA, MLA, Chicago, Turabian. Make a key to the bibliography, e.g., **ASCRIBE A DESCRIPTOR TO EACH BIBLIO ENTRY**, such as a letter for each or the author's last name.
4. Collect the data. As you read through the resources, every time you note something of interest, pertinence or relevancy, document it. **ONE IDEA/QUOTE PER ENTRY, CITE THE SOURCE, PAGE NUMBER, TOPIC IN OUTLINE (USE ONE-WORD FOR THE TOPIC; BE CONSISTENT), AND YOUR RESPONSE, WHY OR HOW**. Two things are important at this step. For each entry, only one idea or quote **AND** capture your immediate response to the entry. Consider this. After you've read through 2-5 sources on the same topic, things run together and our responses vary. Earlier responses get lost in the new information, but that doesn't mean you won't need them.
5. After you have completed your research, **SORT ALL OF THE ENTRIES BY THE ONE-WORD TOPICS**. Imagine the entries are on cards, deal them out by suit, e.g., one-word topic. No need to read them until the entries are organized by topic. Next read through the topical entries, and begin to put them into a logical order of events or thinking, e.g. sub-sort them. Do this for each topic. Some topics may have more or less than others. Don't worry about this yet. Once everything is sorted and sub-sorted, sit down and read through them.
6. Write it up. The citation process is built into the entries. Write the opening using the thesis and outline information. Write the outline topics using and citing the entries. Write the concluding paragraph; and consider putting it at the beginning, because this probably contains the best articulation of the BLUF.

Conclusion:

This method seems tedious during the research process, but makes the writing easier. Consider the reader or, for academic work, the grader. Organized and documented writing is easier to follow, to understand. As the writer, it's also easier on you. It helps to avoid plagiarism, while providing credible support for ideas. Think of this method of documentation as a research assistant who helps to organize your work as you write. 2-4-1.