Research Writing

In all fields of academic research, writing is very important. Writing quality articles, and getting them published serves the purpose of reporting new or existing knowledge to a community and helps peers stay abreast of research and outcomes within a field. This body of knowledge then promotes the creation of new research in a field (Purdue OWL, 2014).

Learning Outcomes

This module will help you to:

1. Comprehend the process of research writing
2. Outline the overall structure of a research paper

*How to write a research paper:* (SUNY, Empire State College, 2014b; University of Wisconsin, Madison, 2014)

Below are some basic steps that will be useful in writing a research paper.

1. *Deciding on a topic:* Usually researchers know what topic they would like to research. If you do not have any idea of what to write, start with a topic of your interest. Read as much material as possible on this topic, and then narrow it down. For example, if your broad interest is in ‘Football’, you may narrow your interests down to ‘college football’.
   You can even narrow this further by focusing on ‘players and their post-college careers’, or ‘nutrition and players’ health’, etc.

2. *Developing a research question:* This is an essential step in your research process, as all the research will be driven by your research question(s). Your research question should not be too broad or too narrow. It should be concise and to the point. For example, ‘What are the effects of long term smoking on lung cancer?’ This question is not too broad as it focuses specifically on lungs and not the entire body. It does not generalize smoking, but focuses specifically on long-term effects of smoking. This is an ideal research question that is to the point, and defines the focus of the research stating specifically that it is focused on long-term smoking, and lungs.

3. *Finding sources and background information about your topic:* This step will help you in gathering all previous works in your research area. The compilation and synthesis of this information is called a literature review. You may use Purdue library databases, online resources such as Google Scholar and other quality periodicals, journals, books, and databases. The Internet is a treasure trove of information and is an excellent tool in gathering literature. Make sure, however, that you are identifying high quality, credible references, not just resources that are based on opinions.

4. *Evaluating the information:* After gathering sources and background information, you need to filter through all your literature and identify information to be included in your paper. Understand that not all literature can be used in the research paper. You should
make sure that the literature that you include demonstrates sound research practices and builds appropriately upon the body of knowledge in a field. Even if you find a reference that has already reviewed the literature, you need to conduct your own review as well.

5. Documenting the information: This will help you to begin writing your research paper. It’s always good to summarize relevant articles, instead of writing from them verbatim. This also helps in minimizing plagiarism and allows you to track which sources will be used in different sections of the paper.

6. Building an outline: An outline provides a skeleton for your paper. Writing an outline will help you know the structure of your paper and to also place your literature in appropriate sections. Once this is done, you can start writing your research paper.

**Structure of a research paper:** A research paper needs to have a flow and a structure. This section will talk about a general structure of a research paper. Depending upon the type of research you are doing, this structure may vary. Remember, your research paper will always depend upon your research question. The structure of your research paper includes the introduction, body of paper, and conclusion.

1. **Abstract:** Abstract is a small paragraph of about 250-300 words which summarizes your research. Include the purpose of the research, methods, and your significant findings. An abstract is typically written after a research paper is completed since you know how your research is going to end. Often, the abstract is an independent section, which comes before the Introduction.

2. **Introduction:** Here you will present the relevant background, the need for your research, specific terms and concepts relevant to your research, your research focus, and goals (University of Wisconsin, Madison, 2014). Remember, this is an important section, as the Introduction is where readers will decide whether the paper is worth reading in its entirety. Your goal is to captivate the readers here and also to clearly point out the importance of your research (SUNY, Empire State College, 2014c).

3. **Body of the Paper:** The body of the research paper builds on the outline of your paper. The important aspect to remember while writing the body is its flow. Make sure each of the sections are linked with the next section in a consistent manner.
   a. **Review of Literature:** Here you will put in all the relevant literature and explain how it helped in the development of your research question. What is the gap in the research, and also what (if any) are your predicted outcomes. This is the foundation of your research. You need to identify how you will use the literature to back up your research.
   b. **Methodology:** Here you will put any hypotheses that you are testing or your sub-research questions that you are investigating. You will also include the process of the research, and your target population, where you obtained your sample, the
specific instruments you used for the research, etc (UMUC, 2014). Describe your research methods clearly so that future researchers may replicate your findings.

c. **Results:** In this section you will present the results of your research. If you have any demographics, start with those. The presentation of results will largely depend on your field of study and the widely accepted norms in that field (UMUC, 2014). Relevant table and charts detailing your results should be included in the results section (Experimental Biosciences, n.d.).

d. **Discussion:** This section is the interpretation of your results. Mostly, a discussion will be carried out from a researcher’s perspective based on the research question. Tie this discussion back to the reviewed literature. For example, how is your research consistent with past findings? How do your findings differ from the previous ones? What could be the possible underlying reasons that you obtained your results? (Experimental Biosciences, n.d.).

e. **Conclusion:** Summarize your findings or arguments and reiterate how the research is important. This section should answer any readers “so why should I care about this research?” question. Depending on your field, a conclusion might not be needed, and the paper might end with a discussion. In that case, answer the “so what?” (i.e., why should anyone care) question in the discussion (UMUC, 2014).

f. **Future work, Implications:** In some fields, these may be optional sections and can be skipped depending on your research and field. Including these sections may offer a good idea for furthering your research to other researchers.

References:


