BIOLOGY: Project Outline Benji Mickel

You will use **technical language** to write a **professional literature review about DNA technologies, blood typing, toxicology and/or forensic pathology (coroner's report)** how the science is **used in forensics** and the **impact they have had on the efficacy of our justice system.**

What is a literature review?

A literature review is a technical paper that discusses published information in a particular subject area.

A literature review has an organizational pattern and combines both summary and synthesis. A summary is a recap of the important information of the source, but a synthesis is a re-organization, or a reshuffling, of that information. It might give a new interpretation of old material or combine new with old interpretations. Or it might trace the intellectual progression of the field, including major debates.

How is a literature review different from an academic research paper?

The main focus of an academic research paper is to develop a new argument, and a research paper will contain a literature review as one of its parts. In a research paper, you use the literature as a foundation and as support for a new insight that you contribute. The focus of a literature review, however, is to summarize and synthesize the arguments and ideas of others without adding new contributions.

Why do we write literature reviews?

If you have limited time to conduct research, literature reviews can give you an overview or act as a stepping stone. For professionals, they are useful reports that keep them up to date with what is current in the field.

- I have written literature reviews in college, and as an employee for an entomologist providing data to state agencies.
- Roxy and Jessica recently wrote a literature review as a start to their thesis work in graduate school.

To Clarify

- Roughly how many sources should you include?
 - For each report you choose to do in this manner, you should use 3 or more scientific articles.
- What types of sources (books, journal articles, websites)?
 - Articles from scientific journals You can access databases of these at Fort Lewis College, the Public Library and online. These articles present original research and data and are peer reviewed, they often have multiple authors.

Click HERE for example article

- Do not use websites or books.
- All sources must be dated 2000 or more recently
- Should you summarize, synthesize, or critique your sources by discussing a common theme or issue?
 - You will summarize the sources you read and synthesize them (see explanation of synthesis above)
 - You will focus on the use of DNA in forensics

- historical reference of the advancements and applications of this science
- current research and advancements and how these can impact the efficacy of our justice system
- o potential for new applications, further advancements and where more research is needed.
- Should you provide subheadings and other background information, such as definitions and/or a history?
 - Yes, **define all key terms** and provide **historical reference** for the forensic science chosen, in addition to a summation and synthesis of the information gather from your sources.

Find models

Look for other literature reviews in your area of interest or in the discipline and **read them** to get a sense of the types of themes you might want to look for in your own research or ways to organize your final review. You can simply put the word "review" in your search engine along with your other topic terms to find articles of this type on the Internet or in an electronic database. The bibliography or reference section of sources you've already read are also excellent entry points into your own research.

Narrow your topic

There are hundreds or even thousands of articles and books on most areas of study. **The narrower your topic, the easier it will be to limit the number of sources you need to read in order to get a good survey of the material**. Your instructor will probably not expect you to read everything that's out there on the topic, but you'll make your job easier if you first limit your scope.

Consider whether your sources are current

Use sources that date back no later than 2000 - the more current the better.

STRATEGIES FOR WRITING THE LITERATURE REVIEW

Construct a working thesis statement

Use the focus you've found to construct a thesis statement. Your thesis statement will not necessarily argue for a position or an opinion; rather it will argue for a particular perspective on the material. Some sample thesis statements for literature reviews are as follows:

The current trend in treatment for congestive heart failure combines surgery and medicine.

More and more cultural studies scholars are accepting popular media as a subject worthy of academic consideration.

See our handout for more information on how to construct thesis statements.

Consider organization

three basic elements:

- Introduction and <u>background/history</u> information
- The body of the review containing the discussion of <u>sources</u> (multiple paragraphs)
- A conclusion Including recommendations for further research, and predictions about how DNA technologies will advance, new applications for this knowledge etc...