

Working with Sources: Sciences

Plagiarism is the theft of someone else's words, work, or ideas.

—Victoria McMillan, *Writing Papers in the Biological Sciences* (2001)

What is Plagiarism?

- Copying word for word from published sources without adequate documentation
- Using language and/or ideas from sources without adequate documentation
- Purchasing a pre-written paper
- Letting someone else write a paper for you
- Paying someone else to write a paper for you
- Submitting as your own someone else's published or unpublished work

Avoiding Plagiarism

- **Gather Research Materials**
 - Take time to make careful choices among available research tools
 - Allow time for gathering materials
 - Write down a citation for every source
 - Allow time for reading
 - Take notes
 - Identify words that you copy whether you are taking notes or cutting and pasting from the web
 - Jot down the page number and author or title
 - Keep a working bibliography
- **Document Sources**
 - Be able to trace every fact to its source, being able to answer your reader's question, "Where did this come from?"
 - You do not need to cite material that is common knowledge
 - What constitutes common knowledge depends on the audience of your paper
 - In general in the sciences, don't use direct quotes or footnotes

Summary and Paraphrase

Conventions of science writing require you to put the language of the original source into your own words by summarizing or paraphrasing. Science writing typically shuns direct quotations.

- A **summary** gives an overview of the original ideas and is shorter than the original.
- A **paraphrase** restates all the original material in different words and is about as long as the original.

Note that the standard for acceptable paraphrasing in the sciences can be different from acceptable paraphrasing in the humanities. Both summarizing and paraphrasing require that you understand the material before you put into your own words. **Cite sources clearly within the sentence.**

Examples from *Scientific Style and Format: The CBE Manual for Authors, Editors, and Publishers*, 6th ed., 1994:

Name-year system:

- By contrast, the several antisera that have been raised against Sp1 (Kandonaga 1986), a defined RNA polymerase II transcription factor, stain the nucleus....
- When Wong's sequence of studies (1958,1987,1988) is examined closely....
- The data was further refined in order to develop a significantly different model (Johnson, 1989; Wong, 1999).

Citation-sequence system:

- Modern scientific nomenclature really began with Linnaeus in botany³, but other disciplines^{4,8} were not many years behind....

Example from *Writing Papers in the Biological Sciences* (McMillan, 2001):

Original passage:

“A very virulent isolate of *Alternaria mali*, the incitant of apple blotch, was found to produce two major host-specific toxins, as well as five minor ones in liquid culture. Although the minor toxins were less active than the major ones, they were still specifically toxic to the susceptible plants.”

Plagiarized passage:

Kohmoto, Kahn, and others (1976) found that a very virulent isolate of *Alternaria mali*, the incitant of apple blotch disease, produce two main host-specific toxins, as well as five minor ones in liquid culture. Although the minor toxins were less active than the major ones, they were still specifically toxic to the susceptible plants.

Appropriate use of passage:

Kohmoto, Kahn, and others (1976) cultured the fungus *Alternaria mali*, which causes apple blotch, and isolated seven different toxins. Of these, two were particularly toxic to susceptible plants.

Choose clear, well-qualified language to make sure you *precisely* represent what you intend.

NEED MORE HELP?

People

Scheduling an Appointment at the Writing Studio: <http://uwp.aas.duke.edu/wstudio>
Scheduling an Appointment with a Librarian: <http://www.lib.duke.edu/reference/refq.htm>

Print & Electronic Guides

Working with Sources: http://uwp.aas.duke.edu/wstudio/resources/working_sources.html
Citing Sources within Your Paper: <http://www.lib.duke.edu/libguide/within.htm>
Assembling a List of Works Cited: http://www.lib.duke.edu/libguide/works_cited.htm
Duke Honor Code: <http://www.duke.edu/web/HonorCouncil/index.html>