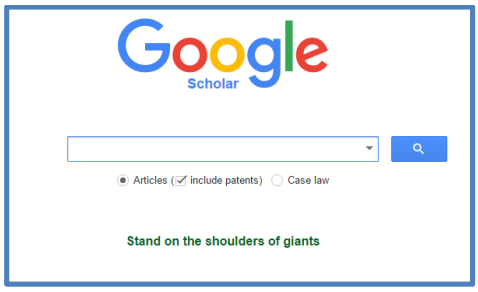
Plagiarism assignment, Adapted from supplementary material created by Emily Holt at the University of Northern Colorado and published in: Holt, E. A. 2012. Education improves plagiarism detection by biology undergraduates. BioScience **62**:585–592.



http://scholar.google.com, accessed 8/21/2016.

Why are you standing on the shoulders of giants when you use google scholar? We necessarily build on other older work when we design new research and pursue new ideas. But when we use ideas from others, it is it crucial that we credit that we acknowledge the sources of our information. This assignment is meant to give you practice properly citing sources and identifying forms of plagiarism.

Definitions of Plagiarism

It is safe to assume you already know it's unethical for you to pay another student to write a paper that you then claim as your own work and turn in for a course project. Any time a student represents work done by someone else as her own, that student has committed an act of plagiarism.

This intentional form of claiming another's work as one's own is only one end of a spectrum of offenses, and milder forms of plagiarism carry penalties equally severe. For example, if you write a paper using your own words throughout except for a single paragraph you took from your textbook, you must put that paragraph in quotation marks and provide a citation for the book as well as the page number from which you took the quote. Failure to do so is plagiarism—even if the instructor believes that the student did not intentionally misrepresent the source of the work. The issue is not intent.

Through this assignment you will practice how to correctly indicate which ideas and words are your own, and which you have taken from some other source. Ignorance of the rules of citation and of quoting does not make plagiarism 'ok'.

Examples of Citations

Textbooks, academic books, and academic journal articles often read something like:

> Many areas that are currently dominated by forests may have been different types of vegetation only decades ago. For example, McBride (1974) and Safford (1995) both found that some forests are undergoing shifts over time from oak-dominated toward bay laurel dominated communities.

This excerpt contains two citations, one to McBride (1974) and another to Safford (1995). A paper containing this excerpt would need to provide the complete citation at the end in a section marked "References". For example,

> McBride J.R. 1974. Plant succession in the Berkeley Hills, California. Madroño **22**:317–329.
>
> Safford H.D. 1995. Woody vegetation and succession in the Garin Woods, Hayward Hills, Alameda County, California. Madroño **42**:470–489.

Citations tell the reader several things. The citation in the above example simply tells the reader who conducted the study described. If you want to learn more about the original work, with the information

provided in the citation, you will be able to access those other studies. In other cases, the citation may tell the reader whose ideas are being described. For example, in this sentence from Allen and Howe (2016):

> There is evidence that lichens are responding positively to recent improvements in urban air quality in developed countries. For example, in Paris eleven lichen species have recolonized the Jardin du Luxembourg in the past 100 years (Seaward & Letrouit-Galinou 1991).

This excerpt contains one citation which in this case tells the reader whose ideas are being expressed. Despite the fact that the words are found in our 2016 publication, they are using the ideas of Seaward and Letrouit-Galinou (which can be found in their original words in the source cited).

It is essential that you provide such citations when you discuss ideas you found in others' work. The citation says to the reader "these are not my ideas. I found them in work done by others, and am simply using them in my work". It is equally essential that you recognize that these citations are not exact quotes from the original work. Despite the fact that we directed the reader to Seaward and Letrouit-Galinou's work, if these were their own words, this sentence would constitute a piece of plagiarism. The citation above says to the reader "these are not my ideas", but it does not say "these are also not my words". If these were Seaward and Letrouit-Galinou's original words, the sentence would have to look like this:

> "There is evidence that lichens are responding positively to recent improvements in urban air quality in developed countries. For example, in Paris eleven lichen species have recolonized the Jardin du Luxembourg in the past 100 years." (Seaward & Letrouit-Galinou 1991, p.181).

In this case, the quotation marks say to the reader "These ideas are Seaward and Letrouit-Galinou's, and so are the words used to express them". I am, therefore, not claiming either ideas or words as my own. I cannot overstate the importance of understanding this distinction. Failure to put quotation marks around exact quotes constitutes plagiarism - you are claiming to have written something that you did not write. Even if you never intended to make such a claim, you have committed an act of misrepresentation that calls into question all of your work.

* Special note: if there are 3 or more authors, the in-text citation only should include the first author's last name (first author is not the first alphabetically, but the first as it appears in the citation) followed by "et al." (Latin abbreviation for "and others")—see above.

Guidelines for Quotations

When you use someone else's exact words, you must take appropriate steps to inform the reader that you are doing so. In general, this means that you must enclose the quotation in quotation marks, and provide a reference that includes the page number. The exact rules are as follows:

> Incorporate a short quotation (fewer than 40 words) in text, and enclose the quotation with double quotation marks. Display a quotation of 40 or more words in a free-standing block of typewritten lines, and omit the quotation marks. Start such a block quotation on a new line, and indent it five spaces from the left margin (in the same position as a new paragraph). Type subsequent lines flush with the indent. If there are additional paragraphs within the quotation, indent the first line of each five spaces from the margin of the quotation. (APA 1994, p. 95)

As you can see, there are exceptions to the rule that quotations must be in quotation marks - but in those instances, there are other clear indicators to the reader that the words are not the author's own. It should be apparent that the previous paragraph is the words of the APA (from the Publication Manual, 4th ed.), and not my own. What tells you this is the indent and the reference including page number. Had I omitted either of these elements, I would have committed an act of plagiarism, as it would not be clear to the reader that these words are not my own.

Quoting and Paraphrasing

Having learned how to correctly quote sources, you may find yourself tempted to write papers consisting mostly or entirely of quotes. If you turn in such a paper, you'll probably find that most instructors return it

without reading it. While it does take some understanding to identify relevant quotes, and to put them into a meaningful order, your instructors generally expect much more from you. We expect the depth of understanding that can only be demonstrated by expressing ideas in your own words. Hence you will be expected to paraphrase (put into your own words) the important points you gather from your resources.

But how do you know whether to quote or to paraphrase? The general rule is to use a quote only when the exact wording of the original source is important. This does not include situations in which the original source is "too complicated" or contains too much "scientific jargon" - if this is the case, ask for help! In actuality, you should find yourself using relatively few exact quotes. It would be perfectly reasonable in most cases to hand in a paper with no quotes whatsoever. So when in doubt, paraphrase.

If correct citation and quotation practices are sciences, paraphrasing is a bit of an art. There are no hard-and-fast rules for paraphrasing. You must instead develop a 'feel' for it. I have provided some examples of what constitutes an adequate paraphrase and what constitutes an inadequate paraphrase. Here is a sentence to be paraphrased:

> "The amount of time females allocated to maintenance behaviors, including self-preening, preening nestlings, allopreening, and maintaining their nest, decreased by 30% in response to hikers" (Swarthout and Steidl 2003, p.312).

Here is a poor paraphrase:

> The amount of time female owls dedicated to maintaining their nest, self-preening, allopreening and preening nestlings decreased 30% in response to hikers (Swarthout and Steidl 2003).

Here is a good paraphrase:

> The presence of hikers reduced female owls' preening, of themselves, their young and their mates, and nest maintenance behaviors by over 25% (Swarthout and Steidl 2003).

You should first notice that in both cases the reference was provided (i.e., Swarthout and Steidl 2003). This work is still the source of the ideas, even if not directly quoted. The poor paraphrase, however, is not really the student's own words, but rather just Swarthout and Steidl's words rearranged a bit (with a few words omitted). If you were to turn in a paper containing this sentence you would have committed an act of plagiarism. It should be apparent that a person could write such a sentence without really understanding the original sentence at all. The author of the good paraphrase, on the other hand, must have understood Swarthout and Steidl's original sentence. The meaning of that sentence is captured in the paraphrase, but the words used to express that meaning are the author's own. An adequate paraphrase indicates to the reader that the author understood the original material. Never attempt to include material you do not understand.

You should also note that EVERY paraphrased sentence must be properly cited. Even if you paraphrase an entire paragraph, each sentence should end with a parenthetical citation. This may seem repetitive or redundant but it ensures the reader understands the source of each sentence. The same is true with quotes, excepting block quotes as illustrated under Guidelines for Quotations.

The above example neatly paraphrases one sentence into another new sentence. This should rarely be the case. Alternative, paraphrasing is an art of summarization and distillation. Once skilled at paraphrasing, you should often derive a paraphrased sentence from more than one sentence—only including the most important, or most relevant, information in your paraphrase. Another conundrum that many students and professionals face is: Can you paraphrase a paraphrase? NO! Go straight to the source! Much like the child's game "telephone," where one child whispers a sentence to the next and so on…information is invariably lost or misconstrued. So it is good practice to always go to the original source and create your own paraphrase. This is especially true of internet sources, such as Wikipedia, which are merely storehouses of other peoples' work.

One last crucial feature to remember about paraphrasing: if you have 4 or more consecutive words (excluding specific phrases or names; e.g., International Union for Conservation of Nature) that are identical in the original work as in your paraphrase, you have likely plagiarized.

Citation Styles

There are many styles of citations. The most widely used include MLA (Modern Language Association), APA (American Psychological Association), Chicago Style and CSE (Council of Science Editors). An excellent guide to the MLA, APA, and Chicago styles with extensive details of how to cite many different sources (including youtube!) is available at: https://owl.english.purdue.edu/owl/section/2/. At TCNJ, we use the citation style of the journal Ecology, which is described in the TCNJ Department of Biology Research Paper Style Manual.

Citing Images

Images enhance a point you are making in many different types of media. In many cases, though, you can don't have your own photograph or diagram, or you can find one you prefer on the internet. First, check whether the image is copyrighted. A good place for photos that have open access licenses is Wikimedia commons, which lets you use images (with attributions) as long as you do not use the image for a commercial purpose. For citing photos, you should follow your citation style guidelines and should include the following information: Photographer Name, photograph date (if available), photograph title, web page, web site, URL (without http://), and date accessed.

What is "Scientific Literature"?

To be honest, it is a sticky question with many answers, but here are some generally accepted categories:

1. Primary Literature: Publications that report results of original research. In other words, the authors of these publications conducted the research themselves. Examples include: journal papers, conference papers, monographic series, technical reports, theses and dissertations. This IS scientific literature because it is peer-reviewed (see below).

2. Secondary Literature: Publications that synthesize and condense several primary literature publications. In other words, authors of these publications did not conduct the research themselves, yet there is an attempt to maintain a level of scientific rigor. Examples include: reviews, monographs, and textbooks. This IS also scientific literature because it is peer-reviewed (see below).

3. Popular Literature: Publications that may be based on one or more primary literature publications or personal experiences/observations. This type of literature, however, is not peer-reviewed (see below), thus may be fraught with inaccuracies or heavily biased. Examples include: most websites, newspaper articles, and magazines (e.g., Time, Newsweek and National Geographic). This is NOT scientific literature (a good hint is the lack of cited references).

Peer-review (sometimes called refereeing) is a screening process of scholarly writing. Prior to publication of primary or secondary literature, the written work is sent to several academics or practitioners in that field. These reviewers evaluate the quality of writing, importance of the work and soundness of methodology. This process ensures scientific rigor and often objectivity.

Many students have struggled with web resources. Each citation style has a way to cite web resources. A publication that can be found on the web may be primary, secondary or popular literature. Many (actually most) journals are both printed and available online. So if you are asking yourself, "is this scientific literature?" Don't assume, "no," simply because it is on your computer screen. But rather investigate if it is original research, if it appears scientifically rigorous, if it uses others sources, but most of all – if it is peer-reviewed.

The Assignment

1. Find one work of primary literature related to the New Jersey ecology.
    a. Provide a full citation.
    b. Select a paragraph (or part of a paragraph) from the Results section of this publication. Write a good paraphrase of this paragraph (minimum of 2 sentences).
    c. Attach a photocopy or scan of the original page with your assignment (highlight the original paragraph).
2. Find a different work of primary literature related to a species native to New Jersey.
    a. Provide a full citation.
    b. Select a paragraph (or part of a paragraph) from the Discussion section of this publication. Write a poor paraphrase of this paragraph (not poorly written, but poorly paraphrased). Again, your paraphrase must be a minimum of two sentences.
    c. List at least 3 reasons why this is a poor paraphrase.
    d. Attach a photocopy or scan of the original page with your assignment (highlight the original paragraph).
3. Find one work of secondary literature related to climate change (other than your textbook).
    a. Provide a full citation.
    b. Select a paragraph (or part of a paragraph) from the first page of this publication (not the Abstract). Write a good paraphrase, which includes a sentence in which you quote from the source.
    c. Attach a photocopy or scan of the original page with your assignment (highlight the original paragraph).
4. Find a website related to evolution.
    a. Provide a full citation.
    b. Is this "scientific literature"?—EXPLAIN.
5. Consider this paragraph:

    > We know a great deal about the cooperative breeding and general ecology of green woodhoopoes due to the pioneering, long-term studies of J. David Ligon and Sandra Ligon (Ligon and Ligon 1978, 1982, 1989, 1991). Adult green woodhoopoes, Phoeniculus purpureus, have reddish-orange bills and feet and black feathers with a metallic green and blue-purple sheen. Meanwhile, juvenile green woodhoopoes have black bill and feet, which allowed the Ligons to distinguish between mature and immature individuals in the field. Of the eight species of woodhoopoes, all of which are restricted to sub-Saharan Africa, the green woodhoopoe is the most common and widespread (Molles 2008, p. 170).

    a. Whose words are these?
    b. Whose ideas are these?
    c. Find one of the pre-1999 references in the excerpt provided above - provide a full citation and a photocopy or scan of the first page of the original article.
6. Find a news article related to ecology:
    a. Provide a full citation.
    b. Write a paragraph paraphrasing the article.
    c. Attach a link to the original article.
7. Find a photo or diagram related to ecology and cite that.