Writing Using Concise or Scientific Language

**Direct quotes can be applied effectively when:**

- Readers may be skeptical of your representation of a source’s words, so you choose to reproduce it verbatim. This is a direct quote and can be very useful to ensure that you do not accidentally misinterpret the source. However, even if you do choose to use a direct quote, it may still help your readers if you add a short summary afterward. This can be more important for longer quotes or quotes on more specialized information.
  
  Ex. Cameron is marked by a dense, stuffy atmosphere that makes it a “breeding ground for the K gene to mutate” (Carter, 2015, p. 98).

- The original source author has established a precedent that you wish to either acknowledge or refute.
  
  Ex. Hurley (2014) claimed Cameron’s facilities are “devoid of any serious infectious diseases” (p. 92). However, recent studies have found that Cameron is host to the majority of K gene infections (Montross, 2015; Jamison, 2017; Worthy, 2019).

**When to quote?**

- When analyzing literature or specific wording
- When a phrase is difficult to reword and the line is short

**When not to quote?**

- To increase your word count
- When your quote starts to become your paper (the quote is too long)
  
  ○ A quote is typically under two lines of text out of the paragraph

**Benefits of utilizing paraphrasing:**

- Sometimes a quote can give you a few extra words; however, paraphrasing shows your audience that you actually understand what the quote says. Depending on the quote, paraphrasing may also allow the reader to better understand the content of the source.
- Discussing ideas/research in your own words displays your understanding of the material. This builds your audience’s (and your professor’s) trust in you.
- Interpreting the data information from the original source makes it easier for your audience to understand.
Imagine how boring a class is if a professor just opens the textbook, reads it word for word, and that is the entire class.

- **Quote:** According to Davis et al. (2013), “there may be a slight advantage in using the 24-hour initial hydrolysis as early production of cortisone helps to maintain sterility within Laettner’s system” (p. 22).
- **Paraphrasing example:** Studies suggest there are minor advantages in applying longer hydrolysis to maintain Laettner’s sterility (Davis et al., 2018).

**Paraphrasing practice strategies**

Method 1: Reread, Reread, and Reread!

- Reread the original passage until you understand its full meaning, then
- Set the original aside and write your own paraphrase, then write a few words below to remind you later how you envision using this material. Above your paraphrase, write a key word or phrase to indicate the subject of your paraphrase.
- Check your rendition with the original to make sure that your version accurately expresses all the essential information in a new form, while avoiding the same wording of the quotation. Sometimes, using the same phrasing could be considered plagiarism.
- Use quotation marks to identify any unique term or phraseology you have borrowed exactly from the source.
- Record the source (including the page/paragraph number) so that you can credit it easily if you decide to incorporate the material into your final document. Highlighting it or flagging it may work for you.

Method 2: Rainbow Highlighting Method (more difficult, for longer quotes)

- In a new document, copy and paste the quote you want to paraphrase (along with citation information, so you can find it later!).
- Highlight each sentence in a different color (or alternating colors).
- Reword the individual sentences into new ones, separating them into their own lines.
  - **Make sure the wording is substantially different, but holds the same meaning.**
- Rearrange the sentences, adjust the wording so it flows, and read it out loud.
- Keep adjusting until it sounds natural and not jumping from idea to idea.

While the above methods seem exhaustive, it’s just like practicing anything. It’ll become easier and automatic the more you do it.
Concise citations: Essential information
Paraphrasing can often be used to concisely communicate relevant information. In these situations some pieces of information may be excluded as irrelevant to a particular audience.

- Quote: In a 2022 study published in the very respected journal, Sports Biology, the authors Jordan Smith and Dean Williams found that the K gene contributed to “facial dimensions akin to those in the common street rat in 82.7% of test subjects” (p. 81).

Below are two possible ways to paraphrase the previous quote:

- This first example focuses more on the authors and makes the sentence sound slightly informal and more natural to hear in conversation.
  - Paraphrase 1: Jordan and Dean (2022) found that the K gene can lead to rat-like facial features.

- The next paraphrase identifies the journal that this study was published in to emphasize the credibility of this study. Some readers may want to see that your research is valid and relevant instead of from a blog, faux news site, or another easily discredited “scientific” publication.
  - Paraphrase 2: A recent study published in Sports Biology found that the K gene can lead to rat-like facial features (Smith & Dean, 2022).

Use simple phrases…
In order to → to
For the purpose of → to
At this point in time → now
Is in compliance with → complies with
Subsequent to → after

Serves to illustrate → illustrates
In the event that → if
Because of the fact that → because/since
Prior to → before
At a temperature of 298K → at 298K

Past vs. Present Tense
- Use past tense when reporting specific actions, observations, and procedures that took place in the past.
  - Ex. After further modification, the plexiglass-composite backboard was field tested at an indoor court in Rolla, MO.
- Use present tense to describe things that are always or generally true.
  - Ex. The backboard is capable of sustaining greater force than previous models.
- Use both when describing something that happened in the past
  - Ex. A plexiglass-composite was used for the prototype because plexiglass is easily available.
- **Limit using ‘this’ in sentences.** Particularly at the beginning of sentences, replace the broad “this” as a subject in sentences.
  - *Instead of:* The arm is at a default, guarded position both before and after the shooting process. *This allows* the shooting motion to be done only at the time the operator chooses.
  - *Try:* The arm is at a default, guarded position both before and after the shooting process. *This default position allows* the shooting motion to be done only at the time the operator chooses.

**What are you trying to emphasize?**
Establishing the subject early in the sentence will help your reader follow the critical information
- What is each sentence below emphasizing (and why might that matter)?
  - *a.* If the “K” gene is not isolated and continues to mutate, like those observed by Jordan, et al. (1983), Bluedevil infections in the Durham area are likely to increase.
  - *b.* Bluedevil Infections in the Durham area are likely to increase if the “K” gene is not isolated to prevent further mutation.

**Passive voice can be appropriate when…**
- Your readers do not need to know who or what is doing something in the sentence.
- The subject of the sentence is what the sentence is really about.
  - *Ex.:* Samples of the K gene were collected from 6 Cameron contests by various researchers.