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Writing Professionally

Write what matters. If you don't care about what you're writing, neither will your readers.

Judy Reeves

I'm not a very good writer, but I'm an excellent rewriter.

James Michener

When people write professionally in the social, educational, or health sciences, they are telling a story about people. But scientists are people, too, complete with individual personalities, likes and dislikes, and ordinary human qualities. Their personalities affect what they do and how they do it. As such, "science writing is not so much about science, but about people—human problems and their solutions, curiosity and discovery" (Holland, 2007). In this book, you will learn how to convey your thoughts on the important problems and solutions relating to people.

It would be hard to overstate how important it is to write effectively. Writing constitutes one of the "3 Rs" of a basic education: reading, writing and 'rithmetic. In the world of business, success is dependent, in part, on effective writing. For high-level positions, "writing is a 'threshold skill' for both employment and promotion" (College Board, 2004, p. 3). In one survey, many companies noted that writing was important in hiring. One respondent asserted that, "in most cases, writing ability could be your ticket in … or it could be your ticket out" (College Board, 2004, p. 3). Potential

employees who do not write well are unlikely to be hired and, if they are hired, they are unlikely to be promoted.

Graduate school admission may also depend on writing effectiveness. Graduate programs routinely request essays as part of the application process. This writing is "often used to make final selections of students with similar GPAs and standardized test scores. If you are on the borderline of being accepted and the admissions committee could go either way, a sterling essay can increase your chances of success considerably" (American Psychological Association, 2007, p. 132).

More immediately, the type of writing presented in this book focuses on the technical style presented in the *Publication Manual of the American Psychological Association* (American Psychological Association, 2010). In the end, you will develop skill in writing in APA style, presenting your ideas with clarity and logic in a manner that will engage the reader.

Most of us find people interesting and are eager to learn why they behave the way they do. But readers do not want to fight through dull and meaningless writing. As writers, our biggest hurdle involves turning complex, technical concepts into prose that others can appreciate.

Writing successfully is not easy. It requires knowledge of the topic we are addressing; judicious selection of the best words, phrases, and sentences; and editing and revising what we have composed. If there were a magical formula that we could use to generate good prose, everybody would succeed in communicating even complex and hard-to-understand ideas. If you have read the work of scientists, though, you will have discovered that, much of the time, scientific writing is dense and impenetrable. Many writers hide interesting concepts inside packages of dull prose.

Furthermore, when you write a paper, not only do you have to make your points clearly, but you have to do it in APA style. This book will focus on writing effectively within the technical constraints of APA style.

How Does Professional Writing Differ From Other Kinds of Writing?

If you are trying to write like a professional, your style will be unlike much of the writing that you have done in the past. When we write professionally, we usually attempt to convey specific information with a great deal of precision, minimizing ambiguity and the possibility of being misunderstood. The adage to say what you mean and mean what you say is highly appropriate for technical writing. You want your reader to understand the points you

believe are important, and you want the reader to know exactly what you intend to say.

In other forms of writing, the emphasis may be on crafting artistic prose. The writer attempts to impress the reader with both content and style. The words that Shakespeare wrote for Macbeth illustrate the point. Macbeth lamented that life "is a tale told by an idiot, full of sound and fury, signifying nothing." These poetic words convey Macbeth's despair. However, Shakespeare's style would not be appropriate for a scientist because the style of science is to be straightforward and unambiguous so the reader does not have to puzzle through the words to find meaning in them.

Psychologists often receive training in how to write objective, scientific papers. Unfortunately, the writing style is often "bloodless" (Josselson & Lieblich, 1996, p. 651), meaning that it is not particularly engaging. Sommer (2006) has encouraged psychologists to learn to write with color and style for lay audiences without sacrificing accuracy. He also implied that the writing style in academic journals need not be dreary.

In scientific writing, we focus on the content of the message. The point is not to impress the reader with the prose, but to render the prose invisible while making the content foremost. This type of writing can be as difficult to do well as literary writing because you need to be concise without omitting important information; you need to choose your words carefully so they engage the reader without obscuring your point; you need to say enough to let your reader understand your message without being repetitive.

Another difference among the various types of writing is that, when we write scientifically or technically, we generally rely on a vocabulary specific to the topic at hand. Professionals understand this wording, but others are not likely to be as conversant with the terminology. This is one of the reasons that scientific writing has the reputation of being incomprehensible—you need to know the jargon. (The concepts are also complex and may be hard to understand, which does not help.) Actually, technical terms are helpful because they let us communicate complex ideas clearly in a few words, although if you do not know the meanings of the words, the prose is meaningless or, at best, difficult.

Using APA Style

A further difference between scientific or technical writing and less formal writing is that, in science, authors typically follow a specific format in preparing reports. In this book, we will follow the guidelines that appear in the

Table 1.1 Typical Sections in an APA-Style Research Report

Section of the report	*What the section contains*
Title page	The title of the paper, the names of authors, and the affiliations of the authors
Abstract	A brief overview of the entire project of about 150 to 250 words
Introduction	The background and logic of the study, including previous research that led to this project
Method	Minute details of how the study proceeded, including descriptions of participants, apparatus, and materials, and what researchers and participants actually did during the study
Results	A detailed statement of the statistics and other results of the study
Discussion	What the results tell us about thought and behavior
References	Where to find the work cited in the paper that relates to the present study

Publication Manual of the American Psychological Association (American Psychological Association, 2010), commonly just called APA style. To begin with, in APA style, research reports usually include seven sections, as described in Table 1.1.

The path that you will take in writing a paper for a class parallels that of submitting a manuscript to a journal. Most of the time, if a writer submits to a journal editor a manuscript that deviates greatly from APA style, the editor may reject the manuscript immediately as unsuitable for publication. In some cases, editors work with authors so that the final version of the manuscript is consistent with APA style (Brewer, Scherzer, Van Raalte, Petitpas, & Andersen, 2001). Similarly, in a class, instructors often insist on APA style and often work with students trying to learn the intricacies of this kind of writing.

In addition, editors have commented that deviations from APA style often accompany problems with the content of a manuscript. So if you create a manuscript that fails to follow APA style, an instructor who is familiar with (and used to) APA style may assume that you paid as little attention to your ideas as you did to the way you expressed them. In the workplace, employers have expressed similar sentiments, that poor writing reflects poor thought (College Board, 2004).

According to the research of Brewer et al. (2001) on the use and the importance of APA style, writers are likely to deviate from APA style in their presentation of research results and in citing references. So you should pay particular attention to these facets of your writing. If you write a paper in APA style that does not involve empirical research and data analysis, APA style can still apply. The structure of your paper is likely to have elements in common with the Introduction, Discussion, and References sections of a research paper, which appear in later chapters. Once you learn the basics of APA style, writing an effective paper might be easier than you anticipated because you will have a good sense of what belongs in a paper and where it goes.

As you write professionally, keep in mind that readers are willing to be convinced with persuasive arguments, but you have to convince them. Scientific writing entails presenting a series of logical arguments that follow from one another. At the end, your good logic is going to make a believer out of your reader. If we are going to accept the process of science, it means that when a writer offers a logical argument that is supported by good data, we should be willing to accept that argument.

Making a Credible Argument

The difference between scientific writing and other writing has to do with the nature of how psychologists attempt to persuade readers. In everyday life, if you want to change somebody's mind about something, there are several ways of doing it. One is to appeal to authority. That is, by quoting an expert (i.e., an authority), you can often convince people to believe you. After all, experts know more than others in their field of expertise. Unfortunately, experts can be wrong.

You can also appeal to what "everybody" knows is true; some things are so obvious, they must be true. Unfortunately (again), some things that people "know" to be true simply aren't true.

You can also appeal to others' emotions. Politicians and advertisers do this all the time. Unfortunately (again), conclusions based on emotional appeals can make a person feel good about a decision that, ultimately, proves to be troublesome. Furthermore, such conclusions are often not very stable (Petty & Cacioppo, 1986).

We should not simply believe the experts (even though they are probably right more than they are wrong in their areas of expertise); they should have

to convince us with logical arguments. We should not simply trust our senses (even though a lot of what we feel to be true has some validity). We should not simply believe in what makes us feel good or reject what makes us feel bad; it should have logical validity.

When trying to convince your reader of your arguments, you should engage the reader in critical evaluation of your ideas. Research has revealed that persuasion based on logic and on attention to important details leads to greater and longer-term acceptance of an argument. This is the type of persuasion that you should strive for in your writing.

Different Types of Communication

If you want to communicate with your audience, you need to know what your audience expects. Depending on whether you are writing, speaking, or presenting visually, your approach will differ somewhat, even if the underlying message is the same.

Written Communication

If you are writing a formal, APA-style research report, as you would for publication in a journal, your reader will expect a structured presentation with considerable detail. The advantage of such a written presentation is that your reader can go back and review the background you cite, review your methodology to make sure it is sound, evaluate your results to judge if they are appropriate, and see if your conclusions are justified from your results and if they relate to the ideas you presented in your Introduction. A written document is a permanent exposition that the reader can go back to at will.

Professionals (including professors) expect the writing to be free from colloquial or informal expressions and to be entirely grammatical. You should choose your words carefully because they are lasting expressions of your ideas.

Oral Communication

In contrast, if you are delivering that same research in an oral presentation, you cannot possibly pack the same level of detail and expect your audience to understand your ideas. Working memory is limited to a small amount of information. So if you are talking to people in an audience,

it does not make sense to introduce as many ideas as you would in writing; your audience cannot go back to review what you have already said. They are forced to listen to your ideas in the present and can keep track of only a few ideas.

In an oral presentation, you should limit yourself to three or four main points you want your listeners to remember. You can introduce minor points to help reinforce the major ideas, but your audience will have a hard time keeping the details in memory. Professional speakers suggest that you tell your audience what you are going to say, then say it, and finally tell them what you just told them. There is something to this philosophy, although in a research presentation, you should not be quite so simplistic. You should establish the framework of your presentation and repeat critical points when appropriate. Still, in the short period of time allotted to oral presentations, usually 10 to 15 min, you are limited in the amount of information you can convey, just as the audience is limited in its ability to comprehend your ideas.

Poster Presentations

Yet another medium of expression is visual. Increasingly, research conferences are relying on poster presentations for reporting research findings. In this form of communication, you present all your information in a small display that might be about 4 ft × 6 ft (i.e., 1.3 m × 2 m) in size. The dimensions vary from one conference to another, but the amount of space always seems to be smaller than you would want.

One of the worst things you can do is to fill the poster with text. Nobody wants to fight through a poster with endless strings of sentences. The viewer is typically interested in your main points. Fortunately, during such a presentation, the author of the poster is usually present, so if viewers want to know more details than are available on the poster, they can simply ask. The use of tables, figures, bulleted points, and other eye-catching features is a good idea in a poster. However, you should avoid attractive, but irrelevant, visual features.

So, for a poster, you should present the main points with as little text as you can get away with. Visual elements are often a more meaningful way to make your points accessible. The result is often more information than in an oral presentation, but less than in a complete APA-style research report. It helps when the researcher is present to clear up any misconceptions that arise because not all the information is available on the poster. Furthermore, if you are presenting a poster, you can create a handout that resembles an

APA-style manuscript. In this way, interested people can get the gist of your research and can ask you any questions that come to mind right away. Then they can take your written handout and attend later to the level of detail they desire.

Internet Publishing

A relatively new option for communicating your ideas is through the Internet. Web presentations combine various features of traditional manuscripts and of visual displays, but there are some additional elements that foster effective communication. A web-based presentation allows easy use of visual elements that are often too costly to include in printed manuscripts. In addition, you can use hyperlinks with your text to refer the reader to related web material or to references.

A simple web page is fairly easy to create if all you need is to present text, figures, or pictures, and hyperlinked text. It is helpful to know the code for the language of the web, HTML (HyperText Markup Language), but with the authoring software on the market, knowing HTML is not absolutely necessary. Fortunately, it is fairly easy to learn. You can even save word-processed documents in HTML format, although generating a well-formatted web page from a word processor can be tricky.

Effective Communication

A professor named Denis Dutton held a bad-writing contest for a few years. The sentence that motivated him to begin the contest appears below; it was about an attempt at educational reform. The prose, which was not intended to be bad, was absolutely incomprehensible. (You should not feel embarrassed if you don't understand it. I don't understand it, either.)

> [It] would delegitimate the decisive, if spontaneous, disclosure of the complicity of liberal American institutions of higher learning with the state's brutal conduct of the war in Vietnam and the consequent call for opening the university to meet the demands by hitherto marginalized constituencies of American society for enfranchisement. (Dutton, 1999)

One of the goals of this book is an attempt to prevent you from writing such incomprehensible prose.

No matter what you choose as your medium of presentation, there are some characteristics of good communication to remember. First, you should establish your theme and organize your thoughts around it, which requires that you know what you want to say. It is tempting sometimes to start writing without a coherent idea of your message. If you operate this way, your writing may meander toward irrelevant topics.

Second, if you want to communicate effectively, you should make sure that your grammar is flawless and that your selection of words is judicious. When your writing is technically competent, your reader will not be distracted from your message by having to figure out what you mean. You also need to go back to your work to edit and revise it. It helps to reread your work when it is not fresh in your own mind; sometimes you can spot problems that were not initially apparent. In addition, your writing may benefit if you ask somebody to read your work and explain to you what is unclear. Mark Twain recognized the importance of revising your work: "The time to begin writing an article is when you have finished it to your satisfaction. By that time you begin to clearly and logically perceive what it is you really want to say."

Finally, it is important to remember that even lengthy manuscripts begin with a single sentence. In order to maximize the effectiveness of your writing, you should set up a schedule and a process. B. F. Skinner is a good example; he was an early bird, so he arose and did his writing for a few hours in the morning, a practice that he continued right up until his death.

Establishing Good Writing Habits

Find a place where you can concentrate free of distraction, at a time when you are clear-headed. If you are a night owl, that may be the best time for you to write; if you are an early-morning lark, that would be a good time. In either case, you should establish a routine. Writing does not happen until you do it. And when you develop your routine, remember to positively reinforce yourself. Identify a goal for your writing session and reward yourself when you reach it. So you might decide to explore and write about a given topic for 30 min. After 30 min, you should reward yourself with a break.

You may need to shape your behavior first, though, so you might need to start with a shorter work period, gradually extending it until you identify

the longest period of time during which you can write effectively. Psychologists have identified a phenomenon called *post-reinforcement pause*. It refers to a period of time after a reinforcement when the animal (including the human animal) stops working toward another reinforcement (Felton & Lyon, 1966). You should make sure that your post-reinforcement pauses are not too lengthy.

By developing good writing habits, you will have taken the first step toward successful communicating. The task is often not easy, but the results are eminently satisfying.

In the next chapters, we will explore how you can develop your ideas, connect them to what others have already written, and express them in a style that reflects a sophisticated knowledge of psychology, all in APA style. In the end, you will have an impact on your audience when you write and when you speak about psychology.

Ethical Writing

Academic integrity is a concept that guides ethical writing and more broadly addresses cheating, plagiarism, and even denying others access to scholarly resources. In this section you will encounter examples and tips to help you avoid plagiarism, but it would be a good idea to read your university's policy on academic integrity. This section begins with an excerpt from a scholarly source and a paragraph that attempts to paraphrase that source (this example is inspired by the University of Kent's psychology department web page at http://www.kent.ac.uk/psychology/learning-resources/plagiarism.html).

In Figure 1.1 you can see an outline of the mistakes in the paraphrased version and then a way to rewrite it, which is described in Figure 1.2.

Scholarly Excerpt

According to self-determination theory (Deci & Ryan, 1985, 1991) individuals who perform an activity out of choice and pleasure regulate their behavior in a self-determined manner. In contrast, individuals who participate in different activities out of internal and/or external pressures regulate their behavior in a non-self-determined fashion. Throughout the past two decades, much research has shown that self-determined motivation is a useful concept to understand human behavior. (Senecal, Vallerand, & Guay, 2001, p. 178)
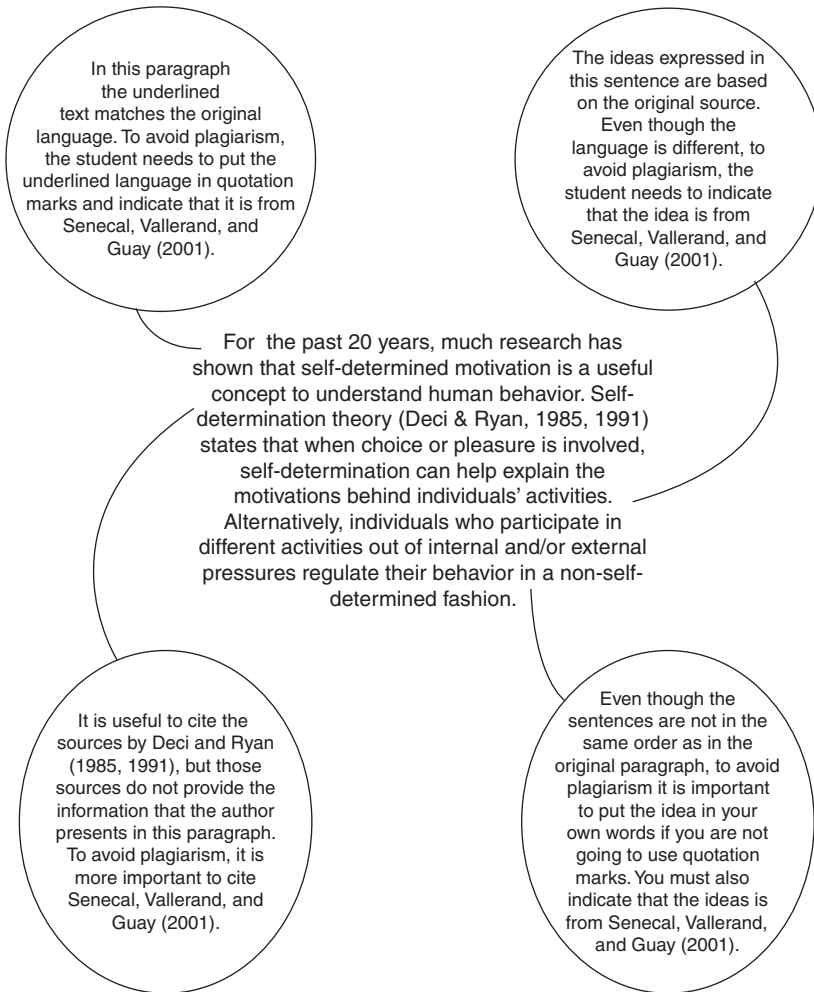
Figure 1.1   Avoiding plagiarism.

Attempted Paraphrase

For the last 20 years, much research has shown that self-determined motivation is a useful concept to understand human behavior. Self-determination theory (Deci & Ryan, 1985, 1991) states that, when choice or pleasure is involved, self-determination can help explain the motivations behind individuals' activities. Alternatively, individuals who participate in different activities out of internal and/or external pressures regulate their behavior in a non-self-determined fashion.

In this paragraph the author indicates immediately that Senecal, Vallerand, and Guay (2001) is the source for this idea. The language is distinct from the original, so it does not need quotation marks.

Using the phrase "according to Senecal et al." lets the reader know that the idea in this sentence also came from another source. The language is distinct from the original so it does not need quotation marks.

Senecal, Vallerand, and Guay (2001) draw from research done by Deci and Ryan (1985, 1991) for their own work on self-determination theory, which offers insight into the relation between human activities and motivation. According to Senecal et al., when choice or pleasure is involved, self-determination can help explain the motivations behind individuals' activities. Alternatively, "individuals who participate in different activities out of internal and/or external pressures regulate their behavior in a non-self-determined fashion" (Senecal, Vallerand, & Guay, 2001, p.178).
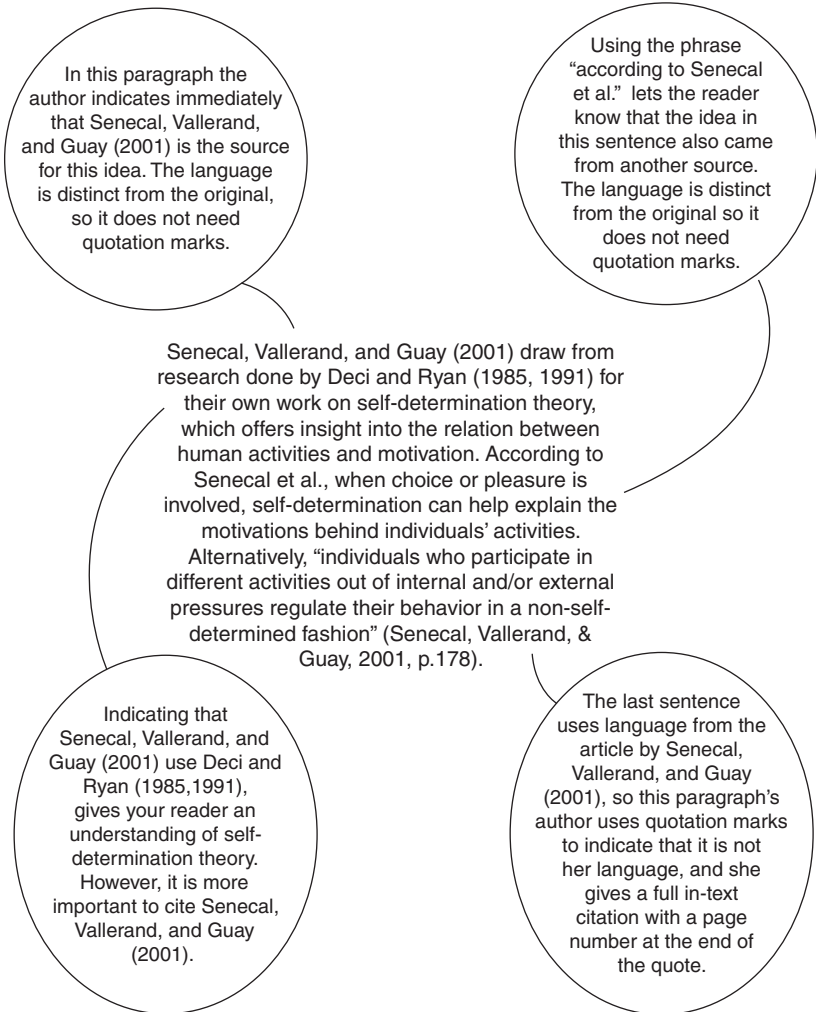
Indicating that Senecal, Vallerand, and Guay (2001) use Deci and Ryan (1985,1991), gives your reader an understanding of self-determination theory. However, it is more important to cite Senecal, Vallerand, and Guay (2001).

The last sentence uses language from the article by Senecal, Vallerand, and Guay (2001), so this paragraph's author uses quotation marks to indicate that it is not her language, and she gives a full in-text citation with a page number at the end of the quote.

Figure 1.2   How plagiarism has been avoided.

Paraphrase Rewrite

Senecal, Vallerand, & Guay (2001) draw from research done by Deci & Ryan (1985, 1991) for their own work on self-determination theory, which offers insight into the relationship between human activities and motivation. According to Senecal et al., when choice or pleasure is involved, self-determination can help explain the motivations behind individuals' activities. Alternatively, "individuals who participate in different activities

out of internal and/or external pressures regulate their behavior in a non-self-determined fashion" (Senecal, Vallerand, & Guay, 2001, p. 178).

Whether intentional or unintentional, plagiarism is a very serious infraction. *Plagiarism* is the use or representation of someone else's idea or language as your own. This can include

- summarizing someone else's idea without giving that person credit;
- using someone else's language without giving that person credit;
- using someone else's language without quotation marks, even if you give that person credit for the idea;
- taking work that someone else wrote for you and presenting it as your own.

However, scholars do not consider it plagiarism if you present information that is *common knowledge* without a citation. That is, if you offer information that you expect an average person would know, such as the temperature at which water freezes or who the fifth United States president was, then you can include that information without needing to cite any sources.

Unfortunately, the margins of common knowledge are not always clear. For example, what is considered common knowledge might be different for psychologists, sociologists, educators, and health professionals. If there is any doubt, you are always safe in citing your sources.

You should become familiar with what is and isn't plagiarism not only because you may face severe consequences for plagiarizing but also because including citations and references in your academic scholarship can strengthen your work: It reflects your awareness of scholarly research that points to the same conclusion.

Referencing perspectives that contradict your stance can benefit your work, too. Showing your audience that you are aware of, and have evaluated, research that presents arguments or conclusions that differ from yours indicates that you have explored multiple perspectives and still consider yours to be the strongest.

So you might forget to cite a source when you are writing your paper, or you might have taken notes but forgotten to write down the source of those notes. Regardless of your intentions, the first example is plagiarism and the second could become plagiarism. Consequently, preventing plagiarism starts when you are in the preliminary research phase and continues through the research and writing process.

Each time you take notes, you want to be able to connect those notes to a specific source. There are different systems you can use to do this, and through your own research and writing you can develop a system that works best for you. For some people, recording a source's complete citation information and then writing notes keeps everything in one place and makes it less likely that either the citation or the notes will be lost or separated. Almost all library catalogs and search engines allow you to email or print citations, and through some article databases you can email or print out entire articles. However, should you email or print citations, you then need to figure out how to connect the citations with your notes about that source.

In any case, you must recognize the importance of keeping track of your sources at the initial research phases and throughout your writing project. Not only can this strategy prevent plagiarism—intentional or unintentional—it can also be more efficient in the long run. There are few things as frustrating as knowing you've summarized, paraphrased, or quoted a source but not knowing which source it is, which causes you to spend time reading through articles or even revisiting the library to retrieve a source you had already returned.

Finally, it is possible to plagiarize from oneself. This phenomenon is called self-plagiarism, and it is not acceptable. Essentially, it is not considered appropriate to lift material from one paper you have written and insert it into a new paper as if it were new. This caution may be more relevant when authors publish their papers in journals, but your professors may have similar policies against your handing in a paper that contains work that you had written previously.

The ethical guidelines set forth by the APA note that in discussions of theory and methodology, some repetition of your earlier work may be appropriate, but the APA cautions minimizing the overlap with your earlier writing and letting readers know when you have taken material from something you wrote before.