Composition 2: Research and Writing

Composition 2: Research and Writing

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Introduction

Composition 2: Research and Writing was created with the intention of providing a free, comprehensive Composition 2 textbook to the students of Connors State College in Oklahoma. This textbook is a compilation of several OER textbooks and resources with edits, revisions, and additions provided by Brittany Seay. This textbook would not have been possible without the hard work and generosity of scholars who decided to not only create a textbook but were then willing to allow others to use and remix their work. The idea of providing free learning material is a noble cause and the scholars represented within this text should be applauded and appreciated for setting aside their time and money to provide learning materials for students around the globe as well as creating solid foundations for other teachers and schools to build on. So, thank you from all of us here at Connors State College.[1]

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1. This project was supported by the Online Consortium of Oklahoma (OCO), Connors State College, and The Oklahoma State Regents for Higher Education (OSRHE)

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THE ACADEMIC MARATHON: THE IDEA OF RESEARCH

Below is the credit for Chapter 1 "The Academic Marathon: The Idea of Research"

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1.1 So You Wanna Be An Engineer, a Welder, a Teacher? Academic Disciplines and Professional Literacies

MARLENA STANFORD AND JUSTIN JORY

[1]Many people today arrive at college because they feel it's necessary. Some arrive immediately after high school, thinking that college seems like the obvious next step. Others arrive after years in the workforce, knowing college provides the credentials needed to advance their careers. And still others show up because college is a change, providing a way out of less than desirable life conditions.

We understand this tendency to view college as a necessary part of contemporary life. We did too as students. And now that we're teachers, we still believe it's necessary because we know it opens doors and grants access to new places, people, and

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ideas. And these things present opportunities for personal and professional growth. We hear about these opportunities every day when talking with our students.

But viewing college simply as a necessity can lead to a troublesome way of thinking about what it means to be a student. Because so many students today may feel like they must go to college, their time at school may feel like part of the daily grind. They may feel like they have to go to school to take classes; they may feel like they are only taking classes to get credit, and they may feel like the credit only matters because it earns the degree that leads to more opportunity. When students carry the added pressure of feeling like they must earn high grades to be a successful student and eventually professional (we don't think this is necessarily true, by the way), the college experience can be downright stressful. All of these things can lead students to feel like they should get through school as quickly as possible so they can get a job and begin their lives.

Regardless of why you find yourself enrolled in college courses, we want to let you know that there are productive ways to approach your work as a student in college, and we argue they will pay off in the long run.

Students who see formal schooling as more than a means to an end will likely have a more positive academic experience. The most savvy students will see the connections between disciplines, literacy development, professionalism, and their chosen career path. These students will have the opportunity to use their time in school to transform themselves into professionals in their chosen fields. They will know how to make this transformation happen and where to go to do it. They'll understand that disciplinary and professional language matters and will view school as a time to acquire new language and participate in new communities that will help them meet their goals beyond the classroom. This transformation begins with an understanding of how the language and literacy

practices within your field of study, your discipline, will transfer to your life as a professional.

Even students who are unsure about what to study or which professions they may find interesting can use their time spent in school to discover possibilities. While taking classes, for instance, they might pay attention to the practices, ideas, and general ways of thinking about the world represented in their class lectures, readings, and other materials, and they can consider the ways that these disciplinary values intersect with their own life goals and interests.

Understanding Disciplinarity in the Professions

When you come to college you are not just coming to a place that grants degrees. When you go to class, you're not only learning skills and subject matter; you are also learning about an academic discipline and acquiring disciplinary knowledge. In fact, you're entering into a network of disciplines (e.g., engineering, English, computer science, etc.), and in this network, knowledge is produced that filters into the world, and in particular, into professional industries. An academic discipline is defined as a field of knowledge within the university system with distinct problems and assumptions, methodologies, and ways of communicating information.[2]

2. The term "discipline" refers to both a system of knowledge and a practice. The word "discipline" stems from the Greek word *didasko* (teach) and the Latin word *disco* (learn). In Middle English, the word "discipline" referred to the branches of knowledge, especially medicine, law, and theology. Shumway and Messer-Davidow, historians of disciplinarity, explain that

(Think about, for instance, how a scientist views the world and conducts their study of things in the world in ways different than a historian.)

Entering into a discipline requires us to become literate in the discipline's language and practice. If membership in a disciplinary community is what we're after, we must learn to both "talk the talk" and "walk the walk." At its foundation, disciplinarity is developed and supported through language—through what we say to those within a disciplinary community and to those outside of the community. Students begin to develop as members of a disciplinary community when they learn to communicate with the discipline's common symbols and genres, when they learn to "talk the talk." In addition, students must also learn the common practices and ways of thinking of the disciplinary community in order to "walk the walk."

The great part of being a student is that you have an opportunity to learn about many disciplinary communities, languages, and practices, and savvy students can leverage the knowledge and relationships they develop in school into professional contexts. When we leave our degree programs, we hope to go on the job with a disciplined mind—a disposition

during this time "discipline" also referred to "the 'rule' of monasteries and later to the methods of training used in armies and schools." So, the conceptualization of "discipline" as both a system of knowledge and as a kind of self-mastery or practice has been around for quite some time. In the 19th century, our modern definition of "discipline" emerged out of the many scientific societies, divisions, and specializations that occurred over time during the 17th and 18th centuries. Our modern conception of disciplinarity frames it not only as a collection of knowledge but also as the social practices that operate within a disciplinary community.

toward the world and our work that is informed by the knowledge, language, and practices of a discipline.

Do you ever wonder why nearly every job calls for people who are critical thinkers and have good written communication skills? Underlying this call is an interest in disciplined ways of thinking and communicating. Therefore, using schooling to acquire the knowledge and language of a discipline will afford an individual with ways of thinking, reading, writing, and speaking that will be useful in the professional world.[3]

The professions extend from disciplines and in turn, disciplines become informed by the professionals working out in the world. In nursing, for example, academic instructors of nursing teach nursing students the knowledge, language, and practices of nursing. Trained nurses then go out to work in the world with their disciplined minds to guide them. At the same time, nurses working out in the world will meet new challenges that they must work through, which will eventually circle back

3. The basic relationship between disciplines and professions is that disciplines create knowledge and professions apply it. Each discipline comes with a particular way of thinking about the world and particular ways of communicating ideas. An experienced mathematician, for example, will have ways of thinking and using language that are distinct from those of an experienced historian. The professions outside of institutions of higher education also come with particular ways of thinking and communicating, which are often informed by related academic disciplines. So an experienced electrician will have ways of thinking and using language that are different from those of an experienced social worker. Both the electrician and the social worker could have learned these ways of thinking and using language within a discipline in a formal school setting, although formal schooling is not the only place to learn these ways of thinking and communicating.

to inform the discipline of nursing and what academic instructors of nursing teach in their classrooms.

It is important to realize that not all college professors and courses will "frame" teaching and learning in terms of disciplinarity or professionalism, even though it informs almost everything that happens in any classroom. As a result, it may be difficult to see the forest for the trees. Courses can become nothing more than a series of lectures, quizzes, assignments, activities, readings, and homework, and there may be few identifiable connections across these things. Therefore, students who are using school to mindfully transform into professionals will build into their academic lives periodic reflections in which they consider their disciplines and the ways they're being trained in disciplinary thinking. They might stop to ask themselves: What have I just learned about being a nurse? About thinking like a nurse? About the language of nursing? This reflection may happen at various times throughout individual courses, after you complete a course, or at the end of completing a series of courses in a particular discipline. And don't ever underestimate the value of forming relationships with your professors. They're insiders in the discipline and profession and can provide great mentorship.

Okay, okay. Be more mindful of your education so that you acquire disciplinary and professional literacies. You get it. But what can you do—where can you look specifically—to start developing these literacies? There are many possible responses, but as writing teachers, we will say this: Follow your discipline and profession's texts. In these texts—and around them—is where literacy happens. It's where you're expected to demonstrate you can read and write (and think and act) like a professional.

Professional Literacy: Reading and Writing Like a Professional

So you wanna be a teacher, a welder, an engineer? Something else? It doesn't matter what profession you're interested in. One thing that holds across all professions is that, although the types of reading and writing will differ, you'll spend a great deal of time reading and writing. Your ability to apply, demonstrate, and develop your reading and writing practices in school and then on the job will contribute greatly to your success as a professional.

You may be thinking, "I'm going to be a culinary artist and want to open a bakery. Culinary artists and bakers don't have to know how to read and write, or at least not in the ways we're learning to read and write in school." While you may not write many academic essays after college, we can confidently say that you will be reading and writing no matter your job because modern businesses and organizations—whether large corporations or mom-and-pop startups—are built and sustained through reading and writing. When we say reading and writing build and sustain organizations, we mean that they produce all the things necessary to run organizations—every day. Reading and writing reflect and produce the ideas that drive business; they record and document productivity and work to be completed; reading and writing enable the production and delivery of an organization's products and services; they create policies and procedures that dictate acceptable behaviors and actions; and perhaps most importantly, reading and writing bring individuals into relationships with one another and shape the way these people perceive themselves and others as members of an organization.

As a professional, you will encounter a variety of texts; you will be expected to read and respond appropriately to texts and to

follow best practices when producing your own. This holds true whether you aspire to be a mechanic or welder, a teacher or an engineer. If you bring your disciplined mind to these reading and writing tasks, you will likely have more success navigating the tasks and challenges you meet on a daily basis.

Conclusion

We hope this reading can transform the way you understand the discipline-specific ways of reading, writing, thinking, and using language that you encounter in all your college courses—even if these ways are not always brought to the forefront by your instructors. We might think of college courses as opportunities to begin acquiring disciplinary literacy and professional reading and writing practices that facilitate our transformation into the professionals we want to become. Said another way, if language is a demonstration of how we think and who we are, then we want to be sure we're using it to the best of our ability to pursue our professional goals and interests in the 21st Century.

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1.2 The Logic Behind Doing Research and Writing Research Projects

[1]Research always begins with the goal of answering a question. In your quest to answer basic research questions, you turn to a variety of different sources for evidence: reference resources, people, evaluative and opinionated articles, and other sources. All along the way, you continually evaluate and re-evaluate the credibility of your sources.

Applying Research Skills

How did you decide to come to Connors State College? That decision was probably based on research.

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For example, you might have started with an internet search of "colleges near me," or maybe you reviewed your high school's concurrent student program. You probably talked to people and read about other schools. You may have spoken to admissions counselors or representatives from various schools. Whose advice did you trust more? On the one hand, the admissions counselors and representatives from a school have a lot of expertise, but they might also have some bias. On the other hand, your friends and family may have their own set of biases (e.g., maybe they want you to stay close to home). You had to navigate all of these claims and positions in order to decide on CSC. You'll do much the same thing as an academic researcher: you will gather sources, both primary and secondary; analyze and evaluate them in relation to each other; and determine how they contribute to your project.

The reasons academics and scholars conduct research are essentially the same as the reasons someone does research on which university or college to attend: to find information and answers to questions with a method that has a greater chance of being accurate than a guess or a "gut feeling." College professors in a history department, physicians at a medical school, graduate students studying physics, college juniors in a literature class, students in an introductory research writing class—all of these people are members of the academic community, and they all use research to find answers to their questions that have a greater chance of being "right" than making guesses or betting on feelings.

Students in an introductory research writing course are "academics," the same as college professors. You might not

think of yourself as being a part of the same group as college professors or graduate students, but when you enter a college classroom, you are joining the academic community in the sense that you are expected to use your research to support your ideas and you are agreeing to the conventions of research within your discipline. Another way of looking at it: first-year college students and college professors more or less follow the same "rules" when it comes to making points supported by research and evidence.

[2]Why Write Research Projects?

A lot of times, instructors and students tend to separate "thinking," "researching," and "writing" into different categories that aren't necessarily very well connected. First, you think, then you research, and then you write. The reality is though that the possibilities and process of research writing are more complicated and much richer than that. We think about what it is we want to research and write about, but at the same time, we learn what to think based on our research and our writing. The goal of this book is to guide you through this process of research writing by emphasizing a series of exercises that touch on different and related parts of the research process.

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But before going any further, you need to be aware of two important points about this book:

1. This book is an introduction to academic writing and research, and chances are you will keep learning about academic writing and research after this class is over. You may have to take other writing classes where you will learn different approaches to the writing process, perhaps one where you will learn more about research writing in your discipline. However, even if this is your one and only "writing class" in your college career, you will have to learn more about academic writing for every class and every new academic writing project. Learning how to write well is not something that ends when the class ends. Learning how to write is an ongoing, life-long process.

2. Academic writing is not the only kind of writing worth learning about, and it is not the only potential use for this book or this class. The focus of this book is the important, common, and challenging sort of writing students in a variety of disciplines tend to do, projects that use research to inform an audience and make some sort of point; specifically, academic research writing projects. But clearly, this is not the only kind of

writing writers do.

Sometimes, students think introductory college writing courses are merely an extension of the writing courses they took in high school, and while this is true for some, the sort of writing required in college is different from the sort of writing required in high school. College writing tends to be based more on research than high school writing. Further, college-level instructors generally expect a more sophisticated and thoughtful interpretation of research from student writers which you looked at and studied in Composition 1. However, it is not enough to merely use more research in your writing than you did in high school or Composition 1; you also have to be able to think and write about the research you've done and are going to do.

Besides helping you write different kinds of projects where you use research to support a point, the concepts about research you will learn from this course will help you become better consumers of information and research. And make no mistake about it: information that is (supposedly) backed up by research is everywhere in our day-to-day lives. News stories we see on television or read in magazines or newspapers are based on research. Legislators use research to argue for or against the passage of the laws that govern our society. Scientists use research to make progress in their work.

Even the most trivial information we all encounter is likely to be based on something that at least looks like research. Consider advertising: we are all familiar with "research-based" claims in advertising like "four out of five dentists agree" that a particular brand of toothpaste is the best, or that "studies show" that a specific type of deodorant keeps its wearers "fresh" longer. Advertisers use research like this in their

advertisements for the same reason that scientists, news broadcasters, magazine writers, and just about anyone else trying to make a point use research: it's persuasive and convinces consumers to buy a particular brand of toothpaste.

This is not to say that every time we buy toothpaste we carefully mull over the research we've heard mentioned in advertisements. However, using research to persuade an audience must work on some level because it is one of the most commonly employed devices in advertising.

One of the best ways to better understand how we are effected by the research we encounter in our lives is to learn more about the process of research by becoming better and more careful critical readers, writers, and researchers. Part of that process will include the research-based writing you do in this course. In other words, this book will be useful in helping you deal with the practical and immediate concern of how to write essays and other writing projects for college classes, particularly ones that use research to support a point. But perhaps more significantly, these same skills can help you write and read research-based texts well beyond college.

Writing That Isn't "Research Writing"

Not all useful and valuable writing automatically involves research or can be called "academic research writing."

- While poets, playwrights, and novelists frequently do research and base their writings on that research, what they produce doesn't constitute academic research writing. The film *Shakespeare in Love* incorporated facts about Shakespeare's life and work to tell a touching, entertaining, and interesting story, but it was nonetheless a work of fiction since the writers, director, and actors clearly took liberties with the facts in order to tell their

story. If you were writing a research project for a literature class which focuses on Shakespeare, you would not want to use *Shakespeare in Love* as evidence about how Shakespeare wrote his plays.

· Essay exams are usually not a form of research writing. When an instructor gives an essay exam, she usually is asking students to write about what they learned from the class readings, discussions, and lecturers. While writing essay exams demand an understanding of the material, this isn't research writing because instructors aren't expecting students to do additional research on the topic.

· All sorts of other kinds of writing we read and write all the time—letters, emails, journal entries, instructions, etc.—are not research writing. Some writers include research in these and other forms of personal writing, and practicing some of these types of writing—particularly when you are trying to come up with an idea to write and research about in the first place—can be helpful in thinking through a research project. But when we set about to write a research project, most of us don't have these sorts of personal writing genres in mind.

So, what is "research writing"?

Research writing is writing that uses evidence (from journals, books, magazines, the Internet, experts, etc.) to persuade or inform an audience about a particular point.

Research writing exists in a variety of different forms. For example, academics, journalists, or other researchers write

articles for journals or magazines; academics, professional writers, and almost anyone create web pages that both use research to make some sort of point and that show readers how to find more research on a particular topic. All of these types of writing projects can be done by a single writer who seeks advice from others, or by a number of writers who collaborate on the project.

Academic research writing—the specific focus of this textbook and the sort of writing project you will need to write in this class—is a form of research writing. How is academic research writing different from other kinds of writing that involve research? The goal of this textbook is to answer that question, and while academic research projects come in a variety of shapes and forms, in brief, academic research writing projects are a bit different from other kinds of research writing projects in three significant ways:

1. Thesis: Academic research projects are organized around a point or a "thesis" that members of the intended audience would not accept as "common sense." What an audience accepts as "common sense" depends a great deal on the audience, which is one of the many reasons why what "counts" as academic research varies from field to field. But audiences want to learn something new either by being informed about something they knew nothing about before or by reading a unique interpretation on the issue or the evidence.

2. Evidence: Academic research projects rely almost exclusively on evidence in order to support this point. Academic research writers use

evidence in order to convince their audiences that the point they are making is right. Of course, all writing uses other means of persuasion—appeals to emotion, to logic, to the credibility of the author, and so forth. But the readers of academic research writing projects are likely to be more persuaded by sound, schoarly evidence than by anything else.

- ◦ "Evidence," the information you use to support your point, includes readings you find in the library (journal and magazine articles, books, newspapers, and many other kinds of documents); materials from the Internet (web pages, information from databases, other Internet-based forums); and information you might be able to gather in other ways (interviews, field research, experiments, and so forth).

3. Citation: Academic research projects use a detailed citation process in order to demonstrate to their readers where the evidence that supports the writer's point came from. Unlike most types of "non-academic" research writing, academic research writers provide their readers with a great deal of detail about where they found the evidence they are using to support their point. This process is called citation, or "citing" of evidence. It can sometimes seem intimidating and confusing to writers new to the process of academic research writing, but it is really nothing more than explaining to your reader where your

evidence came from.

Writing as a Process: A Brief Explanation and Map

No essay, story, or book (including this one) simply "appeared" one day from the writer's brain; rather, all writings are made after the writer, with the help of others, works through the process of writing.

Generally speaking, the process of writing involves:

- Coming up with an idea (sometimes called brainstorming, invention or "pre-writing");
- Writing a rough draft of that idea;
- Showing that rough draft to others to get feedback (peers, instructors, colleagues, etc.);
- Revising the draft (sometimes many times); and
- Proof-reading and editing to correct minor mistakes and errors.

An added component in the writing process of research projects is, obviously, research. Rarely does research begin

before at least some initial writing (even if it is nothing more than brainstorming or pre-writing exercises), and research is usually not completed until after the entire writing project is completed. Rather, research comes in to play at all parts of the process and can have a dramatic effect on the other parts of the process. Chances are you will need to do at least some simple research to develop an idea to write about in the first place. You might do the bulk of your research as you write your rough draft, though you will almost certainly have to do more research based on the revisions that you decide to make to your project.

There are two other things to think about within this simplified version of the process of writing. First, the process of writing always takes place for some reason or purpose and within some context that potentially changes the way you do these steps. The process that you will go through in writing for this class will be different from the process you go through in responding to an essay question on a Sociology midterm or from sending an email to a friend. This is true in part because your purposes for writing these different kinds of texts are simply different.

Second, the process of writing isn't quite as linear and straight-forward as this list might suggest. Writers generally have to start by coming up with an idea, but writers often go back to their original idea and make changes to it after they write several drafts, do research, talk with others, and so on. The writing process might be more accurately represented like this:
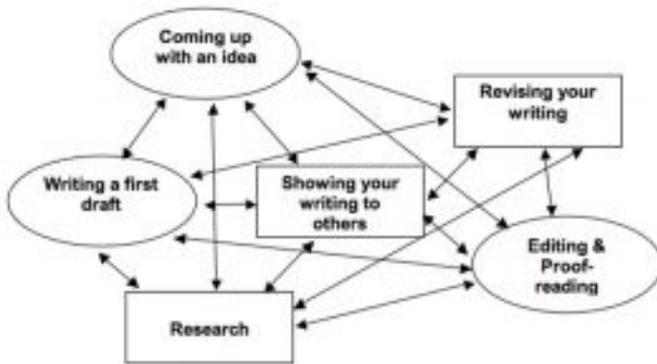
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Seem complicated? It is, or at least it can be.

So, instead of thinking of the writing process as an ordered list, you should think of it more as a "web" where different points can and do connect with each other in many different ways, and a process that changes according to the demands of each writing project. While you might write an essay where you follow the steps in the writing process in order (from coming up with an idea all the way to proofreading), writers also find themselves following the writing process out of order all the time. That's okay. The key thing to remember about the writing process is that it is a process made up of many different steps, and writers are rarely successful if they "just write."

But you should think of this textbook as being similar to a cookbook or an encyclopedia: you don't have to read or use this book in this particular order, and you and your teacher don't need to use all of this book in order to write successful research projects. On the other hand, like a cookbook or an encyclopedia, you should feel free to go back to passages you've read before. Remember: thinking through your research

process should be systematic, but it isn't necessarily a linear one.

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1.3 The Academic Marathon: The Idea of Research: End-of-Chapter Exercises

End-of-Chapter Exercises

1. After reading 1.1, what did you learn about the term "discipline" as it relates to the college experience? What is your desired discipline? Use a search engine (like Google or Bing), to learn more about that discipline. What type of data do scholars in that area depend on? What citation style? Is there somthing unquie abou the research in that discipline that you need to be aware of?

2. As discussed in 1.2, research happens on a day-to-day basis even if it is not in the form of a published paper. Think about your first week here at CSC. Did you research? Did you look up classes,

instructors, meal plans, etc.? When doing this did you choose classes that fit your work schedule? Did you choose based on friends or past students' reviews? All of these subtle and oftentimes overlooked thought processes are a form of unpublished, unscholarly research.

WARMING UP: THE INS AND OUTS OF SOURCES

Below is the credit for Chapter 2 "Warming Up: The Ins and Outs of Sources"

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2.1 Research Process: From Topic Choice to Finding Sources

[1]What is "rhetorical research"?

Rhetorical research is a thoughtful and strategic approach to seeking and evaluating information in order to solve problems, make decisions, and/or communicate effectively.

Academic or professional rhetorical research follows a strategic process. You may have some experience with research assignments from other coursework or from your job. However, research and information finding is a constantly evolving process due to the nature of how we find, evaluate, create, and share information in our mostly digital world. In this chapter, we will focus on how to develop a research strategy that you can apply to your academic, professional, and personal life.

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1. 2.1 (except where otherwise noted) was borrowed with minor edits and additions from Claim Your Voice in First Year Composition, Vol. 2 by Cynthia Kiefer and Serene Rock which is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License

Research as a Reiterative Process

As much as we would like research or information finding to be a "once and done" activity that always gives us an easy and straightforward answer, that just isn't how it works. More often than not, the first "answer" you find is not always the best one (I'm looking at you, first entry listed in my Google results). Finding quality information that is credible and represents diverse views takes time and multiple sources. Additionally, finding information related to your initial question or topic can lead to more questions which can lead to even more questions–and some dead ends — that require you to back up and redirect your research. This is a normal part of research and can actually help your understanding of an issue, question, or topic.

> "Research is iterative and depends upon asking increasingly complex or new questions whose answers in turn develop additional questions or lines of inquiry in any field."[2]

The more information you learn about what you are researching, the more you are able to engage with the topic. You'll learn what field-specific terminology is used to discuss

2. "Framework for Information Literacy for Higher Education." *American Library Association*, February 9, 2015. http://www.ala.org/acrl/standards/ilframework (Accessed June 11, 2022). Document ID: b910a6c4-6c8a-0d44-7dbc-a5dcbd509e3f

the topic; you will learn what some major debates or controversies surround the topic, etc. All of this information can help you ask the right questions and lead you to sources that are credible, authoritative, evidence-based, and reflect varying viewpoints.

Rhetorical Research Key Takeaways

- Research is a process.
- The search for information takes time because you are learning along the way.
- Your research question should and will evolve as you learn more about the topic.
- You want to actively seek out multiple sources and voices that will truly allow you to shape your understanding and opinion of the topic.
- Breathe through it and enjoy the learning.

The Research Process

There are many ways to approach the research process, and your particular strategy will vary depending on the specific research need you have. However, it is helpful to understand the common steps of the research process, so you can use them to guide you regardless of what it is you are searching for. For the purpose of this section, we will focus on research strategies that relate to academic assignments or projects,

although they can most certainly be applied to professional and personal research needs as well.

1. Start with a general question or topic of interest

Most of the time, our search for information stems from the need to answer a question, satisfy our curiosity, or solve a problem. Begin your research strategy with a general idea of what it is you want to know or find out without feeling too committed to the topic. It is important to keep an open mind and to be topic flexible during the early stages of research, especially concerning a subject that you don't know much about.

Need some topic ideas?

- Think about what is important to you. What issues affect your everyday life? What are you curious about? What issues do you feel strongly about?
- Browse articles from news sites online or from your social media feeds. Warning: those articles may not necessarily be appropriate sources of information for your actual research paper, but you can get an idea of what topics or issues are currently being discussed.
- Browse "Hot Topic" library databases for ideas about widely discussed and debated issues.

Remember! You are not settling on a position, argument, or opinion of a topic yet. The first step is only to find a starting point based on what you want to know more about.

2. Pre-Research or Background Research

Background research is a crucial step in the research process as it will help you gain direction for your research. The pre-research stage is all about discovery and information gathering.

How to do background research:

1. Read about your topic without worrying about exactly what your opinion is or what your argument will be. Instead, pay attention to issues that interest you.
2. Look at multiple sources to get information from varied sources.
3. Take note of important concepts, keywords, people, or events.
4. Notice what details are sticking in your mind and interest you the most; those are elements you will want to research further and may be important parts of your essay.

Hint: Using a database like the CQ Researcher will allow you to find background information over entire topics in a single, cohesive document. However, these are still only preliminary research sources and they could (probably will) lead you to more sources in which you will be able to look at what individual scholars are discussing as opposed to relying on a document that's purpose is to provide a broad overview of the topic.

Reference Sources for Background Research

Databases for Reference sources
CQ Researcher, Gale Virtual Reference Library, and Credo Reference

Often, the best types of sources for background information are reference sources. Reference sources such as encyclopedias and handbooks contain fact-based information to help you gain an overview of a topic. Reference articles will broaden your understanding of a topic or issue by:

- Providing context
- Highlighting important subtopics, common arguments or debates, and people
- Utilizing key terminology or jargon relevant to the discussion

Academic Reference Articles

You may be familiar with online encyclopedias such as World Book and Britannica, and these types of reference sources are similar to academic reference sources that you can find through a college library.

- Academic reference articles are usually structured, meaning they are separated into sections with labeled headings. Take a minute to review the linked report from the CQ Researcher over "The New Labor Market." You will notice that

3. This is not an exhaustive list of Reference source databases; however, these are two databases you have access to here at Connors State College that can help you find background information.

to the left of the page there is a Table of Contents, so to speak, that lists the individual topics within that report. These headings break up the large topic into smaller chunks that focus on the most important aspects of the more general topic.

· Academic reference articles usually will include a bibliography or further reading at the end of the article. This is a great resource for finding more in-depth information about a specific aspect of the topic.

Most of the reference sources you will find through the library are considered subject-specific. These sources provide in-depth background information on a specific subject area and its subtopics.

Many academic reference articles are written by or in conjunction with subject experts. This gives the work ethos.

Looking back at "The New Labor Market," you can find that the author of that specific report is [Holly Rosenkrantz.](#) According to her bio, she "is a Washington-based freelance journalist who writes about politics, business and health care. She is a former White House correspondent and labor and workplace reporter and has written for *The New York Times*, *The Washington Post*, *CBS News*, *Bloomberg News* and *Reuters*. Her most recent *CQ Researcher* report was on the Senate

As you learned in Composition 1, ethos (or credibility) is vital to effectively evaluate if a certain source can be trusted. Academic reference databases, for the most part, are full of sources that have authors of similar credentials which allow the sources you will find in these databases to be far more credible than those you may find on a more general, online source (such as the encyclopedias listed earlier).

3. From Background Research to Research Question

With a more robust understanding of your topic including subtopics and issues, you can use the background research to formulate a specific research question. Having a research question will give an outline to your search strategy as you focus in on finding sources that provide evidence and support to "answer" the question.[5]

4. About the author: Rosenkrantz, H. (2022, February 4). *CQ researcher*. http://library.cqpress.com/
5. See the "Hint" in section 2 to understand why the reference sources just found do not provide the type of evidence and support you will need for your research paper.

What makes a good research question?

1. Questions that are focused on a specific issue or subtopic related to your initial background research inquiry. Notice the difference between the general topic and the focused research question below.

> Starting general topic: Universal Basic Income
>
> **Focused research question**: What are the social effects of a universal basic income?

2. Open-ended questions. Start your question with Why or How. Notice the difference between the general question and the focused research question below.

> General question: Do college athletes get paid?
>
> **Focused research question:** Why should college athletes be paid?

3. Questions that focus on a solution to a problem. Notice the difference between the general question and the focused research question below.

General question: Do underserved community members vote?

Focused research question: How can we increase voter turnout within underserved communities?

Remember, your research question is NOT your thesis statement. You will use your research question to focus on finding information that will help you craft your thesis statement as well as information that can provide evidence or support for that thesis.

4. Key Concepts & Keywords

Equipped with a focused research question, you are almost ready to do a deep-dive into the literature and scholarly conversations to find evidence that will shape your thesis. Before you grab your scuba gear, you need to turn your research question into a database-friendly search statement. Library databases, unlike Google, do not understand when we search with a question or a long string of words. Databases give the best results when we search using specific keywords and phrases. These keywords, or search terms, come from the key concepts or main ideas of your research question.

The key concepts are the most important words or phrases of your research question. You will use these as the basis for developing a list of keywords which will then become your database search terms.

Identifying Key Concepts

In order to identify the best keywords to search with, start with the key concepts or the main idea from your research question. Take your research question and pick out the most important words or phrases that really capture the essence of your research question. Key concepts are usually nouns and may be a single word or a phrase.

Example

In this research question, what do you think are the key concepts or main ideas?

- How can we increase voter turnout within underserved communities?

In this question, the two key concepts are "voter turnout" and "underserved communities." Words like increase, benefits, causes, etc. are not considered key concepts. These words are very general and could be applied to many different topics. **Focusing on the key concepts when we search will naturally find information that talks about the importance of and the relationship between the two concepts,** so we don't need to include these words as a search term.

Key concepts can also be search terms (keywords), the words we put into the search box of the database. However, since the library databases will only show you results based on the **exact words** you type in the search box, it is helpful to

brainstorm several different search terms that will yield different search results.

In other words, if you only search using the terms "voter turnout" and "underserved communities," the database will only show articles that use those exact phrases. Most likely there are plenty more relevant articles that use different terminology to discuss those concepts. In order to see those articles in the list of results, you need to try multiple searches using different keywords.

5. Identifying & Brainstorming Keywords

We don't always know what keywords will give us the best results until we try them out in the database, but having a robust list of keywords will give you options when searching. Take some time to brainstorm before you begin searching, but also remember that you can and should add to your keywords as you find articles and learn more about the language used in the discourse around the topic. Focus on your key concepts and your background research to get started brainstorming keywords.

Consider the following when brainstorming keywords:

- Use single words or exact phrases. For example: "voter turnout" is an exact phrase.
- Think about keywords from your background research and keywords that people who write about this topic would use.

- Synonyms, as well as related terms, make great keywords.
- Keyword selection is sometimes trial and error. You may not know what keywords will get the best results until you try.
- As you research and learn more about the topic, make sure you continue to add to the keyword list.

This table provides examples of alternative terms for each key concept.

Key Concept 1: "voter turnout"	Key C
"voter suppression"	"low-i
"voter registration"	"unde
election	"Afric
"polling location"	"com
redistricting	"black
"voter identification"	"unde

Notice that "voter suppression" and "voter registration" represent different aspects of the same topic. Using these different terms will pull up different articles in a database search.

Also, notice that the phrase "underserved

> communities" could apply to many different
> populations or groups.

Keywords are incredibly important to your search strategy, but we have one more step to go before we are ready for the databases.

6. Creating Search Statements

You may already have figured out that one of your keywords on its own is not enough to get you the results you need. For example, if I only search with the phrase "underserved communities," I'll likely get a large number of results but those results will be about many different topics most of which will be unrelated to voting. This is because the database is showing me every article and resource that includes the phrase "underserved communities." The fix? I need to make sure that my search includes all the relevant concepts. Joining together keywords is called a Search Statement.

The Power of AND

For a database, the word AND functions differently than it does for writing. AND is a command to the database and directs the database to include only results that have all the words or phrases connected with AND. Thus, using AND narrows the search to more relevant results.

- "voter turnout" AND "African Americans"
- "voter suppression" AND "African Americans"
- "voter registration" AND "underserved communities"

Also, quotation marks around two or more words directs the database to find those words as a phrase in the results, rather than as separate words.

It's good to mix and match and try different combinations of keywords. However, not all of your keywords may mix well together. Think about what information it is that you want to find. Read the search statement. Does it make sense for what you are looking for?

7. Database Searching

Up to now, we've been focused on developing a research strategy primarily for an academic purpose, but it is important to remember that all of these strategies can be applied to other research needs as well as other resources of information (i.e. Google searching). Since we are focused on library databases, it may be helpful to note the differences between databases and Google.

Google

Mostly free access to information, but many sites do require a subscription, fees, or paywalls.

Most sites go unchecked/unverified (i.e. personal webpages, blogs, forums, social media, private organization/company sites) **It is up to you to evaluate this information.**

Most information is unorganized and relies upon Google rankings and algorithms to give results.

Provides some, but not very precise, search features and search options to refine results.

Library Databases

Free access for CSC students. Access is paid through tuition and other fees.

The majority of information comes from reputable sources and publishers, however, not all information is without bias or represents all viewpoints. **It is still up to you to evaluate this information.**

Information is organized by subject and indexed using subject terms and other metadata.

Provides many search features and filters to refine results. These options do vary by database.

The CSC Library provides access to general [databases](#) that include information on many different subjects and topics. The library also has access to subject-specific [databases](#) which include information on a specific topical area such as nursing, psychology, history, or criminal justice. You can search each of these databases individually or you can use the [Primo](#). Primo is a discovery tool which means that it pulls information from many of the library's different resources and puts it into one list of results[6].

8. Expanding Keyword List and Refining Topic Focus

Your database search results should give you a much more in-depth understanding of your research topic, and you can begin to establish your own thoughts and opinions based on what you learned so far. This process with help you begin developing your thesis statement. For example, through researching "How can we increase voter turnout within underserved communities?" using our Keywords and Search Statements, we would have learned that one way to increase voter turnout is through ride-sharing to polling locations. If we wanted this to be part of our thesis, we should include these new keywords in our subsequent searches. This would help us find information that discusses specifically this aspect of our general topic.

6. This means that the number of sources pulled from Primo will be much longer than when using a subject-specific database, which means, oftentimes, you have to more digging when using this database.

- "ride share" AND "voter turnout" AND[7] "underserved communities"
- transportation AND "voter turnout" AND "underserved communities"

Note: If you find that your results include information about other countries, you can add the phrase "United States" to your search statement. However, do not discount international sources or information. They could provide insight and valuable ideas.

Next Steps: Continue searching the databases, reading articles, refining keywords and search statements as needed, and keeping track of your research.

Research Tip: Use the "Ask a librarian" chat service for research assistance from a real-live librarian during their hours of operation (which you can find

7. Many databases automatically dd the word AND between any keyword or keyword phrases if it is not included in the search already.

in your course syllabus). You can also text our CSC Library staff using the number 918-215-8TXT (8898). Outside of those hours, any questions can be sent via email!

BONUS MATERIAL!

Watch [this library research tutorial video](#) created by Ms. Ona Britton-Spears the CSC Director of Library Services to see these tips and tricks used in real-time and with the CSC databases.

2.2 Categorizing Sources

Understanding types of sources helps guide your search.

[1]Once you have your research question, you'll need information

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1. 2.2 (except where otherwise noted) was borrowed with minor edits and additions from *Choosing & Using Sources: A Guide to Academic Research, 1st Canadian Edition* by Lindsey MacCallum and Teaching & Learning Ohio State University Libraries which is licensed under a Creative Commons Attribution 4.0 International License

sources to answer it and meet the other information needs of your research project.

This section about categorizing sources will increase your sophistication about them and save you time in the long run because you'll understand the "big picture." That big picture will be useful as you plan your own sources for a specific research project.

Typically, you will have many sources[2] available to meet the information needs of your projects. In today's complex information landscape, just about anything that contains information can be considered a potential source.

Here is a more detailed list of potential source types

- Books and encyclopedias
- Websites, web pages, and blogs
- Magazine, journal, and newspaper articles
- Research reports and conference papers
- Field notes and diaries
- Photographs, paintings, cartoons, and other art works
- TV and radio programs, podcasts, movies, and videos

2. In some cases, you will have more options than you are physically able to read in a span of a semester.

- Illuminated manuscripts and artifacts
- Bones, minerals, and fossils
- Preserved tissues and organs
- Architectural plans and maps
- Pamphlets and government documents
- Music scores and recorded performances
- Dance notation and theater set models

With so many sources available, the question usually is not whether sources exist for your project, but rather which ones will best meet your information needs.

Being able to categorize a source helps you understand the kind of information it contains, which is a big clue to (1) whether it might meet one or more of your information needs and (2) where to look for it and similar sources.

A source can be categorized by:

- Whether it contains quantitative or qualitative information or both
- Whether the source is objective (factual) or persuasive (opinion) and may be biased
- Whether the source is a scholarly, professional, or popular publication
- Whether the material is a primary, secondary, or

tertiary source
- What format the source is in

As you may already be able to tell, sources can be in more than one category at the same time because the categories are not mutually exclusive.

Quantitative or Qualitative

One of the most obvious ways to categorize information is by whether it is quantitative or qualitative. Some sources contain either quantitative information or qualitative information, but sources often contain both.

Information can be quantitative or qualitative.

Many people first think of information as something like what's in a table or spreadsheet of numbers and words. But information can be conveyed in more ways than just textually or numerically.

Quantitative Information – Involves a measurable quantity—numbers are used. Some examples are length, mass, temperature, and time. Quantitative information is often called data, but can also be things other than numbers.

Qualitative Information – Involves a descriptive judgment using concept words instead of numbers. Gender, country name, animal species, and emotional state are examples of qualitative information.

Take a quick look at the example table below. Another way we could display the table's numerical information is in a graphic format —listing the students' ages or GPAs on a bar chart, for example, rather than in a list of numbers. Or, all the information in the table could be displayed instead as a video of each student giving those details about themselves.

Example: Data Table with Quantitative and Qualitative Data

Last Name	First Name	Age	Rank	Major	Gender	Current GPA
Adams	Grace	19	Sophomore	English	Female	3.78
Bloomfield	Erika	21	Junior	Physics	Female	3.89
Chow	Kimmie	20	Senior	Political Science	Female	3.77
Crutchfield	Seth	23	Senior	Psychology	Male	3.58
Fitch	Fredrick	18	Freshman	Art	Male	4.0
Grover	Oscar	26	Junior	Biology	Male	3.32

Increasingly, other formats (such as images, sound, and video) may be used as information or used to convey information.

- A video of someone watching scenes from horror movies, with information about their heart rate and blood pressure embedded in the video. Instead of getting a description of the person's reactions to the scenes, you can see their reactions.
- A database of information about birds, which includes a sound file for each bird singing. Would you prefer a verbal description of a bird's song or an audio clip?
- A list of colours, which include an image of the actual colour. Such a list is extremely helpful, especially when there are A LOT of colour names.
- A friend orally tells you that a new pizza place is 3 blocks away, charges $2 a slice, and that the pizza is delicious. This may never be recorded, but it may be very valuable information if you're hungry!
- A map of Canada with provinces shaded different intensities of red according to the median household income of inhabitants.

Activities: Quantitative, Qualitative, and Data

- **Activity:** Quantitative vs. Qualitative[3]

  ◦ What quantitative and qualitative data components might you use to describe yourself?

- **Activity:** Multiple Data Displays[4]

  ◦ Take a look at the [Wikipedia article about UN Secretaries-General](). Scroll down and view the table of people who served as Secretary-General. In what ways is information conveyed in ways other than text or numbers?

See footnotes for possible answers

3. Quantitative: age, weight, GPA, income Qualitative: race, gender, class (freshman, sophomore, etc.), major. Are there others?
4. A photo of each secretary-general, The flag of their country of origin, and A world map with their country of origin shaded. Are there others?

Fact or Opinion

Thinking about the reason an author produced a source can be helpful to you because that reason was what dictated the kind of information they chose to include. Depending on that purpose, the author may have chosen to include factual, analytical, and objective information. Or, instead, it may have suited

An author's purpose can influence the kind of information they chose to include.

their purpose to include information that was subjective and, therefore, less factual and analytical. The author's reason for producing the source also determined whether they included more than one perspective or just their own.

Authors typically want to do at least one of the following:

- Inform and educate;
- Persuade;
- Sell services or products or;
- Entertain.

Combined Purposes

Sometimes authors have a combination of purposes, as when a marketer decides she can sell more smartphones with an informative sales video that also entertains us. The same is true when a singer writes and performs a song that entertains us but that she intends to make available for sale. Academic authors also produce work with multiple purposes.

In those cases, authors certainly want to inform and educate their audiences. But they also want to persuade their audiences that what they are reporting and/or postulating is a true description of a situation, event, or phenomenon, or a valid argument. In this blend of scholarly authors' purposes, the intent to educate and inform is considered to trump the intent to persuade.

Why Intent Matters

Authors' intent usually matters in how useful their information can be to your research project, depending on which information need you are trying to meet. For instance, when you're looking for sources that will help you actually decide your answer to your research question or evidence for your answer that you will share with your audience, you will want the author's main purpose to have been to inform or educate his/her audience. That's because, with that intent, they are likely to have used:

- Facts where possible.
- Multiple perspectives instead of just their own.
- Little subjective information.
- Seemingly unbiased, objective language that cites where they got the information.

The reason you want that kind of resource when trying to answer your research question or explaining that answer is because all of those characteristics will lend credibility to the argument you are making with your project. Both you and your audience will simply find it easier to believe—will have more confidence in the argument being made—when you include those types of sources.

Sources whose authors intend only to persuade others won't

meet your information need for an answer to your research question or evidence with which to convince your audience. That's because they don't always confine themselves to facts. Instead, they tell us their opinions without backing them up with evidence. If you used those sources, your readers will notice and not believe your argument.[5]

Difference Between Fact, Opinion, Objective, and Subjective Information

Fact – Facts are useful to inform or make an argument.

Examples:

- The country of Canada was established in 1867.
- The pH levels in acids are lower than pH levels in alkalines.
- Beethoven was a composer and pianist.

Opinion – Opinions are useful to persuade, but careful readers and listeners will notice and demand evidence to back them up.

Examples:

5. This is especially true if your audience is composed of those who are a part of academia or the subject field you are positing your argument within.

- That was a good movie.
- Strawberries taste better blueberries.
- Beethoven's reputation as a virtuoso pianist is overrated.

Objective – Objective information reflects a research finding or multiple perspectives that are not biased.

Examples:

- "Several studies show that an active lifestyle reduces the risk of heart disease and diabetes."
- "Studies from the Brown University Medical School show that twenty-somethings eat 25 percent more fast-food meals at this age than they did as teenagers."

Subjective – Subjective information presents one person or organization's perspective or interpretation. Subjective information can be meant to distort, or it can reflect educated and informed thinking. All opinions are subjective, but some are backed up with facts more than others.

Examples:

- "The simple truth is this: as human beings, we were meant to move."
- "In their thirties, women should stock up on calcium to ensure strong, dense bones and to ward off osteoporosis later in life."*

*In this quote, it's mostly the "should" that makes it subjective. The objective version of the last quote would read: "Studies have shown that women who

begin taking calcium in their 30s show stronger bone density and fewer repercussions of osteoporosis than women who did not take calcium at all." But perhaps there are other data showing complications from taking calcium. That's why drawing the conclusion that requires a "should" makes the statement subjective.

Primary, Secondary, and Tertiary Sources

Another information category is called publication mode and has to do with whether the information is:

Another way to categorize information is by whether information is in its original format or has been reinterpreted.

- Firsthand information: information in its original form, not translated or published in another form.
- Secondhand information: a restatement, analysis, or interpretation of original information.
- Third-hand information: a summary or repackaging of original information, often based on secondary information that has been published.

The three labels for information sources in this category are, respectively, primary sources, secondary sources, and tertiary sources. Here are examples to illustrate the first- handedness, second-handedness, and third-handedness of information:

Primary Source (Original, Firsthand Information)	J.D. Salinger's novel *Catcher in the Rye.*
Secondary Source (Secondhand Information)	A book review of *Catcher in the Rye.* Even if the review about the book, he or she is still just reviewing the orig
Tertiary Source (Third-hand Information)	Wikipedia page about J.D. Salinger.

When you make distinctions between primary, secondary, and tertiary sources, you are relating the information itself to the context in which it was created. Understanding that relationship is an important skill that you'll need in college, as well as in the workplace. Noting the relationship between creation and context helps us understand the "big picture" in which information operates and helps us figure out which information we can depend on. That's a big part of thinking critically.

Primary Sources – Because it is in its original form, the information in primary sources has reached us from its creators without going through any filter. We get it firsthand.

Examples

- Any literary work, including novels, plays, and poems.
- Breaking news.
- Diaries.
- Advertisements.
- Music and dance performances.
- Eyewitness accounts, including photographs and recorded interviews.
- Artworks.
- Data.
- Blog entries that are autobiographical.
- Scholarly blogs that provide data or are highly theoretical, even though they contain no autobiography.
- Artifacts such as tools, clothing, or other objects.
- Original documents such as tax returns, marriage licenses, and transcripts of trials.
- Websites, although many are secondary.
- Buildings.
- Correspondence, including email.
- Records of organizations and government agencies.
- Journal articles that report research for the first time (at least the sections of articles about the new research, plus their data).

Secondary Source – These sources are translated, repackaged, restated, analyzed, or interpreted original information that is a primary source. Thus, the information comes to us secondhand, or through at least one filter.

Examples

- All nonfiction books and magazine articles except autobiography.
- An article or website that critiques a novel, play, painting, or piece of music.
- An article or web site that synthesizes expert opinion and several eyewitness accounts for a new understanding of an event.
- The literature review portion of a journal article.

Tertiary Source – These sources *further* repackage the original information because they index, condense, or summarize the original.

Typically by the time tertiary sources are developed, there have been many secondary sources prepared on their subjects, and you can think of tertiary sources as information that comes to us "third-hand." Tertiary sources are usually publications that you are not intended to read from cover to cover but to dip in and out of for the information you need. You can think of them as a good place for background information to start your research but a bad place to end up.

- Almanacs.
- Dictionaries.
- Guide books.
- Survey articles.
- Timelines.
- Bibliographies.
- Encyclopedias, including Wikipedia.
- Most textbooks.

Tertiary sources are usually not acceptable as cited sources in college research projects, as highlighted in 2.1, because they are so far from firsthand information. That's why most professors don't want you to use Wikipedia as a citable source: the information in Wikipedia is far from original information. Other people have considered it, decided what they think about it, rearranged it, and summarized it–all of which is actually what your professors want *you*, not another author, to do with information in your research projects.

Activity: Which Kind of Source?

Instructions: Assume that each of the sources below

is relevant to research being done by a university student. Examine their titles and other information carefully to judge whether each is a primary, secondary, or tertiary source.[6]

1. A field guide to snowy owls
2. 29/2/2016 *New York Times* article headline "Otto Warmbier, Detained U.S. Student, Apologizes in North Korea"
3. Stern's *Introductory Plant Biology* (a textbook)
4. *Oxford Dictionary of Engineering*
5. "Health Functionality of Organo-sulfides: A Review" (a journal article)
6. "Adolescent Cooking Abilites and Behaviors: Associations With Nutrition and Emotional Well-Being" (a journal article announcing new research findings)
7. Wikipedia articles

See footnote for answers

The Details Are Tricky— A few things about primary or secondary sources might surprise you:

- Sources *become* primary rather than always exiting as primary sources.

It's easy to think that it is the *format* of primary sources that makes them primary. But that's not all that matters. So when

6. 1. tertiary; 2. primary; 3. tertiary; 4. tertiary; 5. secondary; 6. primary; 7. tertiary

you see lists like the one above of sources that are often used as primary sources, it's wise to remember that the ones listed are not *automatically already* primary sources. Firsthand sources get that designation only when researchers actually find their information relevant and use it.

Example

A diary about his flying missions kept by a Canadian pilot in World War II is a primary source when a researcher uses it in her study of how the war was carried out. But it will never be a primary source for a researcher studying the Canadian public's reaction to the war because it does not contain information relevant to that study.

- Primary sources, even eyewitness accounts, are not necessarily accurate. Their accuracy has to be evaluated, just like that of all sources.
- Something that is usually considered a secondary source can be considered a primary source, depending on the research project.

Example

For instance, movie reviews are usually considered secondary sources. But if your research project is about the effect movie reviews have on ticket sales, the movie reviews you study would become primary sources.

- Deciding whether to consider a journal article a primary or a secondary source can be complicated for at least two reasons.

First, journal articles that report new research for the first time are usually based on data. So some disciplines consider the *data* to be the primary source, and the journal article that describes and analyzes them is considered a secondary source.

However, particularly in the sciences, the original researcher might find it difficult or impossible (he or she might not be allowed) to share the data. So sometimes you have nothing more firsthand than the journal article, which argues for calling it the relevant primary source because it's the closest thing that exists to the data.

Second, even journal articles that announce new research for the first time usually contain more than data. They also typically contain secondary source elements, such as a literature review, bibliography, and sections on data analysis and interpretation. So they can actually be a *mix* of primary and secondary elements. Even so, in some disciplines, a journal article that announces new research findings for the first time

is considered to be, as a whole, a primary source for the researchers using it.

Activity: Under What Circumstances?

Instructions: Look at each of the sources listed below and think of circumstances under which each could become a primary source. (There are probably many potential circumstances for each.) So, just imagine you are a researcher with projects that would make each item firsthand information that is relevant to your work. What could a project be about that would make each source relevant firsthand information?[7]

a.   A marriage license.
b.   Poet W.H. Auden's elegy for Y.S. Yeats.
c.   An arrowhead made by (Floriday) Seminole Native Americans but found at Flint Ridge outside Columbus, Ohio.
d.   E-mail between the Canadian ambassador to the United States, Kirsten Hillman, and her staff

7. a. You are writing about the life of a person who claimed to have married several times, and you need more than just her statements about when those marriages took place and to whom; b. Your research project is about the Auden-Yeats relationship; c. Your research project is about trade among 19th-century Indigenous peoples east of the Mississippi River. d. Your research project is on how Ambassador Hillman conveyed a decision about NAFTA negotiations to her staff.

about the North American Free Trade
Agreement (NAFTA).

See footnote for possible answers

Despite their trickiness, what primary sources usually offer is too good not to consider using because:

- They are original. This unfiltered, firsthand information is not available anywhere else.
- Their creator was a type of person unlike others in your research project, and you want to include that perspective.
- Their creator was present at an event and shares an eyewitness account.
- They are objects that existed at the particular time your project is studying.

Particularly in humanities courses, your professor may require you to use a certain number of primary sources for your project. In other courses, particularly in the sciences, you may be required to use *only* primary sources.

Tip: What are considered primary and secondary sources can vary from discipline to discipline. If you are required to use primary sources for your research project, before getting too deep into your project check with your professor to make sure he or she agrees with your choices. After all, it's your professor who is a part of the field you are trying to create an argument in (also, it's your professor who

will be grading your project). A librarian can also verify your choices. Just remember to take a copy of your assignment with you when you ask because the librarian will want to see the original assignment (After all, that's a primary source!)

Popular, Professional, and Scholarly

We can also categorize information by the expertise of its intended audience. Considering the intended audience—how much of an expert one has to be to understand the information—can indicate whether the source has sufficient credibility and thoroughness to meet your need.

There are varying degrees of expertise:

Popular – Popular newspaper and magazine articles (such as articles from *The New York Times*, *Time*, and *The Washington Post*) are meant for a large general audience, are generally affordable, and are easy to purchase or available for free. They are written by staff writers or reporters for the general public.

Additionally, they are:

- About news, opinions, background information,

and entertainment.
- More attractive than scholarly journals, with catchy titles, attractive artwork, and many advertisements but no footnotes or references.
- Published by commercial publishers.
- Published after approval from an editor.
- For information on using news articles as sources (from newspapers in print and online, broadcast news outlets, news aggregators, news databases, news feeds, social media, blogs, and citizen journalism).

See for more details.

Professional – Professional magazine articles (such as *Plastic Surgical Nursing* and *Music Teacher)* are meant for people in a particular profession and are often accessible through a professional organization. Staff writers or other professionals in the targeted field write these articles at a level and with the language to be understood by everyone in the profession.

Additionally, they are:

- About trends and news from the targeted field, book reviews, and case studies.
- Often less than 10 pages, some of which may contain footnotes and references.
- Usually published by professional associations and commercial publishers.
- Published after approval from an editor.

Scholarly – Scholarly journal articles (such as *Plant Science* and *Education and Child Psychology)* are meant for scholars, students, and the general public who want a deep understanding of a problem or issue. Researchers and scholars write these articles to present new knowledge and further understanding of their field of study.

Additionally, they are:

- Where findings of research projects, data and analytics, and case studies usually appear first.
- Often long (usually over 10 pages) and always include footnotes and references.
- Usually published by universities, professional associations, and commercial publishers.
- Published after approval by peer review or from the journal's editor.

See 2.3 "Understanding Sources" for more detail.

Sometimes it is difficult to understand or conceptualize how sources can vary simply depending on what audience they were written for. The following links will connect you with supplemental tools, guides, and explanations that hopefully will help fill in any gaps regarding popular vs. scholarly sources.

1. Peer Reviewed vs. Popular Press
2. General Databases: Peer Reviewed or Popular?

Media Attributions

- Lindsey MacCallum and Teaching & Learning Ohio State

University Libraries
- Ibid.
- Ibid.
- Ibid.
- Ibid.
- Ibid.

2.3 Understanding Sources
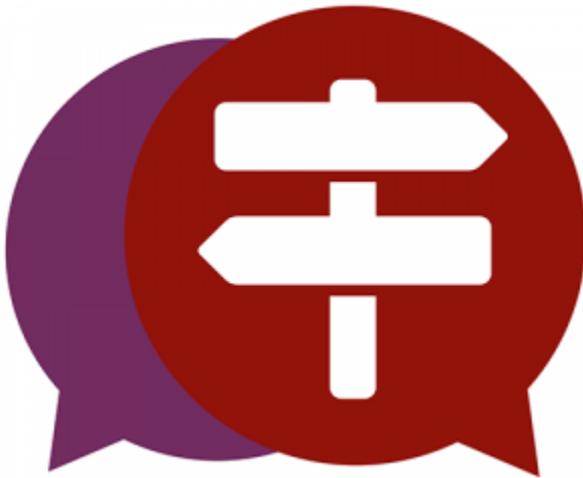
Understanding types of sources helps you use your sources

[1]Scholarly Articles as Sources

Articles in scholarly journals are valued for several reasons. First, they are usually trustworthy because their publication

1. 2.3 (except where otherwise noted) was borrowed with minor edits and additions from *Choosing & Using Sources: A Guide to Academic Research, 1st Canadian Edition* by Lindsey MacCallum and Teaching & Learning Ohio State University Libraries which is licensed under a Creative Commons Attribution 4.0 International License

process includes a peer review that helps ensure their accuracy and contribution to their disciplines. In addition, they often contain the first reports of new research, which makes their sections on methodology, data, analysis, and interpretation primary sources. Sometimes they instead consist of literature reviews which are summaries of multiple research studies done in the past on particular subjects of current interest. That makes those articles very helpful secondary sources.

Peer-Reviewed Sources

The most-respected scholarly journals are peer-reviewed, which means that experts in their field other than the author and editor check out each article before it can be published. It's their responsibility to help guarantee that new material is presented in the context of what is already known, that the methods the researcher used are the right ones, and that the article contributes to the field.

For those reasons, peer-reviewed articles are more likely to be credible. Peer-reviewed journal articles are the official scholarly record, which means that if it's an important development in research, it will probably turn up in a journal article eventually.

Parts of a Scholarly Article

The articles you use for your assignments must also be **relevant** to your research question—not just credible. Reading specific parts of an article can help save you time as you decide whether an article is relevant.

Reading a scholarly article usually takes some effort. According to Dr. Jennifer Raff, here is how you should do it.[2]

Reading a scientific paper is a completely different process from reading an article about science in a blog or newspaper. Not only do you read the sections in a different order than they're presented, but you also have to take notes, read it multiple times, and probably go look up other papers in order to understand some of the details. Reading a single paper may take you a very long time at first, but be patient with yourself. The process will go much faster as you gain experience.

The type of scientific paper I'm discussing here is referred to as a primary research article. It's a peer-reviewed report of new research on a specific question (or questions). Most articles will be divided into the following sections: abstract, introduction, methods, results, and conclusions/interpretations/discussion.

Before you begin reading, take note of the authors and their institutional affiliations. Some institutions (e.g. University of Texas) are well-respected; others

2. Raff, J. (2013, Aug. 13). *How to read and understand a scientific paper: A guide for non-scientists*. Violent metaphors: Thoughts from the intersection of science, pseudoscience, and conflict. Received June 11, 2022, from https://violentmetaphors.com/2013/08/25/how-to-read-and-understand-a-scientific-paper-2/

(e.g. the Discovery Institute) may appear to be legitimate research institutions but are actually agenda-driven. *Tip: google "Discovery Institute" to see why you don't want to use it as a scientific authority on evolutionary theory.*

Also take note of the journal in which it's published. Be cautious of articles from questionable journals , or sites that might resemble peer-reviewed scientific journals but aren't (e.g. Natural News).

Step-by-Step Instructions for Reading a Primary Research Article

1. **Begin by reading the introduction, not the abstract.**

The abstract is that dense first paragraph at the very beginning of a paper. In fact, that's often the only part of a paper that many non-scientists read when they're trying to build a scientific argument. (This is a terrible practice. Don't do it.) I always read the abstract last, because it contains a succinct summary of the entire paper, and I'm concerned about inadvertently becoming biased by the authors' interpretation of the results.

2. **Identify the *big* question.**

Not "What is this paper about?" but "What problem is this entire field trying to solve?" This helps you focus on why this research is being done. Look closely for evidence of agenda-motivated research.

3. *Summarize the background in five sentences or less.*

What work has been done before in this field to answer the big question? What are the limitations of that work? What, according to the authors, needs to be done next? You need to be able to succinctly explain why this research has been done in order to understand it.

4. **Identify the *specific* question(s).**

What exactly are the authors trying to answer with their research? There may be multiple questions, or just one. Write them down. If it's the kind of research that tests one or more null hypotheses , identify it/them.

5. **Identify the approach.**

What are the authors going to do to answer the specific question(s)?

6. **Read the methods section.**

Draw a diagram for each experiment, showing exactly what the authors did. Include as much detail as you need to fully understand the work.

7. **Read the results section.**

Write one or more paragraphs to summarize the results for each experiment, each figure, and each table. Don't yet try to decide what the results mean; just write down what they are. You'll often find that results are summarized in the figures and tables. Pay careful attention to them! You may also need to

go to supplementary online information files to find some of the results. Also pay attention to:

- The words "significant" and "non-significant." These have precise statistical meanings.
- Graphs. Do they have error bars on them? For certain types of studies, a lack of confidence intervals is a major red flag.
- The sample size. Has the study been conducted on 10 people, or 10,000 people? For some research purposes a sample size of 10 is sufficient, but for most studies larger is better.

8. **Determine whether the results answer the specific question(s).**

What do you think they mean? Don't move on until you have thought about this. It's OK to change your mind in light of the authors' interpretation — in fact, you probably will if you're still a beginner at this kind of analysis — but it's a really good habit to start forming your own interpretations before you read those of others.

9. **Read the conclusion/discussion/interpretation section.**

What do the authors think the results mean? Do you agree with them? Can you come up with any alternative way of interpreting them? Do the authors identify any weaknesses in their own study? Do you see any that the authors missed? (Don't

assume they're infallible!) What do they propose to do as a next step? Do you agree with that?

10. **Go back to the beginning and read the abstract.**

Does it match what the authors said in the paper? Does it fit with your interpretation of the paper?

11. **Find out what other researchers say about the paper.**

Who are the (acknowledged or self-proclaimed) experts in this particular field? Do they have criticisms of the study that you haven't thought of, or do they generally support it? Don't neglect to do this! Here's a place where I do recommend you use Google! But do it last, so you are better prepared to think critically about what other people say.

Finding Scholarly Articles

Most scholarly articles are housed in specialized databases. Libraries (public, school, or company) often provide access to scholarly databases by paying a subscription fee for patrons. For instance, CSC Libraries provide access to many databases via its Research Databases List which is available for free to people affiliated with the college. You can search for a journal title in these databases or view a list of databases by subject. For more information, including how to search databases, see section 2.1 and the CSC Library Tutorial page.

News as a Source

News sources can provide insights that scholarly sources may not or that will take a long time to get into scholarly sources. For instance, news sources are excellent for finding out people's reactions, opinions, and prevailing attitudes around the time of an event.

So whether news sources are good for your assignment depends on what your research question is.

News is a strange term because even when the information is old, it's still news. Some sources are great for breaking news, some are great for aggregated (or compiled) news, and others are great for historical news.

While news was transmitted for centuries only in newspapers, news is now transmitted in all formats: via radio, television, and the Internet, in addition to print. Even most newspapers have Internet sites today.

News must be brief because much of it gets reported only moments after an event happens. News reports occur early in the Information Lifecycle.

When Are News Sources Helpful?

- You need breaking news or historical perspectives on a topic (what people were saying at the time).
- You need to learn more about a culture, place, or time period from its own sources.
- You want to keep up with what is going in the world today.

When Are News Sources of Limited Use?

- You need very detailed analysis by experts.
- You need sources that must be scholarly or modern views on a historical topic.

Mainline and Non-Mainline News Sources

Mainline American news outlets stick with the tradition of trying to report the news as objectively as possible. That doesn't mean their reports are perfectly objective, but they are more objective than the non-mainline sources. As a result, mainline news sources are more credible than non-mainline sources.

Some examples of mainline American news outlets

- *The New York Times*
- *The Washington Post*
- *The Boston Globe*
- *The Chicago Tribune,*
- *The Los Angeles Times*
- *ABC News*
- *CBS News*
- *NBC News*

News from non-mainline American news outlets is often mixed with opinions. One way they frequently exhibit bias is that they leave out pertinent facts.

**Some examples of non-mainline American news outlets**

- _MSNBC_
- _Fox News_
- _Gawker_
- _Reddit._

Types of News Sources

Press Services—News outlets (print, broadcast, and online) get a lot of their news from these services, such as Reuters or Associated Press (AP), which make it unnecessary for individual outlets to send their own reporters everywhere. Services are so broadly used that you may have to look at several news outlets to get a different take on an event or situation.

   News aggregators—Aggregators don't have reporters of

their own but simply collect and transmit the news reported by others. Some sources pull news from a variety of places and provide a single place to search for and view multiple stories. You can browse stories or search for a topic. Aggregators tend to have current, but not archival news. *Google News* and *Yahoo News* are examples.

Newspaper sites – Many print newspapers also have their own websites. They vary as to how much news they provide for free.
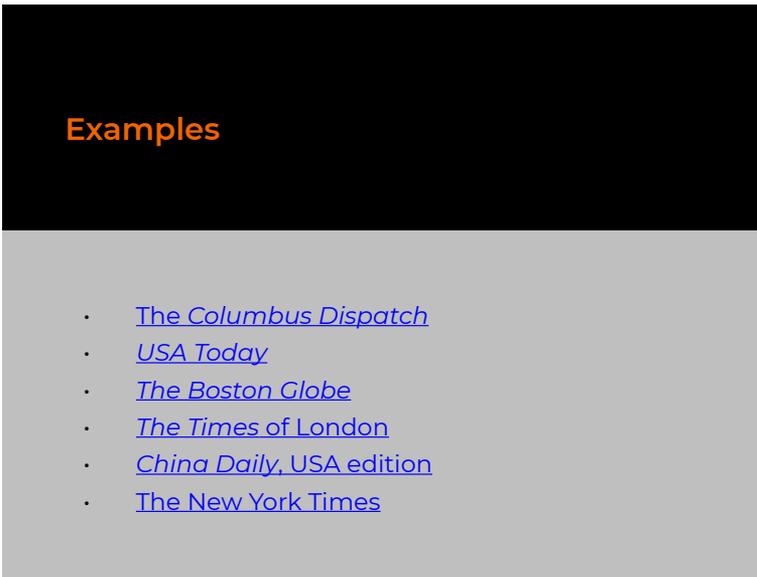
Examples

- The *Columbus Dispatch*
- *USA Today*
- *The Boston Globe*
- *The Times* of London
- *China Daily,* USA edition
- The New York Times

News Databases – Search current, recent, and historical newspaper content in databases provided free by libraries. CSC Libraries offers several news databases to students, staff, and faculty. They include:

- Newsbank: America's News: Provides access to information on people, issues, and events in the local area and around the country. From EBSCOhost.
- Newspaper Source Plus: Provides full-text national & international newspaper coverage from more than 860 newspapers, providing more than 35 million full-text articles. Features more than 857,000 television and radio news transcripts. From EBSCOhost.
- Newswires: Provides near real-time access to top world-wide news from Associated Press, United Press International, PR Newswire, Xinhua, CNN Wire, and Business Wire on a continuous basis while monitored by EBSCO, and relevant results are provided when users enter searches in EBSCOhost. Includes AP Financial News, AP Top News, AP WorldStream, AP U.S. Politics & Government, AP 50 State Reports, UPI Security Industry, UPI Emerging Threats, UPI Business, UPI Entertainment, UPI Sports, UPI Top News, Arabia 2000, and more. End users can immediately access the full-text of the web content, by following the link in the record. The index to the full-text content in EBSCO Newswires is held for a rolling 30-day archive by EBSCO, so users can enjoy the previous 30 days of news relating to their search interests. From EBSCOhost

Broadcast News Sites – Although broadcast news (from radio and television) is generally consumed in real time, such organizations also offer archives of news stories on their websites. However, not all of their articles are provided by their own reporters: some originate from the press services, Reuters, and AP.

Examples

- ABC News
- BBC
- CNN
- NPR News

Activity: One-Minute World News from the BBC

Visit BBC's Video area and watch their One-minute World News to get a quick update on the world's major news stories.

Social Media – Most of the news outlets listed above contribute to Twitter and Facebook. It's customary for highly condensed announcements in this venue to lead you back to the news outlet's website for more information. However, how credible

tech companies such as Facebook, Twitter, and Google are with news is in serious doubt due to recent issues with how secure the platforms are and their ability to detect and prevent false news from being created and/or spreading.

Blogs – Sometimes these are good sources for breaking news, as well as commentary on current events and scholarship. Authors who write more objectively elsewhere can share more insights and opinions, more initial questions and findings about a study before they are ready to release definitive data and conclusions about their research.

Citizen Journalism – A growing number of sites cater to those members of the general public who want to report breaking news and submit their own photos and videos on a wide range of topics. The people who do this are often referred to as citizen journalists.

> Examples of such sources include CNN iReport, and reddit. For more details on the history and development of citizen journalism, including addressing some of the pros and cons, read Your Guide to Citizen Journalism.

Data as Sources

Using data as sources can help with all of your research project's information needs:

- Learn more background information.
- Answer your research question. (The evidence that it provides can help you decide on the best answer for your question.)
- Convince your audience that your answer is correct. (it

often gives you evidence that your answer is correct.)
- Describe the situation surrounding your research question.
- Report what others have said about your research question.

Activity: Example of Data

Check out this very detailed data about frozen lasagna. Did you ever think this much data was available? Are there elements new to you? How might you use such data?

What is data?

The word means many things to many people. (Consider "data" as it relates to your phone contract, for instance)

For our purposes, a definition we like is "units of

information observed, collected, or created in the course of research."[3]

Data observed, collected, or created for research purposes can be [numbers], [text], [images], [audio clips], and [video clips]. But in this section on using data as sources, we're going to concentrate on *numerical* data.

TIP: From the Latin
Data is the plural of datum. (It's similar to how media is the plural of medium.)

Sometimes data is actually necessary to answer research questions, particularly in the social sciences and life and physical sciences.

3. Erway, Ricky. 2013. Starting the Conversation: University-wide Research Data Management Policy. Dublin, Ohio: OCLC Research. http://www.oclc.org/content/dam/research/publications/library/2013/2013-08.pdf

For instance, data would be necessary to support or rule out these hypotheses:

- More women than men voted in the last presidential election in a majority of states.
- A certain drugs shows promising results in the treatment of pancreatic cancer.
- Listening to certain genres of music lowers blood pressure.
- People of certain religious denominations are more likely to find a specific television program objectionable.
- The average weight of house cats in the United States has increased over the past 30 years.
- The average square footage of supermarkets in the United States has increased in the past 20 years.
- More tomatoes were consumed per person in the United Kingdom in 2015 than in 1962.
- Exploding volcanoes can help cool the planet by spewing sulfur dioxide, which combines with water vapor to make reflective aerosols.

So, using numeric data in those portions of your final product that require evidence can really strengthen your argument. At other times, even if data is not actually necessary, numeric data can be particularly persuasive and sharpen the points you want

to make in other portions of your final product devoted to, say, describing the situation surrounding your research question.

For example, for a term paper about the research question "Why is there a gap in the number of people who qualify for food from foodbanks and the number of people who use foodbanks?," you could find data on the website of [Feeding America,](#) the nation's largest network of foodbanks. Some of that data may be the number of people who get food from a foodbank annually, with the number of seniors and children broken down. That data won't answer your research question, but it will help you describe the situation around that question and help your audience develop a fuller understanding (i.e. context).

Similarly, for a project with the research question "How do some birds in Australia use 'smart' hunting techniques to flush out prey, including starting fires?," you might find a journal article with data about how many people have observed these techniques and estimates of how frequently the techniques are used and by how many bird species.

Obtaining Data

There are two ways of obtaining data:

- Obtain data that already has been collected and analyzed. That's what this section will cover.
- Collect data yourself. This can include activities such as making observations about your environment, conducting surveys or interviews, directly recording measurements in a lab or in the field, or even receiving electronic data recorded by computers/machines that gather the data. You will more than likely explore these activities in the courses you take.

Finding Data in Articles, Books, Web Pages, and More

Numeric search data can be found all over the place. A lot of it can be found as part of other sources such as books, journals, newspapers, magazine articles, and web pages. In these cases, these data do not stand alone as a distinct element, but instead are part of the larger work.

When searching for data in books and articles and on web pages, terms such as **statistics or data** may or may not be useful search terms. That's because many writers don't use those terms in their scholarly writing. They tend to use the words **findings or results** when discussing data that could be useful to you. In addition, statistics is a separate discipline, and using that term will turn up journals in that area, which, more than likely, won't be helpful to you. So, use the search terms data and statistics with caution, especially when searching library catalogs.

Even without using those search terms, many scholarly sources you turn up are likely to contain data. Once you find potential sources, skim them for tables, graphs, or charts. These items are displays or illustrations of data gathered by researchers. However, sometimes data and interpretations are solely in the body of the narrative text and may be included in sections called "Results" or "Findings."

Depending on your research question, you may need to gather data from multiple sources to get everything you need to answer your research question and make your argument for it.

For instance, in our example related to foodbanks above, we suggested where you could find statistics about the number of people who get food from

American foodbanks. But with that research question ("Why is there a gap in the number of people who qualify for food from foodbanks and the number of people who use foodbanks?"), you would also need to find out from another source how many people qualify for foodbanks based on their income and compare that number with how many people actually use foodbanks.

Finding Data, Data Depositories, and Directories

Sometimes the numeric research data you need may not be in the articles, books, and web sites that you've found. But that doesn't mean that it hasn't been collected and packaged in a useable format. Governments and research institutions often publish data they have collected in discipline-specific data depositories that make data available online.

Examples

- United States Census Bureau
- Budget of the United States Government
- U.S. Bureau of Justice Statistics
- National Center for Education Statistics
- Daily Weather Maps NOAA)

- GeoData.gov
- The World Factbook (CIA)

The United Nations and just about every country provide information as numeric data available online. Free and accessible data like this is called open data. The U.S. federal government, all states, and many local governments provide open data.

Other data are available through vendors who publish the data collected by researchers.

Examples

- International Monetary Fund Statistical Databases
- World Health Organization Statistical Information System
- Envirofacts
- OECD Education at a Glance
- Corruption Perceptions Index

Evaluating Data as Sources

Evaluating data for relevance and credibility is just as

important as evaluating any other source. Another thing that is the same with data is that there is never a 100% perfect source. So, you'll have to make educated guesses (inferences) about whether the data are good enough for your purpose. We discuss how to do this in section 2.4.

Critical thinking as you evaluate sources is something your professors will expect. But you'll benefit in other ways, too, because you'll be practicing a skill necessary for the rest of your life, both in the workplace and in your personal life. It's those skills that will keep you from being duped by fake news and taken advantage of by posts that are ignorant or, sometimes, simply scams.

To evaluate data, you'll need to find out how it was collected. If the data are in another source, such as a book, web page, newspaper, magazine, or research journal article, evaluate *that* source in the usual way (see 2.4). If the book, newspaper, magazine, or web page got the data from somewhere else, do the same evaluation of the source from which the book or article got the data. The article, book, or web page should cite where the data came from. If it doesn't, then that is a mark against using that data.[4]

In addition, if the data are in a **research journal article**, read the entire article, including the section called Methodology, which tells how the data were collected. Then determine the data's **relevance** to your research question by considering such questions as:

4. While the data in a research journal article are often the work of the authors of the article, you'll want to be sure they provide information about how they collected the data.

- Were the data collected recently enough?
- Is the data cross-sectional (based on information from people at any one time) or longitudinal (based on information from the same people over time)? If one is more appropriate for your research question than the other, is there information that you can still logically infer from this data?
- Were the types of people from whom the data were collected the same type of people your research question addresses? The more representative the study's sample is of the group your research question addresses, the more confident you can be in using the data to make your argument in your final product.
- Was the data analysis done at the right level for your research question? For instance, it may have been done at the individual, family, business, state, or zip code level. But if that doesn't relate to your research question, can you still logically make inferences that will help your argument? Here's an example: Imagine that your research question asks whether participation in high school sports in Columbus City Schools is positively associated with enrolling in college. But the data you are evaluating is analyzed at the state level. So you have data about the whole state of Ohio's schools and not Columbus in particular. In this case, ask yourself whether there is still any inference you can make from the data.

To evaluate the **credibility** of the data in a research journal

article you have already read, take the steps recommended in section 2.4, plus consider these questions:

- Is the article in a peer reviewed journal? (Look at the journal's instructions for authors, which are often located on the journal's website, to see if it talks about peers reviewing the article and asking for changes [revisions] before publishing.) If it is a peer reviewed journal, consider that a plus for the article's credibility. Being peer reviewed doesn't mean it's perfect; just more likely to be credible.
- Do the authors discuss causation or correlation? Be wary of claims of causation; it is very difficult to determine a causal effect. While research studies often find relationships (correlation) between various variables in the data, this does not equal causation. For instance, let's return to our example above: If the study of Ohio high schools students' sports participation showed a positive correlation between sports participation and college enrollment, the researcher cannot say that participation *caused* college enrollment. If it were designed to show cause and effect, the study would not have resulted in a correlation. Instead, it would have had to have been designed as an experiment or quasi-experiment, used different statistical analyses, and would have supported or not supported its hypotheses.

Citing Data

Data is not copyrightable, but the expression of data is. So as with any other information source, you should cite any data you use from a source, whether it appeared in an article or you downloaded the data from a repository on the Web.

Unfortunately, data citation standards do not exist in many disciplines Current workarounds include:

- Citing a "data paper," where available.
- Citing a journal article that describes the dataset.
- Citing a book that includes the data.

Examples: Citing Data

Data from a research database:

- APA: Department of Agriculture (USDA) (2008). "Crops Harvested", Crop Production [data file]. Data Planet, (09/15/2009).
- MLA: "Crops Harvested", Department of Agriculture (USDA) [data file] (2008). Data Planet, (09/15/2009).

Data from a file found on the open Web:

- APA: Center for Health Statistics, Washington State Department of Health. (2012, November). Mortality Table D1. Age-Adjusted Rates for

Leading Causes of Cancer for Residents, 2002-2011. [Microsoft Excel file]. Washington State Department of Health. Retrieved from http://www.doh.wa.gov/

- MLA: Center for Health Statistics, Washington State Department of Health. Mortality Table D1. Age-Adjusted Rates for Leading Causes of Cancer for Residents, 2002-2011. Washington State Department of Health, Nov. 2012. Microsoft Excel file. Retrieved from http://www.doh.wa.gov/Citing the dataset as a website, where possible.

Proper Use of Data

Once you have your data, you can examine them and make an interpretation. Sometimes, you can do so easily. But not always.

Many people have a tendency to look for data to prove their hypothesis or idea, as opposed to really answering their research questions. However, you may find that the opposite happens: the data may actually disprove your hypothesis. You should never manipulate data so that it gives credence to your desired outcome. While it may not be the answer you wanted to find, it is the answer that exists. You may, of course, look for other sources of data – perhaps there are multiple sources of data for the same topic with differing results. Inconclusive or conflicting findings do happen and can be the answer. Conflicting results on the same topic are common. This is the reality of research because, after all, the questions researchers are studying are complicated. When you have conflicting

results you can't just ignore the differences—you'll have to do your best to explain why the differences occurred.

People as Sources

People don't just create the sources we use. They are actually sources them-selves. Most of us use people as sources all the time in our private lives, such when we ask a friend for a restaurant recommendation or ask whether a movie is   worth watching. But you probably aren't using people as sources very often in your assignments–unless you are a journalism major, of course.

In fact, [research](#) indicates that employers such as Battelle, Nationwide Insurance, Microsoft, the FBI, the Smithsonian, the Port of Los Angeles, SS&G Financial Services, and Marriott International have been dissatisfied with their new hires' inability to gather information by talking with real people. They've found new hires unwilling or unprepared to ask the experienced employee down the hall or the expert across town for information to solve a problem. For instance, the study linked above quotes one employer as saying this about new hires:

Here's something we're targeting in interviews now—the big thing is they believe the computer is their workspace, so basic interactions between people are lost. They won't get up and walk over and ask someone a question. They are less

> *comfortable and have some lack of willingness to use people as sources and also have a lack of awareness that people are a valid source of information...*[5]

So getting some experience using people as sources is likely to help you not just with a current research assignment but with your work in the future.

Important: Who's an "Expert"?

Experts aren't only researchers with Ph.Ds doing academic work. The question when trying to decide who can be a source is really always, who can speak with authority about any part of the subject? And the answer to that question is always contextual, a kind of "it depends."

   People can speak with authority for different reasons. According to the framework for information literacy, they can have subject expertise (say, having done scholarship in the field), societal position (maybe a public office or another relevant work title), or special experience (say, living or working in a particular situation of interest or having participated in a historical event).

5. The Workplace Report from Project Information Literacy is licensed under a Creative Commons (CC) license of "CC BY-NCSA 4.0."

For instance, people who have had firsthand experience living or working with a situation (say, a survivor of school shooting if your topic is on that subject) you are studying can have a unique perspective unavailable elsewhere. And it's that up-close, firsthand view of the situation that gives them the authority that you and your audience respond to.

Of course, such sources have to be evaluated just like any other. Could they be biased? Like any source, yes. We just have to keep that possible bias in mind as we use the information from such a source. That's part of exercising the critical thinking that research assignments are famous for producing.

Potentially biased or not, sometimes a source's firsthand experience can't be beat. And recognizing what they offer can help us open up to diverse ideas and worldviews that we would otherwise miss. Don't be surprised if this kind of source takes you off in completely new directions with your assignment, ones that turn out to be much more interesting than those you were following before. For many researchers, finding sources that open up a topic like that is one of the most rewarding—and fun—things about doing research.

Some Examples of People as Sources

Research Question	Potential Person as Source	Potential Person as Source
How are tools originally developed for medicine, geology, and manufacturing used to explore paintings and sculptures?	An art conservator who uses those tools that you read about in the newspaper or other source	The person who invented one of the tools on the floor of the factory where he works
Why do most people who qualify for food at foodbanks not ask for food?	A local food bank director	A person (perhaps a fellow student) who qualifies but does not ask for food at a food bank
How and why do city and county governments brand themselves?	An official in such a city or county who has been involved in branding decisions	The director of a company that designs branding for cities and counties

You can interview a person as a source on the phone, in email, by Skype, or face-to-face. You'll need to:

- Pay attention when reading other sources so you can identify whom to contact and know what they could have to offer.
- Prepare by learning enough about your topic so you can ask appropriate questions, know what your expert has done in relation to that topic so you don't seem ignorant of their contribution, and know how to contact them. You might also want to do a practice interview with a friend.
- Contact your source to see if they are willing to talk with you and when that would be convenient. Then follow through.

Use good interview techniques, such as trying to put them at ease, using active listening techniques to encourage them to

talk, asking follow up questions, and thanking them at the end of the interview.

Citing People as Sources

Like other sources, people should be cited in your research final product, depending on the citation style you're using. For instance, in APA style, interviews, e-mail, and other personal communication (i.e. non-published interviews) should not appear in the reference list but should be in your main text only like this: (A. Authorslastname, personal communication, July 29, 2018).

Media Attributions

- Lindsey MacCallum and Teaching & Learning Ohio State University Libraries

2.4 Thinking Critically About Sources

Evaluating sources often involves piecing together clues.

[1]This section teaches you how to identify relevant and credible

1. 2.4 (except where otherwise noted) was borrowed with minor edits and additions from *Choosing & Using Sources: A Guide to Academic Research, 1st Canadian Edition* by Lindsey MacCallum and Teaching & Learning Ohio State University Libraries which is licensed under a Creative Commons Attribution 4.0 International License

sources that you have most likely turned up on the Web and on your results pages of the library catalog, Google Scholar, and specialized databases. Relevant, credible sources will meet the information needs of your research project.

In order to evaluate a source, you have to answer two questions about it:

1. Is this source relevant to my research question?
2. Is this a credible source– a source my audience[2] and I should be able to believe?

It's important to determine relevance before credibility because no matter how credible a source is, if it's not relevant to your research question it's useless to you for this project.

Tip: Other Criteria from Your Professor

Don't forget that you also have to make sure your sources meet any other criteria that your professor may

2. Like we discussed in earlier sections, understanding who your audience is (i.e. part of academia, peers, experts, etc.) is vital in determining what type of sources you need and what qualifications make those sources credible for that audience.

> have given you for this assignment. For instance, professors often stipulate that some of your sources have to be scholarly sources or articles from a particular database, so make sure you have identified enough of the kind of sources your professor has requested.

You might already be worrying about how long evaluating sources is going to take. When you begin your preliminary research, you won't have to read all of a source to decide whether it is relevant and credible[3]. However, before you use the source as evidence (direct quotes, paraphrases, and summaries), you will have to read the entire source in order to be able to ethically use the information.

Nonetheless, our advice is to not begrudge the time you spend evaluating sources. It's one of the most important things to learn at college—the opportunity to evaluate sources is one of the key reasons your professors assign research projects. For the rest of your professional and personal life, you will be using the critical thinking skills that make choosing the right sources possible, so learning those skills is a good investment.

> Happily, you'll also get faster the more you do it.

Making Inferences: Good Enough for Your

3. Go back to section 2.3 to review how to read a scholarly article to make determining the usefulness of a source a smoother process.

Purpose?

Sources should always be evaluated relative to your purpose – why you're looking for information. But because there often aren't clear-cut answers when you evaluate sources, **most of the time it is inferences – educated guesses from available clues –** that you have to make about whether to use information from particular sources.

Your information needs will dictate:

- What kind of information will help.
- How serious you consider the consequences of making a mistake by using information that turns out to be inaccurate. When the consequences aren't very serious, it's easier to decide a source and its information are good enough for your purpose; though, there's a lot to be said for always having accurate information, regardless of the consequences of using inaccurate information.
- How hard you're willing to work to get the credible, timely information that suits your purpose (what you're learning here will make it easier).

Thus, your standards for relevance and credibility may vary, depending on whether you need, say

- Information about a personal health problem.
- An image you can use on a poster.

- Evidence to win a bet with a rival in the dorm.
- Dates and times a movie is showing locally.
- A game to have fun with.
- Evidence for your argument in a term paper.

For your research assignments or a health problem, the consequences may be great if you use information that is not relevant or not credible.

Activity: Quick Check

1. What's an inference?

   ○ a. An educated guess
   ○ b. An assumption
   ○ c. The obvious answer

2. One mark of an educated person is

   ○ a. Being argumentative
   ○ b. A gold star on the forehead
   ○ c. A habit of thinking about whether a source of information is relevant and

4. 1. a; 2. c; 3. a

credible
- ◦ d. Having more friends

3. You will always have the same standards for accuracy and reliability when you look for information

- ◦ a. False
- ◦ b. True

See footnote for answers.

Evaluating for Relevancy

Relevant sources are those that pertain to your research question. You'll be able to figure that out fairly quickly by reading or skimming particular parts of sources. We'll show you how below, including where to look in specific kinds of sources and what questions to ask yourself as you do.

One thing to consider early on as you make inferences about relevancy is the effect that timeliness, or a source's currency, should have on deciding whether a source is relevant.

Your research question will determine that.

For instance, if your research question is about the life sciences, you probably should consider only the most recent sources relevant because the life sciences are changing so quickly. There is a good chance that anything but the most recent sources may be out of date. So aim for sources no more than 5 years old. (An example discipline that calls for even newer sources is computer security.)

But suppose your research question is about the Edo Period in Japan (1603-1868) or about Robert Falcon Scott, who explored the Antarctic from 1901-1913. In these cases, an item from 1918 might be just as useful as an item from 2018 (although new information may have been found in the 100 year gap). But something from 1899 about Antarctica or from 1597 about Japan would NOT be current enough for these research questions.

These example research questions also give you two more clues about how to treat the timeliness or currency of sources as you consider relevance:

- Because of how long ago they lived or occurred, it would be unusual for many sources on Robert Scott or the Edo Period to have been published very recently. So, unlike

sources for the life sciences, whether a source is very recent should probably not determine its relevancy to those research questions.

- Primary sources might be considered especially relevant to all three research questions. Life science journal articles that provide research findings for the first time count as primary sources. And primary sources (such as Scott's diaries and expedition photographs, as well as paintings, literature, clothing, and household items from the Edo Period) go a long way in explaining faraway people and times.

For your sources for which timeliness matters, see the section below titled "Where to Look," which includes where to look in websites, articles, and books for information about a source's currency.

Time-Saving Tips

Instead of thinking you have to read all of every source in order to figure out whether it is relevant, read or skim only parts of each source. If you're looking at the right parts, that should give you enough information to make an educated guess about relevancy.

But what should you be looking for as you do that reading and skimming? One way to figure that out is to first parse your research question so that you can figure out its main concepts. (This is like identifying the main concepts in your research question in order to search precisely.)

For instance, suppose your research question is: How

does having diverse members in a group increase the critical thinking of the group?

What are this question's main concepts? Our answer is: group diversity and critical thinking.

So when trying to judge which sources are relevant to these main concepts, you would assess whether each source you've found pertains to at least one of these concepts. We recommend you use a table like the one in the example below to keep track of which sources address each main concept.

To be considered relevant to your research question, a source wouldn't necessarily have to cover all of your main concepts, but finding sources that do is ideal. Don't forget that each source would have to pass the currency test, too, if currency is important to your research question. So it's wise to record your decisions about the sources' currency on your tables, too.

Example: Sources' Main Concepts and Currency

Research question: How does having diverse members in a group increase the critical thinking of the group?

Source	Currency Okay	Group Diversity	Critical Thinking
Source A title	X	X	
Source B title	X		
Source C title	X	X	X

The table in this hypothetical example indicates that both Sources A and C are relevant because each pertains to at least one main concept from the research question. Currency doesn't seem to matter much to our research question, so all three sources were marked current. But since currency is all that Source B has to offer, it is not relevant for this project.

If you do make little tables for relevance, it's probably a good idea to hang on to them. You might find them helpful later in your research process.

Where to Look in Websites, Articles, and Books

There are certain places to look and questions to ask yourself to assess three kinds of sources' relevancy to your research question. Whatever you do, don't stop evaluating a source after looking only at a website's name or the title of another source.

Save time by looking in particular places in sources for

information that will help you figure out whether the source is relevant to your research project.

Tips and Tricks[5]

On a **website**, check the name of the website and its articles for clues that they contain material relevant to your research question. Consider whether time should have an impact on what information can be considered relevant. If so, skim any dates, datelines, "What's New pages," and press releases to see whether any website content works with the time considerations you need. Page creation or revision dates can also help.

Skim any site map and index on the website for keywords related to your research question. Try the keywords of your research question in the search box. Do you see enough content about your keywords to make you think parts of the website could be helpful?

For an **article**, think about the title. Does it have anything to do with your research question? Consider whether time should have an impact on what sources can be considered relevant. If so, is the

5. Much of this advice comes from "Speedy Reading" in *The Craft of Research*, second edition, by Wayne Booth, Gregory Colomb, and Joseph Williams, 2003, pp. 108-109.

publication date within your parameters? For instance, if there is a time period in your research question, does the article address the same time period, or was it created in that time period?

Look at the intro and section headings in the article to locate the problem or question that the article addresses, its solution, and the outline of the article's argument for its main claim. Can those help answer your research question? Do they make it seem like the article will give you information about what others have written about your research question? Do they offer a description of the situation surrounding your research question?

Do the article's introduction and conclusion sections help you answer your research question and/or offer a description of the situation surrounding your question so you can explain in your final product why the question is important? Check whether the bibliography contains keywords related to your research question. Do the sources cited in the bibliography pertain to your research question?

For a **book**, check whether the title indicates the book could be about your research question. Consider whether time should have an impact on what sources can be considered relevant. If so, is the publication date or copyright date (usually listed in the library catalog or a few pages after the book's title page) too early or late for any time constraints in your research question? Also, skim some of the

preface and introduction to see whether the book works with the time considerations you need.

For help answering your research question, skim the book's table of contents and any summary chapters to locate the problem or question that the book addresses, its solution, and the broad outline of the book's argument for its main claim. Do they also give you information about what others have written about your research question? Do they offer a description of the situation surrounding your research question? Look for your keywords in the bibliography. Do the sources cited pertain to your research question? Skim the index for topics with the most page references. Do the topics with the most page references pertain to your research question?

Activity: Follow a Title's Clues for Relevance

Instructions: This activity asks you to use logic, the titles of sources, and their publication dates, and

6. **1. b; 2. c; 3. a**

identify the source *most* likely to be relevant to each research question. (Outside of this activity, sources are not actually in competition with one another to be relevant. But this seemed a good way to have you practice your skills at assessing relevance.) Many titles below are imaginary, but that doesn't affect their relevance in the activity. Note: Book, journal, and newspaper titles are italicized; chapter and article titles are in quotes.

1. Research question: How would American journalism change if the federal government started sponsoring at least one newspaper in every state?

   1. a. Source: "The Revolution Years, 1775-1783" in *History of American Journalism*, published in 2016.
   2. b. Source: *The Death and Life of American Journalism: The Media Revolution that Will Begin the World Again*, published in 2009.
   3. c. Source: *The New York Times: Media Master*, published in 2014

2. Research question: How does "prospect theory" in economics help explain medical doctors' decisions to favor surgery or radiation to cure cancer in patients?

   1. a. Source: "Medical Decisions and Reasons for Variance," in *Physicians' Notebook*, 2017.
   2. b. Source: *Cancer Treatment in Older Americans*, published in 1999.
   3. c. Source: "Cancer Treatment

Prescription–Advancing Prospect Theory beyond Economics," in Journal of The American Medical Association Oncology, June, 2016.

3.   Research question: Why have some Big Data mathematical models and predictive algorithms been criticized as being unfair?

1.   a. Source: Weapons of Math Destruction, published in 2016.
2.   b. Source: What is Big Data? published in 2006.
3.   c. Source: "Who Buys Google's Ads?" in The Wall Street Journal, November, 2017.

See footnote for answers.

Evaluating for Credibility

Next, you'll be evaluating each of the sources that you deemed relevant.

What are the clues for inferring a source's credibility? Let's start with evaluating websites since we all do so much of our research online. But we'll also include where to find clues relevant to sources in other formats when they differ from what's good to use with websites. Looking at specific places in the sources will mean you don't have to read all of every resource to determine its worth to you.

And remember, the more you take these steps, the faster it

goes because always examining your sources becomes second nature.

What Used to Help

It used to be easier to draw conclusions about a source's credibility, depending on whether it was a print source or a web source. We knew we had to be more careful about information on the web simply because all the filters that promoted accuracy involved in the print publishing process were absent from most web publishing. After all, it takes very little money, skill, and responsible intent to put content on the web, compared with what has to be done to convince print publishers that your content is accurate and that they will make money by printing it.

However, many publishers who once provided only print materials have now turned to the web and have brought along their rigorous standards for accuracy. Among them are the publishers of government, university, and scholarly (peer-reviewed) journal websites. Sites for U.S. mainline news organizations also strive for accuracy rather than persuasion because they know their readers have traditionally expected it. All in all, more websites now take appropriate care for accuracy than what used to be true on the web.

Nonetheless, it still remains very easy and inexpensive to publish on the web without any of the filters associated with print. So, we all still need the critical thinking skills you'll learn here to determine whether websites' information is credible enough to suit your purpose.

5 Factors to Consider

Evaluating a website for credibility means considering the five factors below in relation to your purpose for the information. These factors are what you should gather clues about and use to decide whether a site is right for your purpose.

- The source's neighborhood on the web
- Author and/or publisher's background
- The degree of bias
- Recognition from others
- The thoroughness of the content

How many factors you consider at any one time depends on your purpose when seeking information. In other words, you'll consider all five factors when you're looking for information for a research project or other high-stakes situation where making mistakes have serious consequences. But you might consider only the first three factors at other times.

A Source's Neighborhood

To understand this concept and begin to use it, imagine that all the sites on the web constitute a community. Just like in a geographical community, there are neighborhoods in which individual sites hang out.

 Thinking about what neighborhood a source is in on the web can help you decide whether the site is credible and suits your purpose.
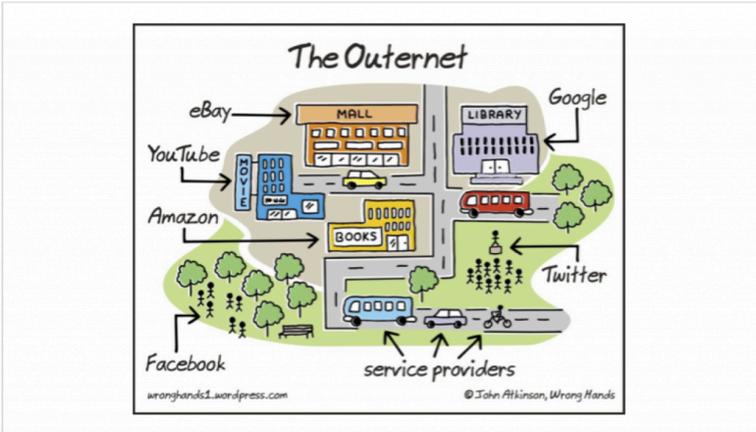
Visualize the web as a community. (Image source: John Atkinson, [*Wrong Hands*](#)*)*

Tip: Author's Purpose for Print

Rather than examine print sources for their web neighborhood, examine them for their author's purpose. Read the introduction and conclusion and look at the table of contents to discern the author's purpose.

For instance, did the author intend to use the book or magazine article to inform/educate, persuade, sell, or entertain?

And is the author's purpose suitable for your purpose? For instance, does the fact that a resource

Clues About a Website's Neighborhood

On a website, check pages labeled About Us, About This Site, Mission, Site Index, and Site Map, if available. (If such pages or similarly labeled ones don't exist, it may be a sign that the site may be less trustworthy.)

Ask yourself these questions to gather clues that will help you decide what neighborhood you're in:

- **Is the site selling products and/or services (even if there are articles and other useful information, too)?** Perhaps it's a retail, service center, or corporate site.
- **Are there membership applications and requests for contributions of money or time anywhere on the site?** They're usually a sign that you're on a site that promotes particular ideas or behavior – in other words, they're in the advocacy neighborhood.
- **Do postings, articles, reports, and/or policy papers give a one-sided view or multiple views on issues, people, and events?** If they're one-sided, the site is probably a commercial site or in the advocacy group neighborhood. If the information is even-handed and includes different sides of an issue, the site is more likely to be on the library/ museum, school, or mainline U.S. news side of town. Sites there usually provide information designed to educate rather than persuade. Newspapers, online or in print, usually do have editorial pages, however. But labeling opinions as such helps keep mainline U.S. news sources in the newsstand neighborhood and out of the advocacy

neighborhood.

Activity: Neighborhoods on the Web

Which Neighborhood?[7]

Instructions: Consider each website and choose its neighborhood on the Web.

1.	In which online neighborhood is OWL?

    1.	a. Service sites
    2.	b. Schools
    3.	c. Entertainment centers
    4.	d. Newsstands

2.	In which online neighborhood is Sequoia and Kings Canyon National Parks?

    1.	a. Government
    2.	b. Advocacy group
    3.	c. Retail store
    4.	d. Service center

3.	In which online neighborhood does Project Vote Smart best fit?

    1.	a. Government
    2.	b. Advocacy group
    3.	c. Libraries (museums, etc.)
    4.	d. Retail

7. **1. b; 2. c; 3. c**

See footnote for answers.

Think we're making a mountain out of a molehill about being careful about web sources? Please click the links below to look at three websites. Is there an inference(s) you can make that applies to all three? Perhaps whether a website looks professionally done is not enough to insure that it is credible.

- RYT Hospital: Dwayne Medical Center – http://rythospital.com
- Dog Island – http://www.thedogisland.com
- The Manhattan Airport Foundation – http://manhattanairport.org

Making the Inference

Consider the clues. Then decide the extent that the site's neighborhood is acceptable for your purpose. It might help to grade the extent that this factor contributes to the site being suitable on a scale like this one:

- A – Very Acceptable

- B – Good, but could be better
- C – OK in a pinch
- D – Marginal
- F – Unacceptable

You'll want to make a note of the resource's grade for the neighborhood so you can combine it later with the grades you give the other factors.

Author and Publisher

You'll always want to know who's providing the information for a website or other source. Do they have the education, training, or other experience that makes you think they are authorities on the subject covered? Or do they just have opinions?

The more you know about the author and/or publisher, the more confidence you can have in your decision for or against using content from that source.

The reputation of the author and publisher influences your confidence in a source.

Authors and publishers can be individuals or organizations, including companies. (Webmasters put things on the site but do not usually decide on everything, content-wise, except for the smallest websites. They often just carry out others' decisions.)

Sites that do not identify an author or publisher are generally considered less credible for many purposes, including for term papers and other high-stakes projects. The same is true for sources in other formats.

Clues About an Author and/or Publisher's Background

If they're available, first take a look at pages called things such as About This Site, About Us, or Our Team first.

- But you may need to browse around a site further to determine its author. Look for a link labeled with anything that seems like it would lead you to the author. Other sources, like books, usually have a few sentences about the author on the back cover or on the flap inside the back cover.
- You may find the publisher's name next to the copyright symbol, ©, at the bottom of at least some pages on a site. In books, the identity of the publisher is traditionally on the back of the title page.

Sometimes it helps to look for whether a site belongs to a single person or to a reputable organization.

- Because many colleges and universities offer blog space to their faculty, staff, and students who use the university's web domain, this evaluation can require deeper analysis than just looking at the address. Personal blogs may not reflect the official views of an organization or meet the standards of formal publication.
- In a similar manner, a tilde symbol (~) preceding a directory name in the site address indicates that the page is in a "personal" directory on the server and is not an official publication of that organization.

> For example, you could tell that Jones' web page was not an official publication of XYZ University if his site's address was: http://www.XYZuniversity.edu/~jones/page.html.

> The tilde indicates it's just a personal web page—in the Residences, not Schools, neighborhood of the web.

- Unless you find information about the author to the contrary, such blogs and sites should not automatically be considered to have as much authority as content that is officially part of the university's site. Or you may find that the author has a good academic reputation and is using their blog or website to share resources he or she authored and even published elsewhere. That would nudge him or her toward the Schools neighborhood.
- Learning what they have published before can also help you decide whether that organization or individual should be considered credible on the topic.

Tip: Find Out What the Author (Person or Organization) Has Published

Library Catalogs – Search in a large library catalog to find books/sources written by the author.

For example:

- [CSC Primo]
- [Ebscohost through CSC]

Web Article Database – Use a free web article database to search for articles and books by the author that the college may not have a subscription to. Note:

While you can search for free, you may not be able to retrieve articles unless searching through a library.

For example:

- [Google Scholar](#)

Specialized Database – Locate articles written by the author by using a specialized database that covers the same topical area as information on the website. Check your library's website to find databases that you can use for this purpose. (Such databases are also called periodical indexes.)

For example:

- [Databases by Subject on the CSC Library page](#)

Extra Tip: Find Out What Has Been Written *About* The Author

Web Search Engine – Use a search engine to find web pages where the author's name is mentioned. (Be sure to search for the name as a phrase, as in "Jane Doe")

For example:

- [Google](#)

Making the Inference

Consider the clues. Then decide the extent that the source's author and/or publisher is acceptable for your purpose. It might help to grade the extent that this factor contributes to the site being suitable on a scale like this one:

- A – Very Acceptable
- B – Good, but could be better
- C – OK in a pinch
- D – Marginal
- F – Unacceptable

You'll want to make a note of the source's grade for the author and/or publisher so you can combine it later with the grades you give the other factors.

Degree of Bias

Probably all sources exhibit some bias, simply because it's impossible for their authors to avoid letting their life experience and education have an effect on their decisions about what is relevant to put on the site and what to say about it.

But that kind of unavoidable bias is very different from a wholesale effort to shape the message so that the site (or other source) amounts to a persuasive advertisement for something important to the author.

Even if the effort is not as strong as a wholesale effort, authors can find many—sometimes subtle—ways to shape communication until it loses its integrity. Such communication is too persuasive, meaning the author has sacrificed its value as information in order to persuade.

Look for evidence of bias in your sources.

While sifting through all the web messages for the ones that suit your purpose, you'll have to pay attention to both what's on the sites and in your own mind.

That's because one of the things that gets in the way of identifying evidence of bias on websites is our own biases. Sometimes the things that look most correct to us are the ones that play to our own biases.

Clues About Bias

Review the website or other source and look for evidence that the site exhibits more or less bias. The factors below provide some clues.

Coverage

Unbiased: This source's information is not drastically different from coverage of the topic elsewhere. Information and opinion about the topic don't seem to come out of nowhere. It doesn't seem as though the information has been shaped to fit.

Biased: Compared to what you've found in other sources covering the same topic, this content seems to omit a lot of information about the topic, emphasize vastly different aspects of it, and/or contain stereotypes or overly simplified information. Everything seems to fit the site's theme, even though you know there are various ways to look at the issue(s).

Citing Sources

Unbiased: The source links to any earlier news or documents it refers to.

Biased: The source refers to earlier news or documents, but does not link to the news report or document itself.

Evidence

Unbiased: Statements are supported by evidence and documentation.

Biased: There is little evidence and documentation presented, just assertions that seem intended to persuade by themselves.

Vested Interest

Unbiased: There is no overt evidence that the author will benefit from whichever way the topic is decided.

Biased: The author seems to have a "vested interest" in the topic. For instance, if the site asks for contributions, the author probably will benefit if contributions are made. Or, perhaps the author may get to continue his or her job if the topic that the website promotes gets decided in a particular way.

Imperative Language

Unbiased: Statements are made without strong emphasis and without provocative twists. There aren't many exclamation points.

Biased: There are many strongly worded assertions. There are a lot of exclamation points.

Multiple Viewpoints

Unbiased: Both pro and con viewpoints are provided about controversial issues.

Biased: Only one version of *the truth* is presented about controversial issues.

Look at the following cites to see some of the above traits in action.

- The Cigarette Papers – Sources of information are documented for each chapter.
- The U.S. Immigration Debate – Shows where it gets its facts; the Council on Foreign Relations is nonpartisan.
- White Poison: The Horrors of Milk – Claims are not supported by documentation.

Making the Inference

Consider the clues. Then decide the extent that the bias you detected in the source is acceptable for your purpose. It might help to grade the extent that this factor contributes to the site being suitable on a scale like this one:

- A – Very Acceptable
- B – Good, but could be better
- C – OK in a pinch
- D – Marginal
- F – Unacceptable

You'll want to make a note of the source's grade for bias so you can combine it later with the grades you give the other factors.

Recognition from Others

Checking to see whether others have linked to a website, tagged, or cited it lets you know who else on the web recognizes the value of the site's content. Reader comments and ratings can also be informative about some sites you may be evaluating, such as blogs.

If your source is a print book, the blurbs on the front or back cover give you information from authors, experts, or other well-known people who were willing to praise the book and/ or author. The same kind of "mini-reviews" may be available on the publisher's website. You can also look for reviews of the book or other sources by using Google and Google Scholar.

Those links, tags, bookmarks, citations, and positive reader comments and ratings are evidence that other authors consider the site exemplary. Book reviews, of course, may be either positive or negative.

Ratings and positive comments and reviews are evidence that others find a source valuable.

Exactly which individuals and organizations are doing the linking, tagging, citing, rating, and commenting may also be important to you. There may be some company you'd rather your site not keep! Or, maybe the sites that link to the one you're evaluating may help solidify your positive feelings about the site.

Don't let an absence of links, tags, citations, ratings, and comments damn the site in your evaluation. Perhaps it's just

not well-known to other authors. The lack of them should just mean this factor can't add any positive or negative weight to your eventual decision to use the site—it's neutral.

Tip: Peer Review and Citation as Recognition

The peer review most articles undergo before publication in a scholarly journal lets you know they're considered by other scholars to be worth publishing. You might also be interested to see to what extent other researchers have used an article after it was published. (That use is what necessitates their citation.) But keep in mind that there may not be any citations for relatively new popular magazines, blogs, or scholarly journal articles.

Activity: Influence You?

Would the blurb on the front cover of *Redirect* by psychologist Timothy Wilson influence you positively or negatively in your evaluation of the book?
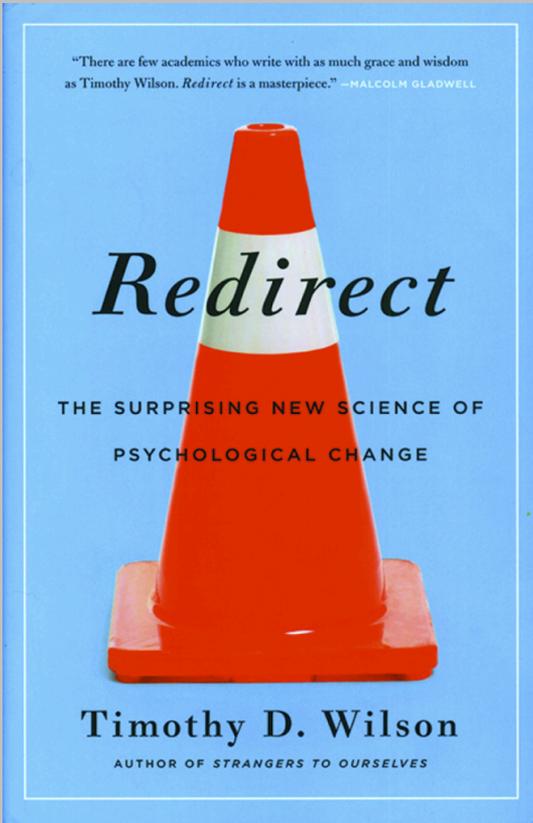
The blurb says: "There are few academics who write with as much grace and wisdom as Timothy Wilson. Redirect is a masterpiece. – Malcolm Gladwell"

Clues about Recognition

Use Bing to find sites that link to a particular URL.

Enter inbody:[URL of known site] in the Bing search box.

For example: inbody:www.deathpenaltyinfo.org

As you look over the results page, always pay attention to more than

> Google does not adequately support this.

the number of sites linking to the site about which you're seeking information. Also, consider the kind of sites that do that linking. Are they the kind of sites you are pleased to see associated with the site you're interested in? If you are doing academic writing, you should want them to be professional, scholarly, and/or mainline news sources—not, for instance, something from the entertainment neighborhood.

If you prefer recognition from a particular neighborhood, you can ask Bing to look specifically for links from that neighborhood.

Suppose, for instance, you wonder whether scholarly sources link to the site above but don't want to look for them among all that you turned up before. You should type in the Bing search box inbody:www.deathpenaltyinfo.org site:edu in order to see whether any scholarly sources link to that site.

Find citations of an article. Although there is no simple way to find every source that cites an article in a popular magazine, a blog, or a scholarly journal, there are some ways to look for these connections.

- **For articles published in popular magazines or blogs,** enter the title of the article in quotes in the search box of a search engine like Google. The resulting list should show you the original article you're evaluating, plus other sites that have mentioned it in some way. Click on those that you want to know more about.

- **For articles published in scholarly journals,** use Google Scholar to enter the title of the article in quotes. In the results list, find the article you're evaluating. (Many articles have similar titles.) Look for the number of citations in the lower left of the listing for your article. If you want more information on the authors who have done the citing, click on the citation number for a clickable list of articles or papers and get the names of authors to look up at the end of the articles or with a search engine. (This is a good way

to discover more articles about your topic, too.)
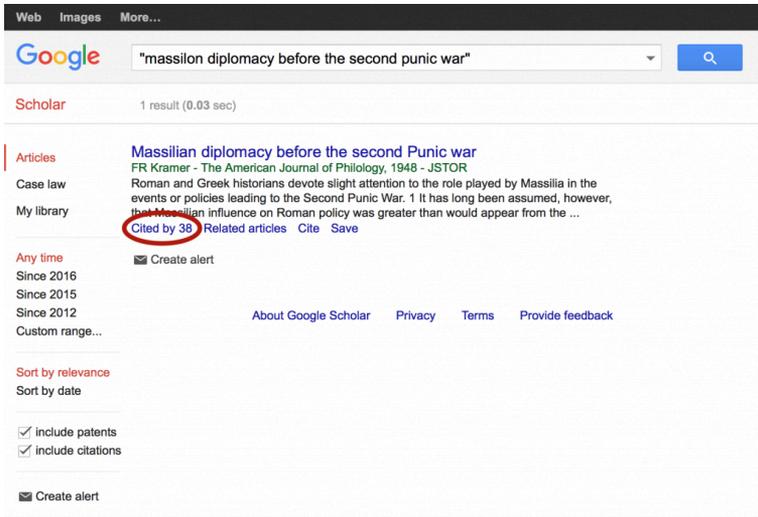
Google Scholar shows how many articles have cited a given article.
[View the live example.](#)

Making the Inference

Consider the clues. Then decide the extent that the source's recognition from others is acceptable for your purpose. It might help to grade the extent that this factor contributes to the site being suitable on a scale like this one:

- A – Very Acceptable
- B – Good, but could be better
- C – OK in a pinch
- D – Marginal
- F – Unacceptable

You'll want to make a note of the source's grade for recognition

so you can combine it later with the grades you give the other factors.

Thoroughness

Figuring out whether a website or other source is suitable for your purpose also means looking at how thoroughly it covers your topic

You can evaluate thoroughness in relation to other sources on the same topic. Compare your source to how other sources cover the material, checking for missing topics or perspectives.

Consider how well a source covers your topic.

Clues About Thoroughness

Click around a site to get some idea of how thoroughly it covers the topic. If the source you are evaluating is a print resource, read the introduction and conclusion and also the table of contents to get a glimpse of what it covers. Look at the index to see what subject is covered with the most pages. Is it thorough enough to meet your information need?

Tip: Related Sites

Use Google to find other sites on the same topic by entering **related:[the URL of the site you know]** in the search box.

For example: related:guides.osu.edu

Use this technique to browse other sites Google turns up. Do other sites cover aspects of the topic that are missing from the site you are evaluating? Or does your site stack up pretty well against the competition?

Making the Inference

Consider the clues. Then decide the extent that the source's thoroughness is acceptable for your purpose. It might help to grade the extent that this factor contributes to the source being suitable on a scale like this one:

- A – Very Acceptable
- B – Good, but could be better
- C – OK in a pinch
- D – Marginal
- F – Unacceptable

You'll want to make a note of the source's grade for thoroughness so you can combine it later with the grades you give the other factors.

Combining the Factors

Once you've considered each factor used in evaluating a source, it's important to take a look at the inferences you made about them. Now is the time to look at those grades all together—to average them if you've been assigning grades—and to make one more inference.

Taking the grade on each factor into account, can you infer that the source is credible enough for your purpose? If it isn't, this is one source that can't be helpful in your project. If it is relevant and credible enough, you can use information from that resource with confidence.

Making the Final Inference

Assume you're writing a term paper and are considering using information from Site XYZ. You ran through the evaluation process as you looked over the site, and you made notes about the grades you assigned.

The grades you gave individual factors are:

- Neighborhood: A
- Author/publisher's background: B
- Degree of bias: A
- Recognition from others: No Evidence
- Thoroughness: C
- Currency of the content: A

You average the grades (A=4, B=3, C=2, D=1, F=0), remembering not to include the factor on which you gave no grade. The score was 3.4, about a B, which is a "Good, but could be better" score on the scale we used in this tutorial.

> Would you use this source in your paper? This answer may vary depending on what your other sources look like. Is this your highest grade of source? Will this be a heavily used source in your paper as you work to prove your point? The answers to questions like these may push you to keep looking or include this source in your final paper.

When Should You Stop?

Research shows that students often don't know when they should stop trying to find and evaluate sources for a particular project.[8] How many sources are enough? It's hard to say, exactly. But you'll need enough to meet the information needs of your project and to meet the requirements your professor told you about.

Furthermore, you may change your mind as you continue working on your project. There is probably not a researcher alive who hasn't thought he or she had enough relevant sources, only to change their mind later when they were actually writing the final product.

The process of finding, reading, and evaluating sources can very rewarding; however, as with most things in life, it can also be extremely frustrating and at times you may feel defeated. Learning how to find, read, and evaluate sources is a skill that

8. **Head, A., & Eisenber, M. (2010). Truth be told: How college students evaluate and use information in the digital age.** *SSRN.* http://dx.doi.org/10.2139/ssrn.2281485

academics (even your professor) are continually learning more about and developing their skills in. So, before you reach the point where you fear your hair may be close to falling out completely, reach out to your professor. They have not only been trained in these same skills and environment, but because they will serve as a new set of eyes on the topic, they can oftentimes point you in a direction you haven't thought of.[9]

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9. **To be honest, most of us (us being college instructors) find this stage of the research process to be enjoyable. So, do not avoid reaching out for fear of "bugging" us.**

2.5 Ethical Use and Citing Sources

It's helpful to understand why to cite your sources.

[1]You likely know that research projects always need a reference

1. 2.5 (except where otherwise noted) was borrowed with minor edits and additions from *Choosing & Using Sources: A Guide to Academic Research, 1st Canadian Edition* by Lindsey MacCallum and Teaching & Learning Ohio State University Libraries which is licensed under a Creative Commons Attribution 4.0 International License

or works cited page (also called a bibliography). But have you ever wondered why?

There are some "big picture" reasons that don't often get articulated that might help you get better at meeting the citation needs of research projects. It's helpful to understand both the theory behind citing, as well as the mechanics of it, to really become a pro.

In everyday life, we often have conversations where we share new insights with each other. Sometimes these are insights we've developed on our own through the course of our own everyday experiences, thinking, and reflection. Sometimes these insights come after talking to other people and learning from additional perspectives. When we relate the new things we have learned to our family, friends, or co-workers, we may or may not fill them in on how these thoughts came to us.
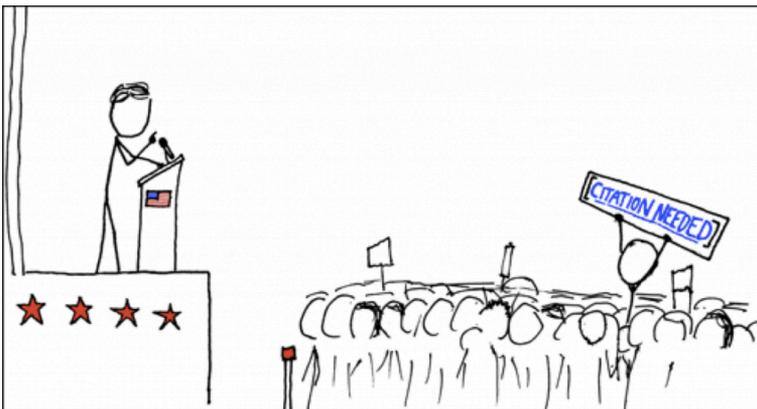
In everyday conversation and political speeches, evidence for arguments is often not provided. (Image source: XKDC)

Academic research leads us to the insight that comes from gaining perspectives and understandings from other people through what we read, watch, and hear. In academic work, we must tell our readers who and what led us to our conclusions.

Documenting our research is important because people rely on academic research to be authoritative, so it is essential for academic conversations to be as clear as possible.

> Documentation for clarity is a shared and respected practice, and it represents a core value of the academy called "academic integrity." It is a way to distinguish academic conversations (or discourse) from everyday conversations (or discourse).

It is hard to talk about citation practices without considering some related concepts. Here are some definitions of those concepts that are often mentioned in assignments when citation is required.

What Is Academic Integrity?

> The International Center for Academic Integrity defines academic integrity as a commitment, even in the face of adversity, to six fundamental values: honesty, trust, fairness, respect, responsibility, and courage. From these values flow principles of behavior that enable academic communities to translate ideals into action. The Fundamental Values of Academic Integrity describes these core values in detail and provides examples of how to put them

> into practice on campuses, in classrooms, and in daily life.[2]

In other words, you must take full responsibility for your work, acknowledge your own efforts, and acknowledge the contributions of others' efforts. Working/Writing with integrity requires accurately representing what you contributed, as well as acknowledging how others have influenced your work. When you are a student, an accurate representation of your knowledge is important because it will allow both you and your professors to know the extent to which you have developed as a scholar. Part of that development is evidenced by how you apply the rules for acknowledging the work of others.

What Is Academic Misconduct?

As you might imagine, academic misconduct is when you do not use integrity in your academic work. Academic misconduct

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2. International Center for Academic Integrity [ICAI]. (2021). The Fundamental Values of Academic Integrity. (3rd ed.). www.academicintegrity.org/the-fundamental-values- of-academic-integrity. The Fundamental Values of Academic Integrity, Third Edition, from the International Center for Academic Integrity is available under a Creative Commons Attribution-NonCommercialShareAlike 4.0 International license.

includes many different unacceptable behaviors, but the one most relevant to what we are discussing here are in bold below.

The absence of academic integrity is described as cheating, often defined as "the deceptions of others about one's work." Such acts may include but are not limited to the following list compiled by the Oklahoma State Regents for Higher Educations Advisory Council:

1. Submitting another's work as one's own or allowing another to submit one's work as though it were his or hers;
2. Several people completing an assignment and turning in multiple copies all represented either implicitly or explicitly as individual work;
3. Failing to contribute an equal share in group assignments or projects while claiming equal credit for the work;
4. Using a textbook, notes, or technology tools during an examination without the permission of the instructor;
5. Receiving or giving unauthorized help on assignment(s) or examinations(s);
6. Stealing a problem solution or assessment answers from an instructor, a student, or other sources;
7. Tampering with experimental data to obtain "desired" results, or creating results for experiments not done;
8. Creating results for observations or

interviews that were not done;

9. Obtaining an unfair advantage by gaining or providing access to examination materials

10. Tampering with or destroying the work of others;

11. Submitting substantial portions of the same academic work for credit or honors more than once without permission of the present professor;

12. Lying about these or other academic matters;

13. Accessing computer systems or files without authorization;

14. **Plagiarizing (Plagiarism is generally defined as the use in one's writing of specific words, phrases, and/or ideas of another without giving proper credit);**

15. **Self-plagiarism is generally defined as a type of plagiarism in which the writer republished a work in its entirety or reuses portions of previously written text while authoring a new work;**

16. Falsifying college records, forms, or other documents.[3]

3. Make sure to check in your syllabus for the full CSC Academic Integrity policy.

What Is Plagiarism?

As noted above, plagiarism can be intentional (knowingly using someone else's work and presenting it as your own) or unintentional (inaccurately or inadequately citing ideas and words from a source). In either case, plagiarism puts both you and your professor in a compromising position.

While academic integrity calls for work resulting from your own effort, scholarship requires that you learn from others. So, in the world of academic scholarship, you are actually expected to learn new things from others AND come to new insights on your own. There is an implicit understanding that as a student you will be both using others' knowledge as well as your own insights to create new scholarship. To do this in a way that meets academic integrity standards, you must acknowledge the part of your work that develops from others' efforts. You do this by citing the work of others. You plagiarize when you fail to acknowledge the work of others and/or do not follow appropriate citation guidelines.

What Is Citing?

Citing, or citation, is a practice of documenting specific influences on your academic work.

In other words, you must cite all the sources you quote directly, paraphrase, or summarize as you:

- **Answer your research question**
- **Convince your audience**
- **Describe the situation around your research question and why the question is important**
- **Report what others have said about your question**

Why Cite Sources?

As a student, citing is important because it shows your reader (or professor) that you have invested time in learning what has already been learned and thought about the topic before offering your own perspective. It is the practice of giving credit to the sources that inform your work.

Our definitions of academic integrity, academic misconduct, and plagiarism give us important reasons for citing the sources we use to accomplish academic research. Here are several reasons for citing.

1. **To Avoid Plagiarism & Maintain Academic Integrity: Misrepresenting your academic achievements by not giving credit to others indicates a lack of academic integrity. This is not only looked down upon by the scholarly community, but it is also punished. When you are a student this could mean a failing grade on the assignment, a failing grade in that class for the semester, or even expulsion from the college.**
2. **To Acknowledge the Work of Others: One major purpose of citations is to simply provide credit where it is due. When you provide accurate citations, you are acknowledging both the hard work that has gone into producing research and the person(s) who performed that research. Think about the effort you put into your work (whether essays, reports, or even non-academic jobs): if someone else took credit for your ideas or words, would that seem fair, or would you expect to have your efforts recognized?**
3. **To Provide Credibility to Your Work & to Place Your Work in Context: Providing accurate citations puts your work and ideas into an academic context. They tell your reader that you've done your research and know what others have said about your topic. Not only do citations**

provide context for your work but they also lend credibility and authority to your claims.

If you're researching and writing about sustainability and construction, you should cite experts in sustainability, construction, and sustainable construction in order to demonstrate that you are well-versed in the most common ideas in the fields. Although you can make a claim about sustainable construction after doing research only in that particular field, your claim will carry more weight if you can demonstrate that your claim can be supported by the research of experts in closely related fields as well. Citing sources about sustainability and construction as well as sustainable construction demonstrates the diversity of views and approaches to the topic.

In addition, proper citation also demonstrates the ways in which research is social: no one researches in a vacuum—we all rely on the work of others to help us during the research

process.

4. **To Help Your Future Researching Self & Other Researchers Easily Locate Sources: Having accurate citations will help you as a researcher and writer keep track of the sources and information you find so that you can easily find the source again. Accurate citations may take some effort to produce, but they will save you time in the long run. So, think of proper citation as a gift to your future researching self!**

Challenges in Citing Sources

Here are some challenges that might make knowing when and how to cite difficult for you. Our best advice for how to overcome these challenges is in the first item.

1. **Running Out of Time: When you are a student taking many classes simultaneously and facing many deadlines, it may be hard to devote the time needed to doing good scholarship and accurately representing the sources you have used. Research takes time. The sooner you can start and the more time you can devote to it, the better your work will be. From the beginning, be sure to include in your notes where you found the information you could quote, paraphrase, and summarize in your final product.**

2. **Having to Use Different Styles: Different disciplines require that your citations be in different styles: which publication information is included and in what order. So your citations for different courses could look different, particularly for courses outside your major.**
3. **Not Really Understanding the Material You're Using: If you are working in a new field or subject area, you might have difficulty understanding the information from other scholars, thus making it difficult to know how to paraphrase or summarize that work properly.**
4. **Shifting Cultural Expectations of Citation: Because of new technologies that make finding, using, and sharing information easier, many of our cultural expectations around how to do that are changing as well. For example, blog posts often "reference" other articles or works by simply linking to them. It makes it easy for the reader to see where the author's ideas have come from and to view the source very quickly. But in these more informal writings, blog authors do not have a list of citations (bibliographic entries). The links do the work for them. This is a great strategy for online digital mediums, but this method fails over time when links break and there are no hints (like an author, title, and date) to know how else to find the reference, which might have moved. This example of a cultural change of expectations in the non-academic world might make it seem that there has been a change in academic scholarship as well, or might make people new to academic scholarship even less familiar with citation. But in fact, the expectations around citing sources in academic research remain formal.**

Citation and Citation Styles

Citing sources is an academic convention for keeping track of which sources influenced your own thinking and research.

Most citations require two parts:

Sources that influenced your thinking and research must be cited in academic writing.

- **The full bibliographic citation on the Bibliography page, References page, or Works Cited page of your final product.**
- **An indication within your text (usually author and publication date and maybe the page number[4] from which you are quoting) that tells your reader where you have used something that needs a citation.**

With your in-text citation, your reader will be able to tell which full bibliographic citation you are referring to by paying attention to the author's name and publication date.

Example: Citations in Academic Writing

Here's a citation in the text of an academic paper:

---

4. Somtimes, you will even use a paragraph number if your source is completely online and does not use pagination.

Studies have shown that compared to passive learning, which occurs when students observe a lecture, students will learn more and will retain that learning longer if more active methods of teaching and learning are used (Bonwell &Eison, 1991; Fink, 2003).

The information in parentheses coordinates with a list of full citations at the end of the paper.

At the end of the paper, these bibliographic entries appear in a reference list[5]

Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom. 1991 ASHE-ERIC Higher Education Reports.* ERIC Clearinghouse on Higher Education. https://eric.ed.gov/?id=ED336049

Fink, L. D. (2003). *Creating significant learning experiences.* Wiley.

Citation Styles

Style guides set the specific rules for how to create both in-text citations and their full bibliographic citations.

There are over a dozen kinds of citation styles. While each style requires much of the same publication information to be included in a citation, the styles differ from each other in

5. The following entries are in APA style.

formatting details such as capitalization, punctuation, order of publication information, and whether the author's name is given in full or abbreviated.

The image below shows bibliographic citations in four common styles. Notice that they contain information about who the author is, article title, journal title, publication year, and information about volume, issue, and pages. Notice also the small differences in punctuation, order of the elements, and formatting that **do make a difference**.

APA:
Rosenhan, D. L. (1973). On Being Sane in Insane Places. *Science, 179(4070),* 250-258. doi:10.1126/science.179.4070.250

Chicago:
Rosenhan, D. L. "On Being Sane in Insane Places." *Science* 179, no. 4070 (1973): 250-58. doi:10.1126/science.179.4070.250.

MLA:
Rosenhan, David L. "On Being Sane in Insane Places." *Science* 179.4070 (1973): 250-258. Web. 4 May 2016.

AMA:
Rosenhan DL. On being sane in insane places. *Science.* 1973;179(4070):250-258. doi:10.1126/science.179.4070.250

Differences between citation practices occur mainly in formatting.

Compare citation elements (including the punctuation and spacing) in the same color to see how each style handles their information.

Steps for Citing

To write a proper citation we recommend following these

steps, which will help you maintain accuracy and clarity in acknowledging sources.

Step 1: Choose Your Citation Style

Find out the name of the citation style you must use from your instructor, the directions for an assignment, or what you know your audience or publisher expects. Then search for your style at the [Purdue Online Writing Lab](#) (OWL) or use Google or Bing to find your style's stylebook/handbook and then purchase it or ask for it at a library. You also have access to an [OER APA Citation Manual](#)

Step 2: Create In-Text Citations

Find and read your style's rules about in-text citations, which are usually very thorough. Luckily, there are usually examples provided that make it a lot easier to learn the rules.

> ### *EXAMPLE: Style Guides Are Usually Very Thorough*
>
> For instance, your style guide may have different rules for when you are citing:
>
> - Quotations rather than summaries rather than paraphrases
> - Long, as opposed to short, quotations.
> - Sources with one or multiple authors.
> - Books, journal articles, interviews and email, or electronic sources.

Step 3: Determine the Kind of Source

After creating your in-text citation, now begin creating the full bibliographic citation that will appear on the References or Bibliography page by deciding what kind of source you have to cite (book, film, journal article, webpage, etc.).

Imagine that you're using APA style and have your OER Handbook as a guide. In your psychogeography paper, you want to quote the authors of the book *The Experience of Nature,* Rachel Kaplan and Stephen Kaplan, which was published in 1989. What you want to quote is from page 38 of the book.

Here's what you want to quote:

> "The way space is organized provides information about what one might want to do in that space. A relatively brief glance at a scene communicates whether there is room to roam, whether one's path is clear or blocked."

1. **Skim the headings in the style guide to remind yourself of what its rules concern.**
   Since it has rules about the length of quotations, you count the number of words in what you want to quote and find that your quote has 38, which is within the range for short quotations (less than 40), according to the APA style guide. According to the rule for short quotations, you see that you're supposed to introduce

the quote by attributing the quote to the author (last name only) and adding the publication date in parentheses. You write:

> **According to the Kaplans (1989)**, "The way space is organized provides information about what one might want to do in that space. A relatively brief glance at a scene communicates whether there is room to roam, whether one's path is clear or blocked."

2. **Then you notice that the example in the style guide includes the page number on which you found the quotation. It appears at the end of the quote (in parentheses and outside the quote marks but before the period ending the quotation). So you add that:**

> According to the Kaplans (1989), "The way space is organized provides information about what one might want to do in that space. A relatively brief glance at a scene communicates whether there is room to roam, whether one's path is clear or blocked" **(p. 38)**.

3. **You're feeling pretty good, but then you realize that you have overlooked the rule about having multiple authors. You have two and their last names are both Kaplan. So you change your sentence to:**

> According to **Kaplan and Kaplan** (1989), "The way space is organized provides information about what one might want to do in that space. A relatively brief glance at a scene communicates whether there is room to roam, whether one's path is clear or blocked" (p. 38).

So you have your first in-text citation for your final product:

According to Kaplan and Kaplan (1989), "The way space is organized provides information about what one might want to do in that space. A relatively brief glance at a scene communicates whether there is room to roam, whether one's path is clear or blocked" (p. 38).

Step 4: Study Your Style's Rules for Bibliographic Citations

Next, you'll need a full bibliographic citation for the same source. This citation will appear on the References page. Bibliographic citations usually contain more publication facts than you used for your in-text citation, and the formatting for all of them is very specific.

EXAMPLE: Bibliographic Citation Rules Are Very Specific

- Rules vary for sources, depending, for instance, on whether they are books, journal articles, or online sources.
- Sometimes lines of the citation must be indented.
- Authors' names usually appear last name first.
- Authors' first names may be initials instead.
- Names of sources may or may not have to be in full.
- Names of some kinds of sources may have to be italicized.
- Names of some sources may have to be in

> quotes.
> - Dates of publication appear in different places, depending on the style.
> - Some styles require Digital Object Identifiers (DOIs) in the citations for online sources.

Step 5: Identify Citation Elements

Figure out which bibliographic citation rules apply to the source you've just created an in-text citation for. Then apply them to create your first bibliographic citation.

Imagine that you're using APA style and have your OER Handbook as a guide. Your citation will be for the book called *The Experience of Nature*, written by Rachel Kaplan and Stephen Kaplan and published in 1989.

1. **You start by trying to apply the basic rules of APA style, which tell you your citation will start with the last name of your author followed by his or her first initial, and that the second line of the citation will be indented. So you write: Kaplan, R. and Kaplan, S. and remind yourself to indent the second line when you get there.**
2. **Since you have two authors, you look for a rule regarding that situation, which requires a comma between the authors and an ampersand between the names. So you write: Kaplan, R., & Kaplan, S.**
3. **Because you know your source is a book, you look for style guide rules and examples about books. For instance, the rules for APA style say that the publication date goes in parentheses, followed by a period after the**

last author's name. And that the title of the book is italicized. You apply the rules and examples and write the publication information you know about your source: Kaplan, R., & Kaplan, S. (1989). The Experience of Nature.

4. You notice while following the format for the title of the book that the title of the book is in italics BUT every word is not capitalized and it doesn't follow title case; it follows sentence case rules. So, you change your title to look like: Kaplan, R., & Kaplan, S. (1989). *The experience of nature.*[6]

5. Next, you look at the rules and examples of book citations and notice that they show the publisher. So you find that information about your source (in a book, usually on the title page or its back) and write: Kaplan, R., & Kaplan, S. (1989). *The experience of nature.* Cambridge University Press.

6. Congratulations, especially about remembering to add the hanging indent to that line! You have created the first bibliographic citation for your final product.

Step 6: Repeat the steps for creating an in-text citation and a bibliographic citation for each of your sources.

Create your bibliographic citation by arranging publication information to match the example you chose in Step 4. Pay particular attention to what is and is not capitalized and to what punctuation and spaces separate each part that the example illustrates.

6. OER APA Handbook Rule

Tip: Citation Software

It may seem like a great idea to quickly copy and paste the citation information that is generated for you using online citation software (like Citation Machine or Easy Bib) because you may be thinking "what is a few points lost after all". However, it will actually cost you more and cause use you more issues in the long run. All online citation generators create incorrect reference entries[7] (some are worse than others). While the sheer volume of errors are the main issue with this plan, you are also limiting your ability to develop the skill needed to cite sources correctly and quickly.

We get it; citations are hard and the rules are overwhelming and seemingly pointless, but the more practice you put into this skill the larger the reward is. Grant your professors a little bit of trust and give citing a solid effort; it gets easier, and, sooner than you think possible, creating your own will be a thousand times easier than "losing points" or spending time editing the generated citations.[8]

When to Cite

Citing sources is often described as a straightforward, rule-

7. After all, it is a computer doing it based off of exactly what you type in and how you type it in.
8. "Tip: Citation Software" was written by Brittany Seay

based practice. But in fact, there are many gray areas around citation[9], and learning how to apply citation guidelines takes practice and education. If you are confused by it, you are not alone – in fact, you might be doing some good thinking.

Here are some guidelines to help you navigate citation practices.

Cite when you are directly quoting. This is the easiest rule to understand. If you are stating word-for-word what someone else has already written, you must put quotes around those words and you must give credit to the original author. Not doing so would mean that you are letting your reader believe these words are your own and represent your own effort.

Cite when you are summarizing and paraphrasing. This is a trickier area to understand. First of all, summarizing and paraphrasing are two related practices but they are not the same. Summarizing is when you read a text, consider the main points, and provide a shorter version of what you learned. Paraphrasing is when you restate what the original author said in a specific passage or phrase in your own words and in your own tone[10]. Both summarizing and paraphrasing require good writing skills and an accurate understanding of the material you are trying to convey. Summarizing and paraphrasing are difficult to do when you are a beginning academic researcher,

9. While citation and the formatting rules are the most 'math-like' thing about writing, it still has some gray areas. For example, you are sure to encounter this firsthand when you watch your professor dig through a Citation Handbook trying to decide which source category your source is closest to.
10. Because paraphrasing is pulled from a specific section, the in-text citations typically include page numbers; however, summaries do not because you are referring to an entire work, not a single section.

but these skills become easier to perform over time with practice.

Cite when you are citing something that is highly debatable. For example, if you want to claim that the Patriot Act has been an important tool for national security, you should be prepared to give examples of how it has helped and how experts have claimed that it has helped. Many U.S. citizens concerned that it violates privacy rights won't agree with you, and they will be able to find commentary that the Patriot Act has been more harmful to the nation than helpful. You need to be prepared to show such skeptics that you have experts on your side, too.

When Don't You Cite?

Don't cite when what you are saying is your own insight. As you learned, research involves forming opinions and insights around what you learn. You may be citing several sources that have helped you learn, but at some point, you must integrate your own opinion, conclusion, or insight into the work. The fact that you are *not* citing it helps the reader understand that this portion of the work is your unique contribution developed through your own research efforts.

Don't cite when you are stating common knowledge. What is common knowledge is sometimes difficult to discern. In general, quick facts like historical dates or events are not cited because they are common knowledge.

- The Declaration of Independence was signed in 1776.
- Barack Obama became the 44th president of the United States in January, 2009.

Some quick facts, such as statistics, are trickier. For example, the number of gun-related deaths per year probably should be cited, because there are a lot of ways this number could be determined (does the number include murder only, or suicides and accidents, as well?) and there might be different numbers provided by different organizations, each with an agenda about gun laws.

A guideline that can help with deciding whether or not to cite facts is to determine whether the same data is repeated in multiple sources. If it is not, it is best to cite.

The other thing that makes this determination difficult might be that what seems new and insightful to you might be common knowledge to an expert in the field. You have to use your best judgment, and probably err on the side of over-citing, as you are learning to do academic research. You can also seek the advice of your instructor, a writing tutor, or a librarian. Knowing what is and is not common knowledge is a practiced skill that gets easier with time and with your own increased knowledge.

The answer to the ever-present question: Why Can't I Cite Wikipedia?

You've likely been told at some point that you can't cite Wikipedia, or any encyclopedia for that matter when you are creating an academic argument, in your scholarly work.

The reason is that such entries are meant to *prepare* you to do research, not be evidence of your having done it. Wikipedia entries, which are tertiary sources, are already a summary of what is known about the topic. Someone else has already done the labor of synthesizing lots of information into a concise and quick way of learning about the topic.

So, while Wikipedia is a great shortcut for getting context, background, and a quick lesson on topics that might not be familiar to you, don't quote, paraphrase, or summarize from it. Just use it to educate yourself.

Activity: To Cite or Not to Cite?

1.   The fact that drunk driving is a major cause of auto

11. 1. a; 2. a.; 3. b; 4. a; 5. b; 6. b

fatalities.

- ◦ a. To Cite
- ◦ b. Not to Site

2. The exact number of people who died in drunk-driving accidents between 2006 and 2008.

- ◦ a. To Cite
- ◦ b. Not to Cite

3. The idea that President Obama was a community organizer before he became a senator

- ◦ a. To Cite
- ◦ b. Not to Cite

4. A dollar amount representing President Obama's financial imapct on Chicago's south side.

- ◦ a. To Cite.
- ◦ b. Not to Cite.

5. The idea that the 21st century in the United States began with the 43rd president, George W. Bush.

- ◦ a. To Cite
- ◦ b. Not to Cite

6. The idea that human evolution is about the emergence of modern humans (homo sapiens) as a distinct species of hominids.

- ◦ a. To Cite
- ◦ b. Not to Cite

See footnotes for answers

In the next section, we are going to look at moving from research to categorizing and synthesizing the information you

discover in your sources as you prepare to make your argument. There are varying ways that this is done and presented; however, for the sake of this book and time, we are only going to look at Annotated Bibliographies and Literature Reviews.

Media Attributions

- **Lindsey MacCallum and Teaching & Learning Ohio State University Libraries**
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- **Lindsey MacCallum and Teaching & Learning Ohio State University Libraries**
- **Ibid.**
- **Ibid.**

2.6 Warming Up: The Ins and Outs of Sources: End-of-Chapter Exercises

End-of-Chapter Exercises

Activity: Fact, Opinion, Objective, or Subjective?

Instructions: Identify the purpose–fact,

opinion, objective, or subjective—for each statement.[1]

- Statement I: "Party animals and wallflowers hoping to change their social personas may have no say in the matter. A study shows that introverts and extroverts show activity in different brain structures which mirror the wildly opposing aspects of their personalities."
- Statement II: "In addition, when Cheek and Buss administered a questionnaire measuring shyness vs. low sociability to 947 college students, they found a very low correlation between shyness and low sociability—just because you're shy doesn't mean you don't want to be around people, and vice versa."
- Statement III: The reason why I have called for President Obama to issue an executive order banning these military-style firearms and magazines is because there is quite obviously no chance that a cowardly and intransigent Congress, in bed with the NRA, would risk passing gun-control legislation in an election year, or perhaps in any year given this political

1. 1. objective; 2. objective; 3. subjective opinion; 4. opinion

climate.
- Statement IV: By any measure, Anne Hathaway is one of the most important actresses of our time.

Activity: Popular, Professional, or Scholarly?

Instructions: Examine the title by clicking on its link. You will then need to choose specific issues and then articles to examine to determine the type of periodical it is.[2]

1. *The Atlantic*
2. *BMC Medicine*
3. *Advertising Age*
4. *Wall Street Journal*

2. 1. popular; 2. Scholarly; 3. professional; 4. popular

Activity: Connecting the Dots beyond the Title

Instructions: Now you can practice evaluating for relevance beyond the title. In the previous activity, you evaluated for currency and relevance the tittles of three sources for the research question: How does "prospect theory" in behavioral economics help explain medical doctors' decisinos to favor surgery or radiation to cure cancer in patients?

Judging by the title, the most relevant source for that research question seemed to be a journal article called **"Cancer Treatment Prescription–Advancing Prospect Theory beyond Economics," in *Journal of The American Medical Association Oncology*, June 2016.**

Read the abstract of the article below.

Then decide whether this source is relevant to your research question above. That is, will the article help you meet any of your project's information needs? If there is at least one need it can help meet, then you should consider the article relevant.

Answer the question below the abstract. Then compare your answer with our feedback.

Your information needs are:

- To learn more background information.
- To answer your research question.
- To convince your audience that your answer is correct or, at least, the most reasonable answer.
- To describe the situation surrounding your research question for your audience and explain why it's important.
- To report what others have said about question, including any different answers to your research question.

Abstract

"Cancer Treatment Prescription–Advancing Prospect Theory beyond Economics," in _Journal of The American Medical Association Oncology_, June 2016 (Note to students: This article and abstract are fictitious.)

Importance Cancer Treatment is complex. We expect oncologists to make treatment decisions according to definitive standards of care. Finding out that prospect theory demonstrates that they react very much like most other people when deciding to recommend surgery or chemotherapy for their patients indicates that more self-reflection on oncologists' part could help patients make better decisions. (Prospect theory describes how people choose between alternatives that have risk when the probability of different outcomes is unknown.)

Objective To show whether prospect theory applies to how oncologists framed their recommendations for

surgery or chemotherapy for patients in good condition and bad condition.

Design, Settings, and Participants Records of 100 U.S. oncologists were examined for the years 2014 and 2015, which documented patient conditions and the way oncologists framed their recommendations regarding surgery or chemotherapy. Thus, a quasi-experimental ex post facto design was used for the study.

Main Outcomes and Measures This study explored the relationship between the way in which the oncologists "framed" the choice of surgery or chemotherapy as they made recommendations to patients, to patients' conditions, and the choice actually made. Those results were compared to what prospect theory would predict for this situation.

Results Physicians seemed to present their recommendation of surgery or chemotherapy in a loss frame (e.g., "This is likely to happen to you if you don't have this procedure") when patients'

conditions were poor and in a gain frame (e.g., "By having this procedure, you can probably dramatically cut your chances of reoccurrence") when their conditions were less poor. These results are what prospect theory would have predicted.

Conclusions and Relevance This study opens up the possibility that, as described by prospect theory, a person's choice of framing behavior is not limited to how we naturally act for ourselves but includes how we act for other people, as the oncologists were acting on behalf of their patients. More research is necessary to confirm this line of evidence and determine whether oncologists' decision making and framing is the most effective and entirely according to the best standards of care.

Question:[3]

Having read the abstract, explain whether this source is relevant by choosing any of your research project's

3. b, c, d, e are all correct answers

information needs (below) that this source could help you meet. (Choose all that apply.) If a source could help with even one need, you should consider it relevant.

- · a. To learn more background information.
- · b. To answer your research question.
- · c. To convince your audience that your answer is correct or, at least, the most reasonable answer.
- · d. To describe the situation surrounding your research question for your audiencea and explain why it's important.
- · e. To report what others have said about your question, including different answers to your research question.

See footnotes for answers.

WALK BEFORE YOU RUN: GATHERING, SYNTHESIZING, AND UNDERSTANDING YOUR SOURCES

Below is the credit for Chapter 3 "Walk Before You Run: Gathering, Synthesizing, and Understanding Your Sources"

A Guide to Rhetoric, Genre, and Success in First-Year Writing by Melanie Gagich licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License is the primary text in section 3.1.

The Process of Research Writing by Steven D. Krause licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 License is the primary text in section 3.2

The primary texts for 3.3 are

- **An Introduction to Research Methods in Sociology by Valerie A. Sheppard licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License is the primary text in section 3.3**
- **"5.2 Synthesizing in Your Writing" by Yvonne Bruce, Melanie Gagich, and Svetlana Zhuravlova licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License was included near the end of this section to provide more information about synthesizing source material.**

Write Here, Right Now: An Interactive Introduction to

Academic Writing and Research by Ryerson University licensed under a Creative Commons Attribution 4.0 International License is the primary text in section 3.4.

Section 3.5 "Walk Before You Run: Gathering, Synthesizing, and Understanding Your Sources: End-of-Chapter Exercises" was written by Brittany Seay.

3.1 Writing Summaries

[1]One of the best ways to test your understanding of a source is to summarize the information you gathered from it. Summaries are also the first step in creating accurate and complete Annotated Bibliographies and Literature Reviews.

What is a summary?

A summary is a comprehensive and objective restatement of the main ideas of a text (an article, book, movie, event, etc.) Stephen Wilhoit, in his textbook *A Brief Guide to Writing from Readings*, suggests that keeping the qualities of a good summary in mind helps students avoid the pitfalls of unclear or disjointed summaries.

These qualities include:

> *Neutrality* – The writer avoids inserting his or her opinion into the summary, or

1. 3.1 (except where otherwise noted) was borrowed with minor edits and additions from A Guide to Rhetoric, Genre, and Success in First-Year Writing by Melanie Gagich which is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License

interpreting the original text's content in any way. This requires that the writer avoids language that is evaluative, such as: good, bad, effective, ineffective, interesting, boring, etc. Also, keep "I" out of the summary; instead, summary should be written in grammatical 3rd person (For example: "he", "she", "the author", "they", etc).

Brevity – The summary should not be longer than the original text, but rather highlight the most important information from that text while leaving out unnecessary details while still maintaining accuracy.

Independence – The summary should make sense to someone who has not read the original source. There should be no confusion about the main content and organization of the original source. This also requires that the summary be accurate.

By mastering the craft of summarizing, students put themselves in the position to do well on many assignments in college, not just English essays. In most fields (from the humanities to the soft and hard sciences) summary is a required task. Being able to summarize lab results accurately and briefly, for example, is critical in a chemistry or engineering class. Summarizing the various theories of sociology or education helps a person apply them to his or her fieldwork. In college, it's imperative we learn how to summarize well because we are asked to do it so often.

College students are asked to summarize material for many different types of assignments. In some instances,

summarizing one source is often the sole purpose of the entire assignment. Students might also be asked to summarize as just one aspect of a larger project, such as a literature review, an abstract in a research paper, or a works consulted entry in an annotated bibliography.

Some summary assignments will expect students to condense material more than others. For example, when summary is the sole purpose of the assignment, the student might be asked to include key supporting evidence; whereas, an abstract might require students to boil down the source text to its bare-bones essentials.

What Makes Something a Summary?

When you ask yourself, after reading an article (and maybe even reading it two or three times), "What was that article about?" and you end up jotting down–from memory, without returning to the original article to use its language or phrases–three things that stood out as the author's main points, you are summarizing. Summaries have several key characteristics.

You're summarizing well when you

- use your own words
- significantly condense the original text
- provide accurate representations of the main points of the text they summarize
- avoid personal opinions.

Summaries are much shorter than the original material—a general rule is that they should be no more than 10% to 15% the length of the original, and they are often even shorter than this (the length is largely dependent on what you are using the summary for).

It can be easy and feel natural, when summarizing an article, to include our own opinions. We may agree or disagree strongly with what this author is saying, or we may want to compare their information with the information presented in another source, or we may want to share our own opinion on the topic. Often, our opinions slip into summaries even when we work diligently to keep them separate. These opinions are not the job of a summary, though. A summary should *only* highlight the main points of the article.

Tip

Focusing on just the ideas that best support a point we want to make or ignoring ideas that don't support that point can be tempting. This approach has two significant problems, though:

First, it no longer correctly represents the original text, so it misleads your reader about the ideas presented in that text. A summary should give your reader an accurate idea of what they can expect if they were to pick up the original article to read.

Second, it undermines your own credibility as an author to not represent the information accurately. If readers cannot trust an author to accurately represent source information, they may not be as likely to trust

that author to thoroughly and accurately present a reasonable point.

How Should I Organize a Summary?

Like traditional essays, summaries have an introductory, body, and concluding material. What these components look like will vary some based on the purpose of the summary you're writing. The introduction, body, and conclusion of work focused specifically on summarizing something is going to be a little different than in work where summary is not the primary goal. These elements are oftentimes much shorter as they are part of a condensed paragraph and not a fully developed argumentative paper.

Introductory elements in a summary

One of the trickier parts of creating a summary is making it clear that this is a summary of someone else's work; these ideas are not your original ideas. You will almost always begin a summary with an introduction to the author, article, and publication so the reader knows what they are about to read. This information will appear again in your bibliography but is also useful here so the reader can follow the conversation happening in your paper.

In summary-focused work, this introduction should accomplish a few things:

- **Introduce the name of the author whose work you are summarizing.**

- **Introduce the title of the text being summarized.**
- **Introduce where this text was presented (if it's an art installation, where is it being shown? If it's an article, where was that article published? Not all texts will have this component–for example, when summarizing a book written by one author, the title of the book and name of that author are sufficient information for your readers to easily locate the work you are summarizing).**
- **State the main ideas of the text you are summarizing—just the big-picture components.**
- **Give context when necessary. Is this text responding to a current event? That might be important to know. Does this author have specific qualifications that make them an expert on this topic? This might also be relevant information.**

However, you will probably find yourself more frequently using summary as just one component of work with a wide range of goals (not just a goal to "summarize X").

Summary introductions in these situations still generally need to

- **name the author**
- **name the text being summarized**
- **state just the relevant context, if there is any (maybe the author has a specific credential that makes their work on this topic carry more weight than it would otherwise, or maybe the study they generated is now being used as a benchmark for additional research)**
- **introduce the author's full name (first and last names) the first time you summarize part of their text. If you summarize pieces of the same text more than once in a work you are writing, each time you use their text after that initial introduction of the source, you will only use the author's last name as you introduce that next**

summary component.

Presenting the "Meat" (or Body) of a Summary

Again, this will look a little different depending on the purpose of the summary work you are doing. Regardless of how you are using summary, you will introduce the main ideas throughout your text with transitional phrasing, such as "One of [Author's] biggest points is…," or "[Author's] primary concern about this solution is…."

If you are responding to a "write a summary of X" assignment, the body of that summary will expand on the main ideas you stated in the introduction of the summary, although this will all still be very condensed compared to the original. What are the key points the author makes about each of those big-picture main ideas? Depending on the kind of text you are summarizing, you may want to note how the main ideas are supported (although, again, be careful to avoid making your own opinion about those supporting sources known).

When you are summarizing with an end goal that is broader than just summary, the body of your summary will still present the idea from the original text that is relevant to the point you are making (condensed and in your own words).

Since it is much more common to summarize just a single idea or point from a text in this type of summarizing (rather than all of its main points), it is important to make sure you understand the larger points of the original text. For example, you might find that an article provides an example that opposes its main point in order to demonstrate the range of conversations happening on the topic it covers. This opposing point, though, isn't the main point of the article, so just

summarizing this one opposing example would not be an accurate representation of the ideas and points in that text.

Concluding a Summary

For writing in which summary is the sole purpose, here are some ideas for your conclusion.

- **Now that we've gotten a little more information about the main ideas of this piece, are there any connections or loose ends to tie up that will help your reader fully understand the points being made in this text? This is the place to put those.**
- **This is also a good place to state (or restate) the things that are most important for your readers to remember after reading your summary.**
- **Depending on your assignment, rather than providing a formal concluding paragraph where you restate the main points and make connections between them, you may want to simply paraphrase the author's concluding section or final main idea. Check your assignment sheet to see what kind of conclusion your instructor is asking for.**

When your writing has a primary goal other than summary, your conclusion should

- **discuss the summary you've just presented. How does it support, illustrate, or give new information about the point you are making in your writing? Connect it to your own main point for that paragraph so readers understand clearly why it deserves the space it takes up in your work. (Note that this is still not giving your opinion on the material you've summarized, just making**

connections between it and your own main points.)

Original Attributions from A Guide to Rhetoric, Genre, and Success in First-Year Writing by Melanie Gagich

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3.2 The Annotated Bibliography

[1]What is an Annotated Bibliography?

As you develop a working thesis for your research project and begin to collect different pieces of evidence, you will soon find yourself needing some sort of system for keeping track of everything. One of the primary tools used in the world of academia is an annotated bibliography, which is a list of sources on a particular topic that includes a brief summary of what each source is about. This writing exercise is a bit different from the other assignments of similar nature in that it isn't an "essay" per se; rather it is an ongoing writing project that you will be "building" as you discover new pieces of evidence for your research project.

> ### Example
>
> Here is an example of an entry from an annotated bibliography in APA style:
> Parsons, M. (2000). Protecting children on the

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1. 3.2 (except where otherwise noted) was borrowed with minor edits and additions from *The Process of Research Writing* by Steven D. Krause which is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 License

electronic frontier: A law enforcement challenge. *FBI Law Enforcement Bulletin, 69*(10), 22-26.

This article is about an educational program used by the U.S. Navy to educate people in the Navy and their families about some of the things that are potentially dangerous to children on the Internet. Parsons claims that the educational program has been effective.

Annotated bibliography entries have two parts. At the top of the entry is the reference entry. It is the part that starts "Parsons, M.'" and as discussed in Chapter 2, lists information like the name of the writer, where the evidence appeared, the date of publication, and other publishing information.

The second part of the entry is the summary of the evidence being cited. A good annotated bibliography summary provides enough information in a sentence or two to help you and others understand what the research is about in a neutral and non-opinionated way.

The first two sentences of this annotation are an example of this sort of very brief, "just the facts" summary. In the brief summaries of entries in an annotated bibliography, stay away from making evaluations about the source—"I didn't like this article very much" or "I thought this article was great." The most important goal of your brief summary is to help you, colleagues, and other potential readers

For guidelines on how to properly write citations for your Annotated bibliographies, see Chapter 2 or your OER APA Handbook.

get an idea about the subject of the particular piece of evidence.

Summaries can be challenging to write, especially when you are trying to write them about longer and more complicated sources of research. Keep these guidelines in mind as you write your own summaries.

- **Keep your summary short.** Good summaries for annotated bibliographies are not "complete" summaries; rather, they provide the highlights of the evidence in as brief and concise a manner as possible, no more than a sentence or two.
- **Don't quote from what you are summarizing.** Summaries will be more useful to you and your colleagues if you write them in your own words. Instead of quoting directly what you think is the point of the piece of evidence, try to paraphrase it.
- **Don't "cut and paste" from database abstracts.** Many of the periodical indexes that are available as part of your library's computer system include abstracts of articles. Do not "cut" this abstract material and then "paste" it into your own annotated bibliography. For one thing, this is plagiarism. Second, "cutting and pasting" from the abstract defeats one of the purposes of writing summaries and creating an annotated bibliography in the first place, which is to help you understand and explain your research.

Different writers will inevitably write slightly different summaries of the same evidence. Some differences between different writers' summaries of the same piece of evidence

result from different interpretations of what is important in the research; there's nothing wrong with that.

However, two summaries from different writers should both provide a similar summary overall. In other words, it is not acceptable when the difference in interpretation is the result of a lack of understanding of the evidence.

Why Write Annotated Bibliographies?

An annotated bibliography is an excellent way to keep track of the research you gather for your project. Make no mistake about it— it is extremely important that you keep track of all of your evidence for your research project, and that you keep track of it from the beginning of the process of research writing.

There's nothing more frustrating than finding an excellent article or book chapter you are excited about incorporating into your research project, only to realize you have forgotten where you found the article or book chapter in the first place. This is extremely frustrating, and it's easily avoided by doing something like writing an annotated bibliography.

You could use other methods for keeping track of your research. For example, you could use note cards and write down the source information as a proper citation, then write down the information about the source that is important. If the material you know you want to use from a certain source is short enough, you might even write a direct quote, which is where you write down word for word what the source says exactly as it is written. At other times, you can write a paraphrase.

While note cards and other methods have their advantages, annotated bibliographies are an extremely useful tool for keeping track of your research.

An annotated bibliography:

· Centralizes your research into one document that you can keep track of both as a print-out of a word-processed file and as a file you save electronically.
· Allows you to "copy and paste" citation information into the references section of your research project.

An annotated bibliography also gives you the space to start writing and thinking a bit about how some of your research might fit into your project. Consider these two sample entries from an annotated bibliography from a research project on pharmaceutical advertising:

Siegel, M. (2002, May 20). Fighting the drug (ad) wars: As corporations push new medicines, sound and affordable healthcare suffers. *The Nation.* https://www.thenation.com/article/archive/fighting-drug-ad-wars/

Siegel, who is a doctor himself, writes about how drug advertising has undermined the communication between doctors and patients. He argues that drug ads have driven up the costs of

prescription drugs, particularly big selling drugs like those for cholesterol.

Wechsler, J. (2002). Minority docs see DTC ads as way to address "race gap." *Pharmaceutical Executive, 32*(34), https://www.pharmexec.com/view/pharma-expenditures-keep-rising

This article is about a study that said that African-American doctors saw advertising of prescription drugs as a way of educating their patients. Wechsler claims that the ads are useful because they talk about diseases that affect African-Americans.

Even from the limited amount of information available in these entries, it's clear that a relationship between these articles exists. Both are similar articles about how the doctor/patient relationship is affected by drug advertising. But both are also different. The first article is from the newspaper *The Nation*, which is known for its liberal views. The second article is from a trade journal that is an advocate for the pharmaceutical industry.

In other words, in the process of compiling an annotated bibliography, you are doing more than keeping track of your research. You are starting to make some comparisons and beginning to see some relationships between your evidence, a process that will become increasingly important as you gather more research and work your way through the different exercises that lead to the research project.

How many sources do I need?

Inevitably, students in research writing classes always ask how many sources they need to include in their research projects. In one sense, "how many sources do I need?" is a utilitarian question, one usually attached to a student's exploration of what it will take to get a particular grade. Considered more abstractly, this question is also an effort to explore the scope of a research project. Like a certain page or word count requirement, the question "how many sources do I need?" is an effort to get a handle on the scope of the research project assignment. In that sense, asking about the number of sources is probably a good idea, a little like asking how much something weighs before you attempt to pick it up.

But ultimately, there is no right or wrong answer to this question[2]. Longer research projects tend to have evidence from more different sources than shorter projects, but there is no cut-and-dry formula where "X" number of pages will equal "X" number of sources.

However, an annotated bibliography should contain significantly more entries than you intend or expect to include in your research project. For example, if you think you will need or if your instructor requires you to have research from about seven different sources, you should probably have about 15 different entries on your annotated bibliography.

The reason you need to find twice as many sources as you are likely to use is that you want to find and use the best research you can reasonably find, not the first pieces of research you can

2. In the sense of pure research; however, there is a wrong answer when the project has a prompt attached to it that specifically states how many sources you need to submit with your final Annotated Bibliography.

find. Usually, researchers have to look at a lot more information than they would ever include in a research writing project to begin making judgments about their research. And by far the worst thing you can do in your research is to stop right after you have found the number of sources required by the instructor for your project.

Writing an Annotated Bibliography

Each entry in your annotated bibliography should contain a reference entry and a brief summary of the cited material. You should think of your annotated bibliography as having roughly twice as many sources as the number of sources you will need to include for the research project, but your instructor might have a different requirement regarding the number of sources required.

Also, you should work on this assignment in parts. Going to the library and trying to complete this assignment in one sitting could turn this into a dreadful writing experience. However, if you complete it in stages, you will have a much better understanding of how your resources relate to each other.

You will probably need to discuss with your instructor the style of citation you need to follow for your research project and your annotated bibliography. Following a citation style isn't difficult to do, but you will want to be consistent and aware of the "rules" from the beginning. In other words, if you start off using MLA style, don't switch to APA style halfway through your annotated bibliography or your research project.

Last, but not least, you will need to discuss with your instructor the sorts of materials you need to include in your research and your annotated bibliography. You may be required to include a balance of research from scholarly and non-scholarly sources, and from "traditional" print resources

(books, magazines, journals, newspapers, and so forth) and the Internet.

Questions to ask while writing and researching

1. Would you classify the material as a primary or a secondary source? Does the research seem to be difficult to categorize this way?
2. Is the research from a scholarly or a non-scholarly publication? Does the research seem difficult to categorize this way?
3. Is the research from the Internet—a web page, a newsgroup, an email message, etc.? Remember: while Internet research is not necessarily "bad" research, you do need to be more careful in evaluating the credibility of Internet-based sources.
4. Do you know who wrote the material you are including in your annotated bibliography? What qualifications does your source say the writer has?
5. Why do you think the writer wrote it? Do they have a self-interest or a political viewpoint that might make them overly biased?
6. Besides the differences between scholarly, non-scholarly, and Internet sources, what else do you know about where your research was published?

Is it an academic book? An article in a respected journal? An article in a news magazine or newspaper?

7.   When was it published? Given your research topic, how important do you think the date of publication is?

8.   Are you keeping your summaries brief and to the point, focusing on the point your research source is trying to make?

9.   If it's part of the assignment, are you including a sentence or two about how you see this piece of research fitting into your overall research project?

Revision and Review

Because of its ongoing nature, revising an annotated bibliography is a bit different than the typical revision process. Take opportunities as you compile your annotated bibliography to show your work in progress to your classmates, your instructor, and other readers you trust. If you are working collaboratively on your research projects, you will certainly want to share your annotated bibliography with classmates who are working on a similar topic. Working together like this can be a very useful way to get more ideas about where your research is going.

It is best to approach the annotated bibliography in smaller steps—five or six entries at a time. If that's how you're approaching this project, then you will always be in a process of revision and review with your classmates and your instructor. You and your readers (your instructor and your classmates)

should think about these questions as you revise, review, and add entries:

1. Are the summaries you are including brief and to the point? Do your readers understand what the cited articles are about?
2. Are you following a particular style guide consistently?
3. If you are including a sentence or two about each of your resources, how do these sentences fit with your working thesis? Are they clarifying parts of your working thesis that were previously unclear? Are they suggesting changes to the approach you took when you began the research process?
4. Based on the research you have so far, what other types of research do you think you need to find?

3.3 The Literature Review

[1]Another way to gather sources and present the information you have gathered utilizing primarily summaries is a literature review. This type of project is a survey of everything[2] that has been written about a particular topic, theory, or research question. The word "literature" means "sources of information." The literature will inform you about the research that has already been conducted on your chosen subject. This is important because we do not want to repeat research that has already been done unless there is a good reason for doing so (i.e. there has been a new development in this area or testing a theory with a new population, or even just to see if the research can be reproduced). Literature reviews usually serve as a background for a larger work (e.g. as part of a research proposal), or it may stand on its own. Much more than a list of sources, an effective literature review analyzes and synthesizes information about key themes or issues.

1. 3.3 (excepts where otherwise noted) was borrowed with minor edits and additions from *An Introduction to Research Methods in Sociology* by Valerie A. Sheppard which is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License
2. relatively speaking. It is a daunting task to read EVERYTHING that has ever been written on a topic (especially in a semester); however, literature reviews are composed of multiple sources covering a specific topic--much like an annotated bibliography.

Purpose of a literature review

The literature review involves an extensive study of research publications, books, and other documents related to the defined problem. The study is important because it advises you, as a researcher, whether the problem you identified has already been solved by other researchers. It also advises you as to the status of the problem, techniques that have been used by other researchers to investigate the problem, and other related details.

A literature review goes beyond the search for information and includes the identification and articulation of relationships between existing literature in your field of research. The literature review enables the researcher to discover what has been already been written about a topic and to understand the relationship between the various contributions. This will enable the researcher to determine the contributions of each source (books, article, etc.) to the topic. Literature reviews also enable the researcher to identify and (if possible) resolve contradictions and determine research gaps and/or unanswered questions.

Even though the nature of the literature review may vary with different types of studies, the basic purposes remain constant.

- Provide a context for your research;
- Justify the research you are proposing;
- Show where your proposed research fits into the existing body of knowledge;
- Enable the researcher to learn from previous theory on the subject;
- Illustrate how the subject has been studied

previously;
- Highlight flaws in previous research;
- Outline gaps in previous research;
- Show how your proposed research can add to the understanding and knowledge of the field;
- Help refine, refocus, or even move the topic in a new direction

What is involved in writing a literature review?

- Research – to discover what has been written about the topic;
- Critical Appraisal – to evaluate the literature, determine the relationship between the sources, and ascertain what has been done already and what still needs to be done;
- Writing – to explain what you have found

Generally speaking, it is helpful to think of the literature review as a funnel. One starts with a broad examination of the research related to the issue, working down to look at more specific aspects of the issue, which leads to the gap or the specific issue that your research will address.

How to undertake a literature review

The first step in undertaking a literature review is to conduct a library search of academic research that has been done on your topic. This can be done electronically, or if you are within close vicinity to a library, you can go in and use their computers to find electronic and print holdings. You can also use Google Scholar for your search. In some cases, research conducted outside academia can serve as an important research source for your literature review. Indeed, such research can have important practical implications, as opposed to academic research which usually (although not always) tends toward theoretical applications.

However, it is important to understand who funded the research you review, in addition to the perspective and the purpose of the research. Review Chapter 2 "Warming Up: The Ins and Outs of Sources" to recap how to vet sources and where to find them.

As part of this first step, there are a few more things to be thinking about as you review the literature

- Who are the various researchers who have studied this topic? Who are the most prolific researchers/writers on this topic? Has a specific researcher or teams of researchers been identified as pioneers or leaders in this field of study?
- How have the various researchers defined key terms that are relevant to your topic? Have the definitions of any of the key terms evolved over time?
- What are the different theories that have been

examined and applied to this topic? How, if at all, have the various theories applied to this topic over time evolved?

- What methodologies have been used to study this topic? Have the methodologies evolved over time?

In addition to thinking about these questions, you should be taking notes during this process. If you are finding your sources online and viewing them as PDFs via a database, you can download the file and annotate as you read using software like Adobe Reader and Kami. Annotating, according to [Webster](), is "a note added by way of comment or explanation." Simply put, it means actively reading and taking notes during the process of your research. For a lot of people, this boils down to highlighting/underlining passages, charts, graphs, and data that they interpret as important to the overall article's purpose. This also includes drafting comments in the margins that explain the thought process you had when you decided that the information you marked was important. Annotating may feel time-consuming and, to some, like "busy work," but if you trust the process, when you go to put together the project using those sources, it will be much easier as you will have your own thoughts to review in order to track back why you kept a source and why you wanted to use it as evidence in your research project.

Your notes for a source should include marking (either by highlighting or drafting a note) information similar to the following.

- If the article is empirical, write down the results of the research study in one or two sentences of your own words. e.g. "people who are between ages 18 – 35 are more likely to own a smart phone than those above or below." It is also a good idea to make note of the methods, the research design, the number of participants and details on the sample used in the study. Sometimes, you may even want to write down the names of the statistical procedures used to analyze the data or even some of the statistics, depending on your assignment.
- If the article is a review of previous research, look for the main points. It may be helpful to read or skim the whole article, look away, and ask yourself what you felt was the main idea.
- Write down any limitations or gaps you notice, anything that seems to contradict something you read elsewhere, or just anything that you think is important or interesting[3]

When reading through your sources, remember that you are looking for the "big picture," not a collection of separate articles all tangentially about the same topic (an annotated bibliography). You are also not trying to prove a point (an essay). You are looking for common themes and patterns in the research as a whole. You are also looking to see how the various pieces of research are linked, if at all. As part of this process, you also want to identify research gaps or areas that require further research related to your topic[4]. In this regard, you cannot be expected to be an expert on your topic. A suggestion for finding gaps is to read the conclusion section of the academic journal articles and conference proceedings your search has uncovered. Researchers often identify gaps in the research in their conclusion. They may even suggest areas for future research. However, remember, if a researcher suggested a gap 10 years ago, it is likely that the gap has now been addressed. To find a gap, look at the most recent research your literature review has uncovered (within 2-3 years of the current date). At this point in your search of the literature, you may realize that your research question needs to change or adapt. This is a fairly common occurrence, as when you first develop a research question, you cannot be sure what the status of the research area is until you undertake your review of the literature related to this topic. Finally, it is worth mentioning that it is very likely you will not include all of the resources you have read in your literature review. If you are asked to include 20 resources in your literature review, for example, expect to read approximately 30.

3. Adjei, J. K. (n.d.). *Research methods*. Retrieved from African Virtual University website: https://oer.avu.org/handle/123456789/490
4. Ibid.

How to write a literature review

There are three parts to the literature review: the introduction, the body, and the conclusion.

Introduction

- The introduction must identify the topic by briefly discussing the significance of the topic including a statement that outlines the conclusion to be drawn from the literature review.
- If your literature review is part of a larger work, explain the importance of the review to your research question.
- Defend the importance of the topic by giving a broad overview of the scope of the work you are reviewing. For example, if you are interested in post-traumatic stress disorder (PTSD) in paramedics, you might provide some stats to prove how much work time is lost by those suffering from PTSD.
- Clarify whether you are looking at the entire history of the field or just a particular period of time.

Body

- Discuss and assess the research according to specific organizational principles (see examples below), rather than addressing each source separately. Paragraphs should discuss more than one source. Avoid addressing your sources alphabetically as this does not assist in developing the themes or key issues central to your review.
- Compare, contrast, and connect the various pieces of

research. Much of the research you are reading should be connected. You may notice various themes within the research (i.e. effects of PTSD on sick time, effects of PTSD on families of paramedics, effects of PTSD on overall paramedic wellness, etc.). If you have undertaken a thorough review of the literature, you should start to see the bigger picture of how the research on this topic has evolved over time, who the main researchers are on this topic, and how the methods and theories related to this topic have changed (if at all).

- Summarize the works you are reviewing. Just as in any written assignment, use logical organization and clear transitions.

Conclusion

Based on your research, suggest where the research in the field will or should go next. If you are proposing your own research study, show how you will contribute to the field and fill in any gaps. The conclusion would also be a good place to defend the importance of the topic, now that you have demonstrated the current state of thinking in the field. You may also want to consider noting any gaps in your own research. Were their groups, questions, data, etc. that you did not look at in your research? If so, why?

Organization and source types in literature reviews

Table 3.3.1 provides some suggested organizational techniques, as well as instances when you might use these various

techniques. The table also provides a writing sample to demonstrate the writing technique.

Table 3.3.1 Three ways to organize your literature review (adapted from Adjei, n.d.)

Organization technique	Instances When to Use	Examples
1. **Thematically**	**When explaining key themes or issues relevant to the topic** This is the most common way to organize literature reviews.	**A literature review of 31 relevant articles published between January 2005 and March 2015 identified 10 variables relevant to user adoption of mobile technology: Perceived usefulness, perceived ease of use, income/ wealth, employment, mobility requirement, education, social resources, etc.“User adoption variables” is the theme**

2. **Methodologically (also called a methodology review)**	**When discussing interdisciplinary approaches to a topic or when discussing a number of studies with a different approach.**	**In e-business adoption literature, various models have been used as a framework for analyzing the factors that need to be satisfied in order to guarantee business success. This review evaluates the different models used in this area with the intent of determining if standardized methodologies exist.**
3. Chronologically	**When historical changes are central to explaining the topic.**	**A literature review is presented on the evolution of post-traumatic stress disorder and its impact on firefighters from the late 1970s through to the present time. As part of this evolution, you might discuss how the definition of PTSD has evolved over time, how the methods used for studying this topic have evolved over time, how treatment options have evolved over time, etc.**

Acceptable sources for literature reviews

There are sources that are considered more acceptable for literature reviews. Below they are listed in order from what is considered most acceptable to less acceptable sources for literature review assignments.

1. Peer reviewed journal articles;
2. Edited academic books;
3. Articles in professional journals;
4. Website material from professional associations (use sparingly and carefully);

Peer reviewed journal articles (papers)

A peer reviewed journal article is a paper that has been submitted to a scholarly journal, accepted, and published. Peer review journal papers go through a rigorous, blind review process of peer review. What this means is that two to three experts in the area of research featured in the paper have reviewed and accepted the paper for publication. The names of the author(s) who are seeking to publish the research have been removed (blind review), so as to minimize any bias towards the authors of the research. Albeit, sometimes a savvy reviewer can discern who has done the research based upon previous publications, etc. This blind review process can be long (often 12 to 18 months) and may involve many edits on the behalf of the researchers, as they work to address the edits and concerns of the peers who reviewed their paper. Often, reviewers will reject the paper for a variety of reasons, such as

unclear or questionable methods, lack of contribution to the field, etc. Because peer reviewed journal articles have gone through a rigorous process of review, they are considered to be the premier source for research. Peer reviewed journal articles should serve as the foundation for your literature review.

Edited academic books

> Edited books contain chapters usually written by different authors who are experts in their field. An editor (or a group of editors) puts together articles from various sources. While each chapter deals with the same topic, chapters may present diverse – sometimes even contradictory – perspectives, guided by the authors' respective areas of expertise.[5]

The papers within the text also go through a process of review; however, the review is often not a blind review because the authors have been invited to contribute to the book. Consequently, edited academic books are fine to use for your literature review, but you also want to ensure that your literature review contains mostly peer reviewed journal papers.

5. Editage Insights. (2021, March 3). Q: Which is considered the highest academic publication among a book, an edited book, and a book chapter? https://www.editage.com/insights/which-is-considered-the-highest-academic-publication-among-a-book-an-edited-book-and-a-book-chapter

Articles in professional journals

Articles from professional journals should be used with caution, as far as it relates to a source for your literature review. This is because articles in trade journals are not usually peer reviewed, even though they may appear as such. A good way to find out is to read the "About us" section of the professional journal. They should state there if the papers are peer reviewed. You can also google the name of the journal and add peer reviewed to the search and you should be able to find out that way.

Website material from professional associations

Material from other websites can also serve as a source for statistics that you may need for your literature review. As you want to justify the value of the research you are interested in, you might make use of a professional association´s website to learn how many members they have, for example. As a hypothetical example, you might want to demonstrate, as part of the introduction to your literature review, why more research on the topic of PTSD in police officers is important. You could use peer reviewed journal articles to determine the prevalence of PTSD in police officers in Canada in the last ten years and then use the Ontario Police Officers´ Association website to determine the approximate number of police officers employed in the Province of Ontario over the last ten years. This might help you create an approximation of how many police officers could be suffering with PTSD in Ontario. That number could potentially help to justify a research grand down

the road. But again, this type of website-based material should be used with caution and sparingly.[6]

The Five 'C's of Writing a Literature Review[7]

To help you frame and write your literature review, think about these five 'c's.

1. **Cite** the material you have referred to and used to help you define the research problem that you will study.
2. **Compare** the various arguments, theories, methods, and findings expressed in the literature. For example, describe where the various researchers agree and where they disagree. Describe the similarities and dissimilarities in approaches to studying related research problems.
3. **Contrast** the various arguments, themes, methods, approaches, and controversies apparent and/or described in the literature. For example, describe what major areas are contested, controversial and/or still in debate.
4. **Critique** the literature. Describe which arguments you find more persuasive and explain why. Explain which approaches, findings, and methods seem most reliable, valid, appropriate, and/or most popular and why. Pay attention to the verbs you use to describe what previous

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6. Adjei, J. K. (n.d.). *Research methods*. Retrieved from African Virtual University website: https://oer.avu.org/handle/123456789/490
7. Derived from Callahan, J. L. (2014). Writing literature reviews: A reprise and update. Human Resource Development Review, 13(3), 271 –275. https://doi.org/10.1177/1534484314536705

researchers have stated (e.g. asserts, demonstrates, argues, clarifies, etc.).

5. **Connect** the various research studies you reviewed. Describe how your work utilizes, draws upon, departs from, synthesizes, adds to or extends previous research studies.

Difference between a literature review and an essay

So now that you know what a literature review is and how to write it, it is important to understand how a literature review is different from an essay. First of all, it is necessary to point out that many students struggle with understanding the difference between a literature review and an essay. This is particularly so because the exact same resources used to create a literature review can be used to create an essay; however, what is different about the two is where the emphasis in the writing is placed.[8]

As discussed previously, a literature review focuses on everything that has been written about a particular topic, theory, or research. It is focused on the research and the researchers who have undertaken research on your topic. In contrast, an essay focuses on proving a point. It does not need to provide an extensive coverage of all of the material on the topic. In fact, the writer chooses only those sources that prove the point. Most professors will expect to see you discuss a few different perspectives from the materials that run contrary to

8. Thomas, J. (2012, September 26). Literature review vs. essay [Blog post]. Retrieved from https://blogs.qut.edu.au/library/2012/09/26/literature-review-vs-essay/

the point you are trying to make. For example, suppose you want to write an essay about the negative effects of shiftwork on nurses. You would gather material to show that shiftwork negatively affects nurses, and the various ways it affects nurses. Now, in this case, you might find the odd research paper that states shiftwork has no effect – although, I doubt it, because it has been extensively documented to have a negative effect. However, the point is that with an essay you are focused on providing information on your topic and proving your point which means that your argument should not be in a literature review as that type of paper is not about what you believe or want to argue should be considered; it is about the current conversation you are planning to enter.

Difference between a literature review and an annotated bibliography

Another type of academic writing that can also confuse students who are attempting to write a literature review is one that you have already learned about in this chapter–the annotated bibliography.

An annotated bibliography provides all of the reference details of a bibliography, but it goes one step further and provides a short summary of the reference. Remember though that an annotated bibliography is not to be confused with a bibliography. A bibliography is a list of journal articles, books, and other resources that someone has utilized in writing. The bibliography provides a list of all resources that someone used to write a

> research paper and, unlike a reference list, includes references that may not appear in the body of the paper.

However, the main difference between an annotated bibliography and a literature review falls on the level of synthesis that happens among the sources. In an annotated bibliography (like we discussed earlier in this chapter), you are creating stand-alone summaries about each source in your paper. These sources should be related in the sense that they are all about the same general research topic; however, in this type of paper, you do not have to look for connections beyond making sure they are discussing the same topic. In a literature review, you have to link the sources to one another (which means your summaries are typically much shorter in a literature review than they are in an annotated bibliography). You move from writing one summary about each source in a single paragraph to connecting several condensed summaries about 2 or more sources in one paragraph. A literature review focuses more on creating a big picture between the sources by grouping like sources together and using transition phrases/words to develop a link between said sources or synthesizing.

[9]Synthesis as Conversation Among the

9. Borrowed with minor edits and additions from ["5.2 Synthesizing in Your Writing"](#) by Yvonne Bruce, Melanie Gagich, and Svetlana Zhuravlova which is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](#)

Authors of Your Source Materials

To **synthesize** is to combine ideas and create a completely *new* idea. That new idea becomes the conclusion you have drawn from your reading. This is the true beauty of reading: it causes us to weigh ideas, to compare, judge, think, and explore—and then to arrive at a moment that we hadn't known before. We begin with **summary**, work through **analysis**, evaluate using **critique**, and then move on to **synthesis**.

How do you synthesize?

Synthesis is a common skill we practice all the time when we converse with others on topics we have different levels of knowledge and feelings about. When you argue with your friends or classmates about a controversial topic like abortion or affirmative action or gun control, your overall understanding of the topic grows as you incorporate their ideas, experiences, and points of view into a broader appreciation of the complexities involved. In professional and academic writing, synthesizing requires you to seek out this kind of multi-leveled understanding through reading, research, and discussion. Though, in academic writing, this is another kind of discussion: you set the goal for the discussion, organize the discussion among the authors of your found researched materials, orchestrate the progress of the discussion, build logical guidance for your audience, and finally you draw your conclusion on the topic.

> *Below are some steps you can use to help you synthesize research:*
>
> 1.   Determine the goal(s) for your discussion such as reviewing a topic or supporting an argument
> 2.   Organize the discussion among the authors of your found researched materials
> 3.   Lead the discussion among the authors of your sources
> 4.   Summarize the most vivid of the authors' examples and explanations
> 5.   Finally, draw your unique conclusion on the topic: in fact, the answer to your research question

What synthesis is NOT

Synthesizing does not mean summarizing everyone's opinion: "Julia is pro-life, and Devon is pro-choice, and Jasmine says she thinks women should be able to have abortions if their life is in danger or they've been the victims of rape or incest."

Synthesizing does not mean critiquing opinions: "Rick tried to defend affirmative action, but everyone knows it's really reverse racism."

Synthesizing does not simply compare texts (unless assigned as such by your instructor). You are neither evaluating nor comparing the effectiveness of the authors' presentations.

What synthesis IS

Instead, synthesis demonstrates YOUR full, **objective**, empathetic understanding of a topic from multiple perspectives. When you synthesize, you "cook" the ideas and opinions of others by thinking, talking, and writing about them, and what comes out is a dish full of many blended flavors but uniquely your recipe:

> "Because feelings about gun control are so strong on all sides, and because outlawing semi-automatic weapons will not solve the problem of illegal handguns that are implicated in most gun crimes in the United States, any solution to the problem of our gun violence will likely require greater efforts to reduce illegal weapons, greater responsibility taken by gun manufacturers, and better enforcement of existing legislation rather than new legislation or constitutional change."

Notice that this synthesis does not crouch behind limited and thoughtless positions: "You can't change the Second Amendment!" "Ban all guns!" This synthesis instead tries to depict the hard reality: guns are an integral part of American culture, and so is gun violence, and limiting the latter can not be done without impacting the former. This synthesis reserves judgment and aims for understanding. In order to gain an unbiased and fair understanding of a topic, you must read research from all sides of the conversation (even if you think you disagree with that side before you begin researching).

3.4 Preparing to Join the Conversation

[1]When you are searching for sources to help you support your argument, resist the impulse to look only for documents that pertain to your **exact** subject matter. Sometimes, students will be frustrated because they have searched exact terms, such as "Occupy Wall Street" AND "Facebook," and have come up with nothing. However, remember that you are creating your own unique argument. Trying to find papers that have made exactly the same argument you want to make will nudge you towards the "patchwork" model and away from the opportunity to put together something new and interesting of your own.

Instead, look for papers on similar subjects or on the broader categories into which your specific discussion fits. Other writers interested in social media and its use in protest movements will have produced papers on the subject. Exploration of this material can be very profitable for you.

You may find material that **corroborates** yours. If Author A's paper on some other protest movement's

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1. 3.4 (except where otherwise noted) was borrowed with minor edits and additions from *Write Here, Right Now: An Interactive Introduction to Academic Writing and Research* by Ryerson University which is licensed under a Creative Commons Attribution 4.0 International License

use of social media has come to conclusions that seem to confirm your own (when you consider both papers in light of the broader subject), you might present some of Author A's research and compare it closely to your own.

You may find material that **contrasts** with yours. This material is just as valuable as the corroborating material. Perhaps you can use it to explore the differences between the contexts of the two discussions (is Author B examining a different type of social media or a different variety of protest movement? Did the users approach social media in a different way? Did the protest movement originate from a different social context or cultural background? Is Author B herself working from assumptions that are fundamentally different from yours, or does Author B's paper genuinely offer a complication you will have to take into consideration as you revise and refine your thesis?).

You may find material that **contextualizes** yours. Perhaps Author C has written a paper on the history of protest movements, on the way communities seem to work online, on social upheaval and the Internet, or on Occupy Wall Street's origins and modus operandi. All four of these subjects are relevant to your paper, but they are also broader in scope. It is often very helpful to look at secondary research on the categories to which your primary document belongs. You will, for instance, be able to discuss the Occupy Wall Street Facebook page

> more knowledgeably if you know something about Occupy Wall Street.

Corroboration, contrast, and contextualization will all give you ways of approaching your subject matter that would remain inaccessible to you if you limited yourself to a close reading. The secondary works you consult will provide factual information you would not otherwise have, as well as analytical ideas that come from perspectives that might not otherwise have occurred to you. You do need to be careful that you are engaging with these works instead of merely replicating them.

Standing on the Shoulders of Giants: Using Your Essay to Look Forward

From Pixabay.

Reflecting on his own considerable and influential body of work, Isaac Newton wrote, "If I have seen further it is by standing on the shoulders of giants." When we reflect on Newton's output in the fields of mathematics, astronomy, and physics, it becomes apparent that Newton was himself a giant whose broad shoulders are forever crowded by thousands gazing into a distance he has made visible. As Newton's own self-assessment reveals, he became a giant not through some solitary moment of inspiration, but through **joining and furthering the ongoing conversation**.

Discourse—the respectful reception of other ideas and the reflective response to them—is the lifeblood of all scholarly disciplines, all universities and colleges, and all university and college courses—such as the ones in which you are currently enrolled. Your research essay, like all research essays, is a vital

contribution to this discourse. Universities and colleges exist primarily as a space to foster the ideas that the works of others inspire in you, the responses to these works that you develop, and the dialogues between you and others as you consider complementary and contradictory responses.

One of the goals of this text is to prepare you to enter this conversation and make sure your contributions are taken seriously at this level. One of the key components of a meaningful essay at this level is the proper balance of your ideas, the examination of primary evidence, and the elevation of your investigation through the proper use of scholarly sources. You are using secondary sources to elevate and complicate **your opinion/claim**, not replace it. Your claim always drives your analysis. Your claim determines how sources are applied to your argument and what inferences you derive from that application.

In creating your research paper you are performing two essential tasks:

2. Selecting a topic for closer examination
3. Selecting a particular scholarly discourse to which you would like to contribute meaningfully

You make these selections because discussion of both in the light of each other will result in an elevated understanding of the topic and a useful extension of the scholarly discourse. You cannot join an ongoing discourse by waving vaguely and making generalizations. You can join an ongoing discourse by

examining a specific idea in detail and in the light of how it extends and further complicates the scholarly conversation.

Joining the Scholarly Conversation: Using Your Primary and Secondary Evidence

Your essay will use several sources, but for the purposes of brevity, we are going to pretend that we have our primary claim and one scholarly secondary source.

We find that one of the best approaches for students preparing to write a research essay using evidence is to imagine taking part in a conversation—perhaps an introduction of two people you know very well but who do not know each other. In this conversation, you will have to take a leading role, but you are hoping that the people you are introducing will hit it off and begin conversing with each other as well. Two mistakes students make when facilitating this scholarly conversation are:

2. **Dominating the conversation to the point that neither their argument nor the secondary sources contribute meaningfully.**
3. **Being a passive conduit and contributing very little in the hope that the sources will somehow carry the conversation all by themselves.**

Dominating the Conversation

Let's look at some examples of these mistakes and then examine ways to remedy them.

The first mistake involves acting like a domineering, interrupting, and inattentive conversation partner—the sort of

person who finishes other people's sentences, most often in ways the interrupted person did not intend. This sort of mistake most often manifests itself in essays in which the student paraphrases the sources, making them say things they are not really saying for the sake of proving their own argument, or using minimal, even one-word citations and plugging them into their own argument out of context. In this way, the writer ignores what either source is saying because the primary concern is making the conversation arrive at the desired conclusion no matter what the cost. Here is an example of this sort of "bullying" of sources using our primary claim and our secondary article:

Example

As McCosker and Johns confirm in "Productive Provocations: Vitriolic Media, Spaces of Protest and Agonistic Outrage in the 2011 England Riots," "aggressive, antagonistic behaviour" like the "unchecked flow of racial bigotry" and the "vitriolic expression and aggressive interaction" found in the comments section of the Occupy Wall Street Homepage demonstrate how such pages "simply give voice to and perpetuate forms of bigotry and incite hatred and further violence." As commenters call each other "idiots" and "terrorists" and "Zionist pigs," they demonstrate how "volatile debates erupting online" serve as "modes of incitement" for real world violence. When one commenter accuses another of having a

"racist God," or when one calls another's religion a "fake story," they demonstrate the "angry, adversarial and provocative speech" that fosters only divisiveness and violence. The original message and intent of the Occupy Wall Street movement is lost in the "angry tenor of speech" dominating the comments section as people reply to each other's comments with "simple people like simple slogans" or "lol dumb post."

Here, we see the author using McCosker and Johns's article as if it is about the Occupy Wall Street page, which it is not, and as if it agrees with the author's assessment of the primary evidence. This secondary source is misused to support what the author wants it to say about the subject. Also, the citations are short snippets used without context. Exactly what are McCosker and Johns referring to when they describe "aggressive antagonistic behaviour?" Exactly what are they referring to when they discuss "angry, adversarial and provocative speech?" And what is the context of each of the harsh phrases the author has lifted from the comments page? If you review McCosker and Johns's article, you'll see there are several times here where the author has clipped a citation to make it serve the desired argument. McCosker and Johns' point is a little more qualified when describing the "volatile debates erupting online." They write of the "dense and volatile debates erupting online," implying a more nuanced reading of online discussions than simply pointing at their potential for danger. The author needs to decide how to convey the primary claim then determine if McCosker and Johns' argument as it exists in their essay can support that point.

Passive Conduit

The second mistake occurs when the writer hopes that the sources will somehow speak to themselves and arrive at a meaningful conclusion without much help. In these sorts of conversations, the student has become a non-contributor, sitting passively as the sources **speak at each other** rather than **speaking to each other** in light of the conversation the student is trying to facilitate. This sort of non-conversation occurs in papers in which the student quotes large passages from one or several sources with minimal purpose or interaction. It is as if the student has said, "Source A, meet Source B," then departed quickly rather than get in the way of the magic that will hopefully happen as these two sources make a meaningful connection. Using once again our primary evidence and our secondary article, here's what happens when the student hopes the sources will speak to and for themselves:

Example

As McCosker and Johns claim in "Productive Provocations: Vitriolic Media, Spaces of Protest and Agonistic Outrage in the 2011 England Riots," it is the "lack of consensus, the evident irrationality and passionate individualism, as well as the intensity of emotion revolving around the continuous generation of provocation and (re)action that reveals the positive capacity of unmoderated comment spaces. That is,

> while not always dialogic in the strict sense of an ongoing conversation or consensus, the comment field as described here enables the emergence of 'a 'life politics' able to reach the various areas of personal life, creating a 'democracy of emotions' (Mouffe, 2005: 15)." This can be seen in the comments on the Occupy Wall Street Facebook page, when after a series of vitriolic comments and insults, contributor Tara Lambert is able to say, "I am seeing the seeds of divisiveness being sewn within OWS and BLM. Start us fighting amongst each other and we are no threat to the power abusers, the oppressors. I am seeing those who should be natural allies, being pitted against each other and suspicion injected into activist circles. History keeps repeating itself."

To borrow Tara Lambert's metaphor, I think we can see the "seeds" of the argument the author of this paragraph is trying to make, but the author relies far too much on large citations from the primary and scholarly sources. Neither source is being put to use and the author's intention is not clear. This author needs to inject purpose into this paragraph and use the evidence to support the claim.

Purposeful Conversation

Now that we have looked at the mistakes made most often when trying to create this sort of conversation, let's use the same information and develop a more useful, more purposeful conversation. Remember to let these sources speak, but also

that the purpose of this conversation is all **yours**. Secondary sources allow you to gain a richer, more informed, and complex vantage point on your primary claim. However, you must avoid relying on secondary sources to act as your "answers." You are using secondary sources to support your claim. Your claim should always drive your analysis. Your claim determines how sources are applied to your argument and what inferences you derive from that application. Here's an example of how we elevate our own argument by utilizing sources so that it becomes part of a larger scholarly discourse:

Example

While it is discouraging to read the comments section of the Occupy Wall Street Facebook page and see commenters calling each other "idiots," "losers," and even "Zionist Pigs," it may be beneficial to regard these debates and dialogues in the same light as McCosker and Johns regard similar online discourse in "Productive Provocations: Vitriolic Media, Spaces of Protest and Agonistic Outrage in the 2011 England Riots." McCosker and Johns claim "[t]he kinds of provocative, often vitriolic and antagonistic but massively multiple expression acts throughout the comment fields... enact agonistic forms of contest as an alternative model of citizenship, acts that incorporate forms of passion and conflict but are no less productive for it." While there are several instances on the Occupy Wall Street Page of people responding to posts with

> less-than-civil comments like "Grow up" or "lol dumb post"—as McCosker and Johns say of similarly vitriolic online discussions of the 2011 England Riots—these "modes of civic participation can be initiated in ways that might become part of legitimate public discourse, before the eruption of violent destruction in the form of riot and looting." Such debates may be the first step in the Internet functioning as a tool for individuals to confront their own insularity and deal with difference peacefully before moving toward unification through a common goal.

In this example, there is a fine balance between this author's intent and the sources used. Neither overwhelms the other. The author keeps an eye on both purpose and context here, using but never altering the meaning of the sources, to support and complicate a deeper reading of the Occupy Wall Street Facebook page.

You will need to keep these aspects of an academic conversation in mind as you read your own sources and prepare to utilize them in your upcoming academic, scholarly arguments.

Media Attributions

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3.5 Walk Before You Run: Gathering, Synthesizing, and Understanding Your Sources: End-of-Chapter Exercises

End-of-Chapter Exercises

You have now read about summarizing and you have also looked at two specific types of papers that academics use to share their source summaries and findings with each other. Now, it is time to practice!

1. Choose a source that you have read a few (ideally at least 2) times throughout the course of your prelimnary research.
2. Summarize the source using 3 paragraphs.

- The first paragraph should include the introductory material.
  - The second paragraph should be the "meat" of the source or the main claim and results the author(s) of the source presented.
  - The third paragraph should be the concluding material.

3. Now, using that same source, write the summary using only one paragraph(6-8 sentences).

   - Not only will this help you practice your summarization skills, but you will also spend some time practicing the art of concision.

4. Finally, take the paragraph summary you just wrote and make it even shorter (3-4 sentences).

If you followed along with the chapter, you will recognize that the first summarization skills come into play when you are trying to create a summary essay over a specific source, the second when you are preparing a summary for an annotated bibliography, and the third when you are looking to create a literature review. Each of these summaries should be able to accurately represent the same source. You should not reach each and think that they are three separate summaries for three separate sources. If you do, then the pieces of information you chose to include are not the most important aspects of the article.

Remember: You have to be mindful of what

information you are marking as important (i.e. choosing to include in the summary) because the smaller the summary gets the less space you have to, essentially, convey the same material.

CROSSING THE FINISH LINE: THE ACADEMIC RESEARCH ARGUMENT

Below is the credit for Chapter 4 "Crossing the Finish Line: The Academic Research Argument"

Write Here, Right Now: An Interactive Introduction to Academic Writing and Research by Ryerson University licensed under a Creative Commons Attribution 4.0 International License is the primary text in section 4.1.

The primary texts for 4.2 are

- **"Chapter 4" of** *Claim Your Voice in First Year Composition, Vol. 2* **by Cynthia Kiefer and Serene Rock licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License**
- **"Structure of Argument" by Karla Lyles and Jeanine Rauch provided by the University of Mississippi is licensed under a** *CC BY-SA: Attribution-ShareAlike*

The primary texts for 4.3 are

- **"Claims, Reasons, and Evidence" by Karla Lyles and Jeanine Rauch provided by the University of Mississippi is licensed under a** *CC BY-SA: Attribution-ShareAlike*
- **"Structure of Argument" by Karla Lyles and Jeanine Rauch provided by the University of Mississippi is licensed under a** *CC BY-SA: Attribution-ShareAlike*

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- **"Claims, Reasons, and Evidence" by Karla Lyles and**

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- **"Chapter 5"** of *Claim Your Voice in First Year Composition, Vol. 2* **by Cynthia Kiefer licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License**

"Annoying Ways People Use Sources" by Kyle D. Stedman is licensed under a Creative Commons Attribution 4.0 International License, except where otherwise noted in *Entering the Conversation* by Naomi Salmon (Editor). The text by Stedman is the primary text used in section 4.5.

"Counterarguments, Acknowledgement and Response, and Warrants" authored by Karla Lyles and Jeanine Rauch and provided by the University of Mississippi is licensed under a *CC BY-SA: Attribution-ShareAlike* and is the primary text used in section 4.6.

Writing & Research in the Disciplines: Advanced Composition at the University of Mississippi is published as an OER through Lumen Learning and is the primary text in section 4.7.

Section 4.8 "Crossing the Finish Line: The Academic Research Argument: End-of-Chapter Exercises" was created by pulling in-chapter exercises from the above-mentioned texts. See section footnotes for individual activity credits.

4.1 Research: First Steps

[1]The Research Paper

When we hear the words "research paper" or "research assignment," our first impulse may be to think of a work that takes other people's ideas and sews them together into a single document: a sort of patchwork quilt. However, a good research paper operates rather differently. "Research" is not an excuse to coast on the knowledge of others but an opportunity to use that knowledge to support and add complexity to our own original ideas.

Photo by Ron Dyar on Unsplash

The word "support" is often used in conjunction with research, and it is a good place to start. Let's unpack the word a little. What does it mean to "support" an argument?

We've already seen some examples of support happening earlier in this text. An argument is not complete without evidence to back it up. However, as you will notice as

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1. 4.1 (except where otherwise noted) was borrowed with minor edits and additions from *Write Here, Right Now: An Interactive Introduction to Academic Writing and Research* by Ryerson University which is licensed under a Creative Commons Attribution 4.0 International License

you move through these chapters, using evidence in support of an argument is not as simple as just presenting it, then standing back and letting the reader figure out what it means. Supporting evidence must be **developed**. Support is more than the evidence itself. It consists of the evidence **and** the interpretation of that evidence.

> If you make an assertion on its own, you have an argument without evidence: an opinion. If you make an assertion and follow it with a list of evidence, you have an argument without development: an observation. If you make an assertion and follow it with a detailed discussion of how and why the evidence demonstrates its validity, you have an argument with support which is the strongest of the three when your purpose is to convince your readers to seriously consider the thesis (or driving claim) you are putting forth.

In a research paper, you must expand your consideration of evidence beyond your own close reading. Therefore, you must also expand your understanding of "support" to include not just an interpretation of your own ideas but an interpretation of secondary works that you will **apply to** your claims and reasons. These secondary sources are not the primary focus of your investigation, but they can be used to give you insight into this investigation: insight you would not gain only looking at your ideas on a topic.

However, before we get too deep into the evidence that you will use to support your claims and reasons, we need to discuss what these terms mean and how each aspect of a research paper functions on its own so that you will be better prepared

to link them together in ways that effectively and efficiently convey your purpose to your intended audience.

4.2 Understanding and Composing Researched Arguments

[1]*Features of Academic Argument*

A clear and arguable position: You must present a reasonable argument for which both evidence and opposing or alternate views (counterarguments) exist. If few would disagree with you or you cannot find any evidence of a credible opposing view, you should consider rethinking and revising your position. A common error occurs when students try to present a **statement of fact** as an argumentative position. See the example below to learn how an idea or statement of fact can be developed and revised to become an effective thesis statement.

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1. 4.2 (except where otherwise noted) is borrowed with minor edits and additions from Claim Your Voice in First Year Composition, Vol. 2 by Cynthia Kiefer and Serene Rock which is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License

When presenting your stance in an argumentative thesis statement, make sure you have stated an argument and not a simple statement of fact or an expository thesis statement like you would write for a report.

Statement of Fact: Some social media users develop unhealthy attitudes about their body image because of the constant portrayal of "ideal" body types they encounter online.

Expository Thesis Statement: Excessive social media use can cause unhealthy physical and mental conditions, particularly for girls and young women.

Overarching Point Argumentative Thesis Statement: Social media users should restrict themselves from exposure to unrealistic photos and from the portrayal of the "ideal" body type in order to prevent the development of significant health issues.

Argument Thesis Statement with

Broadcasting of Discussion Points (Reasons/ Minor Premises): Social media users should restrict themselves from the exposure to unrealistic photos and from the portrayal of the "ideal" body type in order to prevent harmful physical and mental health conditions linked with excessive social media use.

   Proposal Solution Argument Thesis Statement: To help users moderate their exposure to unrealistic photos and "ideal" body types associated with harmful physical and mental health conditions, social media companies should provide users with informative public service announcements focused on healthy body image, display advertising promoting healthy body images and attitudes, and develop filters and messaging preferences to help end-users control their media stream content.

   THESIS TIPS: When you compare the statements above, it is clear that a solid expository or argumentative thesis statement can *contain* factual information, but it must be a more complex idea that requires more development and evidence. The simple statement of fact above does not pass the "so what?" or "why?" test. When a thesis makes a claim about what a person or organization should *do, think, or say*, you are in the realm of argument. A useful strategy for developing a

strong argumentative thesis statement is to answer this question: *Who* should do *what* and *why*?

An obvious organizational structure: A solid argument takes planning. If your argument is disorganized or the thesis and/or the key reasons are unclear or placed in a confusing order, your argument and supporting content may not be taken seriously. Taking the time to plan the essay with a rough phrase-form outline including your citations will save you hours of time when you start writing.

Although many teachers begin to teach some version of argument with the writing of a thesis statement, in reality, a good argument begins with looking at the data that are likely to become the evidence in an argument and that give rise to a thesis statement or major claim. A thesis statement arises from a question, which in turn rises from the examination of information or data of sort. — George Hillocks, former professor emeritus at the University of Chicago in the Departments of Education and English Language and Literature[2]

2. Hillocks, G.,Jr. (2010). Teaching argument for critical thinking

Necessary background information: You must present the issues, history, or larger contexts that provide the foundation for understanding your argument so that your readers (and you) can comprehend and see the urgency in the specific argument you are making. That is, you must acknowledge the current rhetorical context and provide a sense of the argument's importance or exigence.

Viable reasons for your position: Your argument offers valid reasons for your position for which you provide relevant evidence. These reasons usually become the key points expressed in the topic sentences of your body paragraphs.

Convincing evidence: You present convincing, credible, relevant researched evidence including facts, statistics, surveys, expert testimony, anecdotes, and textual (i.e. such as history, reports, analyses) evidence. Think about the appeals you learned about in Composition 1: logos, ethos, pathos, Kairos, and Stasis when selecting your evidence. Varying evidence types will help you vary the rhetorical appeals and create a more balanced argument and greater audience appeal.

Appeals to readers' values: Effective arguments appeal to readers' emotions, values, wants, and needs. You might appeal to your readers' sense of compassion or justice through a compelling narrative/anecdote. However, you will want to make sure that you have a balance between appeals to your reader's values and presenting sound evidence to support those appeals and keep your argument from being driven solely by appeals to pathos.

A trustworthy tone: Through a confident tone, clear focus, knowledgeable voice, and well-researched, credible evidence, you can develop readers' confidence in your credibility

and writing: An introduction. *English Journal, 99*(6), 24-32. https://www.proquest.com/docview/577286527/fulltextPDF/8F9B51E2B09B440EPQ/1?accountid=30550

conveying to them that you possess internal ethos. This means that vague or shallow evidence and writing that is unedited and/or too informal in tone will reduce your audience's trust in your argument resulting in a smaller chance that your readers will seriously consider the ideas you are presenting as valid.

Careful consideration of counterarguments: You present your awareness of opposing views about your argument to address the audience's needs or expectations and to reinforce your internal ethos. If you do not address the "yeah, but" or "what about" in your readers' or listeners' minds, your argument may not be taken seriously and, even worse, your audience will think you have not researched your topic well enough or that you underestimate their existing knowledge. You should concede some points the opposition makes and refute others through evidence when you can.

Appropriate use of patterns of development to present your argument: Your argument reflects the application of the most effective patterns of development or rhetorical modes which you learned about in Composition 1 (i.e. exemplification, explanation, analysis, classification, comparison/contrast, definition, description, narration), with which to develop the content supporting your reasons.

Activating an Inquiry-based Mindset for Creating Arguments

Using a questioning heuristic[3] can help you generate an academic argument. Just as you pre-research a possible

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3. Definition: of or constituting an educational method in which learning takes place through discoveries that result from investigations made by the student

argument topic to see what others are saying about it or just bubble map or list to generate some ideas or list some research questions, you also need to "interrogate" the argument you are forming before you go too far with your research. In fact, working through these questions about the argument will help you identify holes in the argument you can address with specific research questions for your next round of rhetorical research.

QUESTIONING HEURISTIC FOR INVENTING AN ARGUMENT[4]

Questions are at the core of arguments. What matters is not just that you believe that what you have to say is true, but that you give others viable reasons to believe it as well—and also show them that you have considered the issue from multiple angles. To do that, build your argument out of the answers to the five questions a rational reader will expect answers to. In academic and professional

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4. Borrowed with minor edits and additions from "Argument" by Kirsten DeVries which is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License and published as part of Critical Reading, Critical Writing: A Handbook to Understanding College Composition, SP22 edition

writing, we tend to build arguments from the answers to these main questions:

1. What do you want me to do or think?
2. Why should I do or think that?
3. How do I know that what you say is true?
4. Why should I accept the reasons that support your claim?
5. What about this other idea, fact, or consideration?
6. How should you present your argument?

When you ask people to do or think something they otherwise would not, they quite naturally want to know why they should do so. In fact, people tend to ask the same questions. As you make a reasonable argument, you anticipate and respond to readers' questions with a particular part of the argument:

1. The answer to *What do you want me to do or think?* is your **conclusion**: "I conclude that you should do or think X."
2. The answer to *Why should I do or think that?* states your **premise**: "You should do or think X because . . ."
3. The answer to *How do I know that what you say is true?* presents your **support**: "You can believe my reasons because they are supported by a thorough review of the available information and this carefully selected, credible evidence . . ."
4. The answer to *Why should I accept that your*

reasons support your claim? states your
general principle of reasoning, called
a **warrant**: which is/are assumptions and/or
values the author holds and possibly the
audience holds as well: "My specific reason
supports my specific claim because whenever
this general condition is true, we can generally
draw a conclusion like mine." OR "I know
people in my audience value the importance
of X, just as I do."

5. The answer to *What about this other idea,
   fact, or conclusion?* **acknowledges** that your
   readers might see things differently and
   then **responds** to their **counterarguments**.

6. The answer to *How should you present your
   argument?* leads to the **point of
   view**, **organization**, and **tone** that you should
   use when making your arguments.

As you have noticed, the answers to these
questions involve knowing the particular vocabulary
argumentation because these terms refer to
specific parts of an argument. The remainder of this
section will cover the terms referred to in the
questions listed above as well as others that will
help you better understand the building blocks of
the argument.

Types of Arguments

Aristotelian Argument

Most likely sometime during your time in high school or your first semester of composition, you composed a simplified Aristotelian argument essay in which you researched a controversial issue and formed an argumentative position on the issue. You wrote an introduction leading into your thesis statement (major premise), provided two to three reasons as discussion points (minor premises) which became the focus of the essay's body paragraphs. You also provided a counterargument presenting an opposing view and offered both a concession and refutation of that view.

Rogerian Argument

The Rogerian approach to argument is based on the work of Carl Rogers, one of the founders of Humanistic Psychology. Humanists are "concerned with the fullest growth of the individual in the areas of love, fulfillment, self-worth, and autonomy"[5]. In the field of learning and rhetoric, the "Rogerian" approach is focused on personal growth, developing a sense of personal fulfillment, and finding common ground with others. This concept of finding common ground with others who hold opposing views or perspectives is a contrast to the traditional

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5. The Editors of Encyclopaedia Britannica. (n.d.). Humanistic psychology. In *Encyclopaedia Britannica*. https://www.britannica.com/science/humanistic-psychology

Aristotelian argument as discussed above or the Toulmin argument which we will look at later.

A Rogerian argument presents the opposing view without bias or negative tone and finds subclaims or points within the opposition's argument that have merit or align with your own position on the issue. If you understand the issue well enough and can authentically present two or more stances on the issue, you are demonstrating that you have brought an open mind to the issue and are trustworthy in presenting your own argument and the opposing view. That is, you will have validated your internal ethos to your audience. As you present the opposing argument and consider the supporting evidence, your goal is to work your way toward a common ground; that is, the reasons and/or evidence both sides can agree upon, at least to some degree. Even if you do not actually write or present a formal Rogerian Argument, working through an outline of the opposition's case with an open mind for the purpose of finding common ground and determining where your arguments diverge will help you more effectively develop your own argument and present a counterargument that accurately represents the opposition's views.

The Rogerian argument analysis expands your knowledge and understanding of an issue far beyond a simple pro/con understanding of the issue and can help you develop a more sophisticated, complex argument. Processing your argument through the filter of a Rogerian perspective could also help you avoid some argumentative pitfalls. For example, fully understanding and trying to find common ground with opposing views may help you prevent:

- Taking too hostile a position against an opposing argument, thus alienating your

audience.

- Not acknowledging the values, wants, or needs the opposing argument fulfills for the members of your audience will result in you never addressing them yourself.
- Writing a weak, uniformed counterargument to your own argument leading to audience mistrust of your internal ethos.

Toulmin Argument

The Toulmin Argument, which you studied in Composition 1, was developed by philosopher, Stephen Toulmin. Toulmin is best known for his work on argumentation which moved argument out of classical logical reasoning based on syllogisms to what he termed "practical arguments" based on justification rather than abstract proofs. Key elements of the Toulmin Model are claims, grounds or evidence, rebuttals, warrants, backing, and qualifiers. Below is a recap of the main components of the Toulmin Model.

TOULMIN MODEL[6]

THE CLAIM: The claim or thesis must be very clear and concise because it sets up the entire paper. Questions that a good claim might answer are:

THE EVIDENCE: The next part of our argument and the most in-depth is the evidence that supports our claim. We are basically saying in our argument that the reader should agree with us because of XYZ where XYZ is the evidence. It is often said that the heart of any argument is the evidence. The key is to use evidence that is accurate, current, fair, or unbiased which makes it credible to support the claim. Also, the evidence has to be presented accurately because the reader is simply not going to believe you unless you are some form of subject matter expert, which you probably are not, so we need to have the experts speak for you.

THE REBUTTAL: This section usually contains two parts: (1) addresses the main opposing point of view to the writer's position. This demonstrates that you understand what that position is and helps develop your own credibility as the writer. (2) After you

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6. Borrowed with minor edits and additions from Writing and Rhetoric by Heather Hopkins Bowers, Anthony Ruggiero, and Jason Saphara which is licensed under a Creative Commons Attribution 4.0 International License

discuss the opposing view, next you provide **evidence** that casts doubt on that view suggesting that the other position might not be correct. The evidence does not have to prove that the other side is completely wrong; it only needs to suggest that there may be some doubt with the point of view based upon the evidence you are offering.

   THE WARRANT: This is the basic/common or underlying principle that links your claim, reason, and evidence. For example, let's say that your claim was about the dangers of social media use by young adults; however, everyone may not care about social media use. Therefore, you want to connect the reason "why" to the claim by expressing a common or underlying principle that will help your audience understand how the reason and claim link. So, while some people may not care about social media use, ***most people would care about keeping young adults* safe and away from danger** because that is a natural instinct embedded in the human psyche. Warrants can come from principles that are shared at the societal level or within the field itself.

   THE BACKING: This is evidence that supports the warrant *and only the warrant.* Using the example above, your backing would need to support the idea that we should do everything in our power to keep young adults safe, but not address the social media issue. Remember to support your warrant and not the claim as that is what the evidence does.

> *THE QUALIFIERS:* This term refers to language and its use in making your claim. They are words used to acknowledge the limits of your position and keep you from creating a claim that overreaches. Including words that accomplish a sufficiently narrow claim suggests that you know that there are other possibilities or contingencies. One of the best ways to get your readers to walk away from your argument is blind arrogance.

The diagram below reflects the elements of Toulmin's practical argument. The diagram illustrates how warrants and the back of warrants provide the connection between evidence and a conclusion. Warrants help contextualize a fact or link a fact to a conclusion. Creating a diagram such as this will help you create a solid basis on which to justify your argument. Probably the most important elements of the Toulmin model are the warrant and the backing. If you are not sure what warrant/s (shared audience knowledge, values, or assumption/s) link your evidence (grounds for the argument) to the conclusion, you may not be supporting your conclusion with the most effective evidence.
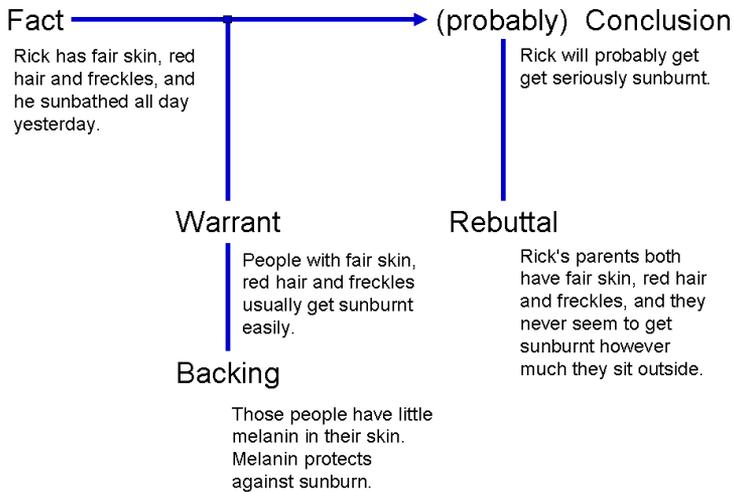
Image by Chaswick Chap, CC-BY-SA 3.0

Other Types of Academic Arguments

ARGUMENT GENRES[7]

Sometimes writing instructors assign specific types of arguments. These genre arguments have

7. Borrowed with minor edits and additions from "Argument Genres" by Heather Hopkins Bowers, Anthony Ruggiero, and Jason Saphara which was published in *Writing and Rhetoric, Colorado State University, Pueblo* and is licensed under CC-BY 4.0.

different purposes and will require different writing strategies. These purposes and strategies require writers to assume different roles. If assigned one of these arguments, you may find yourself investigating a cause, defining a term, evaluating a product, or solving a problem. You'll still be arguing and using rhetorical principles to make these arguments, but you'll need to consider your role as you compose your argument.

Causal Arguments

In a causal argument, a writer must argue about a problem or controversy's cause. Causal arguments are difficult because most controversial issues have complicated causes. Many people also tend to believe in causes that correspond to their political beliefs. Consider the various explanations for school shootings. Some will insist the problem is the easy availability of firearms while others will insist that shooters are inspired by violent video games and entertainment. When making a causal argument, a writer should consider their biases and rely on evidence to support their claims.

In a causal argument, writers may be tempted by logical fallacies. For example, it's important to remember **that correlation is not equal to causation**. If two events happen at the same time, that doesn't necessarily mean that one event caused the other.

Definition Arguments

This type of argument may seem puzzling. How

do we argue about a word's definition? Isn't that what dictionaries are for? For most definition arguments, the real argument isn't the precise meaning of the word. Instead, the argument is about the implications of that definition and how the definition may be applied to specific situations. Consider the word "obscene." One dictionary defines "obscene" as "offensive or disgusting by accepted standards of morality and decency." A writer may want to argue that *Playboy* is obscene. Or that a recent controversial film is obscene. By making this kind of argument, the writer would suggest some course of action: the obscene material should be age-limited, should be condemned, or should be banned. In this kind of paper, the author would make claims about "accepted standards" and "offensive or disgusting" as they apply to the potentially obscene item.

Many popular arguments rely on definitions. Determining whether something is obscene or offensive is just one popular item. As part of the War on Terror, we've argued about the meaning of "torture" and its justification. Many death penalty arguments rely upon the terms "cruel and unusual punishment." The Iraq war inspired many arguments about "just" and "unjust" wars, as did the Vietnam war did decades earlier.

Evaluation Arguments

You may be more familiar with evaluation arguments than you realize. If you've ever read a movie, restaurant, or other product review, you've

read an evaluation argument. As online shopping and social media have expanded, you may have even written your own evaluation argument on Amazon, Google, or Yelp. A good evaluation argument will rely upon clear criteria. "Criteria" (singular "criterion") are the conditions by which you make your evaluation; these conditions could be used to evaluate any thing that is in the same category. A restaurant review may be based upon the food quality, price, service, and ambiance of the restaurant. An evaluation should also consider the specific category of what's being evaluated: one shouldn't evaluate a local pub with the same criteria as a fine dining establishment. By establishing a narrow category, the writer can write a more accurate evaluation. While reviews are the most popular form of evaluation arguments, that is not the only place they are used. Evaluation arguments are useful for supporting or opposing public policies or proposed laws. A community may propose several solutions to deal with a school district's budget woes. A teacher from that district may write a guest editorial arguing for the best policy, or write an article criticizing a poor choice.

Proposal Argument (Problem/Solution)

Proposal arguments require the writer to perform two tasks: argue that there is a problem, and then propose a solution to that problem. Usually, the problem will be a local problem. It is good to focus on a smaller community because national or global problems or much more complex; therefore, making

them harder to successfully argue in the limited space of a college essay.

Proposals have two separate arguments. The first is the problem: it's not enough to label an issue a problem; a writer must prove that the problem is severe to an audience. Take, for instance, the opioid crisis. A writer may need to convince community members who aren't addicts why the crisis is a problem for their community; therefore, it is not enough to discuss how addiction hurts addicts. Showing how the community is harmed by the crime associated with addiction would be a better way to motivate a community to solve the problem.

The second argument is the solution. Explain what the solution is and how it solves the problem. A writer should establish that their solution is the best solution. The best solution is the cheapest solution that best addresses the problem. "Cheapest" here refers to more than monetary costs. While monetary costs are oftentimes a considerable factor, there are other costs like labor and change that may affect people physically, mentally, or emotionally. "Addressing the problem" is an acknowledgment that most proposals won't completely solve a problem. The goal is a reasonable solution that eliminates most of the harm, or the most serious harm, caused by the problem. Perhaps the most difficult aspect of proposals is considering the unintended consequences of a solution. These can be positive or negative. Writers should ask "What happens next?" of their solutions.

[8]Structuring Argument in Your Paper

Now that we have looked at the different terms and styles of arguments, we need to start thinking about how these things come together in a paper because writing academic research papers is (more than likely) going to be a lot messier than this chapter, or any textbook, makes it seem.

In a traditional argument-based paper, the claim is generally stated in the thesis (often at the end of the introduction), with the reasons appearing as the topic sentences of body paragraphs. The content of the body paragraphs is then focused on providing the evidence that supports the topic sentences, ultimately supporting the claim. Such organization helps to ensure that the argument is always at the forefront of the writing, since it provides guideposts in key places to direct the reader's attention to what the author wants to persuade him/her of. There may be occasions, though, when it is preferable to delay stating the claim until later.

> Sometimes, particularly if the audience is likely to be so opposed to your position that you are concerned they may not read further if your claim appears at the start of the paper, it is preferable to postpone stating the claim until after the reasons and evidence have been provided. Doing so allows

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8. The following section (except where otherwise noted) was borrowed with minor edits and additions from "Structure of Argument" by Karla Lyles and Jeanine Rauch provided by the University of Mississippi which is licensed under a CC BY-SA: Attribution-ShareAlike

you to demonstrate the merits of your case, hopefully persuading your reader in the process, before explicitly stating the claim that the reader may have been hesitant to accept initially. **Note that this approach is more of an exception than the rule, so you likely will not format your argument-based papers in this way.**

In addition, regardless of what the reasons are that you plan to use to support your claim, they will not be equal in their strength/ability to do so. Realistically, the reasons will fall along a spectrum from strongest to weakest (note that "weakest" does not carry the traditional connotation of the word "weak"), so, when writing an argument-based paper, you will need to determine the best order in which to place your reasons. The most common suggestion for ordering is to place your weakest reasons in the middle of the paper, with your strongest appearing at the beginning and end. This approach makes sense in terms of wanting to show the reader early in the writing that your claim is backed by sound reasoning and to leave him/her with a final impression that your argument is solid. You also should consider the complexity of the reasons; if some of your ideas are more complicated to understand than others, you will need to strike a balance between strength and complexity in the structure to ensure that your reader is not only persuaded throughout the paper but also that he/she can fully understand the logical progression from one point to the next.

Imagine that you are assigned an argument paper that must focus on an education-related issue, with the audience consisting of your peers. You select as your claim the idea that all undergraduate writing courses that fulfill a general education requirement should include a tutor, who would attend all class meetings and assist students as needed. As you plan your paper, you decide to use the following reasons to support your claim:

1. Students may be more comfortable seeking individualized help with their writing from a peer (advanced undergraduate student or graduate student) than their instructor.
2. The tutor could provide valuable feedback to the instructor to assist him/her with teaching that students may be uncomfortable sharing or otherwise unable to do so.
3. Student grades and retention would improve.

To support the first reason, your evidence consists of anecdotes from fellow students. To support the second and third reasons, your evidence consists of published research that suggests these benefits. In what order would you place the reasons in your paper, and why?

Media Attributions

- **[“Toulmin argumentation can be diagrammed as a conclusion established, more or less, on the basis of a fact supported by a warrant (with backing), and a possible rebuttal.” Image by Chaswick Chap, CC-BY-SA 3.0](#) © Chap Chiswick is licensed under a [CC BY (Attribution)](#) license**

4.3 Claims and Reasons

[1]*Understanding and Building the Foundation*

As discussed in the previous section, an argument in its most basic form consists of three parts:

1. **A claim**
2. **Reasons to support the claim**
3. **Evidence to support the reasons**

In some cases, including only these three components will be sufficient to demonstrate the merits of your ideas and persuade the reader, but in others you will need to go beyond these, incorporating the other terms we learned in section 4.2: counterarguments, backing, qualifiers, and warrants. However, in order to effectively create these additional items, the core (claim, reason, evidence) has to be solid.

1. 4.3 (except where otherwise noted) was borrowed with minor edits and additions from ["Claims, Reasons, and Evidence"](#) by Karla Lyles and Jeanine Rauch provided by the University of Mississippi and is licensed under [CC BY-SA: Attribution-ShareAlike](#)

> Body paragraphs will often begin with a **reason**[2] which is "why" your thesis-level claim is true, then cite some **evidence**, then develop the **warrant** by reading the evidence *through* the claim; however, you should not regard these elements as immovable parts of a rigid formula of 1+1+1=3. Claim/reason, evidence, and warrant should work together more organically than that. You will rarely make a claim without connecting it immediately to evidence. Nor will you simply cite evidence without reading it through the lens of your claim. Better to keep an eye on your thesis and outline and make sure you are always reading the text the way you want your audience to consider it.[3]

Defining and Evaluating Claims

What is a claim? Simply stated, a claim is a position or stance that the person communicating takes on an issue. Claims exist on a spectrum of complexity; for example, the claim that fruit-

2. You can think of reasons as the answer to "why should your readers believe your thesis statement." So, essentially they are your opinion of why your opinion (thesis-level claim) is accurate.

3. Borrowed with minor edits and additions from *Write Here, Right Now: An Interactive Introduction to Academic Writing and Research* by Ryerson University and is licensed under a Creative Commons Attribution 4.0 International License

flavored candy is better than chocolate[4] is rather minor in comparison to a claim that there is not enough affordable housing in the area, with the former's focus resting (largely) on dietary preference and the latter's reach instead extending across financial, political, and educational lines. As you can probably tell then, a claim reflects a position or stance that is the product of a range of influential factors (e.g., biological, psychological, economic, etc.), and as a position or stance, it should articulate an idea that is debatable by reasonable, educated people. However, the ability to challenge the claim is not the only criterion that must be met.

To evaluate the quality of a claim, consider the following:

1. Is the claim clearly and specifically stated? Clarity and specificity are key to ensuring that the claim's intent and scope will be understood, so beware of using vague and/or broadly stated claims.
2. Does the claim state an idea that someone not only could debate but also would want to debate? If someone would be uninterested in debating the idea, then it matters little that he/she could

4. Opinions like these are considered claims/opinions of taste and are considered largely unarguable in academia.

do so.

3. Does the claim state an idea that can effectively be supported? If (sufficient and scholarly) evidence is unavailable to support a claim, then it may be worthwhile to reconsider the claim's phrasing and/or scope so that it can be revised to state an idea that can be supported more fully.

Defining and Evaluating Reasons

If the claim states your position or stance, then the reasons explain and demonstrate why you believe that position or stance is legitimate. So, in a nutshell, reasons are your opinion for why your main opinion (thesis-level claim) is true. This is why reasons are oftentimes the topic sentences of body paragraphs because they help make sure that each paragraph functions to explain/prove the driving claim (i.e. thesis) true.

Because positions/stances are always grounded in certain beliefs and/or experiences, any time a claim is stated there must be reasons behind it. Reasons can take different forms depending on the rhetorical situation; in particular, the person communicating the claim must be mindful of who the intended audience is and what reasons that audience will find most compelling. Keep in mind that when you are writing an academic paper that is argument-based, it can be helpful to imagine that your audience holds a different position than you do on the topic, which places the burden on you to demonstrate why your ideas are sound. When you imagine your audience agrees with you from the start, you may be more

likely to present weaker reasons (as well as evidence) to back your claim.

1. Who is the intended audience, and what kinds of reasons are they most likely to be persuaded by? The ultimate purpose of the argument is to demonstrate the merits of the claim, so, without carefully considering who the audience is for the argument and what will appeal to them, that purpose is unlikely to be met.
2. How contentious is the claim (i.e., is the claim more likely to be positively or negatively received by the intended audience), and what does that suggest in terms of not only the kinds of reasons that are needed but also the amount? If the claim reflects a highly unpopular opinion, then in order for the argument to succeed it may need not only quality reasons, but also many of them.
3. Are the reasons clearly connected to the claim? If it is not apparent how a reason supports the claim, then further information may be needed to show the relationship between them.
4. Which reasons are the strongest, and which are the weakest? The strength of the reasons should be an important factor when determining

organization of the argument since it can impact how the audience interprets and responds to the argument.

5. How complex are the reasons? Just as it is important to consider the strength of the reasons when determining the organization of the argument, it is also necessary to consider their complexity. Some reasons will be simpler to understand, and others will be more nuanced; what is the best ordering of the reasons to maximize each of their contributions to the argument?

[5]*Using Hedging/Qualifying Language*

Although sometimes claims and reasons are phrased to take a firm stance on a topic or provide logical, black and white reasoning, other times it is necessary or preferable to use what is known as hedging—or qualifying—language. Hedging allows writers and speakers to express their opinion cautiously, suggesting that there may be exceptions or circumstances under which the opinion does not apply.

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5. The following section (except where otherwise noted) was borrowed with minor edits and additions from "Structure of Argument" by Karla Lyles and Jeanine Rauch which is provided by the University of Mississippi and licensed under a CC BY-SA: Attribution-ShareAlike

For example, the following sentence uses hedging language (bold): "Increased gas emissions from vehicles are **probably** a leading contributor to global climate change." In this example, "probably" is used to indicate that the writer/speaker is fairly, but not entirely, confident that emissions are one of the primary causes of global warming.

The hedging here can be useful in that, although there is mostly a consensus in the scientific community that global warming exists and humans are a major contributor to it, there is some dissent. Further, since the claim is referring to emissions as a "leading" factor, hedging allows for the possibility that there may be other factors that supersede it as causing global warming. While "hedges" and "qualifiers" are vocabulary terms used interchangably in academia, there is a small distinction between the two. Hedges are small words and phrases that note that the claim or reason is not applicable to all situations everywhere with everyone but they are typically undefined, and while qualifiers do the same thing in terms of limiting the claim/reason, they are typically more specific.

For example, the following sentence used a qualifier (in bold): Today Franklin D. Roosevelt is revered as one of our most admired historical figures, but toward the end of his second term, he was quite unpopular, **at least among certain segments of American society.**[6]

You can think of qualifiers more like **conditions to your claim** and hedges as undefined limits to help you remember the subtle differences between them.

Of course, because hedging/qualifying a claim or reason means expressing caution or uncertainty, it also can lead the audience to question the strength of the claim/reason and the authority of the person making it. The audience may interpret hedging and qualifying as a reflection of the author's doubt in his/her stance, which can then lead them to become doubtful as well. **As a result, it is important to use qualifying language strategically and only when the pros of doing so outweigh the possible cons.**

> **TIP**: Overusing qualifiers and hedging falls into the same category of why most academics (especially beginners) shy away from using the phrases ("I think," "I feel," "I believe," etc.). Essentially, your name is on the paper, so anything not cited automatically falls under those phrases; however, hedging all of your opinions/ reasons with phrases like those hinders your tone from being strong and academic.

Using the same example as earlier, the claim could be reworded to omit the hedging language, instead reading as,

6. Example borrowed from Booth, W. C., Colomb, G. G., & Williams, J. M. (2008). *The craft of research* (3rd. ed.). The University of Chicago Press.

> "Increased gas emissions from vehicles are a
> leading contributor to global warming."

Clearly, the claim is now much firmer in its assertion that emissions are a major reason behind global warming, expressing no doubt that this is the case. On the one hand, the assuredness of the claim will convey confidence to the audience that could then lead them to be more willing to engage with the argument; on the other hand, though, it fails to account for dissent among researchers and could be problematic in light of other contributors to global warming that may be greater influences than emissions from vehicles.

A final caution regarding qualifying language: depending on how you hedge you may end up creating vague and/or awkward phrasings that obscure your ideas. For example, let's say the earlier claim was again reworded to state,

> "Increased gas emissions from vehicles are
> generally a leading contributor to global warming."

The inclusion of "generally" muddies the claim, resulting in confusion about what is meant. If you decide to use hedging language, then, always make sure it is appropriate and will not make it difficult for the audience to decipher what you intend.[7]

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7. Becasue while hedges/qualifiers are important to ensure that a fair and accurate argument is made, specificity in claims/ reasons is vital in making sure any argument is made.

In addition, be careful about using **intensifiers**, which add emphasis to the language they accompany, when hedging[8], since doing so can lead to clunky, nonsensical phrasings.

> For example, the inclusion of the intensifier "very" in the following sentence makes the claim confusing and awkward to read: "Increased gas emissions from vehicles are generally a very leading contributor to global warming."

Remember that in your writing (as well as speaking), every word counts, so use your words purposefully.

8. It is actually a good rule of thumb to avoid intensifiers altogether. Adding unnecessary modifiers (very, really, just, incredibly, amazing, etc.) only detracts from the strength of your claim instead of adding to it.

4.4 Evidence

[1]*Defining and Evaluating Evidence*

Although **reasons** are critical to supporting a **claim**, without evidence they carry little weight. An audience is unlikely to be persuaded to accept a claim on the basis of the author's reasons alone, particularly if that audience holds a drastically different position than you/the author(s). As discussed in earlier sections, evidence can be defined as information that supports the reasons, demonstrating why they are sound ideas (that support the claim).

We tend to think of evidence in terms of statistics (or quantitative data) since people find truth in numbers. However, evidence does not have to be numerical; instead, evidence can take the form of an anecdote (a brief account or story), excerpts from a conversation or an interview, a quotation from a published source, an image or graphic, etc.

> Also keep in mind that a statistic is not necessarily accurate; just as a quotation can be taken out of context, numbers can also be manipulated.

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1. "Defining and Evaluating Evidence" was borrowed with minor edits and additions from "Claims, Reasons, and Evidence" by Karla Lyles and Jeanine Rauch which is provided by the University of Mississippi and licensed under a CC BY-SA: Attribution-ShareAlike

As an audience member, you must be skeptical of the evidence someone presents to you, but, likewise, as a writer, you must be diligent in evaluating the credibility and applicability of any information you come across that you intend to present in support of your argument.

[2]*Using Evidence Effectively and Ethically*

Using evidence effectively means that you have considered the ethos and relevance of your sources, have stayed true to the meaning of the evidence in its original context, and are accurately applying the highest quality evidence you can to support your claims.[3]

Using evidence ethically means you do not randomly "cherry pick" your supporting details and evidence and shape them to meet your evidence need. Using evidence ethically *does* mean you have engaged in a robust research process and selected your sources with a filter for credibility, reliability, and relevance. Using evidence ethically means you have paraphrased, quoted, and cited your information accurately using one of the many standard citation formats, like MLA or APA.

Throughout this textbook, we have emphasized the importance of ethos, both external and internal ethos. When you apply and integrate evidence effectively and ethically, you

2. The rest of 4.4 (except where otherwise noted) was borrowed with minor edits and additions from "Chapter 5" of Claim Your Voice in First Year Composition, Vol. 2 by Cynthia Kiefer licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License
3. Review Chapter 2 "Warming Up: The Ins and Outs of Sources" if you need to look at how to accomplish these steps.

are relying on the external ethos of your sources while, at the same time, building your reader's confidence in *your* internal ethos as a responsible source of information and well-founded arguments. Remember, without ethos as the writer, no amount of solid logic will be effective as your readers will not trust you or the logic you are presenting.

Using Evidence to Supporting Your Rhetorical Purpose

Once you have researched a body of evidence on your topic or argument and are beginning to plan your essay, speech, or project, you encounter complex decision-making about when, where, and how to integrate your evidence to the greatest effect.

> A question many students ask is "How do I know when to integrate researched evidence into my paper?"

Our first suggestion is to review your thesis statement or claim and your discussion points. If a listener or reader were to doubt you on any of these key points, claims, and subclaims, what specific evidence, supporting details, and/or backing could you provide to address or even counter that doubt? Your audience wants to know not only what you think or have experienced, but whether or not your claims are based on evidence and deep research on the conversation around the topic. You want your audience to *know* you have done your due diligence in investigating the topic. You want your audience to *know* you are aware of the current research and content "out there" on

your topic and that you are now empowered enough by what you know, what you have learned, and possibly by what you have experienced to add to the "conversation." Because illogical and unfounded emotional reasoning is so prevalent in our society today, your audience wants to be convinced of *your* trustworthiness as a communicator and ethical user of credible and reliable information. This is why evaluating the source (Chapter 2) before you use it is such a vital step in the research process.

When to Integrate Evidence

The best places to integrate evidence is typically after you have explained/expressed your main claim or reason for that paragraph. This is because logical, organized arguments tend to be specific and void of abstract or general ideas/ponderings, and emotional expressions usually involve detailed descriptions/tangents or are saturated with personal testimony. While using emotional sections in your arguments does not always a negatively affect your argument (when used in balance with the other appeals), if you express your point and then follow it with distracting descriptions and tangents that do not logically/clearly support the point, the audience may not follow your train of thought long enough to get to the scholarly evidence you are planning to insert later.

> ### *INTEGRATING EVIDENCE APPROPRIATELY[4]*

Research is a major component of many genres of writing. During the research process, writers discover academic conversations and learn how to build on those conversations with their own ideas. However, creating an effective balance between these two things can be tricky.

One of the common questions that writers have about research-based assignments is how they can integrate evidence from appropriate academic sources effectively. This component of writing can be difficult because the writer knows it is their paper, and may not understand why they need to use other people's work or how this can be done effectively. In the following chart from the Purdue Online Writing Lab, Stolley, Brizee, and Paiz suggest that some of the reasons writers have difficulty navigating the appropriate place of outside material in their writing is due to some seeming contradictions in assignment guidelines instructors give:

4. Written by [Alexandra W. Watkins](). This article uses a Creative Commons license: [CC BY-NC-ND 4.0.]()

Why Assignment Guidelines for Integrating Researched Support and Evidence May Seem Counterintuitive to You		
Develop a topic based on what has already been said and written	B UT	Write something new and original
Rely on experts' and authorities' opinion	B UT	Improve upon and/or disagree with those same opinions
Give credit to previous researchers	B UT	Make your own significant contribution
Improve your English to fit into a discourse community by building upon what you hear and read	B UT	Use your own words and your own voice

These different perspectives may make you feel like you're trying to perform a high-wire act.

What does it mean to be original while entering the research conversations that others have had? When is the writer's voice appropriate, and when will it lead to reader's confusion?

Some of the guidelines may even seem contradictory to each other.

However, in the middle of these different directives, there is a middle ground where writers can successfully integrate evidence without it overtaking their own messages. The process of writing a research paper becomes easier if you imagine it is like building a house. While writers use the blueprint established by others who write on

the same topic, they nevertheless have to construct their house on their own. What kind of "upgrades" are you including–granite countertops or tile? Carpet or hardwood flooring? These choices make the house your own. Similarly, using source material and established conventions are important–you wouldn't build a house without a roof and walls–but the paper still needs to be distinguishable from others.

As writers move into building their own "houses," finding that middle ground for integrating evidence still might not be clear. Writers who are uncomfortable or unfamiliar with incorporating outside material into their own work may make some of the following common mistakes:

Plagiarism

The *Oxford English Dictionary* defines "plagiarism" as "the action or practice of taking someone else's work, idea, etc., and passing it off as one's own; literary theft." " Plagiarism in writing occurs when writers use information they found in an outside source and don't say where the information came from. In the United States intellectual system, plagiarism carries a significant stigma, and tends to be viewed as an intentional act of deceit (or dishonesty). As a result, the consequences of plagiarism in the American classroom are severe. When writers enroll in classes, they are expected to submit assignments that represent their own, honest efforts.

However, writers may still commit plagiarism for a variety of reasons, such as being unfamiliar with the conventions of citation, feeling uncomfortable writing academic discourse, and coming from a culture with a different philosophy on using other people's words or ideas. Nevertheless, the prevalence of plagiarism detection sites, such as Turn It In or Safe Assign, make it likely that writers will be caught if they plagiarize, so it is best to avoid plagiarism and its inevitable consequences. For further information on how to avoid plagiarism, you might review your university's handbook and your professor's syllabus. Remember, it is always better to ask questions about plagiarism, rather than suffer the consequences.

Overuse of Quotes

Again, because some writers feel uncomfortable with constructing their own arguments, they feel compelled to overuse the writing that has already been done on the topic. This use of evidence, though, is rarely considered effective by readers. Writers should aim for the overwhelming majority–usually about 80% or more–of their paper to be in their own words. Direct quotations should only be used when the information quoted is representative. This might include when you're citing a counterargument, for example, and it's important to include the words as they were written

to develop ethos, or when someone has coined a phrase or term.

This information sometimes confounds writers. How, they wonder, are they supposed to write RESEARCH papers without RESEARCH? What these writers have to learn is that direct quotes are only one type of evidence that can be used to support a claim. Other options for using outside material are paraphrases, summaries, data, and statistics. Remember, though, that even though these types of evidence are in your own words, you still have to give credit to the author who originally collected the data/had the thought.

Misuse of Quotes – Block Quotes

In your previous experience, you may have run into very long blocks of text from other sources that a writer has used.

The following is an example of a block quote in MLA style. The information is from a page of The Writing Center at the University of North Carolina, Chapel Hill's website:

Use quotations at strategically selected moments. You have probably been told by teachers to provide as much evidence as possible in support of your thesis. But packing your paper with quotations will not necessarily strengthen your argument. The majority of your paper should still be your original

ideas in your own words (after all, it's your paper). And quotations are only one type of evidence: well-balanced papers may also make use of paraphrases, data, and statistics. The types of evidence you use will depend in part on the conventions of the discipline or audience for which you are writing. (par. 2)

There are specific conventions for integrating block quotes depending on the citation style. However, because of the nature of first-year writing courses, the use of block quotations for these classes is highly unusual. Because you are probably just learning how to use source material, realize that the use of block quotes may be a crutch. It's better to paraphrase or shorten quotations to a length below that required for block quotes (four lines for MLA) whenever possible. This will ensure that the focus of your papers is your writing and ideas instead of the quotations you are using as support.

Misuse of Quotes – Dropped Quotes

Another issue that may arise with using quoted material is a dropped quote. A dropped quote happens when a writer places a quote in their paper without introducing it or giving any context for it. Unlike a block quote, a dropped quote is never considered effective.
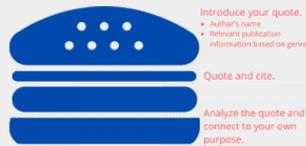
An example dropped quote looks like this:

Writers may sometimes have an issue with integrating quoted material. "Because citation work is detail-oriented, requires great concentration, and is sometimes perceived as 'drudge work,' it often generates a high level of frustration" (Dickerson 477). This statement is true for all writers.

Because the quote in the middle has been dropped in as its own sentence, it could be interpreted differently by the reader than it was by the writer. Moreover, by pulling quotes without thinking about their context, a writer is more likely to misinterpret the meaning of the quote, therefore losing credibility.

To avoid dropped quotes, always use the "quote sandwich"* model:

Introduce your quote.
- Author's name
- Relevant publication information based on genre

Quote and cite.

Analyze the quote and connect to your own purpose.

Hamburger Metaphor for "sandwiching" a quotation between a lead-in to the quote and your analytic commentary connecting the quote to the current point and/or thesis.

- Begin by prefacing what is happening in the original work, information about the piece of writing, or information about or by the author.
- Then, integrate the quote.
- Finally, explain your interpretation of the quote and its significance, i.e., the reason you incorporated it.

- The quote, then, is sandwiched by your own words.

Here's what the edited example looks like after this process:

Writers may sometimes have an issue with integrating quoted material. Discussing her students who work at a law review journal, Stetson professor Darby Dickerson proposes that "because citation work is detail-oriented, requires great concentration, and is sometimes perceived as 'drudge work,' it often generates a high level of frustration" (Dickerson 477). Although she writes about her particular context, the frustration that she mentions translates to other writing situations as well.

Incorporating this material, the new example both better represents the purpose of the original article and borrows the credibility associated with the original's author and position. While the first time the writer is introduced needs to be more thorough, each subsequent time that quotes from the same writer are introduced also needs to have an incorporation of the quote sandwich model.

Issues with Citation

Citation issues can result in accidental issues with

evidence. Some writers think that only direct quotations need to be cited, whereas the writer's own summaries or paraphrases of the same material don't. However, this is not true. In order to incorporate evidence effectively, you must know that any information that you found in an outside source has to be cited appropriately in text, followed by a fuller bibliographic citation in the appropriate place (which depends on the citation style).

For MLA, the citation practice is to place the author's name in parentheses for in-text citations, and the full entry on the Works Cited page. Here is an example of a summary of the chart at the beginning of this article:

- Writers need to augment the existing conversation about a topic, but still need to provide adequate credit to existing sources (Stolley, Brizee, and Paiz, par. 3).
- Notice that although this information has been changed significantly, it still requires citation because the ideas are the authors', not mine.
- Specific conventions are followed for citation depending on the style a writer uses. More information about citation can be found at Writing Commons or through the associated style manual.
- By avoiding these three pitfalls and appropriately integrating evidence, writers can boost their credibility and improve the quality

of their own claims.

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Quoting, Paraphrasing, and Attributing Your Evidence Effectively

Quoting

When you quote a source directly, you are reproducing another writer's or speaker's words exactly as they appear on the page or as they were spoken. You should quote a source verbatim when you are integrating a particularly authoritative, "high-ethos" author or speaker (i.e. expert testimony by a scholarly or well-known expert). The source's expertise backs up, illustrates,

or elaborates your point. This reinforces your internal ethos with your reader or listener because it demonstrates that you have carefully researched and selected your evidence—not just any evidence, but the strongest evidence.

A common misstep new college writers make when selecting evidence from sources is to skim their sources for sentences restating the same general discussion points they are making and integrating them into a paper or speech as if these sentences were actual evidence.

> As a general rule, do not provide a full quotation if a source is making the same general point you are making in nearly the same words, the source is not generally well known, the source is a general journalist or writer, or if it does not add something stylistic that adds to your point.

General statements reiterating your discussion points stated at the same level of generality do not provide evidence or effective support. This strategy leads to a paper or project with a series of general quotations which add little, or no evidence rather than specific, carefully selected, concrete researched evidence. This detracts from your audience's sense of *your* internal ethos and leaves them thinking that you did not research deeply enough and/or are simply lacking evidence to support your argument.

> • Quote directly if you are analyzing diction, tone, or a writer's use of a specific word or phrase (as you would in a literary or rhetorical analysis). In

this case, using quote "snippets" embedded in your point or paraphrase is more desirable than bogging down your text with many lengthy full quotations.

- Quote directly if your source is credible and reflects ethos, and you could not express the evidence more clearly. Are the author or speaker's words powerful, edgy, humorous, eloquent? Do they provide a good example or illustration of a point you are making? Does the person explain scholarly research present findings so specific, clear, and well-written you could not do better?
- Quote if you are making a claim or counterargument that relies on the readers understanding what another writer or speaker says about the topic. A good example is quoting a significant person who is associated with your counterargument because your readers would expect it and be further convinced that you understand both sides of argument.

Occasionally, if you are writing a longer paper, you may need to insert a longer verbatim quote or textual information. Inserting long quoted passages requires a different format than direct quotations. For example, unlike shorter quotations, long quotations should not contain quotation marks. They should appear in a block of text, set off from the margin by one inch. In this format, the period goes at the end of the long passage, then you type in the in-text citation with no period following it.

> If you are writing using MLA format, you block quotes once you have four or more lines of text. If you are writing in APA, then you would block quoted material if the quote exceeds 40 words.

Paraphrasing[5]

Paraphrasing is another way of presenting ideas from source material in your own words, but without the condensing that happens in a summary. Instead, paraphrases stay approximately the same length as the original source material being paraphrased. So why paraphrase when you could direct quote?

Why Paraphrase?

To Demonstrate Understanding

Paraphrasing can demonstrate your understanding of a text, including its more complex details and connections between its main points, and can also help you double-check the depth of your understanding of a text.

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5. Borrowed with minor edits and additions from "Paraphrasing" in *The Word on College Reading and Writing*: *The Word on College Reading and Writing* by Carol Burnell, Jaime Wood, Monique Babin, Susan Pesznecker, and Nicole Rosevear is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License

To Provide Support

You might paraphrase a section from a source (unlike summary, it is unlikely that you will ever need to paraphrase an entire source) when an idea or point in that source is important to an assignment you are working on and you feel it needs to be included, but you can rephrase it in a way that fits your work without losing any key information.

What Makes a Sentence or Phrase a Paraphrase?

A paraphrase:

- **is written in your own words.**
- **is not condensed like a summary sentence.**
- **avoids personal opinion.**
- **is completely rephrased from the original and written in a style consistent with the rest of your writing. (You want to maintain the integrity of your source material and protect your own ethos. That is, you are not just changing up a few words when you paraphrase.)**
- **HAS TO HAVE A CITATION. Changing things into your own words does not mean they are now your thoughts, so always remember to include an in-text citation with any paraphrased material.**

Attributing Your Sources

When you bring in source material to your compositions to support your main ideas, thesis statements, and discussion points, you want your reader to recognize the quality and ethos of your research. When you directly quote a person or a source and do not provide some kind of lead-in or introduction to

that source, *your* credibility as a trustworthy researcher may be questioned by your audience.

Tagging Quotes and Using Signal Verbs

At its most basic level, a signal verb is a verb that indicates that someone is speaking and how they are speaking. In written dialog, you will often see verbs *said*, *claimed*, *exclaimed*, *whispered,* etc. to indicate a speaker or new speaker is speaking and how they are speaking. In academic writing, writers use signal verbs to indicate or "signal" that an outside voice or source is coming into the essay to provide support for the claim, thesis, and/or discussion points.

There are some frequent signal verb phrases to avoid in written text. The first is the verb phrase "talks about." For starters, it is informal in tone and grammar, and, second, your source was not *literally talking*. In your academic writing, you want to use signal verbs that are not highly connotative such as *writes*, *stated*, *claims*, and *explains*.

Insider Diction Tip: When selecting a signal verb to introduce a quoted source, avoid the informal and inaccurate verb phrase "talks about."

For example, most of your supporting quoted material will be sourced from written texts, you would not want to use the signal verb *exclaimed* because without actually seeing or hearing your source speak the words, you would not know whether they *exclaimed* or not.

The point of using signal verbs when you lead into quoted or paraphrased information is to provide a bridge from the source's written or spoken content to your paper. You want to create a smooth connection, not a distortion of the speaker's intent or tone or to add meaning that was not in the original

source. Also, when you "drop a quote" and do not provide the source of the quote or establish the source's ethos, your reader will immediately wonder who or what organization stated the quote and whether or not the person or organization is a credible one.

Example: Cited evidence with Tagged Phrases

- Full-sentence quotation set off by a tag phrase that introduces the author (and year if using APA) of the source:

  ◦ Professor of Constitutional Law and the First Amendment, Jack M. Balkin (2020), explains that "You need lots of different institutions, and they can't all be owned or controlled by a small number of people. They have to provide what Justice Hugo Black once called 'diverse and antagonistic sources' of information" (para. 36).[6]

6. Balkin, J. M. (2020, March 25). How to regulate (and not regulate) social media. *Knight First Amendment Institute.* *https://knightcolumbia.org/content/how-to-regulate-and-not-regulate-social-media*

Blending Quotes[7]

While tagging quotes is arguably the easier way to integrate quotes into your papers, there is an additional method used by academic writers. Academic writers oftentimes will blend the material they wish to quote into their own sentence without noting who the material came from UNTIL the in-text citation at the end of the sentence.[8] This is different than tagging because, as you read above, tagging includes using the author and citation information at the beginning of the quote instead of waiting to present that information at the end of the sentence.

Example: Blending Evidence

Scholars have portrayed Lady Macbeth as a woman driven by her own desires for power and the crown and ultimately the force behind Macbeth's downfall, and this drive is what leads her to "undergo a role reversal of sorts" and "attempt to break out of the rigidly defined

7. "Blending Quotes" was written by Brittany Seay and is licensed under the same license as the book
8. It is important to remind you here, that this does not mean using quotations without attributing the material to the original author is okay on any level. You always have to let your readers know who you are quoting from, you just have a few options as to how and where you do that.

> roles for which [she is...] unsuited" (Thompson & Ancona, 2005, p. 65).[9]

The benefit of using blended quotes is that it helps keep your tone and writing style more uniform throughout your paper; however, because you are blending the quote with your own writing, you have to make sure that the blended material makes sense and reads smoothly. Essentially, you have to make sure that the sentence would read as a grammatically correct sentence and make sense *if* the quotation marks were not there. This can be a hard task because blending someone else's words that may have been written in a different tense or tone than your own sentence is not always as simple as copying and pasting the quote into the sentence and adding the citation material. More often than not, when you blend a quote with your own sentence, you need to make MINOR changes to the quote itself to get the complete sentence to read smoothly.[10]

9. Thompson, M. I., & Ancona, F. A. (2005). He says/she says: Shakespeare's Macbeth (A gender/personality study). *Journal of Evolutionary Psychology, 27*(3-4), 59-70.
10. Once again, the stress here is on the word minor. Under no circumstances should you alter what the author's original quote was actually conveying.

Tools to Use When You are Blending Quotes

- Brackets ([]): Brackets are used to note when you have added or changed a word. Typically these are used to note when a pronoun is either inserted or changed to match the other parts of the sentence, to note when the tense has been changed, or to note if the word has been altered to be singular or plural.

  - In the example above, you will see that "[she is...]" is in brackets. Here is the original text from that article:

    - "Clearly, this role reversal revolves around the question of gender, specifically, the attempt to break out of rigidly defined roles for which **persons might be** unsuited."[11]

  - The author of the sentence changed

11. This is only the sentence that the quote was pulled from. The following paragraph discussed the characteristics of Lady Macbeth that made her more like a male character than a female one. It is important to make sure the quotes you pull are not used in ways that misrepresent the context in which you found them in.

"persons might be unsuited" to insert Lady Macbeth's pronoun in order to keep the main focus of the sentence "Lady Macbeth" clearly defined; however, nothing else (the actual meat of the quote) was altered.

- Elipses (...): Elipses are used to note when you have omitted something in the middle of the quoted material. This tool is commonly used in tagged quotes and blocked quotes as well. You do not need to use ellipses at the beginning or end of a quote to signal that there were words before and after that qutoed section. The beginning and end quotation marks carry that information. You only use ellipses when you have removed something from inside the quoted material. You use 3 periods when you omit within the sentence you have qutoed and you used 4 periods if you have omitted material that is from more than one sentence.

  - In the example above, you will see that [she is] was followed by an elipses set. When you review the original text, you will find that the author of the sentence ommitted 'might' and changed 'be' to 'is.' The [she is] in brackets covers the 'persons' and 'be'; however, the elipses must be included as well to note that the word 'might' was also removed.

One of the biggest things to remember with blending quotes is the sentence still has to be grammatically correct.

Combining Approaches with a Summary

Another sophisticated approach to integrating sources smoothly is to combine approaches. For example, you might attribute the source using an appositive phrase, provide a brief summary of the author's point as it relates to the topic or issue at hand, and integrate a quoted snippet. The example below illustrates how an appositive phrase renaming Peter Cappelli, a professor from the well-known University of Pennsylvania's Wharton School of Business, establishes the ethos of the source or opinion can be combined with a summary of the longer quote included in the original article and reinforced with a specific and compelling quotation.

Example: Mixing approaches to integrating evidence

- [12]Peter Cappelli, a professor of University of

12. Cappelli is a scholarly expert who is quoted in a source he did not write, so you see a different author cited at the end of the sentence. When a person is quoted by another person or source, then you add "as cited in" to the citation to indicate that Cappelli is not the author and you are indirectly quoting

Pennsylvania's Wharton School of Business, suggests students should carefully consider their chosen programs of study and research the typical return on investment in that program over their working lives and cites recent research indicating "that the payoff from many college programs — as much as one in four — is actually negative" (as cited in Selingo, 2015).[13]

Using evidence in your writing can be a tricky skill to develop. The next section is a collection of annoyances, written by Kyle D. Stedman, in the academic realm of quoting that you need to be aware of and actively cautious of as you begin to work with your evidence.

Media Attributions

- **Borrowed with article from Alexandra W. Watkins**

him.

13. Selingo, J. (2015, September 30). Is college worth the cost? Many recent graduates don't think so. *The Washington Post.* https://www.washingtonpost.com/news/grade-point/wp/2015/09/30/is-college-worth-the-cost-many-recent-graduates-dont-think-so/

4.5 Annoying Ways People Use Sources

KYLE D. STEDMAN

[1]*How Slow Driving Is Like Sloppy Writing*

I hate slow drivers. When I'm driving in the fast lane, maintaining the speed limit exactly, and I find myself behind someone who thinks the fast lane is for people who drive ten miles per hour *below* the speed limit, I get an annoyed feeling in my chest like hot water filling a heavy bucket. I wave my arms around and yell, "What . . . ? But, hey . . . oh come on!" There are at least two explanations for why some slow drivers fail to move out of the way:

1. **They don't know that the generally accepted practice of highway driving in the U.S. is to move to the right if an upcoming car wants to pass. Or,**
2. **They know the guidelines but don't care.**

But here's the thing: writers can forget that their readers are sometimes just as annoyed at writing that fails to follow conventions as drivers are when stuck behind a car that fails to

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1. 4.5 was borrowed from ["Annoying Ways People Use Sources"](#) by Kyle D. Stedman which is licensed under a [Creative Commons Attribution 4.0 International License](#), except where otherwise noted in Entering the Conversation by Naomi Salmon (Editor).

move over. In other words, there's something similar between these two people:

> the knowledgeable driver who thinks, "I thought all drivers *knew* that the left lane is for the fastest cars," and the reader who thinks, "I thought all writers knew that outside sources should be introduced, punctuated, and cited according to a set of standards."

One day, you may discover that something you've written has just been read by a reader who, unfortunately, was annoyed at some of the ways you integrated sources. She was reading along and then suddenly exclaimed, "What . . . ? But, hey . . . oh come *on*!" If you're lucky, this reader will try to imagine why you typed things the way you did, giving you the benefit of the doubt. But sometimes you'll be slotted into positions that might not really be accurate. When this frustrated reader walks away from your work, trying to figure out, say, why you used so many quotations, or why you kept starting and ending paragraphs with them, she may come to the same conclusions I do about slow drivers:

1. **You don't know the generally accepted practices of using sources (especially in academic writing) in the U.S. Or,**
2. **You know the guidelines but don't care.**

And it will be a lot harder for readers to take you seriously if they think you're ignorant or rude.

This judgment, of course, will often be unfair. These readers might completely ignore the merits of your insightful, stylistically beautiful, or revolutionarily important

language—just as my anger at another driver makes me fail to admire his custom paint job. But readers and writers don't always see eye to eye on the same text. In fact, some things I write about in this essay will only bother your pickiest readers (some teachers, some editors, some snobby friends), while many other readers might zoom past how you use sources without blinking. But in my experience, I find that teachers do a disservice when we fail to alert students to the kind of things that some readers might be annoyed at—however illogical these things sometimes seem. People are often unreasonably picky, and writers have to deal with that—which they do by trying to anticipate and preemptively fix whatever might annoy a broad range of readers. Plus, the more effectively you anticipate that pickiness, the more likely it is that readers will interpret your quotations and paraphrases in the way you want them to—critically or acceptingly, depending on your writing context.

It helps me to remember that the conventions of writing have a fundamentally *rhetorical* nature. That is, I follow different conventions depending on the purpose and audience of my writing, because I know that I'll come across differently to different people depending on how well I follow the conventions expected in any particular writing space. In a blog, I cite a source by hyperlinking; in an academic essay, I use a parenthetical citation that refers to a list of references at the end of the essay. One of the fundamental ideas of rhetoric is that speakers/writers/composers shape what they say/write/ create based on what they want it to do, where they're publishing it, and what they know about their audience/ readers. And those decisions include nitty-gritty things like introducing quotations and citing paraphrases clearly: not everyone in the entire world approaches these things the same way, but when I strategically learn the expectations of my U.S. academic audience, what I really want to say comes across smoothly, without little annoying blips in my readers'

experience. Notice that I'm not saying that there's a particular *right* or *wrong* way to use conventions in my writing—if the modern U.S. academic system had evolved from a primarily African or Asian or Latin American cultural consciousness instead of a European one, conventions for writing would probably be very different. That's why they're *conventions* and not *rules*.

The Annoyances

Because I'm not here to tell you *rules, decrees,* or *laws*, it makes sense to call my classifications *annoyances*. In the examples that follow, I wrote all of the annoying examples myself, but all the examples I use of good writing come from actual student papers in first-year composition classes at my university; I have their permission to quote them.

Armadillo Roadkill

Everyone in the car hears it: buh-BUMP. The driver insists to the passengers, "But that armadillo—I didn't see it! It just came out of nowhere!" Sadly, a poorly introduced quotation can lead readers to a similar exclamation: "It just came out of nowhere!" And though readers probably won't experience the same level of grief and regret when surprised by a quotation as opposed to an armadillo, I submit that there's a kinship between the experiences: both involve a normal, pleasant activity (driving; reading) stopped suddenly short by

Armadillo Roadkill: dropping in a quotation without introducing it first

an unexpected barrier (a sudden armadillo; a sudden quotation). Here's an example of what I'm talking about:

> We should all be prepared with a backup plan if a zombie invasion occurs. "Unlike its human counterparts, an army of zombies is completely independent of support" (Brooks 155). Preparations should be made in the following areas. . . .

Did you notice how the quotation is dropped in without any kind of warning? (Buh-BUMP.)

The Fix: The easiest way to effectively massage in quotations is by purposefully returning to each one in your draft to see if you set the stage for your readers—often, by signaling that a quote is about to come, stating who the quote came from, and showing how your readers should interpret it. In the above example, that could be done by introducing the quotation with something like this (new text bolded):

> We should all be prepared with a backup plan if a zombie invasion occurs. **Max Brooks suggests a number of ways to prepare for zombies' particular traits, though he underestimates the ability of humans to survive in harsh environments. For example, he writes**, "Unlike its human counterparts, an army of zombies is completely independent of support" (155). **His shortsightedness could have a number of consequences. . . .**

In this version, I know a quotation is coming ("For example"), I know it's going to be written by Max Brooks, and I know I'm being asked to read the quote rather skeptically ("he underestimates"). The sentence with the quotation itself also now begins with a "tag" that eases us into it ("he writes").

Here's an actual example from Alexsandra. Notice the way she builds up to the quotation and then explains it:

> In the first two paragraphs, the author takes a defensive position when explaining the perception that the public has about scientists by saying that "there is anxiety that scientists lack both wisdom and social responsibility and are so motivated by ambition . . ." and "scientists are repeatedly referred to as 'playing God'" (Wolpert 345). With this last sentence especially, his tone seems to demonstrate how he uses the ethos appeal to initially set a tone of someone that is tired of being misunderstood.

Alexsandra prepares us for the quotation, quotes, and then analyzes it. I love it. This isn't a hard and fast rule—I've seen it broken by the best of writers, I admit—but it's a wise standard to hold yourself to unless you have a reason not to.

Dating Spider-Man

An annoyance that's closely connected to Armadillo Roadkill is the tendency writers sometimes have of starting or ending paragraphs with quotations.

Dating Spider-Man: starting or ending a paragraph with a quotation.

This isn't technically *wrong*, and there are situations when the effect of surprise is what you're going for. But often, a paragraph-beginning or paragraph-closing quotation feels rushed, unexplained, disjointed. It's like dating Spider-Man. You're walking along with him and he says something remarkably interesting—but then he tilts his head, hearing something far away, and suddenly shoots a web onto the nearest building and *zooms* away through the air. As if you had just read an interesting quotation dangling at the end of a paragraph, you wanted to hear more of his opinion, but it's too late—he's already moved on. Later, he suddenly jumps off a balcony and is by your side again, and he starts talking about something you don't understand. You're confused because he just dropped in and expected you to understand the context of what was on his mind at that moment, much like when readers step into a paragraph that begins with a quotation. Here's an example:

> *[End of a preceding paragraph:]* . . . Therefore, the evidence clearly suggests that we should be exceptionally careful about deciding when and where to rest. "When taking a nap, always rest your elbow on your desk and keep your arm perpendicular to your desktop" (Piven and

Borgenicht 98). After all, consider the following
scenario. . . .

There's a perfectly good reason why this feels odd—which
should feel familiar after reading about the Armadillo Roadkill
annoyance above. When you got to the quotation in the
second paragraph, you didn't know what you were supposed to
think about it; there was no guidance.

The Fix is the same: in the majority of situations, readers
appreciate being guided to and led away from a quotation by
the writer doing the quoting. Readers get a sense of pleasure
from the safe flow of hearing how to read an upcoming
quotation, reading it, and then being told one way to interpret
it. Prepare, quote, analyze.

I mentioned above that there can be situations where
starting a paragraph with a quotation can have a strong effect.
Personally, I usually enjoy this most at the beginning of essays
or the beginning of sections—like in this example from the very
beginning of Jennifer's essay:

"Nothing is ever simple: Racism and
nobility can exist in the same man, hate and
love in the same woman, fear and loyalty,
compromise and idealism, all the yin-yang
dichotomies that make the human species
so utterly confounding, yet so utterly
fascinating" (Hunter). The hypocrisy and
complexity that Stephen Hunter from the
Washington Post describes is the basis of the

> movie Crash (2004).

Instantly, her quotation hooks me. It doesn't feel thoughtless, like it would feel if I continued to be whisked to quotations without preparation throughout the essay. But please don't overdo it; any quotation that opens an essay or section ought to be integrally related to your topic (as is Jennifer's), not just a cheap gimmick.

Uncle Barry and His Encyclopedia of Useless Information

You probably know someone like this: a person (for me, my Uncle Barry) who constantly tries to impress me with how much he knows about just about everything. I might casually bring up

Uncle Barry and his Encyclopedia of Useless Information: using too many quotations in a row

something in the news ("Wow, these health care debates are getting really heated, aren't they?") and then find myself barraged by all of Uncle Barry's ideas on government sponsored health care—which *then* drifts into a story about how his cousin Maxine died in an underfunded hospice center, which had a parking lot that he could have designed better, which reminds him of how good he is at fixing things, just like the garage door at my parents' house, which probably only needs a little. . . . You get the idea. I might even think to myself, "Wait, I want to know more about that topic, but you're zooming on before you contextualize your information at all."

This is something like reading an essay that relies too much on quotations. Readers get the feeling that they're moving from one quotation to the next without ever quite getting to hear the *real* point of what the author wants to say, never getting any time to form an opinion about the claims. In fact, this often makes it sound as if the author has almost no authority at all. You may have been annoyed by paragraphs like this before:

> Addressing this issue, David M. Potter comments, "Whether Seward meant this literally or not, it was in fact a singularly accurate forecast for territorial Kansas" (199). Of course, Potter's view is contested, even though he claims, "Soon, the Missourians began to perceive the advantages of operating without publicity" (200). Interestingly, "The election was bound to be irregular in any case" (201).

Wait—huh? This author feels like Uncle Barry to me: grabbing right and left for topics (or quotes) in an effort to sound authoritative.

The Fix is to return to each quotation and decide why it's there and then massage it in accordingly. If you just want to use a quote to cite a *fact*, then consider paraphrasing or summarizing the source material (which I find is usually harder than it sounds but is usually worth it for the smoothness my paragraph gains). But if you quoted because you want to draw attention to the source's particular phrasing, or if you want to respond to something you agree with or disagree with in the source, then consider taking the time to surround *each*

quotation with guidance to your readers about what you want them to think about that quote.

In the following passage, I think Jessica demonstrates a balance between source and analysis well. Notice that she only uses a single quotation, even though she surely could have chosen more. But instead, Jessica relies on her instincts and remains the primary voice of authority in the passage:

> Robin Toner's article, "Feminist Pitch by a Democrat named Obama," was written a week after the video became public and is partially a response to it. She writes, "The Obama campaign is, in some ways, subtly marketing its candidate as a post-feminist man, a generation beyond the gender conflicts of the boomers." Subtly is the key word. Obama is a passive character throughout the video, never directly addressing the camera. Rather, he is shown indirectly through speeches, intimate conversations with supporters and candid interaction with family. This creates a sense of intimacy, which in turn creates a feeling of trust.

Toner's response to the Obama video is like a diving board that Jessica bounces off of before she gets to the really interesting stuff: the pool (her own observations). A bunch of diving boards lined up without a pool (tons of quotes with no analysis) wouldn't please anyone—except maybe Uncle Barry.

Am I in the Right Movie?

When reading drafts of my writing, this is a common experience: I start to read a sentence that seems interesting and normal, with everything going just the way I expect it to. But then the unexpected happens: a

Am I in the Right Movie? failing to integrate a quotation into the grammar of the preceding sentence

quotation blurts itself into the sentence in a way that doesn't fit with the grammar that built up to quotation. It feels like sitting in a movie theater, everything going as expected, when suddenly the opening credits start for a movie I didn't plan to see. Here are two examples of what I'm talking about. Read them out loud, and you'll see how suddenly wrong they feel.

1. **Therefore, the author warns that a zombie's vision "are no different than those of a normal human" (Brooks 6).**
2. **Sheila Anne Barry advises that "Have you ever wondered what it's like to walk on a tightrope—many feet up in the air?" (50)**

In the first example, the quoter's build-up to the quotation uses a singular subject—*a zombie's vision*—which, when paired with the quotation, is annoyingly matched with the plural verb *are*. It would be much less jolting to write, "a zombie's vision *is*," which makes the subject and verb agree. In the second example, the quoter builds up to the quotation with a third-person, declarative independent clause: *Sheila Anne Barry advises*. But then the quotation switches into second person—*you*—and unexpectedly asks a question—completely different from the expectation that was built up by the first part of the sentence.

The Fix is usually easy: you read your essay out loud to

someone else, and if you stumble as you enter a quotation, there's probably something you can adjust in your lead-in sentence to make the two fit together well. Maybe you'll need to choose a different subject to make it fit with the quote's verb (*reader* instead of *readers*; *each* instead of *all*), or maybe you'll have to scrap what you first wrote and start over. On occasion you'll even feel the need to transparently modify the quotation by adding an [s] to one of its verbs, always being certain to use square brackets to show that you adjusted something in the quotation. Maybe you'll even find a way to quote a shorter part of the quotation and squeeze it into the context of a sentence that is mostly your own, a trick that can have a positive effect on readers, who like smooth water slides more than they like bumpy slip-and-slides. Jennifer does this well in the following sentence, for example:

> In *Crash*, no character was allowed to "escape his own hypocrisy" (Muller), and the film itself emphasized that the reason there is so much racial tension among strangers is because of the personal issues one cannot deal with alone.

She saw a phrase that she liked in Muller's article, so she found a way to work it in smoothly, without the need for a major break in her thought. Let's put ourselves in Jennifer's shoes for a moment: it's possible that she started drafting this sentence using the plural subject *characters*, writing "In *Crash*, no characters were allowed. . . ." But then, imagine she looked back at the quote from Muller and saw that it said "escape *his* own hypocrisy," which was a clue that she had to change the

first part of her sentence to match the singular construction of the quote.

I Can't Find the Stupid Link

You've been in this situation: you're on a website that seems like it might be interesting and you want to learn more about it. But the home page doesn't tell you much, so you look for an "About Us" or "More Information" or "FAQ" link.

I Can't Find the Stupid Link: no connection between the first letter of a parenthetical citation and the first letter of a works cited entry

But no matter where you search—Top of page? Bottom? Left menu?—you can't find the stupid link. This is usually the fault of web designers, who don't always take the time to test their sites as much as they should with actual users. The communication failure here is simple: you're used to finding certain kinds of basic information in the places people usually put it. If it's not there, you're annoyed.

Similarly, a reader might see a citation and have a quick internal question about it: *What journal was this published in? When was it published? Is this an article I could find online to skim myself? This author has a sexy last name—I wonder what his first name is?* Just like when you look for a link to more information, this reader has a simple, quick question that he or she expects to answer easily. And the most basic way for readers to answer those questions (when they're reading a work written in APA or MLA style) is (1) to look at the information in the citation, and (2) skim the references or works cited section alphabetically, looking for the first letter in the citation. There's an assumption that the first letter of a citation will be the letter to look for in the list of works cited.

In short, the following may annoy readers who want to quickly learn more about the citation:

> *[Essay Text:]* A respected guide on the subject suggests, "If possible, always take the high ground and hold it" (The Zombie Survival Guide 135).
>
> *[Works Cited Page:]* Brooks, Max. The Zombie Survival Guide: Complete Protection from the Living Dead. New York: Three Rivers, 2003. Print.

The reader may wonder when The Zombie Survival Guide was published and flip back to the works cited page, but the parenthetical citation sends her straight to the Z's in the works cited list (because initial A's and The's are ignored when alphabetizing). However, the complete works cited entry is actually with the B's (where it belongs).

The Fix is to make sure that the first word of the works cited entry is the word you use in your in-text citation, every time. If the works cited entry starts with Brooks, use (Brooks) in the essay text.

Citations not including last names may seem to complicate this advice, but they all follow the same basic concept. For instance, you might have:

- **A citation that only lists a title. For instance, your citation might read ("Gray Wolf General Information"). In this case, the assumption is that the citation can be found under the *G* section of the works cited page. Leah cites her paraphrase of a source with no author in the**

following way, indicating that I should head to the G's if I want to learn more about her source:

> Alaska is the only refuge that is left for the wolves in the United States, and once that is gone, they will more than likely become extinct in this country ("Gray Wolf General Information").

- **A citation that only lists a page number. Maybe the citation simply says (25). That implies that somewhere in the surrounding text, the essay writer must have made it stupendously clear what name or title to look up in the works cited list. This happens a lot, since it's common to introduce a quotation by naming the person it came from, in which case it would be repetitive to name that author again in the citation.**
- **A quotation without a citation at all. This happens when you cite a work that is both A) from a web page that doesn't number the pages or paragraphs and B) is named in the text surrounding the quotation. Readers will assume that the author is named nearby. Stephanie wisely leaves off any citation in the example below, where it's already clear that I should head to the O's on the works cited page to find information about this source, a web page written by Opotow:**

> To further this point, Opotow notes, "Don't imagine you'll be unscathed by the methods you use. The end may

> justify the means. . . . But there's a price to pay, and the price does tend to be oneself."

I Swear I Did Some Research!

Let's look in depth at this potentially annoying passage from a hypothetical student paper:

I Swear I Did Some Research: dropping in a citation without making it clear what information came from that source

> It's possible that a multidisciplinary approach to understanding the universe will open new doors of understanding. If theories from sociology, communication, and philosophy joined with physics, the possibilities would be boundless. This would inspire new research, much like in the 1970s when scientists changed their focus from grand-scale theories of the universe to the small concerns of quantum physics (Hawking 51).

In at least two ways, this is stellar material. First, the author is actually voicing a point of view; she sounds knowledgeable, strong. Second, and more to the point of this chapter, the author includes a citation, showing that she knows that ethical citation standards ask authors to cite paraphrases and summaries—not just quotations.

But on the other hand, which of these three sentences, exactly, came from Hawking's book? Did *Hawking* claim that

physics experts should join up with folks in other academic disciplines, or is that the student writer? In other words, at which point does the author's point of view meld into material taken specifically from Hawking?

I recognize that there often aren't clean answers to a question like that. What we read and what we know sometimes meld together so unnoticeably that we don't know which ideas and pieces of information are "ours" and which aren't. Discussing "patchwriting," a term used to describe writing that blends words and phrases from sources with words and phrases we came up with ourselves, scholar Rebecca Moore Howard writes,

> "When I believe I am not patchwriting, I am simply doing it so expertly that the seams are no longer visible—or I am doing it so unwittingly that I cannot cite my sources" (91).

In other words, *all* the moves we make when writing came from somewhere else at some point, whether we realize it or not. Yikes. But remember our main purpose here: to not look annoying when using sources. And most of your instructors aren't going to say, "I understand that I couldn't tell the difference between your ideas and your source's because we quite naturally patchwrite all the time. That's fine with me. Party on!" They're much more likely to imagine that you plopped in a few extra citations as a way of defensively saying, "I swear I did some research! See? Here's a citation right here! Doesn't that prove I worked really hard?"

The Fix: Write the sentences preceding the citation with specific words and phrases that will tell readers what information came from where. Like this (bolded words are new):

> It's possible that a multidisciplinary approach to understanding the universe will open new doors of understanding. **I believe that** if theories from sociology, communication, and philosophy joined with physics, the possibilities would be boundless. This would inspire new research, **much like the changes Stephen Hawking describes happening** in the 1970s when scientists changed their focus from grand-scale theories of the universe to the small concerns of quantum physics (51).

Perhaps these additions could still use some stylistic editing for wordiness and flow, but the source-related job is done: readers know exactly which claims the essay writer is making and which ones Hawking made in his book. The last sentence and only the last sentence summarizes the ideas Hawking describes on page 51 of his book.

One warning: you'll find that scholars in some disciplines (especially in the sciences and social sciences) use citations in the way I just warned you to avoid. You might see sentences like this one, from page 64 of Glenn Gordon Smith, Ana T. Torres-Ayala, and Allen J. Heindel's article in the *Journal of Distance Education:*

> Some researchers have suggested "curriculum" as a key element in the design of web-based courses (Berge, 1998; Driscoll,

> 1998; Meyen, Tangen, & Lian, 1999; Wiens & Gunter, 1998)

Whoa—that's a lot of citations. Remember how the writer of my earlier example cited Stephen Hawking because she summarized his ideas? Well, a number of essays describing the results of experiments, like this one, use citations with a different purpose, citing previous studies whose general conclusions support the study described in this new paper, like building blocks. It's like saying to your potentially skeptical readers, "Look, you might be wondering if I'm a quack. But I can prove I'm not! See, all these other people published in similar areas! Are you going to pick fights with all of *them* too?" You might have noticed as well that these citations are in APA format, reflecting the standards of the social sciences journal this passage was published in. Well, in this kind of context APA's requirement to cite the year of a study makes a lot of sense too—after all, the older a study, the less likely it is to still be relevant.

Conclusion: Use Your Turn Signals

You may have guessed the biggest weakness in an essay like this: what's annoying varies from person to person, with some readers happily skimming past awkward introductions to quotations without a blink, while others see a paragraph-opening quotation as something to complain about on Facebook. All I've given you here—all I *can* give you unless I actually get to know you and your various writing contexts—are the basics that will apply in a number of academic writing contexts. Think of these as signals to your readers about your

intentions, much as wise drivers rely on their turn signals to communicate their intentions to other drivers. In some cases when driving, signaling is an almost artistic decision, relying on the gut reaction of the driver to interpret what is best in times when the law doesn't mandate use one way or the other. I hope your writing is full of similar signals. Now if I could only convince the guy driving in front of me to use *his* blinker. . . .

Discussion

1. Because so many of these guidelines depend on the writer's purpose, publication space, and audience, it can be difficult to know when to follow them strictly and when to bend them. What are some specific writing situations where a writer is justified to bend the standards of how to incorporate sources?

2. Choose one of the annoyances. Then, look through a number of different pieces of writing from different genres and collect two examples of writers who followed your chosen guideline perfectly and two who didn't. For each source you found, jot a sentence or two describing the context of that source and why you think its writer did or did not follow the guideline.

3. Rank the annoyances in order of most annoying to least annoying, pretending that you are a college professor. Now, rank them from the point

of view of a newspaper editor, a popular blogger, and another college student. What changes did you make in your rankings?

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4.6 Counterarguments, Acknowledgements and Responses, and Warrants

[1]*Counterargument*

Although sometimes supporting a claim with reasons and evidence is sufficient to persuade a reader, in other situations you will need to strengthen the argument with what is known as a counterargument or what some refer to as a rebuttal.

What is a counterargument? A counterargument is an opposing belief that refutes the claim.

> For example, one might argue that educators, parents, and those who experience bullying all should work together to ensure that students who bully others are held accountable.

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1. 4.6 was borrowed with minor edits and additions from "Counterarguments, Acknowledgement and Response, and Warrants" by Karla Lyles and Jeanine Rauch which is provided by the University of Mississippi and licensed under a CC BY-SA: Attribution-ShareAlike

As long as sufficient reasons and evidence are offered to support this claim, some readers will be persuaded to accept it. For other readers, though, the claim will not persuade them because of its emphasis on responding to bullying rather than preventing it from occurring in the first place. Those readers may dispute the initial claim by stating that educators, parents, and students who are bullied should turn their attention instead to developing anti-bullying techniques or programs that would discourage bullying from taking place. Their position may be strengthened by the idea that such techniques and programs, by preventing bullying, would also prevent the consequences that result from being bullied, including substance abuse and psychological and behavioral problems.

Most beginning students hear the word counterargument or rebuttal and think that their professor is asking them to find a source that claims the exact opposite of what they are trying to argue. Well, if you are arguing a stance that is logical and can be debated by reasonable people finding a logical, reasonable person claiming the exact opposite is likely to be impossible. Your instructors are actually asking you to find a stance that differs from your claim in subtle ways. Using the example above, the counterargument isn't that the original claim is dead wrong but that the solution to the problem is off in some way. When presenting a counterargument, therefore, the intent is not just to take an opposing position for the sake of doing so; rather, it is to highlight an alternative opinion that reflects a credible, well-informed perspective that you can then discuss and build off.

> *Keep in mind that counterarguments or rebuttals at this level typically come in two parts as discussed in 4.2.*
>
> 1. addresses the main opposing point of view to the writer's position. This demonstrates that you understand what that position is and helps develop your own credibility as the writer.
> 2. After you discuss the opposing view, next you provide evidence that casts doubt on that view suggesting that the other position might not be correct. The evidence does not have to prove that the other side is completely wrong; it only needs to suggest that there may be some doubt with the point of view based upon the evidence offered.[2]

Acknowledgment and Response

When building your argument, it is necessary to determine whether your position will be stronger by only focusing on the

2. Borrowed from Writing and Rhetoric by Heather Hopkins Bowers; Anthony Ruggiero; and Jason Saphara which is licensed under a Creative Commons Attribution 4.0 International License, except where otherwise noted.

reasons and evidence that support that position[3] or by also integrating and responding to (whether by wholly refuting and creating a counterargument section or recognizing the merits of) other positions that differ from your own. This decision is one that should be made carefully and only after you have familiarized yourself thoroughly with the topic and the differing opinions on it. If you prematurely decide not to integrate others' opinions before you sufficiently understand what they are, then you may miss an opportunity to strengthen your own claim by showing the weaknesses of those opinions and to further build your ethos in the process. On the other hand, if you opt to integrate those opinions before you fully understand them, then you may weaken your own position and cause the audience to question your credibility as you muddle through explaining the opposition.

If, once you are knowledgeable about the differing opinions on the topic, you decide to integrate any of them into your own argument, you will need to make sure that you not only acknowledge those opinions **but also effectively respond to them**. Simply acknowledging them will not help to advance your own argument and can instead stall it; the audience will likely question why the opposition appears in your argument if you do not use it to your advantage, or, worse, may start to question whether the opposition actually presents a better claim than your own.

A common tendency among beginning researchers and writers is to tack their acknowledgment of a differing opinion to the end of their body paragraphs.

3. This is almost never the case.

> However, doing so, only leaves your readers focused on an idea other than yours before they move into your next reason. This can not only undermine your entire argument but also create serious clarity concerns.

When the opposing position you want to include in your argument is one for which you cannot see any merits, then your task will be to expose the weaknesses of that position so that you can refute it, maintaining a balanced, appropriate tone while doing so. Be careful that your tone and diction do not project to the reader that you are insulting those who hold the opposing view (e.g., "Any reasonable person could see that X is wrong because...") or that you are perhaps inaccurately portraying that view. You need your audience to trust that you are honestly representing the opposition to highlight its weaknesses, rather than you setting it up to fail through a misleading interpretation.

In addition, you must also be careful that in the process of refuting the opposition you do not actually demonstrate that it is stronger than your own claim[4]; this can occur if the reasons and evidence you use in your refutation are weak or if the opposition you have chosen to highlight is a minor point that does not greatly influence your own stance (suggesting that you lack enough reasons and evidence of your own to support your claim but are unwilling and/or unable to successfully refute the stronger opposing views).

Although when making your argument it may be impossible to find any merit in the opposition, in many cases you can

4. If this happens, you may also want to seriously consider if your claim needs to be rethought.

find sound reasoning that warrants your recognition. When this occurs, it is worthwhile to consider acknowledging and responding to the opposition alongside presenting your claim since doing so enhances your credibility, showing that you are not so focused on supporting your own position that you are unwilling to recognize the merits of others' ideas.

Using the example from earlier, the two positions on school bullying are not mutually exclusive. It is possible to agree that educators, parents, and students who are bullied should collaborate both to push for appropriate punishment of those who bully and to develop anti-bullying initiatives to stop bullying from happening in the first place. Thus, a stronger approach to advancing the counterargument may be to acknowledge that although these groups working together to ensure bullying is properly responded to is important, it simply is not enough; only focusing on response after the fact, despite its value to perhaps deterring bullying, obtaining "justice" for those who are bullied, etc., is not sufficient if we are serious about combating the bullying problem.

Warrants

Sometimes an argument needs further reinforcement beyond the claim, reason, and evidence. Academic writers provide this through the use of what is known as a warrant, which is an underlying belief that connects a reason and the claim. Sometimes, especially for professional writters, it is unnecessary to include warrants in an argument since the specific audience they are writing to generally also hold the same core principles and beliefs, but there are occasions when they are critical to use.

- If the audience is outside of the discourse community, so it is not (as) familiar with the topic and needs additional information;
- If the reason is a new way of thinking or is heavily debated; and
- If the audience is likely to be (highly) resistant to the reason.

Including a warrant when any of these apply can make the difference between whether the argument is successful or unsuccessful.

Take, for example, the following paragraph, written to support the claim that bullying should be collaboratively addressed by educators, parents, and those who experience bullying:

When an adolescent is bullied, he/she often undergoes behavioral and emotional changes, changes that can pose significant harm to him/her as well as others. For example, sometimes the young person who is bullied will abuse substances in order to cope with what he/she is going through, as Litwiller and Brausch (2013) explain: "Several painful and provocative behaviors have been identified consistently as behaviors that relate to both bullying and adolescent suicidal behavior. Of all such risk behaviors, alcohol and/or illicit drug use has most frequently been shown to relate" (p. 676.). If these behaviors go unnoticed, then the person being bullied is likely to continue engaging

in the alcohol and/or drug use, which can lead to further consequences for him/her as well as others. Hinduja and Patchin (2013) explain that "bullying (offline and online) has been tied to a host of other negative psychosocial and behavioral outcomes such as suicidal ideation, dropping out of school, aggression and fighting...and carrying a weapon to school" (p. 712). All of these outcomes affect not only the individual being bullied, but also those around him/her, with the potential for violence to occur in the school setting. Ignoring the effects of bullying is not an option, then, and bullying must be addressed by all parties involved.

In the paragraph, the first sentence is the topic sentence, which establishes a reason to support the claim and prepares the reader for the content that will appear in the paragraph. The next sentence then offers an example of the changes the topic sentence refers to, leading into the third sentence that integrates source material to show (i.e. provide evidence) that substance abuse is indeed one of the behavioral changes that occur. At this point in the paragraph, we (as readers) have been provided a reason to support the claim as well as evidence that supports the reason, and as the paragraph continues we are given additional examples and source material to demonstrate why the reason is a sound reason to support the claim (i.e. the warrant). The paragraph then concludes by reinforcing the claim, asserting that the harm these changes present to the person who is bullied as well as others makes it critical for all relevant parties to address bullying. Presumably, for most readers, the paragraph represents a clear chain of reasoning, because if bullying presents a threat to the person who is bullied as well as those around him/her, then it is sensible to

claim that the bullying should be stopped. Further, since in many cases the bullied will be unable to end the abuse himself/herself, it is necessary for others in positions of power to step in.

However, some readers may not think that just because there are potential consequences of bullying for the bullied as well as those around him/her that educators, parents, and the bullied should work together to end the bullying. Instead, some readers may think that stopping bullying is the responsibility of educators and/or parents alone since adolescents are not in the same position of power as these other parties, and the bullying may only escalate if the bullied try to end it. Others may think that, depending on how the bullying is occurring (such as if it is limited to online bullying outside of school grounds) that it is beyond the scope and power of educators to step in, leaving the burden for parents and/or their children who are experiencing the bullying. For these readers then, a warrant would be necessary to demonstrate why the reason clearly supports the claim; otherwise, they would be unpersuaded by this part of the argument—and possibly the argument overall, depending on how central the reason was to supporting the claim.

Thus, when developing your argument you must keep in mind that its structure is sort of like the structure of a building. There are certain parts that are essential (i.e., the claim, reasons, and evidence, just like the foundation, walls, and entry/exit routes); whereas, other parts may be useful, but are not always needed (i.e., counterarguments, acknowledgment and response, and warrants, just like upgrades such as heated flooring).

Parting Thoughts

However you want to imagine these terms and how they interact is up to you, but (building on the house example) ask yourself these questions:

- How much would you be willing to invest in a house with the upgrades versus the one with only a foundation?
- Would you buy a house with all the upgrades but no foundation?

Your answers to these hypothetical questions should help you determine what your argument needs and what you can/should expect your sources to provide to you as you determine if you want to use them in your foundation.

4.7 Strategies for Making a Successful Argument

[1]*Final Thoughts*

When preparing to write an argument-based paper, you need a plan to make the process go as efficiently and successfully as possible. Below are some tips to help.

1. **Don't decide on your claim until you have completed at least some preliminary research. It's okay to have an opinion about the topic in the early stages of planning your argument, but, if you decide on your position before familiarizing yourself with others' claims, reasons, and evidence, then you're committing yourself to a premature stance.**
2. **Read broadly. When conducting your research don't focus only on sources that may agree with your preliminary/tentative position. You need to read as much as possible to understand the range of opinions on the topic, which you may want and/or need to incorporate into your paper and, where necessary, rebut to further strengthen your argument.**

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1. 4.7 was borrowed with minor edits from [Writing & Research in the Disciplines: Advanced Composition at the University of Mississippi](#) which is published as an OER through Lumen Learning

3. **Manage the source material you consult.** Your personal preferences and assignment instructions will affect how you approach your research, but make sure as you read sources that you annotate (take notes on) the material, identifying the author's/authors' claim, reasons, and evidence. Being engaged in the text and understanding the author's main purpose and audience will assist you in gathering the best source information to help you defend and support your own argument.

     - **In addition, as you draft, make sure to carefully and accurately document any content that must be cited; doing so will ensure that proper credit is given and plagiarism is avoided.**

4. **Re-read sources, especially those that present complex, nuanced arguments.** Just as you wouldn't want your audience to mistake what you are arguing, you want to avoid misinterpreting what your sources' authors are arguing as well.
5. **Change your claim if your position changes.** Sometimes, during the course of our research and/or writing, we realize that our beliefs have changed, and we no longer support the position we once did. Provided that there is time to revise your writing before the deadline, if your position changes, your claim should also. Don't argue an opinion you no longer agree with if you can avoid doing so.

4.8 Crossing the Finish Line: The Academic Research Argument: End-of-Chapter Exercises

End-of-Chapter Exercises

[1]Review "Rogerian Argument" section 4.2: Give a Rogerian argument a try by taking your argument and doing the following items:

- summarize the opposing viewpoints
- determine if the opposing view's argument is reasonable and if the author's assumptions are

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1. Borrowed with minor edits from "Chapter 4" of *Claim Your Voice in First Year Composition, Vol. 2* by Cynthia Kiefer and Serene Rock licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License

valid
- present their arguments and supporting points or premises accurately making sure to keep your tone respectful
- acknowledge your shared concerns (the "common ground")
- follow up with support for your own argument
- compose a stronger counterargument based on what you know about the opposing argument's support

  - concede the opposition's valid supporting points with which you found common ground
  - refute the weaknesses in the opposing view's argument

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[2]Review "Structuring Argument in Your Paper" in section 4.2: Imagine that you are assigned an argument paper that must focus on an education-related issue, with the audience consisting of your peers. You select as your claim the idea that all undergraduate writing courses that fulfill a general education requirement should include a tutor, who

2. Borrowed with minor edits from "Structure of Argument" by Karla Lyles and Jeanine Rauch which is provided by the University of Mississippi and is licensed under a CC BY-SA: Attribution-ShareAlike

would attend all class meetings and assist students as needed. As you plan your paper, you decide to use the following reasons to support your claim:

1. Students may be more comfortable seeking individualized help with their writing from a peer (advanced undergraduate student or graduate student) than their instructor.
2. The tutor could provide valuable feedback to the instructor to assist him/her with teaching that students may be uncomfortable sharing or otherwise unable to do so.
3. Student grades and retention would improve.

To support the first reason, your evidence consists of anecdotes from fellow students. To support the second and third reasons, your evidence consists of published research that suggests these benefits. In what order would you place the reasons in your paper, and why.

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[3]Review section 4.3: Evaluating a Claim in Practice

Bias in the media has long been a topic of discussion, both popular and scholarly, and recently has even led to the creation of charts to show where news outlets fall on a spectrum from "conservative" to "liberal"

3. Borrowed with edits from "Claims, Reasons, and Evidence" by Karla Lyles and Jeanine Rauch which is provided by the University of Mississippi and is licensed under a *CC BY-SA: Attribution-ShareAlike*

ideology. Some people even claim that no media outlet can be relied on to report the truth.

Based on what you learned in chapter 4, is the claim, "Media cannot be trusted" effective? Why or why not?