Research is a process

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Abstract:

In many of your courses—including College Writing—you will need to integrate research into essays, presentations, and other projects. Research is critical in academic writing and speaking because it places your work in a larger conversation. Research is a process that helps you expand on your ideas, discover new ones, and support arguments. When you integrate outside sources into your work, you build your credibility by showing that research supports your arguments and claims. This chapter will provide a brief introduction to research and will cover the basics of finding, accessing, and using outside sources to build and support effective arguments.

Keywords: college writing | research | citing sources | finding resources

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Types of Sources

When researching a topic, you are likely to come across a wide variety of published sources of information or evidence. Sources can be categorized in many different ways, and you may be asked by your instructor to use particular types of sources in your writing. These include primary and/or secondary sources, and popular and/or scholarly sources. However, it can be difficult to meet your instructor's requirements for sources if you're not sure how to identify or distinguish between these different types of sources.
Primary and Secondary Sources

You may have heard sources referred to as either primary or secondary when doing research in the past. The University of Maryland provides the following definition of primary sources:

Primary sources are original materials. They are from the time period involved and have not been filtered through interpretation or evaluation. Primary sources are original materials on which other research is based. They are usually the first formal appearance of results in physical, print or electronic format. They present original thinking, report a discovery, or share new information. (University of Maryland Libraries)

While this definition is clear and succinct, you might notice that it does not provide any specific examples of primary sources. This is because what constitutes a primary source varies widely depending on the context or academic discipline. Here are a few examples:

- For historical research on the Vietnam War, a primary source might be a letter or diary that provides a first-hand account of a soldier's experience, or a newspaper article from 1968 reporting on the war.
- For a psychology topic like post-traumatic stress disorder (PTSD), a primary source might be an original research article about a study of treatment options for PTSD.
- For research on the visual rhetoric of the anti-war movement during the Vietnam War, a primary source might be a photo of protesters.

Secondary sources are removed in some way from primary sources. Considering the examples in the last paragraph, a secondary source in history might be a book on the Vietnam War that relies on numerous primary sources like letters and newspaper articles to provide context. In psychology, secondary sources might be review articles that summarize and evaluate original research articles. In art, secondary sources might include a scholarly journal article or an in-depth review of an exhibition published in a newspaper or magazine. Like primary sources, secondary sources can take many forms. Common types of secondary sources you are likely to come across in the process of doing research for a College Writing class include books, articles, and websites.

Popular and Scholarly Sources

Many of your college research assignments will require certain types of secondary sources, like articles or books. When you are doing research, you are likely to find a mix of popular sources, like newspaper and magazine articles, and scholarly sources, like books and journal articles. Scholarly sources (also called academic, peer-reviewed, or refereed sources) are written both by and for scholars—people with education and expertise related to the topics they're covering. Scholarly sources also include formal citations and are published either in peer-reviewed journals or in books by academic publishers. Popular sources, like magazines and newspapers, tend to be written by journalists for a more general audience, and they rarely include formal citations like footnotes or a Works Cited list.

Scholarly sources are not "better" than popular sources; the two serve different purposes. Scholarly sources will typically provide more in-depth analysis of a particular topic. They often
cite primary and secondary sources, including other scholarly sources. However, if you are researching a recent event or a topic of current interest, popular articles are your best bet as they are much more likely to cover current events and news. Popular sources are also important because they can be read by anyone with access to the internet or a library, while many scholarly sources can only be accessed with specific credentials like a university ID. With a general sense of the types of sources you are looking for, you can begin searching for sources that help support your argument. The next few sections will help you get started with that process, but your research guides, linked on page 87, provide more detailed information about finding evidence, including tutorials on searching library resources like databases and catalogs.

Using Web Sources

Using the web for research is convenient and is second nature to many of us, but since most of what is available on the web has not been edited or reviewed, it is particularly important to carefully evaluate these sources before deciding to use them. At the time we were writing this, a Google search for standardized testing brings back 101 million results. There's a good chance that not all 101 million of those results would provide strong evidence for an academic assignment. There are many criteria to consider when you evaluate web sources—a Google search for evaluating web sources brings back more than 2 million results—but we recommend the ABCD framework.

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* A stands for authority, which requires you to consider the person, people, or organization responsible for the website. Look for "about us" or "contact us" links if the author is not immediately clear. Think about your context—a website on standardized testing by someone with a Master's degree in Education has more authority than a site written by a literature professor. When authors cannot be identified, authority is significantly compromised. That is one major issue with sources like Wikipedia. Remember that you are using outside sources to build your own ethos as a writer, and sources with authority issues can negatively impact that ethos.

* Bias can be tricky to identify and might require a little extra research. Information creators have perspectives and agendas that affect the way they present information. Biased sources are often very one-sided or do not provide the full picture on a particular topic or issue. This can be very nuanced—it is often not as easy as finding a site entitled "Standardized Testing is the Worst (the bias there is fairly clear) or a site written by the Educational Testing Service. Bias is a particularly sticky issue when we are dealing with controversial topics, as strong opinions are likely to be voiced. Just because an author makes an argument, it does not necessarily mean a source is biased. Balanced sources often present well-reasoned positions on one side of an issue, supported by a range of outside sources. For example, a magazine article about ocean pollution
may have a strong argumentative thesis about eliminating the use of plastic straws in order to protect marine animals—a thesis that many people could reasonably disagree with for a number of reasons, including that some people with physical disabilities rely on straws for drinking. However, the author can create balance in their argument by offering multiple perspectives from scientific research alongside interviews with disability rights activists, public policy makers, and consumers. Similarly, just because a site has a clear bias does not mean that you should discard it as a source. Rather, you should consider seeking out additional sources that are more neutral. You can help mitigate bias by seeking out multiple perspectives on a topic so that you have a fuller picture of the information available.

Currency, or how up to date a source is, is relative to the topic at hand. The first step in evaluating the currency of a source is to identify the date of publication, then consider whether the information in the source is up-to-date enough to serve as solid evidence for your argument. Typically in a College Writing course, you are going to be looking for the most recent information on a topic. It is important to remember, though, that the most recent information on standardized testing is likely to be newer than the most recent information about the Vietnam War. While older information can provide a useful historical perspective on a topic, a good rule of thumb is to look for sources published within the past five years when your topic is about current events, science, technology, or social issues. However, it is also important to read your assignment guidelines carefully, as some instructors will provide directions about how current your sources should be for research assignments.

Documentation is how an author or a publication indicates to readers that their assertions or arguments are backed up with evidence. The most common kind of documentation is the use of citations to outside sources. Citations to other sources may be formal, such as the kind found in footnotes, endnotes, works cited lists, or bibliographies. Formal citations are typically used in scholarly sources, such as academic journal articles or nonfiction books from academic publishers. However, citations can also be informal, such as through the use of signal phrases ("According to researchers at Stanford, ...") or even through hyperlinks to articles, reports, or other types of evidence in online sources. Informal citations are common in newspaper and magazine articles, blog posts, and social media. If an author does not use formal or informal sources to document their work, you can also research the publication or platform in which the work appears. Is there documentation on a publication's website of an editorial process through which the author's arguments or assertions are reviewed before publication? For example, the website for the Associated Press news service outlines how their journalist's reports are fact-checked before publication. Similarly, the website for the *Journal of Social Media in Society* describes the peer review process scholarly article submissions to the journal must go through. Just as integrating and citing outside sources helps you build ethos as a writer, these forms of documentation can also help establish the credibility of the sources you find.

**Using Library Resources**

The web is always a great starting point for research, but when the research you are doing is academic, you almost always need to go beyond what is freely available. College and university libraries typically have many thousands or even millions of books and articles, representing original scholarship by experts as well as quality popular sources by journalists, critics, and other
professional writers, that your tuition pays for. Next, we will cover some basics about using library resources, but you can find out more by using your research guides. If you need help with your research, you can always contact your College Writing Librarian or use the "Chat with a Librarian" link at http://library.uncg.edu.

As you use library resources, be aware that they do not "speak Google." In general, you cannot type in a question or a long phrase into a library database search box and expect to get useful results. The best strategy is to do some brainstorming before you start searching to help you consider the terms you want to use. If you are researching how well the SAT predicts college success, you should identify critical terms related to the topic: SAT and college success. You should also consider terms that are broader (like standardized test or college admissions test for SAT) and narrower (like grade point average for college success). Having a variety of search terms ready helps if you find that your initial search is not as successful as you would like it to be. When you have identified a handful of useful terms, you can use those to search for relevant sources in the library catalog or databases. To make your search as effective as possible, use connectors like AND and OR to help target your search. A search for "SAT AND college success" will bring back results that deal with both of these topics, which helps you narrow down your results to those that are likely to be relevant. A search for "SAT OR college admissions test" will bring back any results that deal with either of those concepts, so that broadens your results. These searches work in the UNCG Libraries catalog as well as in our databases.

- The catalog (which you can find by visiting http://library.uncg.edu and clicking the "catalog" tab in the red search box) is your gateway to books, DVDs, CDs, and more at UNCG. For more in-depth information about searching the catalog, visit your research guide!
- Library databases are searchable collections of subscription-based resources. Most of our databases at UNCG primarily contain articles (both popular and scholarly), but some also include citations to books, conference presentations, and other types of sources. We have hundreds of databases at UNCG, but you can find specific recommendations for databases, as well as video tutorials showing how to use them most effectively, on your research guides.

**Citing Sources**

Citing sources is a critical part of the research process. Not only does it protect you from plagiarism, which is a violation of the Academic Integrity Policy, it also builds your credibility by indicating that your ideas are supported by research. In most English classes, you will be asked to cite sources in MLA style. Citations are meant to help your audience find the sources you have consulted, which is why they require so much detail; your readers need to have as much information as possible in case they want to find any of your sources. One thing to remember about citations is that they are somewhat like mathematical formulas. You never have to memorize the order of citation elements, you just need to be able to plug the information about your sources into the correct format. There are excellent citation resources online that you can use to double check the details of a citation. The OWL at Purdue is our personal favorite, but check your research guide for additional resources. (For more on citation and formatting, see Ch. 16, "Rhetorical Elements of Academic Citation.")
Getting Help

This chapter only scratches the surface of the resources we have available and the strategies that can help you use them most effectively. If you need help with any part of the research process, from brainstorming search terms, to selecting the appropriate library resources, to citing your sources, you can always contact the UNCG Libraries. You can contact a librarian for research help by clicking "Chat with a librarian" on the Libraries' homepage.