Finding Evidence

Analyzing activities to find evidence in support of a claim

Once a working thesis statement is in place, your essay has begun to establish a **claim**—something the project is stating to be true. No matter how elegant the claim itself is, though, it's only a small piece of the writing task. A claim by itself is powerless to influence a critically-thinking audience, and you should assume that any audience reading your work will be critical thinkers.

It's pretty alarming, and even insulting to readers, when evidence isn't provided to support a claim. Here's one study reflecting this in action:

The Royal Society of Chemistry's magazine *Chemistry World* published an article in 2008 on a study of psychiatric drug ads in medical journals that found that over a third of the total claims made by drug ads are not actually supported by the studies they reference as evidence.

Taken on an ad by ad basis, the results are even more shocking:

42 out of the 53 ads (nearly 80 per cent) the researchers examined made at least one claim the team couldn't substantiate. 27 made a claim that was not supported by the data source cited by the ad. A further 15 contained claims that couldn't be verified by the team — usually because the ads provided no sources of data to back up their claims, or made claims that could not be verified because drug firms either failed to respond to the researchers' requests for trial data, or refused to supply it.

Six out of nine pharmaceutical companies – including GlaxoSmithKline, Pfizer, AstraZeneca and Shire – did not reply to the researchers, while Wyeth refused to send trial data.

'In these cases, we have to take their word [that their claims were supported by scientific evidence], which, personally, I would think is not a wise idea,' says author Glen Spielmans. Only Janssen Pharmaceutica – makers of schizophrenia drug Risperdal (risperidone) – and medical device firm Cyberonics sent relevant studies to back up their claims.

You'd think after spending all that time and effort to design and run trials which consistently support the manufacturer's product you could just reference your own studies, but apparently even that seems too excruciatingly transparent for the spin-happy industry.

When examined by critical readers, these advertisements that fail to provide support actually do more harm than good. Doctors will be much less likely to prescribe them as a result.

We'll explore the means to locate and apply appropriate evidence to your own writing, in the following pages.

Selecting Evidence

INTRODUCTION

Many papers that you write in college will require you to <u>make an argument (Links to an external site.)</u>; this means that you must take a position on the subject you are discussing and support that position with evidence. It's important that you use the right kind of evidence, that you use it effectively, and that you have an appropriate amount of it. If, for example, your philosophy professor didn't like it that you used a survey of public opinion as your primary evidence in your ethics paper, you need to find out more about what philosophers count as good evidence. If your instructor has told you that you need more analysis, suggested that you're "just listing" points or giving a "laundry list," or asked you how certain points are related to your argument, it may mean that you can do more to fully incorporate your evidence into your argument. Comments like "for example?," "proof?," "go deeper," or "expand" in the margins of your graded paper suggest that you may need more evidence. Let's take a look at each of these issues—understanding what counts as evidence, using evidence in your argument, and deciding whether you need more evidence.

WHAT COUNTS AS EVIDENCE?

Before you begin gathering information for possible use as evidence in your argument, you need to be sure that you understand the purpose of your assignment. If you are working on a project for a class, look carefully at the assignment prompt. It may give you clues about what sorts of evidence you will need. Does the instructor mention any particular books you should use in writing your paper or the names of any authors who have written about your topic? How long should your paper be (longer works may require more, or more varied, evidence)? What themes or topics come up in the text of the prompt? It's also a good idea to think over what has been said about the assignment in class and to talk with your instructor if you need clarification or guidance.

WHAT MATTERS TO INSTRUCTORS?

Instructors in different academic fields expect different kinds of arguments and evidence—your chemistry paper might include graphs, charts, statistics, and other quantitative data as evidence, whereas your English paper might include passages from a novel, examples of recurring symbols, or discussions of characterization in the novel. Consider what kinds of sources and evidence you have seen in course readings and lectures. You may wish to see whether the Writing Center has a handout regarding the specific academic field you're working in—for example, literature (Links to an external site.), sociology (Links to an external site.), or history (Links to an external site.).

WHAT ARE PRIMARY AND SECONDARY SOURCES?

A note on terminology: many researchers distinguish between primary and secondary sources of evidence (in this case, "primary" means "first" or "original," not "most important"). Primary sources include original documents, photographs, interviews, and so forth. Secondary sources present information that has already been processed or interpreted by someone else. For example, if you are writing a paper about the movie "The Matrix," the movie itself, an interview with the director, and production photos could serve as primary sources of evidence. A movie review from a magazine or a collection of essays about the film would be secondary sources. Depending on the context, the same item could be either a primary or a secondary source: if I am writing about people's relationships with animals, a collection of stories about animals might be a secondary source; if I am writing about how editors gather diverse stories into collections, the same book might now function as a primary source.

WHERE CAN I FIND EVIDENCE?

Here are some examples of sources of information and tips about how to use them in gathering evidence. Ask your instructor if you aren't sure whether a certain source would be appropriate for your paper.

Print and electronic sources

Books, journals, websites, newspapers, magazines, and documentary films are some of the most common sources of evidence for academic writing.

Observation

Sometimes you can directly observe the thing you are interested in, by watching, listening to, touching, tasting, or smelling it. For example, if you were asked to write about Mozart's music, you could listen to it; if your topic was how businesses attract traffic, you might go and look at window displays at the mall.

Interviews

An interview is a good way to collect information that you can't find through any other type of research. An interview can provide an expert's opinion, biographical or first-hand experiences, and suggestions for further research.

Surveys

Surveys allow you to find out some of what a group of people thinks about a topic. Designing an effective survey and interpreting the data you get can be challenging, so it's a good idea to check with your instructor before creating or administering a survey.

Experiments

Experimental data serve as the primary form of scientific evidence. For scientific experiments, you should follow the specific guidelines of the discipline you are studying. For writing in other

fields, more informal experiments might be acceptable as evidence. For example, if you want to prove that food choices in a cafeteria are affected by gender norms, you might ask classmates to undermine those norms on purpose and observe how others react. What would happen if a football player were eating dinner with his teammates and he brought a small salad and diet drink to the table, all the while murmuring about his waistline and wondering how many fat grams the salad dressing contained?

Personal experience

Using your own experiences can be a powerful way to appeal to your readers. You should, however, use personal experience only when it is appropriate to your topic, your writing goals, and your audience. Personal experience should not be your only form of evidence in most papers, and some disciplines frown on using personal experience at all. For example, a story about the microscope you received as a Christmas gift when you were nine years old is probably not applicable to your biology lab report.

Applying Evidence

The "Evidence" handout from The Writing Center at UNC-Chapel Hill continues, offering guidance for how to select, refine, and apply evidence once you've located it.

USING EVIDENCE IN AN ARGUMENT

Does evidence speak for itself?

Absolutely not. After you introduce evidence into your writing, you must say why and how this evidence supports your argument. In other words, you have to explain the significance of the evidence and its function in your paper. What turns a fact or piece of information into evidence is the connection it has with a larger claim or argument: evidence is always evidence *for* or *against* something, and you have to make that link clear.

As writers, we sometimes assume that our readers already know what we are talking about; we may be wary of elaborating too much because we think the point is obvious. But readers can't read our minds: although they may be familiar with many of the ideas we are discussing, they don't know what we are trying to do with those ideas unless we indicate it through explanations, organization, transitions, and so forth. Try to spell out the connections that you were making in your mind when you chose your evidence, decided where to place it in your paper, and drew conclusions based on it. Remember, you can always cut prose from your paper later if you decide that you are stating the obvious.

Here are some questions you can ask yourself about a particular bit of evidence:

- 1. O.k., I've just stated this point, but so what? Why is it interesting? Why should anyone care?
- 2. What does this information imply?
- 3. What are the consequences of thinking this way or looking at a problem this way?

- 4. I've just described what something is like or how I see it, but why is it like that?
- 5. I've just said that something happens-so how does it happen? How does it come to be the way it is?
- 6. Why is this information important? Why does it matter?
- 7. How is this idea related to my thesis? What connections exist between them? Does it support my thesis? If so, how does it do that?
- 8. Can I give an example to illustrate this point?

Answering these questions may help you explain how your evidence is related to your overall argument.

HOW CAN I INCORPORATE EVIDENCE INTO MY PAPER?

There are many ways to present your evidence. Often, your evidence will be included as text in the body of your paper, as a quotation, paraphrase, or summary. Sometimes you might include graphs, charts, or tables; excerpts from an interview; or photographs or illustrations with accompanying captions.

Quotations

When you quote, you are reproducing another writer's words exactly as they appear on the page. Here are some tips to help you decide when to use quotations:

- 1. Quote if you can't say it any better and the author's words are particularly brilliant, witty, edgy, distinctive, a good illustration of a point you're making, or otherwise interesting.
- 2. Quote if you are using a particularly authoritative source and you need the author's expertise to back up your point.
- 3. Quote if you are analyzing diction, tone, or a writer's use of a specific word or phrase.
- 4. Quote if you are taking a position that relies on the reader's understanding exactly what another writer says about the topic.

Be sure to introduce each quotation you use, and always cite your sources.

Like all pieces of evidence, a quotation can't speak for itself. If you end a paragraph with a quotation, that may be a sign that you have neglected to discuss the importance of the quotation in terms of your argument. It's important to avoid "plop quotations," that is, quotations that are just dropped into your paper without any introduction, discussion, or follow-up.

Paraphrasing

When you paraphrase, you take a specific section of a text and put it into your own words. Putting it into your own words doesn't mean just changing or rearranging a few of the author's words: to paraphrase well and avoid plagiarism, try setting your source aside and restating the sentence or paragraph you have just read, as though you were describing it to another person. Paraphrasing is different than summary because a paraphrase focuses on a particular, fairly short bit of text (like a phrase, sentence, or paragraph). You'll need to indicate when you are

paraphrasing someone else's text by citing your source correctly, just as you would with a quotation.

When might you want to paraphrase?

- 1. Paraphrase when you want to introduce a writer's position, but his or her original words aren't special enough to quote.
- 2. Paraphrase when you are supporting a particular point and need to draw on a certain place in a text that supports your point—for example, when one paragraph in a source is especially relevant.
- 3. Paraphrase when you want to present a writer's view on a topic that differs from your position or that of another writer; you can then refute writer's specific points in your own words after you paraphrase.
- 4. Paraphrase when you want to comment on a particular example that another writer uses.
- 5. Paraphrase when you need to present information that's unlikely to be questioned.

Summary

When you summarize, you are offering an overview of an entire text, or at least a lengthy section of a text. Summary is useful when you are providing background information, grounding your own argument, or mentioning a source as a counter-argument. A summary is less nuanced than paraphrased material. It can be the most effective way to incorporate a large number of sources when you don't have a lot of space. When you are summarizing someone else's argument or ideas, be sure this is clear to the reader and cite your source appropriately.

Statistics, data, charts, graphs, photographs, illustrations

Sometimes the best evidence for your argument is a hard fact or visual representation of a fact. This type of evidence can be a solid backbone for your argument, but you still need to create context for your reader and draw the connections you want him or her to make. Remember that statistics, data, charts, graph, photographs, and illustrations are all open to interpretation. Guide the reader through the interpretation process. Again, always, cite the origin of your evidence if you didn't produce the material you are using yourself.

DO I NEED MORE EVIDENCE?

Let's say that you've identified some appropriate sources, found some evidence, explained to the reader how it fits into your overall argument, incorporated it into your draft effectively, and cited your sources. How do you tell whether you've got enough evidence and whether it's working well in the service of a strong argument or analysis? Here are some techniques you can use to review your draft and assess your use of evidence.

Make a reverse outline

A reverse outline is a great technique for helping you see how each paragraph contributes to proving your thesis. When you make a reverse outline, you record the main ideas in each

paragraph in a shorter (outline-like) form so that you can see at a glance what is in your paper. The reverse outline is helpful in at least three ways. First, it lets you see where you have dealt with too many topics in one paragraph (in general, you should have one main idea per paragraph). Second, the reverse outline can help you see where you need more evidence to prove your point or more analysis of that evidence. Third, the reverse outline can help you write your topic sentences: once you have decided what you want each paragraph to be about, you can write topic sentences that explain the topics of the paragraphs and state the relationship of each topic to the overall thesis of the paper.

Color code your paper

You will need three highlighters or colored pencils for this exercise. Use one color to highlight general assertions. These will typically be the topic sentences in your paper. Next, use another color to highlight the specific evidence you provide for each assertion (including quotations, paraphrased or summarized material, statistics, examples, and your own ideas). Lastly, use another color to highlight analysis of your evidence. Which assertions are key to your overall argument? Which ones are especially contestable? How much evidence do you have for each assertion? How much analysis? In general, you should have at least as much analysis as you do evidence, or your paper runs the risk of being more summary than argument. The more controversial an assertion is, the more evidence you may need to provide in order to persuade your reader.

Play devil's advocate, act like a child, or doubt everything

This technique may be easiest to use with a partner. Ask your friend to take on one of the roles above, then read your paper aloud to him/her. After each section, pause and let your friend interrogate you. If your friend is playing devil's advocate, he or she will always take the opposing viewpoint and force you to keep defending yourself. If your friend is acting like a child, he or she will question every sentence, even seemingly self-explanatory ones. If your friend is a doubter, he or she won't believe anything you say. Justifying your position verbally or explaining yourself will force you to strengthen the evidence in your paper. If you already have enough evidence but haven't connected it clearly enough to your main argument, explaining to your friend how the evidence is relevant or what it proves may help you to do so.