Evidence

For information or an argument to be convincing there must be good evidence to back up the claims presented. There are many types of evidence; here are four basic forms:

1. Facts
2. Statistics
3. Examples/Anecdotes
4. Expert Opinions

Just because someone calls something evidence, doesn't mean the evidence is good or actually supportive. When thinking critically it's good to have a healthy skepticism towards all evidence, all facts, all statistics, all examples, and all expert opinions.

Evaluating and Providing Evidence

Here are some questions that help when it comes to evaluating evidence. These questions will help whether you're coming up with your own evidence for an argument or claim, or critically assessing evidence presented by someone else.

Is the evidence adequate and representative?

- There should be a number of examples, so that you can see a real trend.
- If it's a survey, there should be a large and varied sample.

The example, while credible, may in fact be a rare exception. For example, a few heavy smokers who live long lives are not good evidence against the many smokers whose lives are shortened due to tobacco use.

Is it accurate?

- As you look closely at the evidence, do you see any flaws in it?
- Do you detect any logical errors?

While discovering a variety of minor errors does not in itself negate an argument, it does cast doubt on the overall credibility of the argument. If the facts in one source contradict evidence that is in other sources, then you must judge the accuracy.

What kind of source is it, and is it a relevant source?

- Does it really fit the situation that is being argued?
- Has it been taken out of context?
- Is the source of the evidence credible?
- Is the source of the statistics or facts named?
- What kinds of credentials does the expert have (degrees, professional affiliations, employment, experience)?
- If a website, who is the owner/author of the website?
- If a scientific study, who commissioned it (e.g., a study on health care reform commissioned by the insurance industry would need to be examined very carefully)?

- Does the source of the quotes or statistics have an interest in the matter?
- Do other credible sources refer to this source? That's usually a good sign of credibility.

Ask Questions

When thinking critically about evidence, it's good to ask tons of questions. Don't be afraid of looking ignorant or poorly informed. Ask questions like:

What do you mean by that?
Where did you get your information?
Do you have any way to back that up?
I'm sorry, I don't know what you mean when you say _____. Can you please explain?

Make sure to ask yourself questions too, like:

Am I saying this just because I want to, or just because it helps me?
Where am I getting my information?
Can I support my claims?

Try asking these questions when you watch TV, whether it's the news or some show you watch for fun. Try asking questions like these while you're reading material for class or even just for fun. Try asking these questions too, when you talk with your friends or families or coworkers. And especially, try asking yourself these questions when you're considering your own perceptions or claims and attempting to build evidence for your positions.