Use of Evidence: Explanation of Outcome (d)

(Slide 1) This lecture explains the fourth learning outcome that relates to the concept of evidence.

(Slide 2) Outcome (d), which may be stated as:

> 2d) Determine the nature of textual sources referenced in a text and estimate the reliability of a source in a given context

is similar to, and builds on, the fourth outcome for the previous unit, which was:

> 1d) Incorporate content from footnotes/endnotes, bibliography, and other features of academic writing to state the explicit meaning of, or predictable inferences from, a text

as well as what you've learned about the use of evidence. Outcome 2d) is, in fact, two outcomes in one, but they are so closely tied that this shouldn't be a problem. Let's begin by talking about the reliability of beliefs, and then move to talking about textual sources.

<u>The Reliability of Beliefs</u>

(Slide 3) In the last unit, you learned how to read footnotes and bibliographies and incorporate their content into your reading of academic texts. In order to perform the latter half of this skill properly, that is, to incorporate their content into your reading, you need to assess the value of the source. Assessing the value of information and beliefs is a major part of critical thinking, but because doing so often depends heavily on context and discipline-specific knowledge, there's a limit to how much we can have you practice this skill in the present course.

Should we say a few more words about this before continuing? You're no doubt have had teachers in high school, or professors in college, complain about students relying on Wikipedia entries, or encyclopedias, or random sources they found on the internet rather than quote-unquote "good" sources of information. Well, yes, the quality control mechanisms of Wikipedia leave a lot to be desired, but these criticisms that you've heard before are really rather straightforward examples of problems that you'll continue to wrestle with in more subtle ways throughout your college career, and also in your work and home life.

(Slide 4) Let's take just a simple example from private life. Let's say you're going to buy a home. You need to know how much it's going to cost you – the total sticker price, the monthly price of your mortgage, taxes and when the tax assessment might change, utilities, things like that. If you don't know these basic facts, you really shouldn't be buying the home. But who do you trust for this information? Hopefully you can trust the real estate agent regarding the sticker price, but can you trust him regarding the price of taxes and utilities? He's got a vested interest, after all, in getting you to buy the house, so can you rely on him to do his due diligence? Or how about the price of your mortgage? It's no unheard

of for banks to not be exactly forthcoming about the actual price of loans, including things like one-time fees as well as interest rates, and that's why in the United States we have the Truth in Lending Act, also known as Regulation Z, which requires lenders to be honest and clear about the cost of loans. This isn't to say that people didn't get mislead during the recent housing bubble, signing flexible rate and interest-only loans, but unless they worked with dishonest lenders, those people at least had the correct information about their loans, even if they didn't understand the fine print or practical implications of them.

(Slide 5) It's often said that a home is the largest financial investment most people will make in their lives, so it makes real sense for people to be able to rely on information they get about the costs of home ownership. But really for anything you do, or anything you choose to believe, you probably want good information, and you also want to be able to estimate the reliability of information you get. In the case of mortgage costs, once you determine that you know the real costs, then you treat that as real knowledge, you accept (unless you learn otherwise) that your beliefs are true and you move on. But often the information we use as basis for further beliefs or actions is less than certain, and in such cases we need to keep in mind not just our beliefs, but also our degree of confidence in them.

Let's take a simple example. I'm getting ready for work, and I look out the window and I see what look like rain clouds. I then turn on the television and watch the weather forecast, and it says that the day will be cloudy, but no rain. Well, I know that weather forecasts aren't entirely reliable, so I think I'll put an umbrella in my briefcase anyway, just in case. Maybe I'd take a big golf umbrella if I knew it would rain, but today I just take a small, folding one, just in case. In this example, I don't belief it's going to rain – if I did, then I'd bring the big umbrella – but I also don't believe the weather forecast, because then I wouldn't bother with any umbrella. What I believe is, it might rain, so I want to be ready if it does, and if it doesn't. If I conclude it's probably going to rain and the forecast is wrong, maybe I'll bring the big umbrella anyway, and if I think it probably won't rain, maybe I'll take my chances. But my not bringing an umbrella doesn't mean I believe it won't rain – maybe I think there's a small chance it will, and I'm not really sure.

(Slide 6) OK, so that's an example of how in daily life we estimate the value of evidence, in this case the evidence of our eyes as we look out at the morning sky, and evidence from authority, in this case the TV weatherman. We constantly assess the value of evidence in daily life, in fact we couldn't get through the day without doing this, and similarly in your college work you'll have to constantly do this as well. Only it's tougher for students to do this in school, for some odd reason. Maybe it has to do with early education: you're taught that if it's in the textbook, it's right, and you're given silly multiple-choice and true-false exams that don't allow you to really think about what you're learning and then spit it back. Whatever the reason, a lot of students have difficulty learning the skill of being appropriately skeptical of information they're presented with, but this is a crucial skill for college and also for life and work beyond.

Some sources are more reliable than others, and many sources are more reliable for some kinds of facts and opinions than others. Figuring out who to trust, and how much faith to put in them, is often difficult. But it's also essential that you think about reliability of sources, even though you recognize that your own ability to judge reliability may not be absolutely reliable. It's still better to make your best assessment than to throw up your hands and trust some random source.

<u>The Nature of and Reliability of Textual Sources</u>

(Slide 7) Let's begin our discussion of the nature of textual sources with a rough-and-ready typology. This isn't intended as a final model that you can simply memorize and apply; rather, it's designed to illustrate what we're talking about, and to be sufficiently robust to get you started.

Academic texts differ from popular ones in a number of ways. They are written for specialists, or at least students, whereas popular works are written for a general audience who might have little background in the topic being treated and, unlike students, aren't engaged in systematic study of the topic, even at the introductory level. Academic texts tend to be written by experts, whereas popular texts might be written by people with little more knowledge of the subject than their intended readership. Consequently, it's important to be able to distinguish academic from popular texts. By the way, when we say "texts," we mean both books and articles, and sometimes other written or multimedia works.

(Slide 8) Some publishers can be relied upon to produce what we're here calling academic texts, whereas others are trade publishers that only produce popular books. As a rule, university presses produce academic books, though some of the larger ones like Oxford University Press have all-academic imprints like the Clarendon Press and also produce books, albeit high quality ones, for popular audiences. And most university presses will produce less academic books on regional topics like history or foodways in addition to more academic works.

Everything else being equal, the credentials of an author are important. Someone who has a PhD from a reputable school or teaches at a university has gone through some kind of vetting process in their field of expertise, though of course plenty of professors write popular books, some of which are very popular in nature (and popular in the sense that they sell well). Of course, academic credentials might be irrelevant for a biologist writing about religion or politics, or a history professor writing about physics. And people who work at professional organizations like the IMF or World Bank, or reporters with extensive field experience, can also be very reliable sources: colleges don't have a monopoly on experts. And these are all rules with plenty of exceptions, but they're a place to start.

Often a combination of indications of expertise are better than one. A book written by a reporter from a major newspaper like the Washington Post, or the Straights Times in Singapore, is more likely to be an academic book if it's published by Yale University Press, and a popular book if it's published by Random House.

(Slide 9) In addition to looking at the authority of the author, another thing to consider is the sources on which the text you're reading is based. If the bibliography of a book published by a university press contains a lot of popular works, then that might be an indication that the book you're reading is a fairly popular one, despite its publisher; whereas if it cites a lot of sources that appear reliable, then that's evidence that the book itself is more reliable. Of course, the subject matter of the book matters in this regard. If the book is about popular culture, you'd expect a lot of popular sources, and you might actually be skeptical if all the sources were scholarly books and journals. In a book on the culture of the internet, you'd expect a lot of references to blogs and websites.

In this context the distinction between primary and secondary source is important. In a book on the culture of the internet, blog postings would generally count as primary sources, because blogs are the kind of thing the book is <u>about</u>. In contrast, a book about blogs is a secondary source if you're interested in blogs, because it's not a blog itself, but rather a book. Exceptions are predictable once you understand this distinction.   If you're interested in how people write the English language differently in blogs than in books, then blogs themselves would generally be primary sources, but Language Log (http://itre.cis.upenn.edu/~myl/languagelog/), a blog about language written by a number of distinguished linguists, would almost certainly count as a secondary source. Most often you'll encounter the primary/secondary source distinction in history classes, but really it's a distinction important in many fields.

(Slide 10) This rough-and-ready typology is no more than a place to start, but hopefully it illustrates the kind of issues that any critical reader must consider in assessing the reliability of sources. One can look at the publisher or the author, and take into account the context. One can also look at more subtle hints like language: does the person write with technical precision? If not, the person might not be as knowledgeable as they appear, or if the author is trying to explain a technical subject in a non-technical way, perhaps the content of what they say is, like their language, not as technically precise, or even accurate, as one might hope. There are no doubt lots of other rules of thumb that one could develop, but in particular cases one still has to look to the details of the source in question.