Understanding Information Evaluation:

with helpful Checklists

This presentation will help you to you understand the information evaluation process, help you to use and evaluate information, and provide useful tools for evaluating the information you gather for your classroom assignments.

Why is the quality of the information you use important?

In order to write good papers (or even excellent papers), you must use information that is the most accurate and reliable as possible, and that information must be directly related to your topic. [For how to conduct good searches by keyword, see the handout for Search Strategies.]

When you use someone's else's ideas to write your papers, your reputation depends upon their reputation. So always try to obtain the highest quality you can find.

The most reliable and accurate information is called "scholarly."

Scholarly information materials have been through a "peer-review" process.

About the Peer Review Process
(What makes this type of information more reliable and accurate?)

"Peer Review" means that the author's fellow experts, in the field about which he/she is writing, have thoroughly examined books, book chapters, and articles before they are published, to ensure accuracy and reliability.

This makes sure that authors must be experts in their field.

This makes sure that someone has double checked the information for accuracy and reliability – in other words, quality.

It means that the author did his or her own research on the topic, before they wrote about it, and gave credit to the sources they also used. This way, you can trace the origins of the ideas used.

How Does this Work?

The people who write works that are called "scholarly" will be experts in their fields. What does this mean? It means that they have a higher degree (a master's or Ph.D) in the field they are writing about, and/or they have extensive on the job experience. A combination of these is better than one or the other. Two examples of a combination are a university professor or a scientist who does research for a corporation or laboratory.

How Does this Work? (continued)

University professors at large, research universities (both private and state run) must do their own research (as scientists) and publish frequently, in order to keep their jobs. Scientists who work for corporations and laboratories also publish their findings.

When these scientists write about their research, or when they compose a review of other scientists' published works, they submit their book or paper to the editor of a scholarly publisher. Scholarly publishers are specialized publishers who publish this sort of work. Scholarly publishers include professional associations (such as the AAAS), university textbook publishers (such as McGraw-Hill, Pearson, Gale/Cengage, and others), university presses (such as Harvard, Yale, University of Chicago, University of South Florida, and others), and certain large corporations who specialize in publishing journals (articles).

The publisher is very important for the peer review process. Why? Let's look at a couple of examples.

Suppose an author writes an article for TIME magazine (a popular, not a scholarly publisher). The author may have a Ph.D., have extensive experience in the field, have written 80 articles and more than 10 books on the topic, and have references cited at the end of the article. But, because TIME does not use the peer review process (the editor makes all publishing decisions), TIME articles are not scholarly.

Now, let's look at what happens when the peer review process is engaged by a scholarly publisher.

The author (or authors) submit their book or article to the scholarly publisher.

The editor then takes over, and takes a big, black marker, and marks over the top of the name of the authors (and where they work, if that is listed). Why? To be sure the peer review process is <u>fair</u>. If the editor didn't conceal the identity of the author, the reviewers may be able to hold grudges or exercise bias against the author for reasons having nothing to do with their work.

Next, the editor makes about 3-5 copies of the book manuscript, or 5-7 copies of the article, and sends them out to people called "readers," who have volunteered to be reviewers for this publisher. These "readers" are mostly unpaid, and where they are paid, it's not much – a nominal amount, just to pay them something. The motivation for the readers (who are also university research professors or laboratory scientists, just like the author who wants to be published) is that it looks good on their rèsumè.

So, these other researchers (colleagues of the author), look over the book or article, and make recommendations for improvement. These recommendations may be as simple as correcting spelling or grammar, or they may recommend "more charts and graphs," say that a specific section needs more explanation, or even state that they think the research is not scientific enough to be published.

When they are finished editing and making suggestions, the readers return the manuscript to the editor, who then sends it on to the author, to make corrections and adjustments.

Eventually, the work may be accepted for publication by that publisher, or not. If not, then the author(s) may start over with another scholarly publisher.

One of the effects of this process is that it delays information coming out in print. This is why, when someone has completed their research in 2005, their article may not be published until 2008.

Another effect this process has, is to prevent wacko ideas from being published as scientific fact.

But, that is a two-edged sword, because it also delays new ideas from being published quickly. A great new idea, even if demonstrated with good science process, may be treated as though it is a wacko idea, simply because it challenges the status-quo, or currently accepted, mainstream ideas. In that event, it takes longer for this research to be published, and to eventually make its way into article databases, that students may use to find the information.

Another thing to keep in mind is that medical research is not always peer-reviewed. However, for the purposes of doing student papers here, we will assume that medical information found in the databases we provide for you meet this requirement.

Now, here are some tools to help make this a bit easier...

The following checklist of <u>Evaluation Criteria for Web Sites</u>, is by Susan E. Beck. When this information was found, on the New Mexico State University Web site, Ms. Beck stated that her work may be copied and used by others – for educational purposes – as long as she is given credit for the work.

Some of the questions and the format (how it looks) have been modified from the original web page, but the work remains Susan E. Beck's. Her original permission statement follows the checklist.

<u>HINT:</u>

This checklist may be used for any work or information source – including books, book chapters, and articles. To use it this way, simply skip over the questions that obviously have only to do with Web sites.

Evaluation Criteria for Web sites
I. Authority

Is there an author? Is the page signed?

Is the author qualified? An expert?

Who is the sponsor?

Is the sponsor of the page reputable? How reputable?

Is there a link to information about the author or the sponsor?

If the page includes neither a signature nor indicates a sponsor, is there any other way to determine its origin?

Look for a header or footer showing affiliation.

Look at the URL. http://www.fbi.gov

Look at the domain. .edu, .com, .ac.uk, .org, .net

Rationale (why we need this step)

Anyone can publish anything on the web.

It is often hard to determine a web page's authorship.

Even if a page is signed, qualifications are not usually provided.

Sponsorship is not always indicated.

II. Accuracy

Is the information reliable and error-free?

Is there an editor or someone who verifies/checks the information?

Rationale (why is this important?)

[Would you want to use a source for your paper that you weren't able to know if the facts in it were right or not?]

Unlike traditional print resources, web resources rarely have editors or fact-checkers.

Currently, no web standards exist to ensure accuracy.

III. Objectivity

Does the information show a minimum of bias?

Is the page designed to sway opinion?

Is there any advertising on the page?

Rationale (why we need this step)

Frequently the goals of the sponsors/authors are not clearly stated.

[This means that you have to think about the words used, how the

subject is phrased, whether important information is left out, etc.]

Often the Web serves as a virtual "Hyde Park Corner", a soapbox.

Evaluation Criteria for Web sites

IV. Currency

Is the page dated?
If so, when was the last update?
How current are the links? Have some expired or moved?
Rationale (why this is important)
Publication or revision dates are not always provided.
If a date is provided, it may have various meanings. For example,
It may indicate when the material was first written
It may indicate when the material was first placed on the Web
It may indicate when the material was last revised

V. Coverage

What topics are covered?
What does this page offer that is not found elsewhere?
What is its intrinsic value?
How in-depth is the material?
Rationale (why this is important)
Web coverage often differs from print coverage.
Frequently, it's difficult to determine the extent of coverage of a topic from a web page.
The page may or may not include links to other web pages or print references.
Sometimes web information is "just for fun," a hoax, or someone's personal expression that may be of interest to no one, or may even be outright silliness [all made up].

Evaluation Criteria for Web sites

Last updated on 08/18/2005 00:39:46 by Susan E. Beck
Collection Development Coordinator
New Mexico State University Library
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This document was originally created in Notepad in July, 1997 for the Institute for Technology-Assisted Learning, at the New Mexico State University.
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http://lib.nmsu.edu/instruction/evalcrit.html

Send comments or suggestions to: Susan E. Beck at susabeck@lib.nmsu.edu
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URL: http://lib.nmsu.edu/~susabeck/
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The next evaluation guide is in a grid, or rubric, format. Some students may find this format easier to use than the list of questions.

This one is from Florida Gulf Coast University Library, and does not list a specific person as its author. This 1-page handout is specifically for evaluating non-Web sources, such as books and articles. This is an excellent rubric for decision making, and is offered here, as a supplement to the previous checklist.

You are encouraged to print it out, for greater readability.

Identifying Scholarly Journals, Peer Reviewed/Refereed. Journals, Magazines and Trade Publications

	Scholarly	Peer Reviewed/Refereed	Magazines	Trade
Who wrote it?	Written by experts/ professionals in a specific field.	Written by experts/ professionals in a specific field.	Written by professional or free-lance writers.	Generally written by those working in the specific field.
	It is authored by academics and is published by a recognized society with academic goals and missions. The author(s) name appears at the beginning or end of the article. The author(s)' credentials may be included as part of the article.	The author(s) name appears at the beginning or end of the article. The author(s)' credentials may be included as part of the article	The author's name does not always appear in the article.	The author's name does not always appear in the article.
Who reads it?	Written in technical and scholarly language understood by professionals and students in that field.	Written in technical and scholarly language understood by professionals and students in that field.	Written for a general audience.	Written for those working in the specific field.
What is it like?	Deals with academic study and research in its field.	Before publication, articles are reviewed by one or more outside experts (peers) in the field.	Deals with general interest and current topics.	Rarely – if ever – includes a bibliography.
	Always includes a bibliography. (List of sources or citations.)	Deals with academic study and research in its field. Includes a bibliography.	Rarely – if ever – includes a bibliography.	Deals with subjects specific or related to its field.
	The articles generally have a serious, sober look. They often contain graphs, charts and occasional photographs. Articles are often refereed/peer reviewed.	The articles generally have a serious, sober look. They often contain graphs, charts and occasional photographs. A journal that is peer-reviewed is not always considered scholarly.	The articles generally have glossy photographs and illustrations. The publication includes ads. Articles are never refereed/peer reviewed.	The articles generally have glossy photographs and illustrations. The publication includes advertisements. Some trade publications are actually peer reviewed, but that doesn't mean they are scholarly.
How do you find articles in these periodicals?	Found in subject specialized indexes. Some can be found in general subject indexes.	Found in subject specialized indexes. Some can be found in general subject indexes.	Found in general indexes.	Found in general indexes and some subject specialized indexes.
Examples:	*Cell* *Psychology, Public Policy,* * and Law* *Tourism and Hospitality* * Research* *Transportation* *Zygote* * etc.*	*Acta Criminologica* *Cell* *Topics in English Linguistics* *Urban Policy & Research* * etc.*	*A Penny Saved* *Harper's Bazaar* *Horse and Horseman* *National Geographic* *Newsweek* *Time* * etc.*	*Air Cargo World* *American Vegetable Grower* *Beverage World* *Boat Technology International* *Dairy Farmer* *National Fisherman* * etc.*

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Caution: Database creators may use differing criteria to determine peer-reviewed and/or scholarly status. For better authority, check: *Ulrich's International Periodical's Directory,* or the instructions to authors in the journal itself. Access *Ulrich's* at http://library.fgcu.edu/OnlineResources/esources.htm.

It is highly recommended that you print this presentation to keep and use as a guide.

If you have questions about materials not covered in this handout, please feel free to contact the library and ask for further assistance.

Good Luck!