Guide to Evaluating Information Sources

Using the acronym **CRAAP** can help you to evaluate whether a source of information is appropriate for your research. Here are points to consider as you evaluate your sources.

**Currency**

Currency is important when evaluating factual information, since new research and information is constantly emerging. The date a document or book was created may affect its accuracy or introduce bias, and should be especially noted when researching issues in the sciences.

- Does the date the information was published affect its accuracy or introduce bias? This should especially be noted when researching issues in the sciences. Although an article may be published in a very well-respected scholarly journal, if it was published in 1960, it may no longer be considered very accurate.

- Keep in mind that, for some types of information, currency is not an issue. For example, an article on current medical research or case law is more time-sensitive than an essay on Aristotle.

- For web sites, look for a copyright or last updated note on the homepage and check if links are active. Broken links can indicate a site has not been updated in a while.

**Relevance**

Relevant sources are written at an appropriate level for your research and relate to your topic or answer your research question. Since much of your research may rely on articles, it is important to be aware of the distinctions made between articles that are considered scholarly or professional and those that are considered popular.

Depending on the depth of your research and understanding of a topic, one type might be more relevant than another.

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<th>In general, <strong>scholarly</strong> or professional sources:</th>
<th><strong>Popular</strong> sources:</th>
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<tr>
<td>Present primary accounts of original research or in-depth analysis of a topic.</td>
<td>Provide general information on topics of interest to a wide audience.</td>
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<tr>
<td>Are written by and for researchers, scholars, or practitioners who are considered experts in their field.</td>
<td>Are written by journalists or writers who may or may not have any expertise in the topic.</td>
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<tr>
<td>Use specialized language and terminology related to the discipline or profession.</td>
<td>Use language that is easily understood by the general public.</td>
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<tr>
<td>Often include a bibliography of supporting or related research.</td>
<td>Rarely provide citations to source materials.</td>
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<tr>
<td>Undergo a rigorous peer review process through an editorial board.</td>
<td>Undergo a limited editorial review.</td>
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Authority

When determining the credibility of information, look closely at the author and the publisher (or sponsor, for a website).

For books and periodicals:

- What are the author's credentials and reputation?
- Is the author an expert or researcher in the field? A government agency? A journalist?
- Where is the author employed? Is the author associated with a group or organization that may stand to benefit from the research? For instance, a scientific study about pain relievers may be less credible if the primary investigator works for Bayer, a major manufacturer of aspirin.
- Is the publisher well known?

Universities, museums, and other educational or research institutions are often reliable publishers. For example, the Association of American University Presses is the largest and oldest association of nonprofit scholarly publishers in the world. Any university press affiliated with this organization is well-respected and can be assumed to publish credible material.

For Web sites:

- Look for an "About this Site" link to learn more about the individual, organization, agency, or corporation hosting the site. Is it an educational institution (.edu)? A government agency (.gov)? A commercial supplier (.com)? A non-profit organization (.org)?
- Look for an "About the Author" link. What are the author's credentials? The problem with many websites, when used for research, is that the author is not clearly identifiable or the author is not qualified as an expert on the topic.
- Examine the URL. Is there a tilde (~) in part of the URL? This implies that a web page is a personal page, even if it's linked to a larger institution. It may not be held to the same standards as the institution's pages, or reflect the institution's views.

Accuracy

Accuracy refers to whether an information source provides verifiable and reliable factual information. Ask yourself:

- Are there errors in the information presented? (Typographical errors on websites are especially telling.) Minor mistakes might be acceptable, but too many errors could undermine the information offered.
- Are there theories that have since been disproven on the site? This is especially important to determine for scientific issues, and may indicate that the entire site is outdated.
- Does the text generally agree with other sources for the same information?
- Is there documentation or evidence presented for the information provided? Look for in-text references and citations or a link to research methods and materials consulted.
- How is the site created, maintained, or managed? Is it a social media-based site like Wikipedia? A blog?

Let’s Talk Wikipedia!

Wikipedia can be a valuable resource when beginning your research, but should never be used as a source for a research paper. On Wikipedia, any given entry is vulnerable to false information or even malicious hacks. It also doesn’t follow
the guideline of identifying an author’s credentials as an expert on a topic. When using Wikipedia and other social media sites such as blogs, podcasts, and discussion forums, remember:

- Consider the information found on Wikipedia and blogs as a surface-level introduction to your research topic that may or may not be accurate. To find out for sure, you will need to dig deeper.
- As with other sites, compare the information provided with other, more reliable resources, and cite these other resources, not Wikipedia or a blog, in your research.
- Look for documentation of the information provided. Wikipedia articles often contain footnotes at the bottom of the article page, which can often lead to valuable print and electronic sources that may be more reliable than the entry itself.
- Take advantage of the variety of opinions available on social media sites, but make sure to check out the varied references they cite.

Bias

Depending on the purpose, information may be presented from different viewpoints and may contradict information found in other sources. Keep in mind that just because a source is in print or claims to be "fair" or "balanced" does not make it so -- use your critical thinking skills to evaluate the information for yourself. Here are a few things you might ask yourself to determine bias:

- Does the article contain basic information that contradicts generally accepted information found in many of your other sources?
- When was the article published? Could the time period in which it was written introduce bias?
- Where does the article appear? A scholarly journal? A newspaper? A magazine strongly tied to an organization or group?
- Look carefully for political affiliations, leanings, or any specific agenda that the author, sponsoring organization or publisher might have.
- What do the author and/or publisher have to gain from convincing readers their opinion is right?

Here are some additional tips for evaluating bias in web sources:

- Commercial sites usually end in .com. They might be trying to sell you something or promote their own product, so beware of self-promotional language and potentially incomplete or biased information or statistics.
- Academic sites end in .edu, but examine the URL and the page's content. Is it a library web page, or a student's personal project?
- Government-related sites end in .gov. These are generally reliable because the document is from a U.S. government-affiliated site. Keep in mind that reports, data and statistics, and official documents may be more reliable than general interest pages.
- Non-profit groups such as public interest organizations, religious groups, and think tanks use the .org domain. These sites may be biased toward the organization's point of view.

Many organizations publish research reports on their websites. While these can be a valuable source of information, remember that many organizations have a political agenda. It's important to be aware of any agendas that might exist.

- Some organizations, like the Heritage Foundation, make it clear what their underlying philosophy is, either in the very title of the organization or through an "About Us" section or a "Mission Statement."
- Other organizations may not be as clear with their political agenda, so you'll need to explore the site further.