



Evaluating Information Sources

AUTHORSHIP

MOTIVE/INTENTION

OBJECTIVITY

CURRENCY

VERIFIABLE FACTS & REFERENCES

EXPERT REVIEW

STABILITY

Why do I Need to Evaluate the Information that I Use?

We evaluate information hundreds of times each day. Whether you're considering buying a new car or choosing to believe an implausible story you've just heard, you're evaluating information and deciding whether it can be depended upon or disbelieved. Some information, such as a book published by a reputable publisher, has been reviewed by others first. Other information reaches us in unfiltered form. Your skepticism is a powerful tool in evaluating both reviewed and unreviewed information.

Academic information suitable for academic research comes in many formats, but there are some common elements in deciding whether any information is **credible** – consider the following when deciding whether to use – or believe – the information you find. **Consider:**

- ☐ The **AUTHORSHIP**. Who is the author or producer of the information? Who is the publisher? What experience or education does the author have in this area?
- ☐ What is the **MOTIVE** or intention for sharing this information? Educational? For profit? To sway public opinion for a political purpose? This will lead you to consider the degree of **OBJECTIVITY** in the information.
- ☐ How **CURRENT** is the information? How **STABLE** is it (will it still be accessible in a year)?
- ☐ Is the information presented with **FACTS** that can be verified? Are there **REFERENCES** provided?
- ☐ Do others that you trust believe that the information is **credible**? Has information been **REVIEWED by EXPERTS**?



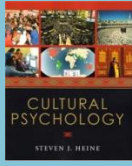
Common Information Sources

When evaluating the credibility of information sources, consider the following:

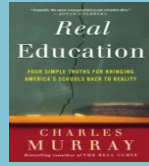
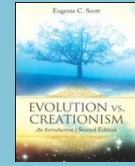
AUTHORSHIP
MOTIVE/INTENTION
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- **Books**, both in-print and published electronically (e-books)
- **Journal Articles**, both in-print and electronic
- **Newspaper Articles**, both in-print and electronic
- **Websites**
- Other types, including **social media, wikis, podcasts, newscasts, videos, etc.**

For college-level research, your information must meet strict guidelines for credibility.



Evaluating Books in Print



AUTHORSHIP – Most authors published by a **publishing house or university** have credentials or experience in the topic area. Verify that the author does have credentials (advanced degrees, experience in topic area, affiliations with organizations, positions of leadership, etc.). Be aware that **self-published books** by an author do not need to meet many standards.

MOTIVE/INTENTION – you can do a background search on an author on the web to find out previous history and publishing/research activity. You can search for books published after 1978 on the [U.S. Copyright Office Website](https://www.copyright.gov/). Try to determine the purpose for publishing and a life perspective. Examine the language within the source to determine the author's bias. You can also search [Amazon.com](https://www.amazon.com/) and [Library of Congress Online Catalog](https://www.loc.gov/) to look for other publications by the author or publisher.

OBJECTIVITY – Are topics treated with fairness and objectivity? Does the author consider the perspectives of others within the text? Does (s)he use weighted language or neutral language? Does (s)he back up her statements with specific evidence?

VERIFIABLE FACTS & REFERENCES – Is an extensive list of references given? Are the references from current works or older works?

CURRENCY – Check the copyright in publication page; is the source current enough for your needs? This is more important for some topics than others. Books typically take years to progress from idea stage to final publishing, so consider this if your topic is changing rapidly.

EXPERT REVIEW – Has the author won awards for this work from national or regional organizations? Is this work referenced in other books or articles? Books that are referenced often in other works have passed an **expert review** test that is often a **hallmark of quality information**. Book reviews are another useful tool to determine the quality and usefulness of a book. Click [here](#) for a tutorial from Cornell University Library on searching for book reviews.

STABILITY – Published books are a stable information format unless they go out of print, but even then can be found with persistence. Ask a librarian to help you.

Evaluating Books Published Electronically (E-books)



AUTHORSHIP – E-Books are changing rapidly. E-Books can be electronic copies of a print book or published only electronically. Most authors published by an established **publishing house or university** have credentials or experience in the topic area. Verify that the author does have credentials (advanced degrees, experience in topic area, affiliations with organizations, positions of leadership, etc.). Check to see if there is a published version of the e-book – if so, you can evaluate just as you would a bound book. Be aware that **self-published books** by an author do not need to meet many standards, and more authors are self-publishing electronically every year.

MOTIVE/INTENTION - you can do a background search on an author using the same websites as shown in the last slide to find out previous history and publishing/research activity. Try to determine the purpose for publishing and a life perspective. Examine the language within the source to determine the author's bias.

OBJECTIVITY – Are topics treated with fairness and objectivity? Does the author consider the perspectives of others within the text? Does (s)he use weighted language or neutral language? Does (s)he back up her statements with specific evidence?

VERIFIABLE FACTS & REFERENCES – Is an extensive list of references given? Are the references from current works or older works?

CURRENCY – Check the publishing or production date; is the source current enough for your needs? This is more important for some topics than others. Printed books typically take years to progress from idea stage to final publishing, so consider this if your topic is changing rapidly. In this case, a e-book may be much more current.

EXPERT REVIEW – Has the author won awards for this work from national or regional organizations? Is this work referenced in other books or articles? Books that are referenced often in other works have passed an informal **expert review** test that is often a **hallmark of quality information**. Book reviews are another useful tool to determine the quality and usefulness of a book. Click [here](#) for a tutorial from Cornell University Library on searching for book reviews.

STABILITY – **Published books** are a stable information format unless they go out of print, but even then can be found with persistence. In contrast, **E-books** have varying degrees of stability or accessibility, meaning that you may be able to access the book a specified number of times or only on certain platforms. Check your purchase contract carefully to be sure you will have access to the e-book as long as you need it.



Evaluating Journal Articles



AUTHORSHIP — For academic research, use ***scholarly, peer-reviewed journal articles** to be sure that you are using **credible** information in your research. However, it may be acceptable to use trade journals (like *Training*) or popular journals (such as *Time Magazine*), for background information. Check with your instructor.

MOTIVE/INTENTION — Who is this author and why is (s)he sharing this information? What is the perspective? Can you detect any bias within the language used, the choice of quotations used, choice of evidence or the presentation of material? What else has this author written?

OBJECTIVITY — Related to the perspective of the author is the degree of objectivity. Does the author consider other points of view? Use neutral or weighted language? Are statements of opinion supported with specific evidence?

VERIFIABLE FACTS & REFERENCES — If you are considering an academic article, it is likely to have verifiable list of references. Scan the list and see if the sources relate to your considered topic. In what year were each published?

CURRENCY — The lifecycle of idea stage to published article varies, but is generally much shorter than a published book. It generally takes at least 6 months for an academic article to reach print after it is submitted to the peer-review process. Electronic articles are often digitized versions of the print, so they are often “published” a week to a month online after the printed version is released.

EXPERT REVIEW — A defining feature among scholarly journal articles is the peer-review process. This means that they were submitted to a panel of the author’s peers for expert review before they were approved for publishing. To consider: Is this author’s work referenced in other articles? It is a good indicator of quality if an author’s work is referenced often — it means that (s)he is considered a leader within the field.

STABILITY — **Published journal articles** are a relatively stable information format in print and when published simultaneously in print and in electronic versions. Be aware that articles published online may be archived for a short period of time. In contrast, **E-journals** have varying degrees of access rights. Check your purchase contract carefully to be sure you will have access to the e-journal as long as you need it.

See Library Tutorial *Academic Journals, Trade Journals and Popular Magazines

Evaluating Newspaper Articles



AUTHORSHIP — Most authors who are published by a **newspaper** are **free-lance or staff writers who investigate** a topic area. The articles are reviewed by editors and content may be verified by fact-checkers.

MOTIVE/INTENTION — you can do a background search on an author on the web to find out previous history and publishing/research activity. Though newspaper reporters are expected to present a balanced story, everyone has a perspective. Examine the language within the article to determine the author's bias.

OBJECTIVITY — Are topics treated with balance and objectivity? Does the author consider the perspectives of others within the text? Does (s)he use weighted language or neutral language? Does (s)he back up her statements with specific evidence? Be aware that **editorials and opinion pieces** are not news articles, but are also published in the newspaper. They will feature a strong point of view.

VERIFIABLE FACTS & REFERENCES — references are not often given in news articles, so you need to independently verify the facts that you learn with other sources.

CURRENCY - News articles are published very quickly and provide a good source to research rapidly changing topic areas.

EXPERT REVIEW — News articles are usually reviewed by editors and sometimes by fact-checkers. A reputation by a reporter for thorough research is a good indicator of quality work. Has the author won awards for this work from national or regional organizations?

STABILITY — Newspaper articles are a stable source in print and when published simultaneously in print and in electronic versions. Be aware that articles published online may be archived for a short period of time.



Evaluating Websites Quickly: 5-Minute (or Less) Clues to Credibility

In an Internet search, you may be overwhelmed by hundreds of thousands of hits. In contrast to expert-reviewed sources such as journal articles and books, in an open-Web search it will be up to YOU to first review this information for **credibility**. Here are some tips to pare down your search quickly:

- ☐ **Deconstruct the URL** - From a search engine list, you can determine the **source** and can often predict the **likelihood of credibility** - this is a huge time-saver! (See next slide for how-to)
- ☐ **Navigation and professional content** – Easy to navigate? In a quick scan, does the information seem well-written and easy to understand? Do the links all work?
- ☐ **Authorship and Production** – This is a must. Who writes the content and houses the site? Credit should be given in a prominent place on the website. Check the margins of the site and read contact information, “About Us” “Who We Are” “Mission” “Philosophy”, etc. Is there a real world street address and contact number given in addition to email address?
- ☐ **Currency** – when was the website last updated?
- ☐ **Resources Listed** – another strong clue to credibility is the way the author credits – or doesn’t credit – the sources consulted.
- ☐ **If a site you are considering scores high in these areas, add it to your list to examine further.**

Looking for Clues to Credibility: Deconstructing the URL

URL is an acronym for **uniform resource locator**, or the website address. Understanding the structure of URLs can give you a lot of information about the authorship and credibility of the website.

URLs consist of three parts:



In a browser, it looks like this: **transfer protocol**://servername.domain/directory/subdirectory/filename.filetype

Pay close attention to the server name and the domain name, because this may tell you who is sponsoring or housing the site and what kind of site it is intended to be. Here are examples of some first level domain names:

- .com = Commercial
- .edu = Educational
- .gov = Governmental
- .int = International
- .mil = Military
- .net = Internet resource
- .org = Non-profits

Below is an example of a URL. Can you determine which domain and file type it is?

http://www.ibrc.business.ku.edu/e_com/ibrc_tutorial.html

Transfer Protocol

Server name.domain

File Location

FileType



Deconstructing the URL

- From the example URL http://www.ibrc.business.ku.edu/e_com/ibrc_tutorial.html we may be able to predict that:
 - » The sponsor or host is an **.EDU** domain
 - » This page is affiliated with the **University of Kansas** (designated by 'ku')
 - » This was created by an author from the **School of Business** within the **University**
 - » This is a **tutorial created in HTML**
 - » Based on these clues from the URL alone this is a **credible source** to evaluate further.
- The information you decode from the URL can help you sift quickly through websites in your browser result lists. Generally, but not always, **.EDU** and **.GOV** domains present more credible information because they are generally well-established and well-funded organizations which are staffed by professionals. These types of sites also fund and present the bulk of objective research studies. Remain skeptical even of information found on these sites, however, and use your evaluation tools to **question everything you read**.

Tip: Be aware that a tilde (~) in a URL often signifies a personal directory on a web site. Although they *can* contain reliable information, personal web sites should be treated with high degree of skepticism.

After the 5-Minute Test: Evaluating Websites Thoroughly

Compared to the relatively stable information published in print, information that you locate on the Internet can be more volatile, meaning that a website can be gone next week or next year. In addition, almost anyone can “publish” online for any reason with or without expertise in a subject. You can sift the **credible** information from the suspect by approaching website sources with a skepticism. These guidelines are based on Appendix E from Selected Chapters from P.O.W.E.R. Learning Strategies for Success in College and Life by Robert S. Feldman:

CREDIBILITY (of AUTHORSHIP)

- ⇒ Credentials of author/developer are given
- ⇒ What organization or person publishes and maintains this site?
- ⇒ Contact information of author/sponsor available

MOTIVE /INTENTION/OBJECTIVITY

- ⇒ Information is treated with fairness and tolerance
- ⇒ Degree of bias, stereotyping, use of language (neutral language, inflammatory language?)
- ⇒ Purpose/motive for site is apparent (education, commercial, advocacy, entertainment, etc)

CONTENT (VERIFIABLE FACTS & REFERENCES)

- ⇒ Accurate and useful information
- ⇒ Clear and logical site
- ⇒ Easy to navigate and/or search
- ⇒ Are there notable omissions?
- ⇒ What is the domain? (e.g. .edu, .gov, .com, etc)



Evaluating Websites

CORRECTNESS (VERIFIABLE FACTS AND REFERENCES)

- ⇒ Where is the information obtained from?
- ⇒ Does the site contain a bibliography or list of sources used?
- ⇒ Spelling and grammar are correct

CURRENCY

- ⇒ Date of information stated
- ⇒ Updated/revised date
- ⇒ Links workable

CRITICAL THINKING

- ⇒ How does this information tie in with your other resources?
- ⇒ Can you treat the information on this site in the same way as a printed source?

EXPERT REVIEW – look for websites that have been **reviewed by librarians, instructors or experts** in a field. You may find links to credible sources on library websites, college departmental websites, reference lists, [Voice of the Shuttle](#) ,among others.

STABILITY – websites can disappear without warning and are generally not considered a stable information source. The likelihood that a website will still be accessible (and continually updated) in a year or two is heavily dependent on the stability of the sponsoring organization. Websites with suffixes in the **.gov** or **.edu** domains have proven to be relatively stable, reflecting the longevity of their sponsoring organizations. Does this site seem well-established?

Other Website Evaluation Guides

- ⇒ Evaluating Web Pages: Techniques to Apply & Questions to Ask
UC Berkeley - Teaching Library Internet Workshops
- ⇒ Evaluating Web Sites: Criteria and Tools - *Cornell University*



A Note about Informal Sources from the Internet

- Q. Should you use **informal sources in your research**?
 - Wikis, blogs and social networking sites such as Twitter provide information, also. Informal sources often transmit information in real-time and don't rely on publishers or third-party intermediaries to deliver or review the information. Sometimes they can provide an up-to-the-minute insight that may be valuable to research a rapidly changing field or topic. Sometimes the information can lead you in a new direction in your research that you had not previously considered.
- A. **Possibly - Use with caution and verify all information with reliable sources.**
 - The volatility of this information makes it challenging to determine from where and from whom the information is coming.
 - For this reason, most instructors will not approve the use of informal sources in your academic research, but some may allow the use of this information as background reading. Check with your instructor!

Summary

- Use your **skepticism** to evaluate everything that you read in all information formats, and use only the information that you ultimately decide as **credible** to inform your research.
 - All producers of information have a **bias**, or a perspective with which they view the world. It is your job as a researcher to determine that bias and the accuracy of the information contained within the work.
 - Evaluate the information with the criteria outlined here to apply **your own critical thinking** to the information. Verify all information with **multiple sources**.
-
- ☐ The **AUTHORSHIP**. Who is the author or producer of the information? Who is the publisher? What experience or education does the author have in this area?
 - ☐ What is the **MOTIVE** or intention for sharing this information? Educational? For profit? To sway public opinion for a political purpose? This will lead you to consider the degree of **OBJECTIVITY** in the information.
 - ☐ How **CURRENT** is the information? How **STABLE** is it (will it still be accessible in a year)?
 - ☐ Is the information presented with **FACTS** that can be verified? Are there **REFERENCES** provided?
 - ☐ Do others that you trust believe that the information is credible? Has information been **REVIEWED** by **EXPERTS**?

Evaluation of Information Sources

Works Consulted

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