



Class: FY BSc

Subject : Problem solving & Critical thinking

Subject Code: PUSASQF106

Chapter: Unit 2 Chp 2

Chapter Name: Evaluating Information Sources: Recognizing Bias and Assumptions

Today's Agenda

1.1 Evaluating the credibility of information sources

Use the criteria below to help you evaluate the information you find to determine if it is appropriate for your research. Remember that different criteria will be more or less important depending on the topic or purpose of your research.

1. Currency: The timeliness of the information.

- When was the information published or posted?
- Has the information been revised or updated?
- Does your topic require current information, or will older sources work as well?
- Are the links functional?

2. Relevance: The importance of the information for your needs.

- Does the information relate to your topic or answer your question?
- Who is the intended audience?
- Is the information at an appropriate level (i.e. not too elementary or advanced for your needs)?
- Have you looked at a variety of sources before determining this is one you will use?
- Would you be comfortable citing this source in your research paper?

1.1 Evaluating the credibility of information sources

3. Authority: The source of the information.

- Who is the author/publisher/source/sponsor?
- What are the author's credentials or organizational affiliations?
- Is the author qualified to write on the topic?
- Is there contact information, such as a publisher or email address?
- Does the URL reveal anything about the author or source?

examples: .com (commercial) .edu (education) .gov (government) .org (organization) .net (network)

4. Accuracy: The reliability, truthfulness and correctness of the content.

- Where does the information come from?
- Is the information supported by evidence?
- Has the information been reviewed or refereed?
- Can you verify any of the information in another source or from personal knowledge?
- Does the language or tone seem unbiased and free of emotion?
- Are there spelling, grammar, or typographical errors?

1.1 Evaluating the credibility of information sources

5. Purpose: The reason the information exists.

- What is the purpose of the information?
- Is it to inform, teach, sell, entertain, or persuade?
- Do the authors/sponsors make their intentions or purpose clear?
- Is the information fact, opinion, or propaganda?
- Does the point of view appear objective and impartial?
- Are there political, ideological, cultural, religious, institutional, or personal biases?

1.1

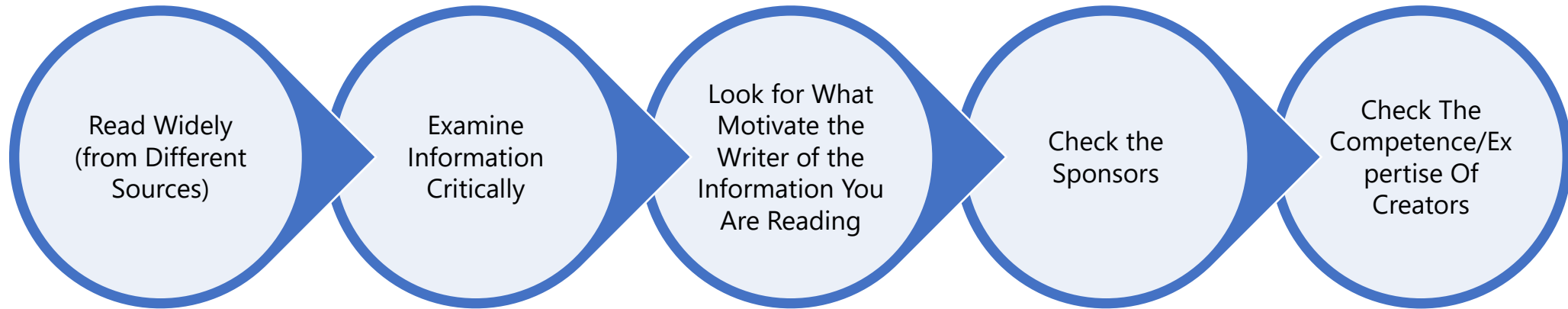
Why is it important to evaluate information sources?

When you do research, you want to find the best information to support your ideas. This requires careful evaluation of the information you find.

Evaluate information...

- To find the most relevant information for your topic and assignment
- To ensure the quality and reliability of your research
- To find expert views, opinions, and research on your topic
- To weed out unreliable, biased, outdated, and/or incorrect information
- To make sure you get the information your professor is seeking

1.1 How to verify the authenticity of information?



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<https://digitalminimalism.com/verifying-the-authenticity-of-any-information-10-rules-to-follow-in-2022/>

1.1 Fact v/s opinion

Basis for comparison	Fact	Opinion
Meaning	Fact refers to something that can be verified or proved to be true	Opinion refers to a judgement or belief about something
Based on	Observation or research	Assumption or personal view
Verification	Possible	Not possible
Change	Universal	Differs from person to person
Debatable	No	Yes
Influence	Facts has the power to influence others	Opinion does not have the power to influence others

1.1 Bias in information sources

Confirmation bias

- This type of bias refers to the tendency to seek out information that supports something you already believe, and is a particularly pernicious subset of cognitive bias.
- People will cue into things that matter to them, and dismiss the things that don't, which can lead to the "ostrich effect", where a subject seeks to avoid information that may disprove their original point.

The Dunning-Kruger Effect.

- This particular bias refers to how people perceive a concept or event to be simplistic just because their knowledge about it may be simple or lacking—the less you know about something, the less complicated it may appear
- This form of bias limits curiosity, because it seems simplistic to them. This bias can also lead people to think they are smarter than they actually are

Decline bias

- The decline bias refers to the tendency to compare the past to the present, leading to the decision that things are worse, or becoming worse in comparison to the past, simply because change is occurring.

1.1 How to identify bias in information sources?

Optimism or pessimism bias

- This bias refers to how individuals are more likely to estimate a positive outcome if they are in a good mood, and a negative outcome if they are in a bad mood.

Information bias

- Information bias is a type of cognitive bias that refers to the idea that amassing more information will aid in better decision-making, even if that extra information is irrelevant to the actual subject at hand.

Selection bias

- This bias refers to the way individuals notice things more when something has happened to make us notice that particular thing more—like when you buy a car and suddenly notice more models of that car on the road. The car has simply become part of the individual's observations, so they tend to observe it more elsewhere (also known as observational selection bias).

1.1 How to identify bias in information sources?

Availability bias

- This bias refers to the tendency to use the information we can quickly recall when evaluating a topic or idea—even if this information is not the best representation of the topic or idea. Using this mental shortcut, we deem the information we can most easily recall as valid and ignore alternative solutions or opinions.

Fundamental attribution error

- This bias refers to an individual's tendency to attribute someone's particular behaviors to existing, unfounded stereotypes, while attributing their own similar behavior to external factors. For instance, when someone on your team is late to an important meeting, you may assume that they are lazy or lacking motivation without considering internal and external factors like an illness or traffic accident that led to the tardiness.

Hindsight bias

- Hindsight bias is when people perceive events to be more predictable after they happen. With this bias, people overestimate their ability to predict an outcome beforehand, even though the information they had at the time would not have led them to the correct outcome. Hindsight bias can lead to overconfidence in one's ability to predict future outcomes.

1.1 How to identify bias in information sources?

Anchoring bias

- The anchoring bias pertains to those who rely too heavily on the first piece of information they receive and base all subsequent judgments or opinions on this fact. For instance, if you tell someone a picture frame costs \$20 and they go to a store that sells it for \$15, their anchoring bias will lead them to perceive the \$15 frame as a bargain, even though it may be on sale at a different store for \$10.

Observer bias

- The observer bias occurs when someone's evaluation of another person is influenced by their own inherent cognitive biases. Observers, like researchers or scientists, may assess the outcome of an experiment differently depending on their existing evaluations of the current subject. Subsequently, the subject that is under observation may alter their behavior if they know they are being observed. Double-blind studies are often implemented to overcome observer bias.

1.1 Strategies for conducting effective research

1. Get organized
2. Articulate your topic
3. Locate background information
4. Identify your information needs
5. List keywords and concepts for search engines and databases
6. Consider the scope of your topic
7. Conduct your searches
8. Evaluate the information sources you found
9. Analyze and adjust your research strategy

<https://journalistsresource.org/home/research-strategy-guide/>