

174 Text Analysis

Key Question: Why is carefully analyzing text and written documents so important?

The amount of written information available on any particular topic has increased exponentially since the internet became readily available. Choose any environmental topic and there will be hundreds if not thousands of websites on it. Some

will be factual, others will be opinionated, some will be just inaccurate, and a few will be intentionally misleading. Data and information should be checked to make sure it comes from a reputable source. It is also important to make sure the information has not been used out of context or been "cherry picked" for data to put forward biased ideas.

Text analysis may include:

- ▶ Describing the article:
 - Stating the main points in article.
 - Describing the author's perspectives and assumptions.
 - Identifying any claims made by the author and any evidence presented to justify them.
- ▶ Evaluating the article:
 - Identifying and describing any bias in the article. How might this have affected the article's accuracy?
 - Describing the limitations of an investigative article.
 - Describing the article's conclusions.



What can be trusted?

- ▶ Environmental science covers many contentious and emotive topics. Many new ideas about the environment clash with traditional views or threaten livelihoods and economies. As a result people may have certain views they feel invested in. This leads to people putting forth information to support their view, lobbying to a certain extent.
- ▶ When reading environmental information, especially on the internet, it is important that you take note of where the information comes from and whether it makes sense in a wider context. This will help you identify biased or flawed information.
- ▶ Note the site from which you obtained information. Is it reputable or just someone's blog with their own unverifiable ideas? Be cautious with video clips (e.g. YouTube). Again, these often present an unsubstantiated personal view. Check the comments as they may identify errors (if any) in the video.



Evaluating environmental information

- ▶ In order to form an opinion about the information presented, you must critically evaluate the information. Points to consider include:
 - ▶ Validity of the information.
 - The currency of the information. Is it up to date?
 - Is the information peer reviewed? Has it been accepted by the scientific community?
 - ▶ Does the information present an unbiased view?
 - Is information presented in a fair, unbiased way? Is it based on fact and not emotion?
 - Is the information presented clouded by the attitudes, beliefs, or values of the person, group, or organization supplying the information?
 - ▶ Journals are peer-reviewed. That is, the information is checked by experts in the topic area. This greatly improves the reliability of the information. However, journals are often very technical and require a high level of in-area expertise to understand.
 - ▶ Newspaper articles are a good starting point as a source of generally reliable information, but beware of the newspaper's particular leaning. Tabloids often sensationalize stories, while some newspapers may have left or right political leanings, which can skew the focus of a story.
 - ▶ Online sites that are specific for a topic need to be carefully scrutinised for validity. Stay away from conspiracy sites as these often sensationalize stories and misreport the science. Government sites often have the most current and reliable data based on information from skilled advisers.



- ▶ Periodicals or technical magazines, e.g. National Geographic, Scientific American, or Popular Mechanics, are useful sources of reliable information. As they are written for the general public they make understanding the technical information much easier.