Station – Evaluate information

Instructions - Please work on the topic described below and introduce it to your fellow students (max. 10 minutes)!

When writing a scientific paper, it is important that the literature used meets scientific standards. Scientifically high-quality literature can be found in library catalogues and databases. It is important to pay attention to this:

1. In which works do scientists in your subject area publish?
2. How can the quality of sources (especially Internet sources) be checked?

Scientific literature - publication types

An important form of communication in science is publishing. These publications are perceived by experts and in the best case quoted and recycled. Scientists usually publish in the following types of publications:

- **Monographs**: These are books written by up to 4 authors. The quality varies between publishers and authors. Good publishers include Springer, Wiley, Hanser, De Gruyter and a few more. A dissertation is also a monograph. Monographs can be found in library catalogues.
- **Collective works**: An editor or a team of editors look for different authors who write individual articles on a topic. If such a book is quoted, the contribution must be included. Contributions to collective works can be found in databases or in discovery systems (e.g. Boss).
- **Conference papers** are a special form of collective works. These are particularly important in the technical field, as many researchers publish in them. Here high-quality and current topics are covered. Conference papers can be searched in databases.
- **Journal articles**: Especially in databases such as the Web of Science, journals with a peer reviewed standard can be found. This means that an article is only printed in the journal if an external reviewer has found the article to be good. In addition, the topics dealt with here are very topical.
- Grey literature is literature that has not been published by a publisher. It is often found on the Internet (e.g. via GoogleScholar). These are mainly publications by institutions, companies or research groups.
- **Standards**: Standards exist from various institutes, such as the "Deutsches Institut für Normung". Standards are unified standards for products and processes. Standards are mainly found in special databases, such as the DIN standards database, which also contains international standards.
- **Internet sources**: These are websites of institutions or companies that can be consulted for a quotation. Web presences of private individuals are normally not worth quoting.

The following works are not citable:

- Popular literature
- Boulevard newspapers and magazines
- lecture notes
- General encyclopedias
- Private websites
- Wikipedia
- Diploma, seminar and term papers (partly depending on the department)

Source Quality Assessment - CRAAP Test

Especially with sources from the internet you have to pay attention to the quality, not least because the so-called fake news has been accumulating lately. Fake news is misinformation that is published via online platforms and serves propaganda purposes. These rumors have a strong opinion-forming effect and are so dangerous because they are also picked up by journalists. For this reason it is advisable to use the CRAAP test. The first thing to look at is how up-to-date the source is (**currency**).

Then you think about which target group the author is addressing and whether the topic has been comprehensively described (**relevance**). With regard to the author, questions such as *What is his reputation? Is he institutionally connected, for example through a professorship? Has he published any other publications on the topic?* must be answered.

Accuracy is about checking to what extent the author proves his theses, whether he has an objective style of writing and whether, for example, there are many spelling mistakes. Finally, it has to be decided whether it is an objective text with a clearly formulated intention, which is supposed to fulfill a certain purpose (**purpose**).

Currency	Relevance	Authority	Accuracy	Purpose
Date: close to the event?	Target audience?	Who is the author?	Origin, source?	Sense & purpose?
Revised, supplemented, amended?	Relation to the topic?	Independent, biased?	Documents, proofs?	Obective?
Do the links work?	Appropriate complexity?	Reputation, expertise?	Impartial, one-sided, emotional?	Cleary formulated intention?
		Contact information?	Checked?	Serious or satire?
		Further publications?	Misspellings?	Fact, opinion, advertising?