Primary Sources

First-hand accounts that describe original research: the experimental procedures, data, results, and conclusions.

- Laboratory notes
- Dissertations
- Interviews
- Peer-reviewed conference papers
- Technical reports
- Peer-reviewed journal articles
- Patents

The purpose of these sources is to present new discoveries/results with others in the field. These materials are peer-reviewed both for the science and the text. Authors are scientist(s) who conducted the research.

Secondary Sources

Publications that summarize and review a field of study. They are one step removed from original research, since they do not contain any.

Scholarly

Peer-reviewed; provide an overview for others in the same field

- Review articles
- Books/monographs
- Commentaries

Popular

Not peer-reviewed; provide an overview for the general public

- Magazines

The purpose of these sources is to generalize, analyze, interpret, evaluate, or otherwise “add value” to the original information. They can simplify the process of finding and evaluating primary literature.

Scholarly sources are peer-reviewed.

Popular sources are not peer-reviewed.

Authors are scientist(s) who conducted the research.

Tertiary Sources

Documents that condense information from primary and/or secondary sources that are widely accepted.

- Textbooks
- Encyclopedias
- Fact books
- Guides
- Handbooks

The purpose of these sources is to provide a broad overview of a topic to the general public. They provide no new information.

These materials are usually peer-reviewed (but not scholarly). Authors are experts in their field.