

### What is the difference between a research assignment and a report?

A report generally explains or describes something, whereas a research assignment is an analysis of facts, ideas, data, and expert opinions that usually support a thesis statement.

### What is a research assignment?

- A research assignment presents the results of an investigation into a particular topic, and usually involves the following:
  - a thesis statement that is supported by research
  - research of existing facts, ideas, data, and expert opinions
  - your own creative thinking, analysis, and expression of ideas
  - a formal presentation of your findings—in essay, oral and/or technological form
- A research assignment is *not*:
  - a simple analysis of your own thoughts
  - a synopsis of what you have read about your topic
  - a rewriting of someone else's argument with a few other sources added

### Developing the Topic and Hypothesis

1. Select a topic of interest to you.
  - Analyse your assignment by highlighting key words and phrases, such as argue, analyse, evaluate, discuss, compare, and contrast.
  - Explore possible topics that are interesting to you.
  - Brainstorm ideas with others, including your teacher.
  - Ensure the topic fulfills the guidelines of the assignment.
2. Are sufficient resources available for your topic?
  - Read about your subject in encyclopedias, textbooks, journals, and on the Internet.
  - Evaluate the quality, quantity, and reliability of the resources.
3. Can the topic be narrowed down to a non-trivial, manageable hypothesis?
  - Think of questions to assist you in defining sub-topics that you will explore.
  - Narrow down the topic to a research question, such as: "What are the effects of ...?" This will provide the focus of your research. Brainstorming is an effective technique for narrowing down your topic.
  - Write a tentative hypothesis statement that summarizes your point of view, is a specific declaration of your main idea, and is a statement (not a question) reflecting your position on a particular topic or issue. Your hypothesis will be formalized as you are actually researching and writing your assignment.

## Accessing Resources

1. Explore a variety of different resources.
  - Encyclopedias (print, CD-ROM or Internet-based), the Internet, and textbooks are good initial sources while developing your topic ideas.
  - Scientific journals and expert publications provide opinions and data.
  - The Internet contains a wide variety of information in varying degrees of detail and accuracy. Web sites, newsgroups, and discussion groups may all have valuable information.
2. Use effective search techniques.
  - Identify important concepts for your search.
  - Use key words from your topic:
    - Search for general topic words first.
    - Use synonyms and variations of your keywords.
  - Narrow your search by using Boolean operators, such as “OR”, “AND”, “NOT” or “+”, by placing a phrase in quotation marks or brackets, or by changing the order of the key words in the phrase.
  - Because each search engine on the Internet does not have all web sites comprehensively indexed, you should use a variety of search engines.
    - General search engines keep their own database of web sites. Some examples are:
      - Yahoo ([www.yahoo.ca](http://www.yahoo.ca))
      - Lycos ([www.lycos.com](http://www.lycos.com))
      - Google ([www.google.com](http://www.google.com))
      - AllTheWeb ([www.alltheweb.com](http://www.alltheweb.com))
      - AltaVista ([www.altavista.com](http://www.altavista.com))
      - Northern Light ([www.northernlight.com](http://www.northernlight.com))
      - Dogpile ([www.dogpile.com](http://www.dogpile.com))
      - Search Canada ([www.searchcanada.ca](http://www.searchcanada.ca))
      - Canadian Links ([www.canadian-links.com](http://www.canadian-links.com))
    - Meta search engines access databases kept by general search engines. Some examples are:
      - Metacrawler ([www.metacrawler.com](http://www.metacrawler.com))
      - Ixquick ([www.ixquick.com](http://www.ixquick.com))
      - Ask Jeeves ([www.askjeeves.com](http://www.askjeeves.com))
    - Use the search engine’s online help page. It will provide information on features that are specific to that search engine.
    - Web sites will often have their own internal search engine. Use it to refine your search within the web site.
  - Access online library databases, such as Electric Library Canada, a database of books, newspapers, magazines, and television and radio transcripts. Your local public library may also have online access to its database for people with a valid library card.
  - Use a tracking chart to keep a record of your searches. Record the success or failure of each search. Include the search engine and key words you used, and any web sites you visited (even the non-useful ones).

## Evaluating Your Sources

1. Check to make sure your sources are up to date. The date of publication is always cited on all web sites, textbooks, journals, encyclopedias, etc.
2. Is your source reliable and reputable?
  - Government statistical department web sites (e.g., Statcan) are reliable.
  - University resources (web sites and university presses) are generally reliable.
  - Consumer and corporate sources may be biased toward their own position on an issue. Be aware that only data that are favourable to their own side of a discussion may have been published.
  - Is the author a recognized expert in the field? This may be initially difficult to assess. Reliable experts' opinions in the related field of study are regularly cited in other publications.
3. Consider these questions when you are evaluating a source.
  - Is your sample reliable?
  - Is the sample large enough? Small samples may not give reliable results.
  - Is the sample random? Is the sample biased?
4. Take notes and keep records of all your sources.
  - Make a printout of any sources you require. Again, make sure you keep an accurate record of the source.
  - Create and use a tracking chart. Write the complete details of your source, even if you feel you may not use it, as you may change your mind later.
    - If your source is a print source, include all the appropriate information that would go into a bibliography, plus the page number and the Dewey Decimal number.
    - If your source is an online source, include the URL, the title of the web site, the date you accessed the site, any source used as a reference by the web site, as well as any other pertinent information to make accessing the site easier in the future.
  - Take notes on a separate sheet for each source. At the top of the page, write a brief source identification referring to a detailed entry on the tracking chart. Write down information that may support your hypothesis statement or research question: background data, expert opinions, opposing viewpoints, etc. Paraphrase, where possible, and cite your sources. Write in quotation marks any information that you copy verbatim.

## Citing Sources

1. Citing your sources.
  - All sources used for ideas, information, data, or opinions must be cited in your assignment. Detailed information regarding these sources must be included. See your teacher for a preferred format such as endnotes, footnotes, or in-text citations.

## Plagiarism

1. What is plagiarism?
  - Plagiarism is using or copying another person's ideas, information, data, opinions, or words without acknowledging that it has been taken from the original source. Even if you paraphrase someone else's ideas or words, you must acknowledge the source that you are paraphrasing in the form of footnotes, endnotes, and in the bibliography.
2. What are the consequences of plagiarism?
  - At universities, plagiarism will generally result in failure in the course, and may include the penalties of probation or possibly expulsion from the college or university. Consult your school evaluation policy for the consequences of plagiarism.
  - A permanent blemish will appear on the student's academic record.
3. How can you avoid plagiarism?
  - Do not hand in another student's work as your own.
  - Be familiar with your teacher's or school's system and style of documentation.
  - When taking notes from any source, record the detailed bibliographic information.
  - When you are writing down a direct quote, make sure you use quotation marks.
  - Keep your own ideas separate from those of your sources. When you are making notes, write your name or initials beside your own opinions.
  - Let your own ideas, not those of your sources, steer you in writing your assignment.
  - Never copy material word-for-word and place it into your essay or work unless you clearly indicate that the material is a direct quotation and give full details of the source.