Getting Started

Clarify Assignment/Research Paper

Doing effective research takes time. In order to maximize the amount of time spent on research, the student needs to clarify the paper/assignment with the instructor before embarking on this task. A clear picture of what is required for the final submission is critical before starting the research process.

Time Management

Evaluate the deadline of the paper and budget time accordingly. Building in extra time allows for unexpected delays such as obtaining resources on interlibrary loan or visiting other libraries for information. In general, break the research process into the following stages and develop a timeline to accompany it:

- Generate/confirm ideas/topics.
- Complete a summary/outline of paper/research process.
- Complete the research.
- Write and revise; build in more ideas if applicable. Conduct more research if needed.
- Analysis, synthesis and writing of first draft.
- Final revision.

Consult with Library Staff

If a student is clear about the assigned topic, but not quite sure where to start in the research process, students are encouraged to consult with Campus Library staff to see if their topic is feasible to research or to gain an idea as to how much information is available on the topic.
The Research Process

STEP 1 - Define/Clarify the Topic

In order to make the research process a rewarding and informative experience, the following guidelines are suggested:

- **Choose a familiar topic** - perhaps the student already knows something about a topic but would like to further analyze it in order to find out more in-depth information.

- **Choose an interesting topic** - perhaps the student does not know anything on a topic but would like to find out about it for personal/professional reasons. Selecting a topic that interests the student makes the research process more appealing.

- **Be aware of any strong beliefs/prejudices** - ensure that both sides of an argument or topic are evaluated in the research process. Biases and prejudices may slip into a paper. Do not search for information that supports only one side of the topic as the paper will not be balanced. The research process is undertaken in order to become familiar with a topic in its entirety.

Recommended sources to consult to determine a topic include:

- Browse journals, periodicals or magazines that cover the particular field of study. For example, browsing issues of *The Canadian Journal of Aging* might provide ideas for research in the area of gerontology.

- Explore an excerpt in an encyclopedia, dictionary, handbook, or almanac to obtain background on a topic. For example, exploring *Encyclopedia Britannica* might provide ideas on the history of graphic design.

Search the **Novanet library catalogue** to locate a book on a topic that provides a comprehensive overview. For example the book *Water* by Marq de Villiers, might assist in narrowing a topic such as the pros and cons of water dams.
STEP 2 - Narrow or Focus the Topic

A student should do a preliminary assessment of the available resources in order to see if the topic is feasible to study. Too much information on a topic indicates that the topic is too broad. The topic needs to be narrowed if this is the case. Conversely, if there is not enough information available, the topic is too narrow and needs to be broadened. A topic that is too broad or narrow is very frustrating to research.

The student needs to do some background reading and ask the questions:


If a student has difficulty narrowing/focusing a topic, they are encouraged to consult with their instructor/Campus Library staff for assistance at this point.

STEP 3 - Formulate a Topic

After a preliminary assessment of the topic has been completed, it is then time to formulate the question that needs to be answered or the topic that will be covered in the research paper.

- Articulate a specific research question (i.e. the effect of obesity in children).
- State a specific claim (scholarly literature suggests that a healthy and balanced diet, as well as regular exercise, decreases the risk of obesity in children).
- Analysis will be supported with evidence.

The rest of the paper is devoted to the explanation of such a claim.
STEP 4 - Searching for Information

This is perhaps the most lengthy step of the research process. There are many sources available and it may be difficult to consult all types. However, the sources consulted needs to be balanced. Sole reliance on one type of resource (i.e. Internet sources) will make the research imbalanced. A good research paper incorporates different types of sources (i.e. periodical literature, encyclopedias, books, videos, statistical information, Internet sources, etc.) and demonstrates that an effective information search has been conducted.

- Consult with library staff for the most effective sources on the topic.
- Evaluate information presented in a number of different sources.
- Ensure that journals chosen are the best type for the topic.

Consulting library staff will ensure that all types of information sources are searched on the topic in order for the student to complete a balanced review. Library staff can assist the student throughout the entire search process or demonstrate how to search the sources so the student can search independently.

STEP 5 - Read/Evaluate Information

Once the information is collected, the student can start to read and evaluate it. Make notes of key points that need to be brought forth in the paper, highlight information (if copies are made) and/or cluster information into organized units. All of these techniques contribute to the effective construction of the research paper. The student will start having a solid idea as to how the paper will be organized at this point.

Conducting research involves compiling a bibliography. It is recommended to maintain a "working bibliography" of the sources that are used. If a student keeps track of the information sources consulted at the early stages of the research process, developing a final bibliography will not be time consuming. This working bibliography can be kept in an electronic file or a handwritten document. Ensure all the bibliographic information is recorded about the source (author, title, subtitle, place of publication, publisher, year of publication and issue information - if a journal).
STEP 6 - Organize/Write the Paper

Once the information sources have been obtained/reviewed, it is time to look at the construction of the research paper.

- **Synthesize information** - How is the information going to be worked into the paper? Extract relevant information that will be used.

  Caution: Do not plagiarize another's work. Plagiarism is defined as "the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work" (*Webster's Unabridged Dictionary*, Random House, 1998, p.1479). It is an academic offense to take another author's work and present it as one's own. Ensure that other author's ideas are cited in the body of the paper.

- **Re-visit the search statement** - What was the intent of the research topic? Evaluate the outline that was previously completed in order to stay on track.

- **Develop a strong introduction** - This informs the reader what the paper will set out to do.

- **Organize the material into a logical format** - This might be a chronological or comparative approach. Whatever format is adopted, arrange the notes in this order so the writing process is easier.

- **Provide a balanced viewpoint.**

- **Develop a solid conclusion** - This needs to be based on factual information presented in the paper.

- **Complete a bibliography.**
Searching for Information

Searching for information is often a time consuming process. It should be conducted thoroughly in order to ensure that all available resources have been consulted. In general, there are three main types of information sources that are frequently used:

- Books
- Periodical literature
- WWW resources

Each resource has its strengths and all should be consulted to ensure a balanced viewpoint on a topic.

Books

Books often provide a thorough and exhaustive overview of a topic. They provide historical and/or comprehensive information and are often useful for tracking down further information on a topic by providing high caliber bibliographies.

Books in libraries are located in the:

Reference collection

- Includes encyclopedias, dictionaries, handbooks, almanacs, etc.
- Usually cannot be borrowed from a library and must be consulted on site.
- Usually contain factual information, overview of a topic, background information etc.
- Useful for preliminary reading on a topic.
General collection

- May be borrowed from the library, usually up to 3 weeks at a time.
- Complete range of topics that support College programs located at the campus.

Locating Books at NSCC

NSCC Library Services is a member of the Novanet library consortium and makes their collection available online via the Novanet library catalogue. After registering for library services, NSCC students, faculty, staff may borrow resources from any one of the 10 Novanet libraries in Nova Scotia. Searching Novanet is the most effective method for locating books on a topic. For assistance on searching Novanet:

- Consult Campus Library staff.
- Consult the online Novanet tutorial.
- Use the Novanet library catalogue's Help/Tutorials button.

Books that are not located in NSCC campus collections can be requested through either Novanet Express or through the College's Interlibrary Loan Services.

Periodical Literature

Periodical literature refers to articles in magazines and journals. Magazines and journals are called periodicals because they are published on a periodic basis (regular/irregular). The nature of periodical literature is very different than books. Characteristics of this type of information source are:

- Periodicals are published on a regular basis therefore information is very current.
- Fairly specific and detailed information.

Visit the Library's Journal Titles A-Z Service to explore the various periodicals that the Campus Libraries carry in their collections or that are available in the Library’s databases.
What is a Periodical Citation?

Identifying the bibliographic citation is critical in the research process as it is required when searching for the correct issue of the magazine/journal, but also to record in a bibliography.

A periodical citation is the bibliographic description of the article in a magazine or journal and may include the title of the article, author(s), magazine/journal title, issue information (volume, number, page numbers). It is critical to document all of this information when compiling the bibliography.

Example of a Periodical Article Citation:

As periodical information is published regularly in thousands of magazines/journals, this body of information requires a reference source that indexes the contents of each issue. They are called periodical indexes and direct the patron to a specific issue of a magazine/journal on a topic or by a particular author. They attempt to indicate the location of an article in a magazine or journal and point to a particular issue where the article may be found. This saves the student from having to browse through various issues of magazines when looking for a particular topic.

Many periodical indexes are in electronic format and often provide the full text of the article in the database. Visit the Library’s databases to explore the electronic periodical indexes, as well as assistance on how to search them.
WWW Resources

The World Wide Web (WWW) is a component of the Internet that uses text, images, sound, video and file transportation to provide information. It contains billions of web pages located on computer servers all over the world and is one of the fastest growing components of the Internet.

The WWW is incredibly vast where companies, organizations, educational institutions and people all serve as information providers. The web's interactive nature makes it a wealthy source of information.

To learn how to search the WWW effectively, visit the College’s WWW Guide or browse through a list of recommended World Wide Web Resources that the Library collects and organizes.

WWW Guide
http://www.library.nscc.ca/research_assistance/www_guide

World Wide Web Resources
http://www.library.nscc.ca/resources/www_resources

Searching the World Wide Web during the research process is useful because:

- It often provides extremely current information.
- It provides an unparalleled range of topics.
- Most web pages have been indexed by some type of web search tool (i.e. search engines or subject directories) which makes them searchable by keyword.

Consult Evaluation of World Wide Web Resources for criteria on how to assess a web page for credibility, reliability and authority.
Compiling a Bibliography

In order for a research paper to be complete, it must be accompanied by a bibliography. A bibliography is a list of sources that have been consulted/used for the paper. The bibliography needs to be formatted according to an established style of documentation. The student needs to consult with their instructor to determine which style to use.

Direct/indirect quotations from sources or paraphrased ideas of another author's work also needs to be documented within the paper. Check with Campus Library staff on to how to correctly cite other author's ideas according to an established format. Plagiarism is an academic offense and the student will be penalized if another author's ideas are not credited in the paper.

Compiling a bibliography and correctly citing sources ensures honesty, integrity and completes the research paper. All author's works need to be credited in the research paper. Sources used in a bibliography include (but are not limited to): books, periodical literature, interviews, newswires, television/radio programs and electronic resources (including World Wide Web resources).

Common Bibliographic Styles

The two most common styles of formatting a bibliography and citing sources in the College are:

- **American Psychological Association (APA)** - used in sciences and social sciences.

- **Modern Language Association (MLA)** - used in arts and humanities.

Visit the Library Service's bibliographic style guides for assistance on how to format a bibliography according to APA or MLA or consult with Campus Library staff who can provide guidance in this area.

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<td>American Psychological Association (APA)</td>
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<tr>
<td>Modern Language Association (MLA)</td>
<td><a href="http://www.library.nscc.ca/research_assistance/bibliographic_styles/mla_guide.asp">http://www.library.nscc.ca/research_assistance/bibliographic_styles/mla_guide.asp</a></td>
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Guide for Faculty

The Library Services’ Research Guide strives to equip students with basic information literacy skills needed during the research process, as well as prepare them with the necessary information-seeking skills required in their personal and professional lives. This guide directs students throughout the entire research process and provides assistance on how to effectively search, retrieve and evaluate information, as well as how to compile a bibliography and cite sources. Faculty can support this initiative in many ways:

- Partner with Campus Library staff in delivering library instruction to students. Library Services offer several workshops and programs that strive to equip students with the necessary information literacy skills needed in today’s information environment.

- Integrate the Library Services’ Research Guide into the classroom, either by asking students to complete it independently or making it part of the classroom instruction. Ask a librarian how this guide can be most effectively used in a program.

- Require students to incorporate a variety of resources, such as books, videos, periodical literature and web sites, into their assignments and papers.

- Incorporate the Library Services’ Research Guide into a faculty web site and make it part of the list of resources available to students.

Visit Library Services’ Teaching Resources to investigate other options of integrating information literacy into the curriculum.

Library Services’ Teaching Resources
http://www.library.nscc.ca/Instruction/teaching_resources.asp
Recommended Resources

Many sources were consulted to compile the library Service's Research Guide and are provided in the Reference list below for students to pursue further reading on the research process. Check the Novanet Catalogue, the World Wide Web, or contact Campus Library staff to acquire any of these resources.

References


Constructing your research paper (4 April, 1997). Retrieved September 3, 2002 from http://library.ucsc.edu/ref/howto


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