



RESEARCHING GUIDE

For Dental Hygiene Students

Your quick-start reference to smart research strategies



PICO Search Terms

One useful way of structuring scientific research is to divide your focus into four sections: problem, intervention, comparison, and outcome (PICO). This facilitates selecting language and key terms for your computerized search of research sources.

- **Problem or Population**
focuses on a particular problem, a disease, a type of patient, or a particular symptom.
- **Intervention**
focuses on a particular treatment or exposure.
- **Comparison**
identifies alternatives to the intervention.
- **Outcome**
specifies the desired or expected outcome.

There are many guides to the PICO research method on the internet.



Organizing Your Thinking

For an unfamiliar topic, a good strategy is to write down a list of questions. Just identifying what it is you don't know about the subject is often half the battle. Having a list of questions will help you create your search criteria, formulate specific questions to ask others, and often even give you the answers you seek.



Search Engines

Some websites, such as the National Center for Dental Hygiene Research and Practice, list a dozen or so helpful research databases.

PubMed uses MeSH terms, which are explained in the PubMed/Medline Tutorial.



Creating and Using Key Words

Once you have a topic that is adequately focused and narrowed, it is helpful to create a list of key words to facilitate searching for resources. It will also help keep track of searches you've done by ensuring that the same keywords are used in all the databases you've searched (i.e., internet search engines, journals, library catalogues, etc.). It is also a good idea to think about possible synonyms and alternative phrases for the key words in order to do a more comprehensive search.



Using the Correct Operators

Operator:

A symbol that represents the intended relationship between the keywords used in a search.

Boolean operators:

The operator AND indicates that the keywords must be found together.

The operator OR indicates that either, or both, of the keywords must be found.

The operator NOT allows you to exclude certain words in the search.

Remember that even with a set list of keywords, internet database searches won't be as precise as you might want. Using the correct operators in the keyword search significantly narrows down material and saves a lot of time.