



Scope and Search Strategies

The first step in successful research is to match the information need with an information resource that has the appropriate scope. Four components of scope are 1) subject, 2) time frame, 3) type of materials covered, and 4) the information provided about the materials covered. Once an appropriate information resource has been identified, the researcher will need to use five basic search strategies for the most effective searching.

Every **search** system offers a variety of features and special search techniques. Rarely are any two systems searched exactly the same way. Many systems offer **help** screens that provide valuable assistance with frequently used search strategies, as well as very specialized techniques, such as case sensitivity. Often the only way to use the search systems effectively is to access the **help** provided. There are, however, some common search strategies that can be utilized for databases and other systems. These include:

- **Boolean** operators - use of AND, OR, and NOT or other logical operators for expanding or narrowing a search statement. An example would be using “global warming OR greenhouse effect” to retrieve items that pertain to either of those concepts. Another example would be to search “career AND engineering” to retrieve items that pertain to something about job opportunities for engineers.
- **Nesting** - use of parentheses or other punctuation to group related concepts together to clarify the order in which a search is executed. The grouped concepts will be searched first as in a mathematical equation. An example is: academic and (integrity or honesty).
- **Truncation** - use of a symbol to indicate a search for a term containing a certain number of specific characters, after which any character or characters are acceptable. Some truncation or wildcard symbols take the place of one character only, while others can replace any number of characters. Frequently used truncation symbols are the “?”, “\$”, and “*”. Examples are “garden?” to retrieve garden, gardens, or gardening; “computer*” to retrieve computer, computers, computerized, or computerised. Some systems even allow for replacing characters within the word, such as in “behavio?r” or “wom*n.”
- **Controlled vocabularies** - use of terms or subject headings that have been previously identified as common or standard within a certain field. For example, the terms frequently used to index psychology resources are found in the [Thesaurus of Psychological Index Terms](#). The vocabulary often used in the engineering literature can be found in the [Ei Thesaurus](#). The [Library of Congress Subject Headings](#) volumes provide the specialized terms for most academic library collections, including the library catalog of Florida Tech. Although there are some concepts common to many disciplines, certain specialized terms may be required to retrieve desired results within a specific database. Many search systems offer controlled vocabulary searching, as well as keyword searching.