Advanced Search Techniques

Objective: Students will understand advanced search techniques including the use of quotation marks for phrase searching, truncation or wild card*, and advanced search screens.

Search Techniques

Search techniques are the methods you use to search catalogs, article databases, and web search engines to find information.

The use of the Boolean operators AND and OR between keywords to create a search statement is an example of a search technique.

This lesson will cover some more advanced search techniques which can help you refine your searches.

Quotation Marks and Truncation

In library catalogs and article databases, the two most helpful advanced search techniques are:

1) Quotation Marks

2) Truncation or Wild Card

Quotation Marks

Quotation marks are used around phrases. By using quotations marks, you are telling the computer to only bring back pages with the terms you typed in the exact order you typed them.
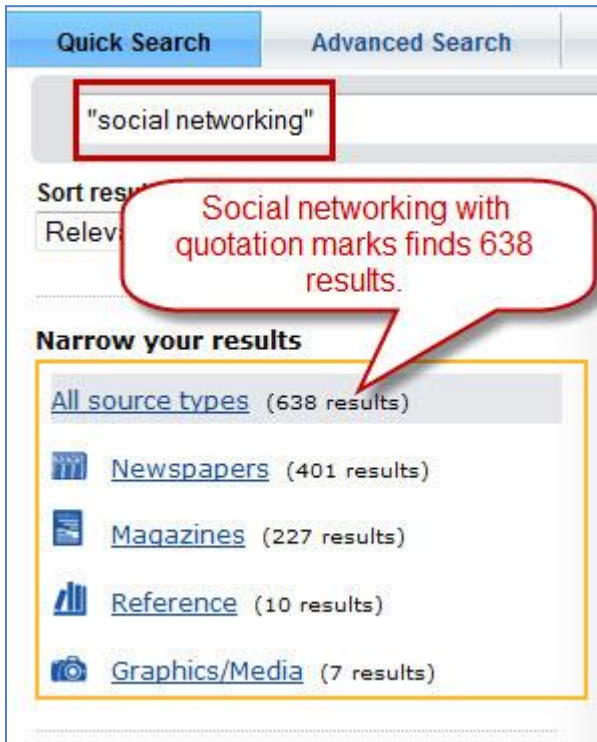
Example:

"health care reform"

instead of

health AND care AND reform

For example, if you are interested in finding information on social networking, it is best to search for "social networking" in quotation marks. Otherwise, the computer might search for social AND networking and find many more irrelevant results.
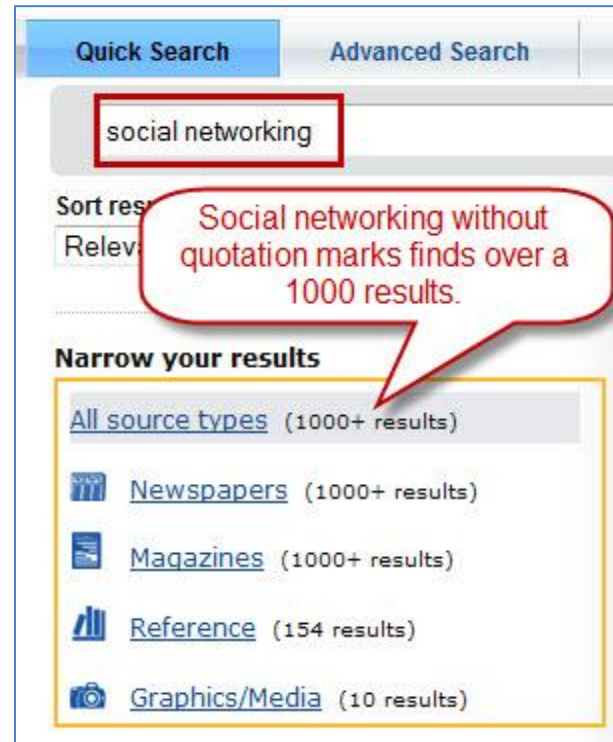
Truncation

Truncation means to chop off. When you truncate you chop off the end of the word, so the computer can search for multiple endings.

For example, your research question includes the keyword education. You can truncate education, so that the computer will find all of the word ending variations.
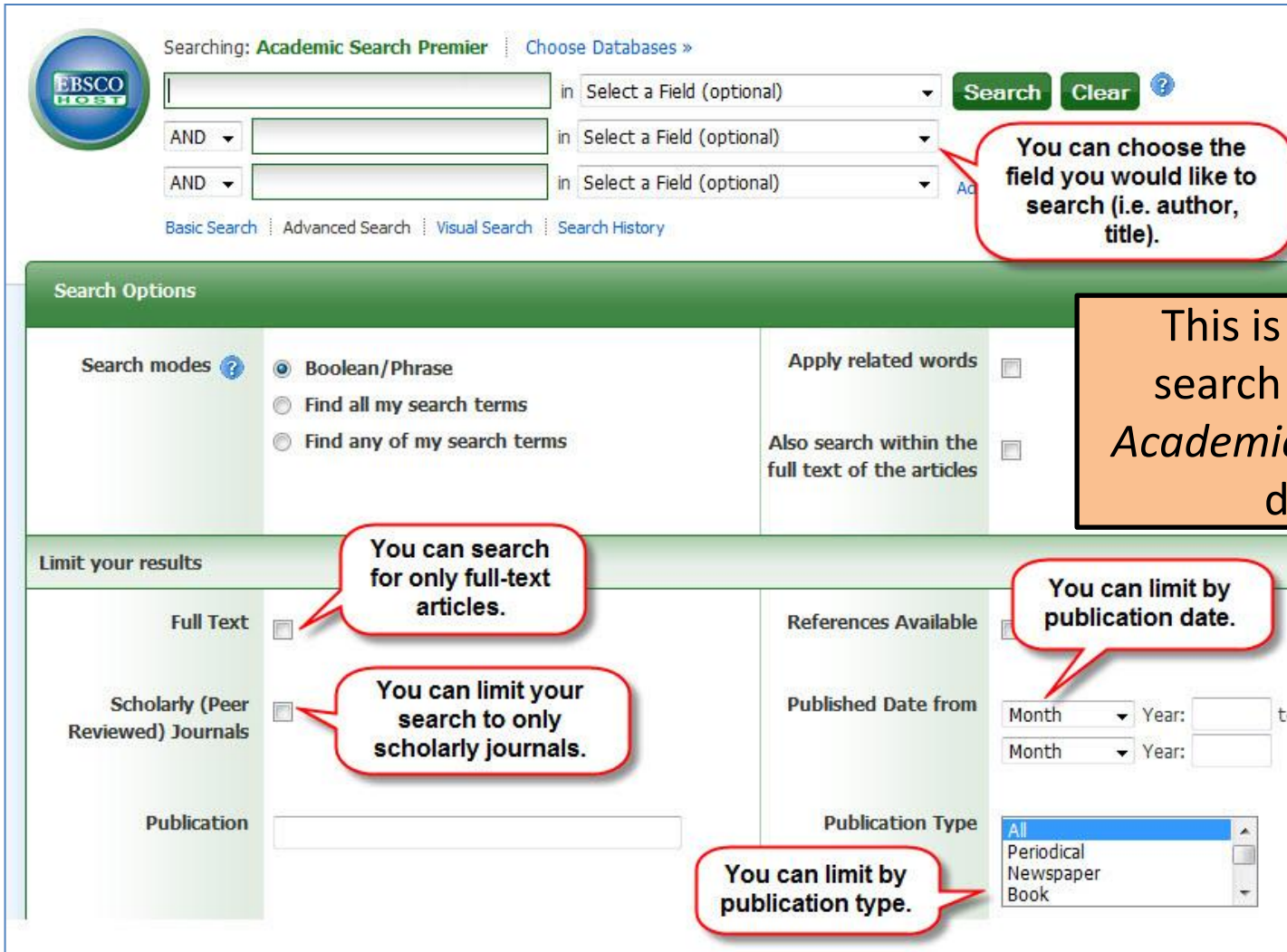
Educat* will find:

Education
Educate
Educated
Educating

Hints

Be careful where you place the truncation symbol. Educate* *will not* find education or educating, although it will find educate and educated.

Truncation *will not* find synonyms (i.e. scien* will not find the words botany, biology, or astronomy), although it may bring up articles on those topics **IF** they include the words science, scientific, or scientist.

To search more precisely in article databases, you can use their advanced search screens.

This is the advanced search screen for the *Academic Search Premier* database.

In article databases, you can also refine your search after reviewing your search results.

This screen shot of the *SIRS* database shows additional refining options after conducting a search for *smoking AND teenagers*.

Advanced Search Techniques for Web Searching

Using advanced search techniques when searching the web is even more important because you are sifting through so much information.

Some of the techniques used for searching the web versus library catalogs and article databases are different.
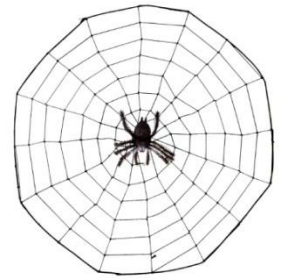
Web Searching Advanced Search Techniques

- Use quotation marks to search for phrases

- Use the minus (-) symbol in front of a word to exclude it

- Use the advanced search screen to help refine your search

- Be very specific

- Search in appropriate domains (.com, .edu, .gov)

Minus Symbol (-)

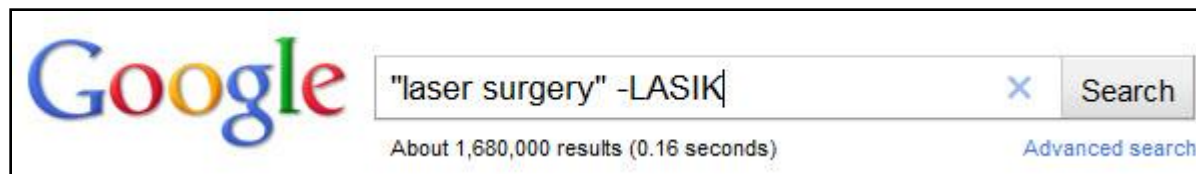Sometimes when searching the web, the computer displays lots of results that are not on your topic.
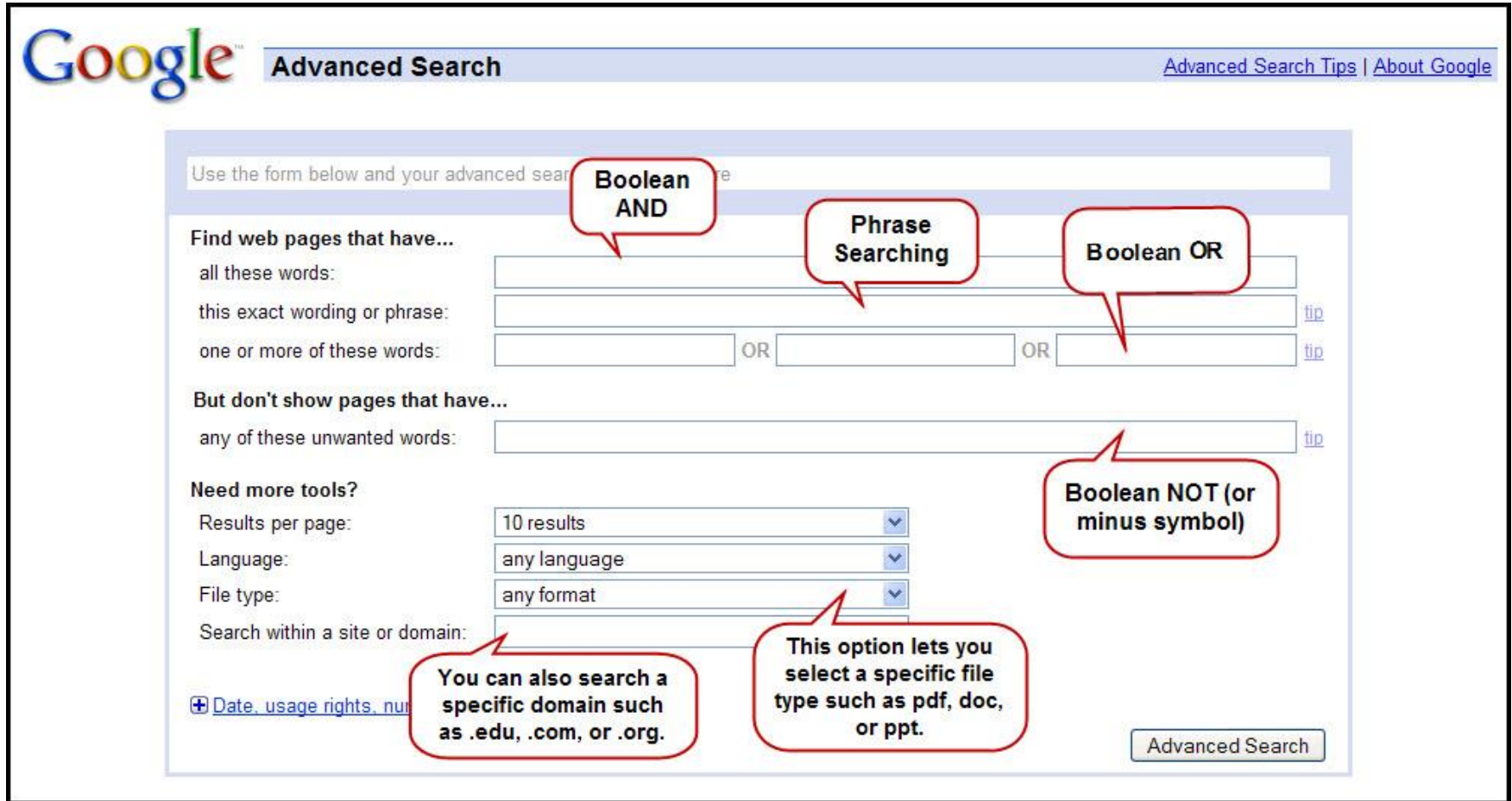
For example, you want to find information on laser surgery, but most of the search results are pulling up LASIK. To remove these hits, search for: "laser surgery" -LASIK

Google "laser surgery" -LASIK × Search
About 1,680,000 results (0.16 seconds) Advanced search

Advanced Search Screen

Like article databases, most search engines have an advanced search screen. This screen offers many options to help you refine your search.

Google's Advanced Search Screen

Be Very Specific

Library catalogs and article databases have a limited amount of information. The web is virtually limitless. To pull up the most relevant information when searching the web, you need to use lots of terms related to your research question.

For example, if you search for "tattoo removal" you find over 1,350,000 hits.

If you search for "tattoo removal" "blue ink," you only find 723.

Notice here, that both concepts are being searched as phrases.

Domain Searching

Finally, when searching the web, it is often helpful to limit your results to a specific domain.

The domain of a web site indicates the type of organization or geographic region from which the site originates. Helpful domain limiters include:

- .edu-education
- .gov-government,
- .mil-U.S. military,
- .org-organization
- .com-commercial

To limit your search to a specific domain type

- Add site:*domain* to your search.

- Or use the *advanced search* option and type in the domain.

Summing Up

Using advanced search techniques when searching library catalogs, article databases, and web search engines will help refine your search. They will help limit the number of search results, and the results found should be more relevant for your research question.