

Know How Research Skills: Advanced Web Searching

Slide 1: Welcome to the Know How Research Skills tutorial on advanced web searching.

At the end of the tutorial there will be a quiz. If you successfully complete the quiz, you will be able to print a certificate and email your instructor.

Your results will not be saved so you must complete this at one time.

Slide 2: You have probably had this sort of experience. You're working on a paper on the relationship between vitamins and disease and you need some information.

Slide 3: So you go to Google. And yikes! It found over 40 million results. So now what?

Slide 4: This tutorial will show you ways to use the advanced search features in Google to decrease the number of results and increase the quality of those results.

Slide 5: But before we start searching, let's think about what makes a web page a good source or a not so good source to use for your paper, because that way we can see how the advanced search features work.

Slide 6: A helpful way to evaluate information is the CRAP test.

Slide 7: C stands for Current. How important is current information for your topic? Sometimes it isn't. For instance, old information on Michelangelo is OK, but old information on medical treatments may not be OK.

Slide 8: R stands for Reliable. This is the most important one. Is the information based on real research or is it just someone expressing an opinion or a personal story? Those can be useful, but in the end you want information that is based on facts and serious study.

Slide 9: A stands for Authority. In other words, who wrote it and what group is publishing it? Does the author have qualifications? Is the organization sponsoring the website reputable?

Slide 10: P stands for Point of View. Is the web page pushing just one viewpoint or is it a balanced approach? It's OK to have a point of view, but you need to realize it may be a biased source.

Slide 11: So remember the CRAP test:

Current
Reliable
Authority
Point of View

Keep these points in mind as we go over the advanced search features in Google.

Slide 12: It's estimated that less than 20% of Googlers have ever used the Advanced Search, although it is very easy to find.

In the top right hand corner, click on the gear wheel. From the expanded menu, click on Advanced Search.

Slide 13: There are many features on this page, but don't worry. We won't go over all of them, just a few of the most important ones.

Slide 14: First off, let's look at how you input your search words. In regular Google you just type in that one box, but here you have lots of choices.

"All the words" is just like regular Google. Every word you enter must be in the resulting web pages.

Slide 15: "This exact wording or phrase" is a great way to get rid of irrelevant results. Often your search words are really a phrase – words that go in a certain order. For example, let's see what happens if we just type in TIME MANAGEMENT in the regular Google. As you can see, we get over a 100 million results.

But if you enter it as a phrase using "exact wording or phrase," 75% of the results disappear. The ones that were taken out are the ones that had the words TIME and MANAGEMENT somewhere but not right next to each other.

Slide 16: So think about search words, and if some are really phrases, put them in the "exact wording or phrase" box.

Slide 17: The next feature we'll look at is "search within a site or domain." This is a way to only find information from a certain website or to only get results from certain domains. This can be very useful for helping find reliable sources written by expert authors – remember the R, the A, and the P in the CRAP test?

Slide 18: Probably the most common way to use this is to limit results to the domains. That's the little code at the end of the URL or web address. The most common are .edu, .gov, .org, and .com.

Slide 19: .edu is for colleges and universities, .gov is for government websites, and .org is used for nonprofit organizations.

This will eliminate .coms, or commercial sites that are often just trying to sell stuff and may not be as appropriate for college level projects.

Slide 20: So you put in your search words or phrases at the top, and then use this box to only get results from colleges or universities, or from government websites or from nonprofit groups. These are more likely to have reliable research on topics.

For example, remember that search for VITAMINS and DISEASE ? It got over 40 million results and a lot were from .com sites trying to sell vitamins.

If we limit to .edu, we go down to a little under a million and they are from universities like Harvard. In other words, these are more reliable sources.

Slide 21: If for example, you wanted to get opinions about genetic engineering, if you go back to the advanced search you could do a search for GENETIC ENGINEERING and limit it to .org –which is nonprofit groups and point-of-view pages. As you can see from the results these are from websites like Greenpeace and the American Medical Association. All are giving their opinions on genetic engineering.

Slide 22: The other way to use this feature is to limit your search to one specific website. For example, if you put in utexas.edu, your search would only look for web pages from the University of Texas' website.

Slide 23: The next two advanced search techniques require that you click on the plus sign to expand the options.

Slide 24: The "Date" option obviously helps with the Current portion of the CRAP test.

This lets you limit results to various time periods up to the past year. This means the web pages in your search results were either created or updated during the time period you select. Without using this, your results will include all web pages no matter how old and out-of-date they might be.

A search for GENETIC ENGINEERING as a phrase gets – without limiting by date – about 7 million results. If you limit to those from the past month, we go down to under a million. This is the sort of topic that changes rapidly, so older material is probably not going to be valid.

Slide 25: Another good way to use this is to search for recent events by limiting to the past day or week. This will get you the most current information on the web.

Slide 26: Our last advanced search trick with Google is "Where your keywords show up." This tells Google where your search words must come from on the web page. It is a very powerful way to get fewer, more relevant results.

The default method in Google is that the search words can be anywhere on the web page. The most useful choice to get better results is to select "in the title of the page."

Slide 27: What is the title of the page? It is at the very top left of the screen. For example, on the Google Advanced Search screen the title are those very words. Some human being has to decide what the page is about and what the title should be, so the words up there are going to indicate a page that is really focused on your topic.

In the previous section, we saw that a search for the phrase GENETIC ENGINEERING limited to the past month got about a million results. If we then add the title of the page option, the results go way down, they go down to about 16,000.

When using this, only use two or three search words because a title is not likely to be super long or detailed.

Slide 28: You can use all of these techniques at the same time to make a more powerful search. For example, remember our original search for VITAMINS and DISEASE which got over 40 million results. If we limit it to .edu and limit the results to the latest year and then limit the results to the titles of the web pages, we get one result. From 40 million to one! That's pretty powerful stuff.

Slide 29: So here's a quick review of the Google advanced search features we covered.

Use "the exact wording or phrase" if your search involves words that are used in an exact order.

Use “search within a site or domain” to limit the results to information from .edu, .gov, and .org websites. You can also use this to search within a specific website.

Use the “date” limiter to only get results from the past year or newer.

Use “where your keywords show up” to only get results where your search words are in the title of the page.

Slide 30: Although we have focused on Google because it is the most popular search engine and it has more advanced search features, others, like Yahoo and Bing offer similar ways to fine tune a search. Look for their Advanced Search or Preferences options.

Slide 31: We hope these tricks lead you to better web searching. Happy hunting!

Next, take this short quiz to complete this tutorial.