

## SEARCH ENGINES

### How do Search Engines Work?<sup>2</sup>

Search Engines for the general web do not really search the World Wide Web directly. Each one searches a database of web pages residing on servers. Search engine databases are selected and built by computer robot programs called spiders. These "crawl" the web, finding pages for potential inclusion by following the links in the pages they already have in their database (i.e., already "know about"). They cannot think or type a URL or use judgment to "decide" to go look something up and see what's on the web about it.

If a web page is never linked to in any other page, search engine spiders cannot find it. The only way a brand new page can get into a search engine is for its URL to be sent by some human to the search engine companies as a request that the new page be included.

◇ Following this process, Google ranks the results from the pages having the most links to the ones having the least. That is why the first results on the top of the page are not necessarily the most relevant or the most legitimate, but rather the most popular or the most widely referred to. This is why research tips can help you get the best out of a Google search.

### HOW TO USE GOOGLE<sup>3</sup> ([www.google.com](http://www.google.com))

- **Many words in the same document or site.** You just write the words one after the other with a single space between them.  
Ex: aid Bangladesh budget global
- **Exact phrases or expression** in quotation marks.  
Ex: "To be or not to be"
- **Exclude a word.** For example, you want to find some documentation about fascism, but you don't want it to be related to the Nazi movement.  
Ex: Fascism -Nazi
- **One word or another** that do not need to be together. Use **OR**.  
Ex: aid Bangladesh conditions OR conditionalities
- **A title or word in a title.** Gives you pages or articles that contain your request in its title.  
Ex: intitle:"hybrid seeds"
- **A word in the url** (website address). Allows you to specify what type of website you are looking for, or in which country the site is based.  
Ex: site:edu monga Bangladesh  
Ex: site:bd cyclone sidr

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<sup>2</sup> <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/SearchEngines.html>

<sup>3</sup> Inspired by <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Handouts.html>

- **A specific file type**, like powerpoint, word, pdf.  
Ex: filetype:ppt "green revolution" South Asia  
Ex: filetype:pdf voice Bangladesh site:bd
- **A definition.**  
Ex: define:alienation

- ◇ You can **combine all the above tools** to be even more specific.
- ◇ **How many results** did Google give you? If you have too many, maybe you could try a more specific search.
- ◇ You can use the "**Advanced Search**" tool to do almost all the same requests.
- ◇ If looking into a large subject matter, find words that are more **specific to narrow down the results**.
- ◇ Be careful not to exclude too much by using too specific words. Use the words in their most simple form, or use OR. Ex: conditions vs. conditionalities

### How to evaluate the results?

Because there are so many websites and no quality control, you should be critical of the information you find on the Internet. Always examine the sources you are using to make sure they are trustable. Some tips to evaluate your results:

- Look at the url: is it a personal, corporate, political, educational site, and in any case, is it relevant for the information you are looking for?
- Look for restricted domain names such as .bd .edu or .gov  
Anyone can add .com .org .net and even .us and .uk (they are unrestricted domain names) to their site address, so be aware.
- Is it recent? Look for the "last updated" date.
- Using another search engine in addition to Google may give you better results.

### Exercise

Through Google, find a reliable Bangladeshi website that talks about women's literacy in relation to micro-credit. Try three different ways of searching.

1<sup>st</sup>

What did you type in the search box: \_\_\_\_\_

Number of sites Google found: \_\_\_\_\_

Best site (or one of the best) you found with this search: \_\_\_\_\_

2<sup>nd</sup>

What did you type in the search box: \_\_\_\_\_

Number of sites Google found: \_\_\_\_\_

Best site (or one of the best) you found with this search: \_\_\_\_\_

3<sup>rd</sup>

What did you type in the search box: \_\_\_\_\_

Number of sites Google found: \_\_\_\_\_