Getting the best out of Google
Information Skills Practical Workshop

There is a vast amount of information on the internet but much is not of a quality suitable for your assignments or dissertations. When you are gathering material for research it is important that you evaluate what you find and use only the highest quality, authoritative information.

You are **strongly advised** to begin your research by searching academic databases containing relevant peer-reviewed journal literature. These can be accessed through Primo at **http://primo.abdn.ac.uk/**

This workshop focuses on **Google** and **Google Scholar** and some other ways to find suitable resources on the internet. Use this worksheet in conjunction with the document: **Getting the best out of Google: Further information**

1. Planning your search

This is an important step in the research process whether you are searching Primo, subscription databases or using Google. Consider the search terms you will use and their synonyms before you begin entering terms into any search box. Time spent considering search terms before you start searching means your search will be more methodical and logical.

2. Searching using Google

Always use the Advanced Search option – **www.google.co.uk/advanced_search**

When you plan a search of the internet using Google, remember to apply the search rules in order to retrieve the best quality and most relevant results.

Google Search rules	
phrase search	In the simple search bar put double quotation marks around words when you are looking for occurrences of an "exact phrase", e.g. **"I have a dream…"** in relation to the famous speech by Martin Luther King Jnr. In the advanced search platform use the search box next to **this exact word or phrase** to introduce a phrase to your search. No need to use quotation marks with this option
word variations (truncation)	Google uses stemming technology which enables it to search automatically for all possible endings for a keyword, e.g. **diet** finds **diet**, **diets**, **dietary**. Always only type the singular form of words
synonym search	A **tilde (~)** sign placed immediately in front of a keyword will instruct Google to look for that word and also its synonyms, e.g. **~food ~facts** finds **food facts** and **nutrition** and **cooking** information
Boolean Search: When using Boolean operators you must enter them in **UPPERCASE**	
AND	Google automatically links keywords with **AND** The order in which you type the keywords is important and will affect the search results. If you really want to find a particular word, type it more than once into the search box
OR	In the simple search bar use **OR** between words to find documents that include either of two search terms, making sure that it is written in uppercase, e.g. vacation paris **OR** rome. In the advanced search platform use the search box next to **any of these words** to introduce alternative keywords or synonyms. Not need to use OR with this option

Exercise 1	Using Advanced Search

1. Go to **www.google.com**

2. On the **simple search** screen type in the following keywords exactly as given and note the number of results: **aberdeen typhoid outbreak death**

3. Click on **Search**

4. How many results are retrieved?

Next, we will compare results by applying Google search rules in the **Advanced Search** screen.

1. Click on **Settings** at the bottom right of the screen and select **Advanced search**
2. In the **All of these words** box type **Aberdeen**
3. In the **this exact word or phrase** box type **typhoid outbreak**
4. In the **any of these word** box type **death fatality**
5. In the **site or domain** box type **.ac.uk**
6. Click on **Advanced search** at the bottom of the screen
7. How many results do you get?
8. The material found with this advanced search will be more appropriate for any assignment you may be doing than that returned using the simple search. It will also be more likely to point you in the direction of other academic level material
9. Using Google's single search box repeat your phrase search and add a site or domain to it, e.g. **"typhoid outbreak" site:www.abdn.ac.uk**

Have a go yourself with search terms of your own to see how the advanced search options works.

3. Google shortcuts

It is also possible to perform advanced searches in Google by using shortcuts in the simple search box. Below are examples of some of the shortcuts you can use.

Google shortcut	function	example
site	search only within a specific site	site:www.stanford.edu site:ac.uk
filetype	find a particular type of file, such as PDF, DOC, TXT	filetype:PDF
define	find definitions for a word	define:audacity
intitle	find particular words in the title of the webpage	intitle:inspirational
..	get ranges of numbers, dates, prices	Presidents 1800..1900
word * word	find other combinations of words between words	care * health
-word	exclude a particular word from results. For example, search for cartoons but not the Simpsons.	cartoon -simpsons
phrase searching	search for exact set of words, quotes or phrases	"I have a dream"

4. Searching for images

For information on finding copyright-cleared images please see document: **Getting the best out of Google: Further information**

5. Setting up Google Scholar

Changing some settings within Google Scholar will help you to use it in a more useful and efficient way. Follow the two steps below to make it easier to find materials available through the University of Aberdeen and to export references to reference management software such as RefWorks.

Step 1	Linking to Aberdeen University collections from Google Scholar

- The linking service to subscribed material should already be set up on the University PCs but you will need to configure this on your own machine. Follow the steps below to configure your machine for linking to resources that the University subscribes to
- You will need to accept cookies in your browser for these personalisations to work

1. Go to Google Scholar at **http://scholar.google.co.uk**
2. Click on **Settings** under the three horizontal lines at the top left-hand side of the page
3. Click on **Library links** on the left-hand side of the screen
4. Search for the **University of Aberdeen** and then **select the tick box** for University of Aberdeen
5. Click on the **Save** button. To retain these settings, you must **turn on cookies**

Step 2	Setting up the export link from Google Scholar to RefWorks

You can easily export bibliographic details from Google Scholar directly to RefWorks.

1. From within Google Scholar click on **Settings**
2. Click on **Search results** on the left-hand side of the screen.
3. In the **Bibliography manager** section select **Show links to import citations into:**
4. Then select **RefWorks**. Other reference management software is also supported by Google Scholar
5. Click on the **Save** button. To retain these settings you must **turn on cookies**

6. Searching with Google Scholar

Google Scholar searches across scholarly literature from all areas of research, often farther back in time than many of our subscription databases.

Material accessible through Google Scholar includes peer-reviewed papers, theses, books, preprints, abstracts and technical reports from academic publishers, professional societies, institutional repositories and universities.

It **should not be your first source of information** because the resources it searches are nowhere near as comprehensive as those on databases such as Scopus, Web of Science, EBSCO, Medline, ProQuest etc.

Exercise 2	Using Google Scholar Advanced Search

1. Go to Google Scholar at **http://scholar.google.co.uk**

2. Click on the three horizontal lines at the top left of the screen to open the **Advanced search** platform

3. In the **'with all of the words'** box type: **nutrition diet flavonoid**

4. In the **'with at least one of the words'** box type: **chocolate cocoa**

5. Click on the blue button to search.
   How many results are retrieved?

6. Next – we can exclude all references to another food. Click on the three horizontal lines to go back to the Advanced search platform

7. **Keep all keywords in the other search boxes as before** and in the first **'without the words'** search box type: **tea**

8. Click on the blue button to search

9. How many results are retrieved?

Have a go yourself with search terms of your own to practice with how Google Scholar works. Then try some of the different ways to search the internet from the suggestions in document: **Getting the best out of Google: Further information**

7. Evaluation is vital

Search engines collect information indiscriminately – there is no human intervention in the selection of content. It is essential that information derived from unregulated sites is evaluated using a set of criteria. The following table lists the main ways to evaluate information derived from the internet.

R	Relevance	**Is the content relevant to your info needs?**
A	Authority	**Who wrote it? Are they respected or well-known?** **Is content accurate? Are there links to other reliable sites?**
D	Date	**Up-to-date? If it is undated is it reliable? Is date important?**
A	Appearance	**Are there spelling errors? Is it professional in appearance? Does it include citations and references? Formal or informal writing**
R	Reason for writing	**Consider bias. Bias is not always bad but must be aware of it. Is it sponsored by someone?**

Mandalios, J (2013). RADAR: An approach for helping students evaluate Internet sources, *Journal of Information Science* 39: 470

8. Help and advice

Library staff and Information Consultants can help with any difficulties using any library resource
Information Consultant contact details: http://bit.ly/InfoConsultants   Subject & Enquiry staff (TSDRL Floors 4-6, Medical and Taylor Libraries help desks)   Library web pages www.abdn.ac.uk/library
IT staff are able to help with specific IT-related problems you may be having
IT Service Desk - Log any IT problems at https://myit.abdn.ac.uk   Tel: 01224 273636 (24 hour service available)   Email: servicedesk@abdn.ac.uk