Teacher Version





Online Search

Cover Fundamentals of effective online search

Syllabus version 2.0





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Goals

Online Search enables Candidates to demonstrate their skills and knowledge in searching effectively for information. Candidates will be aware of different information sources (both traditional and online) and be aware of the advantages and disadvantages of the same. Candidates will appreciate the impact of social media and the access it can provide to a vast range of information.

Candidates will know how to use a search engine to carry out a search and to be aware of safety issues while browsing. Candidates will understand what an information need is and be able to develop a simple research plan. Candidates will be able to perform a wide range of targeted search tasks, taking advantage of the wide range of search features and filters available so as to efficiently search and refine their search inquiry to produce meaningful results for their work.

Candidates will be aware of the scope of information available and be able to search throughout web pages, images, blogs, maps, video libraries as well as academic resources. Candidates will be aware of various social media search tools and be able to search throughout different social media platforms.

Candidates will be able to evaluate their search results in terms of relevance to their work or project and be able to assess the currency and quality of the information and its sources. Candidates will be able to recognise any gaps in the information retrieved and amend their search plan to address the same.

Candidates will understand the concept of referencing in their work and understand the legal and ethical issues involved with publishing research results. Candidates will understand the concepts of Intellectual Property (IP), plagiarism and copyright and be able to reference any resources they use in their work or projects and appreciate the importance of referencing.



3-1 Information

3-1-1 Sources

3-1-1-1 Recognise traditional information sources and recognise their limitations.

There has always been a need in society to access information in order to stay informed, to make well-educated decisions and to improve educational and career prospects.

Information has always been readily available through traditional sources such as newspapers, books, libraries, archives, business/personal directories, educational establishments and scholarly texts. To access information in the traditional way meant going to a place such as a library, a bookshop or a newspaper shop to view the physical information source. It also meant that the content within those sources was static and could not be easily updated.

3-1-1-2 Recognise new information sources such as: websites, blogs, social media platforms, podcasts, video, etc.

With the advent of the Internet and the development of mobile communications, the ease of access to electronic information has meant that the ability to search for information from many different sources has become an important skill in itself. At the same time a range of hardware devices have also sprung up, allowing users to view information on everything from tablets to mobile phones to computers.

While the traditional outlets are still available, information can now also be found on the Internet in formats and technologies as diverse as images, audio, video, maps, podcasts, web logs (blogs) and text messages. Web 2.0 technologies — wikis, blogs, social networking, and so on — all encourage a more active, participatory role for users. Users no longer use the web just to obtain information, but instead create information and share it with others using these technologies. As a result, the range of information sources available to the user has grown exponentially with the advent of these technologies.

Podcasts, blogs and social media platforms will keep you up to date on news and opinions, often augmented by still images and video clips. The word 'podcast' is derived

from the words broadcast and iPod - from the success of the use of iPods.

A podcast is a digital file made available on the Internet for downloading to a portable player or computer or phone or tablet etc., usually free of charge. Typical examples of podcasts are a short video introducing a company and its services, or a weekly news update – e.g. NPR podcast, see Fig. 1 offers subscription to a podcast specifically for teachers.



Description

Truth for Teachers is designed to speak life, encouragement, and truth into the minds and hearts of educators and get you energized for the week ahead.



Blogs are like mini websites – they are free, easy to use, update automatically and are easily shared. A blog is an online journal that allows other users to read your thoughts and reply to them. Blogs are often shared on other social networking sites. Take Informa Middle East's Twitter account, for example, in Fig. 2 below. (https://twitter.com/informamea)



Fig. 2 – Informa Middle East's Blog (Twitter)

Other resources, such as maps and audio downloads can provide you with directions to your destination and music to keep you entertained on your journey. For example, Google Maps (maps.google.com) can help you find local businesses and give you driving directions.

3-1-1-3 Be aware of the advantages and disadvantages of online information for the purposes of making informed decisions.

Online information has become the norm when it comes to doing research. You can find information online for almost any subject imaginable, and this research can be conducted from your school, your home or anywhere with mobile data access.

Unfortunately, though, there are also disadvantages to the information found online. Anyone can post information online, which means there is a great deal of information that is inaccurate and/or not credible. You should also monitor the time you spend researching a topic, because what should take 15 minutes might end up taking several hours due to the enormous amount of information available.

3-1-1-4 Appreciate some key characteristics of social media such as: listening, sharing, commenting, questioning, answering and informing.

Social media relies on building relationships between users of social networking sites. Whether doing research for personal (private) use, a class project or for professional reasons, users have the unique opportunity of interacting with others on social networks. This allow users to:

- Listen to what others have to say this is usually done through posting messages, using for example Twitter (https://twitter.com)
- Share content including posts, photos, videos, pages and links that your connections may find useful or interesting.
- You can 'tag' users in a comment or message them privately if you want to ask other teachers or students about school-related subjects. Facebook (<u>https://www.facebook.com/</u>) and Instagram (<u>https://instagram.com/</u>) are good examples for cases like these.
- Create groups (public or private), allowing others to comment on content and/or ask questions to trigger class discussions using, for example, Facebook.

Encourage people to respond to their content. For example, a writer can express
their opinion in a blog or on a forum and invite readers to comment on it. The
writer can then respond to any comments from students who joined the
discussion. This allows readers to ask questions directly to the writer who in turn
can explain or elaborate on the original post.

Most social media platforms allow content to be published and cross-promoted with other platforms, which opens up the content to the largest possible audience.

3-1-1-5 Appreciate how social media can provide access to a vast range of useful information, apps, search content, top questions, polls, news and trends as well as webinars and other educational content.

Social media can provide access to a vast range of useful information. A search for content on any subject will return a lot of information which may need to be refined; there may be numerous references to forums and message boards where both sides of an argument or the advantages and disadvantages of a product or service are discussed at length. Current topical issues and trends are often discussed in blogs; leading experts on different subjects can share their current thoughts on their subject with the public through different social networking sites. Top questions posed on blogs and polls carried out on, Twitter, for example, provide insights into the latest positions in current affairs debates.

Webinars, short for a 'web seminar', is a presentation or lecture or workshop etc. that is transmitted over the web through, for example, YouTube (https://www.youtube.com/). This provides a wealth of information for users who may not have the opportunity to attend conferences or seminars; instead they can access it through the Internet from their home or work.

Most educational establishments have social media sites to engage with their students, giving them access to educational content and spreading awareness about their events. American University of Sharjah connects with users quite well on their Facebook page – see Fig. 3 below.

(https://www.facebook.com/wwwausedu/).



Websites developed by a community of users provide another source of information. These websites are referred to as **wikis**. A popular example is Wikipedia (www.wikipedia.org) (see Fig. 4 below) which is a web-based collaborative encyclopaedia project that covers almost every subject imaginable. Users can add and edit comments, enhancing its content constantly and in real-time. Many refer to this process as **crowdsourcing**.



Fig. 4 - Wikipedia Homepage

Social media accounts are easily accessed using PCs, laptops, tablets and smartphones, giving users access anytime and anywhere, as long as they have Internet access. Apps, or applications, are mini programs that are designed to carry out specific tasks on smartphones, tablets or other mobile devices; tasks such as finding information, accessing emails, checking the weather or reading the news.

Google Scholar (http://scholar.google.com; see Fig. 5) provides a free search of scholarly literature across many subjects and sources.



Fig. 5 - Google Scholar

Quiz

Q1- You wish to access some information and academic articles about a famous theoretical mathematician. Which online source could help?

- a- Google Scholar
- b- Bing Expert
- c- Safari Guru
- d- Google Documents

Q2- You wish to post a video clip of about 3 minutes in length to help explain to classmates about the Principle of Archimedes. Which platform will you use?

- a- Twitter
- b- LinkedIn
- c- YouTube
- d- Blogger

Q3- You are working on a geography project about coastal erosion. To begin you need to define the current coastal positioning and outline. Which online search service will help?

- a- Google Surveyb- Safari Outline
- c- Google Maps
- d- Bing Navigator

Q4- You are searching for trending topics online. Which social media service does this apply to?

- a- Blogger
- **b-**Twitter
- c- MySpace
- d- Flickr

Answers Overleaf

Answers

Q1- a- Google Scholar

Q2- c- YouTube

Q3- c- Google Maps

Q4- b- Twitter



3-2 Online

3-2-1 Search Engines

3-2-1-1 Know how to carry out a search using a search engine and understand how a search can be widened or narrowed.

A **search engine** is a programme that searches the web for you and displays a list of appropriate web pages. Some popular examples are:

- Google (www.google.com)
- Bing (www.bing.com)
- Yahoo (www.yahoo.com)

Carrying out a search is a simple process in which the user enters a string of words related to the topic they wish to research into the search box. Once the words have been entered simply click on the 'Search' button and results will be displayed on your screen. An example is shown in Fig. 6 and Fig. 7 using Google's search engine.

	Go	ogle	
Football	Google Search	I'm Feeling Lucky	

Fig. 6 - words entered into Google's search engine



Fig. 7 - Google's search results on 'football'

Once the results are displayed, there are several options to narrow the search using options available. From Fig. 7 above, notice that there are tab headings: Web, News, Images, Maps, Videos, etc. Using any of these options will filter the search to show only results in each category.

Second, by selecting 'Search tools', three options are immediately provided of which the first, 'Any time', is set by default. By clicking on the drop down arrow you are provided with ranges of time to narrow the search to a specific time period. This is extremely helpful when searching for more current information or recent news articles. See Fig. 8.



Fig. 8 - 'Search tools', 'Any time' drop down menu for Google

Another method is by simply adding more words in the search string specific to the topic. For example, type 'football math', as seen in Fig. 9, and see what appears in the results.



Fig. 9 - Narrowed search using additional words, using 'football math'

Notice that, in Fig. 7 the search produced 1.3 billion results using 'football' while in Fig. 9 the search produced only 47.2 million results. In addition, if you look at Fig. 9 carefully, certain words are in **bold** lettering. Therefore the search was not only narrowed, but Google produced the result that was believed to be most important based on what you typed in the search engine, because the specific topic of 'math' was addressed more closely with the additional words. We will look at some more advanced search engine features in the next section to assist you in becoming more productive and efficient while searching.

3-2-1-2 Know how to use advanced search engine features to set preferences, such as: exact words or phrases, language, region, time, terms appearing, file type, etc.

Google.com is used for all the examples contained within this section. There are many search engine techniques (including ones on social media platforms such as YouTube and Twitter) that can greatly increase your productivity and efficiency if used correctly. This section will address several particularly for Google, but don't hesitate to research other techniques further on the Internet.

To use an advanced search option go to http://www.google.com/advanced_search.

Exact words or phrases search, refers to a result that forces the search engine to use a specific set of words in a particular order. For instance, "UK: Bike ride keeps students motivated", would only show results that have the exact phrase in the order provided. This is a good tool if you saw an article and remembered the title and you wanted to search for it again. Try the example above in any search engine making sure to put the quotation ("") marks at the beginning and the end of the phrase.

Language and region are typically set automatically by the search engine based on your location, which is determined by your IP (Internet Protocol) address used by your Internet provider. These settings can be set manually using the following link: http://www.google.com/advanced_search

Time refers to the search option discussed in the previous section. There is one additional option shown in the list in Fig. 8, and that is 'Custom range...', which provides you with greater control over the exact time frame of the search results.

File type searches allow you to dictate the exact file type you are searching for on the Internet. For instance, you wanted to search an Adobe Acrobat (pdf) file for climate change. Try entering 'climate change' in the Google search box and select the file type: Adobe Acrobat (pdf). By using the command 'filetype:' this will limit the search to links or pages with that filetype attached. Refer to Fig. 10 and see the difference.



Fig. 10 - Results using the 'filetype:' command

3-2-1-3 Set preferences to exclude explicit material in searches.

When teaching young students, some search results may be inappropriate for them to see. Setting the search preferences will help filter unwanted results. By clicking on the 'Settings' link in the 'Options' (wheel) icon at the bottom-right corner of Google.com, for example, you can select 'Search settings'.



Fig. 11 - Google's search engine settings drop down menu

The first option that displays on your screen is the 'SafeSearch' filters and by checking the option 'Filter explicit results' you will effectively exclude explicit material from the search. Make sure you click on 'Save' at the bottom of the page to apply the change. See Fig. 12.

Google	
Search Settings	
Search results Languages Location	SafeSearch filters Turn on SafeSearch to filter sexually explicit content from your search results. Filter explicit results. Lock SafeSearch
нер	Google Instant predictions When should we show you results as you type? Only when my computer is fast enough. Always show Instant results. Never show Instant results.
	Results per page 10 20 30 40 50 100 Faster Slower
	Private results Private results help find more relevant content for you, including content and connections that only you can see.

Fig 12 – Google's 'SafeSearch filters' option to filter explicit results

Note that these filters are not perfect and they should *not* be the only tool that a parent, guardian, or teacher might use to protect their children.

3-2-1-4 Be aware of safety issues when browsing active content, cookies, pop-ups, etc. – and know how to use your browser security settings.

This section will show you how to minimise your exposure to risks associated with browsing on the Internet. Here are three concepts you should keep in mind while searching.

- Active content refers to a website that is interactive. Website developers rely on scripts (small programmes) that are executed within the web browser to increase functionality or add better-looking designs. Java and ActiveX are commonly known scripts used for web browsing. Although they are not malicious, attackers regularly use those scripts to download or execute malicious code into your computer.
- 2. Cookies are files placed on your system to store specific data for websites. Cookies can contain basic information of the pages you have visited on the website or more specific information such as your credentials used to access the

site. Cookies are designed to be readable only by the website being used but of course there are ways to decipher the cookie files and use them to gain access to information an attacker might use to harm their victim.

3. Pop-ups refer to a form of online advertising intended to attract potential customers. Pop-ups inherited the name because generally a new browser window pops up in front of the active browser window. There are certain virus attacks and websites that will endlessly continue to generate pop-ups overloading your computer processor, thus slowing everything down and/or crashing the computer.

Some Safe Browsing practices:

- Update anti-virus and anti-malware programmes
- Regularly delete cookies in browsing history from your Internet browser menu options
- Use a firewall programme
- Never click on pop-ups
- Avoid using your personal e-mail address for random registrations. If you are browsing the web and come across a form that you want to fill out, but you are not sure what it will do, you may want to use a throwaway email address to fill it out. View these Google search results for some Disposable Email services (Note: some sites disallow use of these accounts)
- Use programmes such as WebOfTrust (https://www.mywot.com/) or McAfee Site Advisor (www.siteadvisor.com) to help avoid sites that are known for infecting computers.

Quiz

Q1- Which of the following is an example of a Search Engine?

- a- Internet Explorer
- b- Bing
- c- Firefox
- d- Opera

Q2- What are Internet browser pop-ups?

- a- Files stored on your system
- b- Online advertising
- c- Anti-virus programme
- d- Web browser

Q3- How would you narrow a search on the Internet?

a- Select one of the results' links
b- Update your Internet browser
c- Add more words to the search string
d- Write the word 'narrow' in the search box

Q4- What are examples of browser components that could present potential safety issues while browsing the Internet?

- a- Active content
- **b-** Cookies
- c- Pop-ups
- d- All of the above

Answers Overleaf

Answers

- Q1- b- Bing
- Q2- b- Online advertising
- Q3- c- Add more words to the search string
- Q4- d- All of the above



3-3-1 Information Need

3-3-1-1 Describe the information need for your project / assignment. Identify your topic, know what you are and what you are *not* looking for.

While working on a projects, it is important that you take the time to define your research topic. One good technique is to formulate the search as a question and identify the main terms used in the question.

In order to structure a search, you may wish to ask yourself what it is you're searching for. Is it a topic (place, thing, idea), a person (an author or person inside a company with whom you want to speak) or a product/service (to buy and/or find out information)?

Next, identify the main subjects in the question. Do this by picking out the main terms or keywords used.

3-3-1-2 List some possible information sources to address the information you need to describe.

To find information for your specific topics use the various search engines and directories. To find people, for example, use the search directories dedicated to people. There are even search engines dedicated to all kinds of subjects in the field of education. Refer to Teach-nology as a prime example. (http://www.teach-nology.com/worksheets/math/)

Here are some general information sources you might consider depending on your requirements:

- Online encyclopaedia,
- Sources cited in articles,
- Maps or satellite images,
- Online newspaper archives,
- Books,
- Images, pictures,
- Documents

3-3-1-3 Estimate the potential extent / scope of your information search.

We now have an overabundance of information available to us from many different sources. The key repository of most of this information is the Internet. This can be advantageous when we have an instant information need. However, the problems begin when we try to locate the information that will satisfy this need.

With the vast amount of information currently available on the Internet how do you go about accessing what you need? This is a subject in its own right as there are many places you can search. You can search in dozens or hundreds of different ways, depending on what you are looking for and how you prefer to search.

Searching requires a bit of practice, as there are well over a billion webpages out there, most of them with nothing to do with what you are looking for.

3-3-1-4 Narrow the search scope to arrive at a preliminary search focus for your project / assignment.

Suggestions for narrowing your search scope:

- Be more specific. For instance, add geographic terms to your query. To give an example, you could add a city or country to your search words. Also consider restating the question; this may suggest ways to broaden or narrow your topic.
- Draw up a list of synonyms or related terms. This will provide you with extra terms to use when searching for information. To search for an exact phrase of more than one word, use quotation marks ("").
- Check out the Advanced Search options in the search engine as discussed in the previous chapter.

3-3 Prepare

3-3-2 Keywords

3-3-2-1 Develop a search plan by identifying suitable keywords, synonyms, or search terms.

It is always advisable to plan your search offline in the first instance. For example, write down on a piece of paper what it is you are searching for. Identify the main search themes or topics, and then list keywords that may help you access this information.

A **keyword** is a single word or phrase that defines a topic, subject area or concept. Remember to list any synonyms as well. Synonyms are different words with identical or at least similar meanings. For example, if you type the word 'learning' into a search engine, you will receive over 1.1 billion results. However, it is important to remember there are many words related to the word learning, such as:

- Education
- Writing
- Studying
- Academics
- Training

Use many synonyms for a word when searching for a subject to avoid missing a website that may contain important information. Once you have created your list, open your web browser and begin typing your keywords into the search engine's search box; see the example in Fig.13 below, which shows the search box on Wikipedia (http://en.wikipedia.org/wiki/Main_Page).

A an o					C	Create account 🔒	Log in
ο Ω W J	Main Page Talk	Read	View source	View history	Search		Q
WIKIPEDIA The Free Encyclopedia	Welcome to Wikipedia, the free encyclopedia that anyone can edit. 4,239,055 articles in English		• A • B • G	urts Nography Geography	HistoryMathematicsScience	SocietyTechnologyAll portals	

Fig. 13 - Wikipedia - search box

Keep in mind that this is not just for one-worded terms. You may come across a longer, more specific phrase that is relevant to you (e.g. '4 different styles of learning').

To understand more about how search engines connect you to the right information, the

following terms distinguish the online services you use in your search:

- **Search engines** programmes that search the web for you and display a list of appropriate webpages (turn to Section 3.2.1.1)
- Search directory a resource created and collected by online users that lists websites by category and subcategory
- **Search spiders** programs that are used to feed pages to search engines. It's called a spider, or web crawler, because it crawls over the web
- Search aggregators programmes that gather results from multiple search engines simultaneously

If a search engine is producing results that are too scattered to be useful and you cannot think of any better words, refer to a search directory. Here are a few examples you can use:

The Open Directory Project (ODP) at http://dmoz.org (see Fig. 14 below), claims to be the most comprehensive human-reviewed directory of the web, it was built and is maintained by volunteers.



Fig. 14 - The Open Directory Project homepage

If you know what you're searching for, a directory lets you search in a more structured way than a search engine, it has named categories with entries assigned to them partly or entirely by human cataloguers (as shown in Fig. 14 above). If you think of it in terms of a book, a directory would be the table of contents, with the search engine as the index.

As an example, if we want to search for a recipe for lamb:

- Type 'lamb' into Google's search box
- Hundreds of millions of pages are returned (see Fig. 15). Many of these contain good information, but you will want to narrow this search further.



Fig. 15 - Google search result for the word lamb

• To refine the search, simply add the word 'tagine'; a search for lamb tagine returns just over a million pages (remember, this figure will change when Google updates its database). This is still too many pages, but there are other ways to narrow this search further, and we will review this more in the next section.

3-3-2-2 Understand how relational operators (Boolean), AND, OR, NOT, help address your search goals.

The Internet is a vast computer database. As such, its contents must be searched according to the rules of computer database searching. Most database searching is based on the principles of Boolean logic. Boolean logic refers to the logical relationship among search terms, and is named after the British-born Irish mathematician George Boole.

Boolean operators allow you to extend or minimise a search, depending on what you are searching for. Boolean logic consists of three logical operators:

- OR
- AND
- NOT

If you want to construct search queries using Boolean logical operators, you will need to experiment with search engines and see what happens when you search. You can try some of the search statements shown in the following example.

Examples:	
Query:	I need information about cats.
Boolean logic:	OR
Search:	cats OR felines
Query:	I'm interested in dyslexia in adults.
Boolean logic:	AND
Search:	dyslexia AND adults
Query:	I'm interested in radiation, but not nuclear radiation.
Boolean logic:	NOT
Search:	radiation NOT nuclear
Query:	I want to learn about cat behaviour.
Boolean logic:	OR, AND
Search:	(cats OR felines) AND behaviour

Note the use of parentheses in the last search, this tells the search engine to process the two related terms first. Next, the search engine will combine this result with the last part of the search.

3-3-2-3 Recognise common relational operators in search: +, -, * ().

Few search engines nowadays offer the option to do full Boolean searching with the use of the Boolean logical operators. It is more common for them to offer simpler methods of constructing search statements.

Keyword searching refers to a search type in which you enter terms you wish to retrieve. Symbols are used to represent Boolean logical operators. In this type of search on the Internet, the absence of a symbol is also significant, as the space between keywords in most search engines defaults to AND.

Implied Boolean logic has become so common in Web searching that it may be considered a de facto standard.

- + is equivalent to AND; there is no space between the plus sign and the word.
 (+ is the assumed default)
- is equivalent to NOT, there is no space between the minus sign and the word.
- * matches any word when used in a phrase

Some practical examples follow.

Example Using +

Query: I'm interested in world population and the African continent.

Search: world population+Africa

Fig. 16 below shows these search results using Google:



Fig. 16 - World population+Africa search results

Example Using -

Query:	I want information about radiation but not nuclear radiation
Search:	radiation -nuclear

Fig. 17 shows the results using Bing:



Fig. 17 - radiation -nuclear search results

Example Using *

Query:	I want to learn about feline and cat behaviour
Search:	cat*feline behaviour

Fig.18 shows how the search results display behaviour of cats and/or felines.

A Home	Mail	Search	News	Sports	Finance	Celebrity	y Weather	Answers	Flickr
YAHO	D!	cat*feline	e behaviou	r			×	Search	
		Web	Images	Video	News	More ~	Anytime ~		
		Ads related	to: cat*felii	ne behavio	ur				
		Cat Behaviour - international cat care I Formerly icatcare.org/advice cat-behaviour - The information provided nere has been put together by experts in feline health, behaviour and welfare. However, it is not intended to be used as a substitute for							
		Everythi cats abou Cat behavi destructive	ng You N th com/od/k ior problems scratching o	leed to behaviortra ,including a an be corre	Know Abc aining/qt <mark>ca</mark> ttention-seek cted by follov	out Cat Be tbehavior ing behavior ving the	havior 01.htm ↓ , biting, aggressio	n, and painful	or
		Feline b www.vetb Cats are es (ailurophile	ehaviour ook.org/wi ssentially aso s), or sociop	Cat - V (cat/nde cial. This is athic by ailu	etbook x.php Felir often misco irophobes. Th	ne_behavio ntrued as dem ne reason for	un ~ reaning by cat low their asocial natur	vers re	

Fig. 18 - Yahoo search

3-3-2-4 Understand how using a controlled vocabulary helps address your search goals.

A controlled vocabulary is a carefully selected list of words and phrases used to tag documents so that they may be more easily retrieved by a search. It provides a way to organise knowledge for subsequent retrieval.

Using controlled vocabulary forces the user to focus the search query on what is relevant. It will also reduce ambiguity and reduce the need for synonyms in searches.

Quiz

Q1- What kind of online service will allow you to search for people?

a- Search Engine
b- Search Directory
c- Search Spiders
d- Search Aggregators

Q2- Which kind of punctuation marks will help you search for a phrase of more than one word?

a- Exclamation marks	
b- Quotation marks	
c- Asterisks	
d- Open brackets	

Q3- In search, what are synonyms?

- a- Different words with the same meaning
- b- Different words with different meaning
- c- Similar words with alternative meaning
- d- Random words with the same meaning

Q4- Which one of the following is not one of the three logical Boolean operators?

a- OR b- NOT c- AND d- EXCLUDING

Q5- Which one of the following is a relational operator and refers to a match for any word within a search phrase?

- a- + b- c- ()
- **d-** *

Answers Overleaf

Answers

- Q1- b- Search Directory
- **Q2- b- Quotation marks**
- Q3- a- Different words with the same meaning
- Q4- d- EXCLUDING
- Q5- d- *

Chapter 3-4		
Search		
_	3-4-1	Start
	3-4-2	Qualify
	3-4-3	Specify
3-4-1 Start

3-4-1-1 Select some suitable keywords to carry out a search.

The topic of identifying suitable keywords was covered in **Chapter 3.3.2 Keywords**. In this section you will complete an exercise using keywords to carry out a search.

Exercise – Use keywords in a search

Wikipedia is used for this exercise to find information about the United Nations Secretary General.

- 1. In your browser's address bar key in http://en.wikipedia.org/wiki/Main_Page
- In the search box key is the phrase 'United Nations Secretary General'; as you key in the words you will notice that suggestions are made for your search, see the Fig. 19



In the search box of any search engine – Google, Yahoo, AOL Online, mywebsearch, Bing, etc. you can key in your choice of keywords to carry out a search. You can also use AND, OR, NOT, * and – (as discussed previously in Section 3.3.2) in your keyword searches.

3-4-1-2 Enter a simple query to carry out a search.

You can narrow your searching by using a few words in the form of a query, for example if you were interested in finding information about troubleshooting for the 6th generation iPod Nano, follow these steps:

- 1. Access your favourite search engine.
- 2. In the search box type iPod Nano 6th generation troubleshoot and press Enter.
- 3. Browse the search results, see the example using Google search in Fig. 19



Fig. 19 - Google search results

3-4-1-3 Search for an exact phrase.

Finally, you might not wish to search for generic words that may appear on every page on a website. You may know the exact description of what you are searching for.

In order to achieve an exact match on a phrase you would place quotation marks around the text. This will then retrieve the phrase for you in the order specified in your search. For example, typing the song title 'I have nothing to declare except my genius' into a search engine returns over 1.6 million pages. However, by enclosing the phrase in quotation marks, the numbers of pages are greatly reduced to less than 70,000.

In the first instance, most occurrences and formats of the words would have been found on different pages. In the second example, only the complete phrase would have been returned. See Fig. 20.



Fig. 20 - Google search results

3-4-2 Qualify

3-4-2-1 Include or exclude words in the search.

You can include or exclude words in your search, as shown in this example.

You decide to search for information on both iPods and other mp3 players -

- In the search box of any browser key in mp3 players OR iPod
- Now we wish to exclude a word: we are not interested in looking at the iPod Nano model so we will exclude it from our search.
- Key the following text into the search engine mp3 players OR iPod -Nano

The pages returned would contain no information about the Nano, see Fig. 21.



Fig. 21 - Search results for mp3 players OR iPod but not the Nano

You could exclude further MP3 players by typing minus again and the name of another MP3 brand, for example **–Creative**.

3-4-2-2 Search using synonyms or similar words.

Synonyms are different words with identical or similar meanings (see Section 3.3.2.1), which can be used in your searches. If you precede a word with a tilde (usually a keyboard symbol – "~"), Google will search for all pages that include the word and all appropriate synonyms. For example you type ~famine in to the search box, this is the equivalent of typing 'famine OR scarcity OR deprivation OR shortage OR starvation'.

3-4-2-3 Search using a wildcard element (*) in a query.

You can use the asterisk (*) character to indicate a wildcard search. This is useful when you are trying to match a term that may or may not be plural or might use one of several verb tenses.

For example chemi* will find results containing words that begin with 'chemi' (e.g. chemical, chemistry, chemist).

If you weren't sure whether you wanted to find information on carbon monoxide or carbon dioxide, you could use the wildcard to have both options appear in the search results, as demonstrated in the example in Fig. 22 below.



Fig. 22 – Google search for 'carbon *oxide'

If you want to search for documents where two words do not appear side by side, insert the * operator between the two keywords in the query - while still surrounding both keywords by quotation marks. This searches for instances where the two keywords are separated by one or more words.

The only stipulation you must follow for the asterisk to work is that you must have at least four non-wildcard characters in a word before you introduce a wildcard.

3-4-2-4 Search pages from your country, or from the entire web.

You can specify where you want your search results from – either from your own country or a specific region. For example, using Bing, you can change the setting by clicking on 'Preferences', then 'Region', as shown in Fig. 23 below.

5				
SEARCH	REGION Region	Your region is set to A	rab countries - English	
LANGUAGE		Argentina Australia	Indonesia Italy	South Africa Spain
HOMEPAGE		Austria Belgium - Dutch	Japan Korea	Sweden Switzerland - French
REGION		Belgium - French Brazil	Malaysia Mexico	Switzerland - German Taiwan
		Canada - English Canada - French	Netherlands Norway People's Republic of	Turkey United Kingdom United States - Easlish
		Germany Hong Kong S.A.R. India	China Poland Russia	United States - Spanish
			Saudi Arabia	

Fig. 23 - Bing – change country setting to tailor your search

3-4-2-5 Search within a specific website.

The search engine can also be used to restrict your research to a specific website. In this instance, you enter the entire top-level URL, like so: www.khaleejtimes.com/ (the Khaleej Times website).

To search only within the website for a particular topic, in this example – education, type the following words into the search box: site: www.khaleejtimes.com/ education (see Fig. 24.)

Your results will only include pages listed within the site.



Fig. 24 - Search within a specific website on Google - Khaleej Times

3-4-3 Specify

3-4-3-1 Search throughout image categories only and apply different image search options.

Search engines allow you to specify results that only contain images, using the example above of the Khaleej Times search, see Fig. 25 – click on 'Images' and conduct the same search to return results that are only images.



Fig. 25 - Search within a specific website on Google Images - Khaleej Times

3-4-3-2 Search throughout video categories only and apply different video search options.

Search engines have options to search for video content only. For example - Google now displays a panel to the left that allows you to specify more precise results. Click on 'Images' and the results changes to return only images. Selecting 'Search tools' under the Images tab expands to display a range of image-related options such as size, colour and type.

3-4-3-3 Search throughout blogs & discussion forums.

Searching through blogs is a feature on search engines. In fact, there are blog search engines – e.g. http://www.blogsearchengine.org/, shown in Fig. 26 on the next page – where you can enter your search keywords in the search box. You may need to set up your blogging account first for certain websites.



Search Term \rightarrow				Search!
	🐈 Favorites	StumbleUpon	Del.icio.us	Google Bookmarks
		Fig. 26 – Blog	Search Engine	

Other examples include -

Blogger	http://www.searchblogspot.com/
Ice Rocket	http://www.icerocket.com/

Similar to a regular search engines like Google, blog search engines will usually provide you with a short excerpt or a description of the blog post highlighting your search terms.

Sub-reddits, discussion topics you can find on reddit.com, have very interactive discussion forums (see Fig. 27 below). You can key in your own search words or select one of the groups listed.

Hereid E	gedu		
↑ 15 ↓	N.	Children with a Religious Upbringing Show Less Altruism seemitoemeteen.cox Submitted 7 hours ago by vitrue 2 comments share	Search reddit Q
↑ 121 ∛		Majority of U.S. public school students are in poverty weak-agonitation dubmited 21 bours ago by gas32 11 comments share	username password
↑ + +		US Marshals arresting people for not paying their federal student loans todinautan.com Submitted 6 minutes ago by ghostolpennwast comment share	education 46,141 readers, ~24 here
* • •	Ð	Free Software for Education - GNU Project areasy Submitted 11 minutes ago by pizzalole_ comment_share	The goal of <i>ICEducation</i> is to provide a community in which educational stakeholders can participate in meaningful, reflective, and thought-provoking discourse about educational policy, research, technology, and politics.
↑ • • •	-8	Rise in self-harm linked to stress of new school curriculum vesteren zen. Submitted 20 minutes ego by Vopgun2016 1 comment share	Subreddit rules: 1. Be on-topic and relevant 2. Be civil

Fig. 27 - Reddit - Education Subreddit https://www.reddit.com/r/education

Quora (see Fig. 28) is another prime example, where users ask, answer and edit questions based on topics. Users organise information into different topics to make it easier to find, collect and share information with others.



Fig. 28 – Quora – Search Results after typing 'Education'

3-4-3-4 Apply a range of time-related search filters.

You can specify how current the information returned is or even specify that you want information posted in a certain date range. For example Google's search settings (show below in Fig. 29) allow you to specify times from a range of options.

Then narrow your results by						
language:	any language					
region:	any region	*				
last update:	anytime	•				
site or domain:	anytime					
terms appearing:	past 24 hours past week					
SafeSearch:	past month					
reading level:	no reading level displayed	¥				
file type:	any format	•				

Fig. 29 - Google's search settings - Times

3-4-3-5 Apply other search filters such as Verbatim.

Further options available in Google's search settings include Dictionary, which will return dictionary definitions of the search term. Google does this when you type 'define' in front of the word in the search box. Verbatim will return webpages containing the exact phrase only.

Google	defin	ne:"exact pl	hrase"					Ļ	Q
	AII	Images	Videos	News	Maps	More •	Search tools		
	About Sea Wh you Us res	t 10,900,000 m nen you sea arch terms nen you wa ur search e sing an Ex earchhelp.co	results (0.45 arch for an in the phra int to searc expression cact Phras ch.com/Usir	seconds) exact pl ase in the ch using a with quot se in you ag_an_Exa	nrase, yo exact ord an exact r ation man ation man r search act_Phras	u are sear ler in whic bhrase , yo bhrase , yo ks. e_in_your_s	ching for all the h they appear. ou simply surround Search.htm		
							Feedback		

Fig. 30 – Google's 'define' feature

Quiz

Q1- Which Google Search tool is a content filter which blocks objectionable or adult content?

- a- Safe Search
- b- Safe Guard
- c- Safe Mode
- d- Safe Browse

Q2- You have placed quotation marks around your search phrase. What does this mean in terms of your search?

- a- Approximate phrase match
- b- Exact phrase match
- c- Alternative phrase match
- d- Substitute phrase match

Q3- Which one of the following is a Boolean operator that will exclude a phrase from your search?

- <mark>a- +</mark>
- **b-** -
- **C- /**
- d- &

Q4- Which punctuation mark refers to a wildcard in search?

- a- + b- & c- *
- **d-** ""

Q5- Which formulation in your search will limit search results to the UK domain only?

- <mark>a-</mark> :UK
- b- *UK
- c- -UK
- d- .UK

Answers Overleaf

Answers

Q1- a- Safe Search

- Q2- b- Exact phrase match
- Q3- b- -
- Q4- c- *
- Q5- a- :UK

Chapter 3-5		
Refine		
	3-5-1	Target
	3-5-2	Social Media
	3-5-3	Other



3-5-1 Target

3-5-1-1 Search for information setting specific file types (.pdf, .ppt, .doc).

Search engines have options to restrict search results to a specific file type. Google search is used in the following example:

- 1. Use Google to search for information.
- 2. Click on the 'Options' button, then click on 'Advanced Settings'
- 3. Under 'Narrow Your Results' select an option from the 'File Type' dropdown
- 4. Click the 'Advanced Search' button (see Fig. 31 below)

Then narrow your re by	esults	
language:	any language	
region:	any region	•
last update:	any format	
	Adobe Acrobat PDF (.pdf)	
site or domain:	Adobe Postscript (.ps)	
	Autodesk DWF (.dwf)	E
terms appearing.	Google Earth KML (.kml)	
SafeSearch:	Google Earth KMZ (.kmz)	
	Microsoft Excel (.xls)	
reading level:	Microsoft PowerPoint (.ppt)	
file type:	any format	•
usage rights:	not filtered by licence	

Fig. 31 - Google search for specific file types

As you can see from Fig. 31 above, the type of file is listed alongside the file extension.

3-5-1-2 Filter a search to include/exclude domain extensions.

A domain extension is the last part of the domain name – the letters immediately following the final dot in an Internet address. You can filter a search to include or exclude domain names and extensions, the following example uses Google search.

- 1. Click on the 'Options' button, then click on 'Advanced Settings'
- 2. Under 'Narrow Your Results' in the 'site or domain': key in the name of the site, e.g. wikipedia.org will only return results from Wikipedia; .gov will return results from government sites; .UK will return results from UK websites, etc.
- 3. Click the 'Advanced Search' button (see Fig. 32 below)

Then narrow your results by			
language:	any language	*	Find pages in the language that you select.
region:	any region	*	Find pages published in a particular region.
last update:	anytime	•	Find pages updated within the time that you specify.
site or domain:			Search one site (like wikipedia.org) or limit your results to a domain like .edu, .org Or .gov
terms appearing:	anywhere in the page	*	Search for terms in the whole page, page title or web address, or links to the page you're looking for.
SafeSearch:	Show most relevant results	-	Tell SafeSearch whether to filter sexually explicit content.
reading level:	no reading level displayed	•	Find pages at one reading level or just view the level info.
file type:	any format	-	Find pages in the format that you prefer.
usage rights:	not filtered by licence	-	Find pages that you are free to use yourself.
		Advanced Search	

Fig. 32 - Google Advanced Search - includes or excludes domain extensions

3-5-1-3 Refine a search to a specific domain.

You can use the site operator to restrict your research to a specific website. In this example, to search for information about peacekeeping on the United Nations website (www.un.org) using Bing, follow these steps:



The search results will return results relevant to the Wikipedia's site only. (See Fig. 34 below)



Fig. 34 - Bing search results

3-5-1-4 Refine a search to words in the URL or text in the website body text.

You can refine a search to words in the URL or text in the website body text. The inurl: and allinurl: operators let you restrict your search to words that appear in web page addresses (URLs).

For example, to search for sites that have the word "GCC" in their URL enter this query in the search box:'gcc'

Use the **allinurl**: operator to retrieve multiple words in the URL. For example **allinurl**: **GCC news**. (See Fig. 35)

Google	allinurl:gcc news	Ļ	٩					
	All News Images Videos Maps More - Search tools							
	About 59,500 results (0.40 seconds)							
	Fiscal challenges weigh on GCC health care investment gulfnews.com//fiscal-challenges-weigh-on-gcc-health-care-investment ▼ 2 hours ago - Dubai: The GCC governments have embarked on massive investment plans to upgrade health infrastructure but the sharp decline in oil prices GCC news from Gulf News - International Middle East LIAE							
	gulfnews.com/in-focus/region/gcc?page=gulf+cooperationNews Gulf News Report. Saleh Al Mulla was arrested after insulting Kuwaiti ruler and criticising visit by Al Sissi. KuwaitEgyptAbdul Fattah Al Sissi · GCC condemns							
	GCC FTA left off Australia's new trade minister's priority list gulfnews.com//gcc-fta-left-off-australia-s-new-trade-minister-s-priority 6 hours ago - Dubai: A Free Trade Agreement (FTA) with the Gulf Cooperation Council (GCC) may no longer be a top priority for Australia, according to							

Fig. 35 – Google's allinurl:"GCC" search results

Although URL's are important, it is more likely you will want to search the body of the text of your web pages. The operators **intext** and **allintext** can be used in this context.

For example:

To search for one word (e.g. literature) in a website type 'intext:literature'. To search for several words (e.g. classic literature) type 'allintext: classic literature'

(Note: There must be no space between 'intext:' and the following word.)

3-5-2 Social Media

3-5-2-1 Recognise the types of information that can be found on social media applications: personal, social, criminal, professional, groups, events, images, videos, etc.

You have learned of the various types of social media platforms such as social networking sites, blogging and microblogging sites, media sharing, and bookmarking sites. Each one of these platforms carries various types of information.

This information could include personal information, social interactions (e.g. Twitter), professional (e.g. LinkedIn), groups and events (e.g. Facebook), images (e.g. Instagram) and videos.

Criminal information though is one you have to be careful of, especially depending on the rules of the country in which you reside. Criminal information has a broad definition and could be explicit photos, or propaganda about your country's government, or information on how to perform a criminal act. Seeing or reading might not always be a crime, but using caution and understanding the laws of your country will greatly reduce your risk of breaking those laws.

3-5-2-2 Be aware of social media search tools, such as, Social Searcher, Social Search, Social Mention, Smashfuse, etc.

There are search engines that specifically address social media platforms and ignore the static websites. Such search engines include Social Searcher, Social Search, Social Mention, Smashfuse and others.

These are not just simple search engines. Installed in each one of these applications are analytical tools that provide trending topics and other great social media features. One advantage is that you do not need to log into your personal accounts to get this information from all the various social media platforms.

Google, Bing or Yahoo can sometimes be sufficient, but using these engines can provide that little extra quality information specific to social networks.

3-5-2-3 Know that you can use Boolean search on Twitter, Facebook and Google+ to get more detailed information from social media.

Boolean logic, as described earlier, is the use of AND, OR, and NOT. The same search logic can also be used on certain social media sites. So if you are specifically looking for a subject that contains two or more words make sure to use the "+" sign between each word. If you want to exclude a word you can use "-" just before the word. OR with any word is always the default with all search engines so you do not need to add any special signs; just search the words or phrase.

3-5-2-4 Search throughout different social media platforms to find users, events, interest groups.

If you want to search for specific people, use the appropriate social media site. For academics or business people, it makes sense to search with LinkedIn as this is the platform most likely to be used by these people (see Fig. 36 below).

Find People	Advanced People Search	Reference Search	Saved Searches	
Keywords	:		Title:	
First Name	:			Current or past V
Last Name	:		Company:	
Location	Located in or near: V		School	Current or past V
Country	Oman	\sim	301001.	
Postal Code	:			
Within	50 mi (80 km) 🗸 🗸			
		Sea	rch	

Fig. 36 - LinkedIn Advanced People Search (http://www.linkedin.com/search?trk=advsrch)

Similarly, if you are researching musicians or artists, your first place to look should be Soundcloud, YouTube or MySpace. Search on Facebook, Google+ or Twitter for friends and family.

Using the various social search engines provided in the previous section can also assist you in finding events, interest groups or any other social topic.

3-5-2-5 Search web logs (Blogs), micro-blogs.

A blog – short for "web log"- is a personal website that is updated frequently with commentary, links to other websites, and anything else the author might be interested in.

Blogs are usually maintained by an individual, with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse chronological order. "Blog" can also be used as a verb, meaning to maintain or add content to a blog.

In the example shown in Fig. 37 below, you can browse recent posts or search for topics of interest.



Fig. 37 - Science Blogs (http://scienceblogs.com/)

Many blogs provide commentary or news on a particular subject; others function as more personal online diaries. A typical blog combines text, images, and links to other blogs, web pages, and other media related to its topic. The ability for readers to leave comments in an interactive format is an important part of many blogs.

To search these blogs or micro blogs you can individually search the website or social media platform such as Twitter for microblogging. You can also use search engines, for example www.searchblogspot.com, which is a dedicated search for blogging sites.

3-5-3 Other

3-5-3-1 Search for people, homepages.

To a search engine, a person's name, address or phone number is just another piece of information stored in the database. There are two broad categories of search for people on the web: those who look for people with web and email addresses, and those who look for people in real life with phone and street addresses. The simplest way to search for a person is to look up the name using a standard search engine.

Enclose the name in quotation marks to restrict the numbers of results you get back. The more unusual the name, the better this technique works. You need a more focussed approach if you need to find one of the millions of results when searching for "John Smith" on Google.

Most telephone companies now provide online access to their standard and classified directories, white-pages and yellow-pages respectively. You can find someone's phone number, but you generally need at least a last name and a partial address such as city or state.

To find a person's homepage, log onto some of the social networking websites, such as Facebook (www.facebook.com) or LinkedIn (www.linkedin.com).

Using Facebook to search for a person, for example (see Fig. 38 below), is straightforward, you simply key in the person's name and click the search button.



3-5-3-2 Search within personal or business directories.

If you want your searching activity to be more focused then use a directory. The basic difference between a search engine and a directory is that a search engine's data is assembled in a highly automated manner and a directory is assembled by people.

For example, in the case of Google, automated GoogleBot software is sent to crawl the Web, and then uses a proprietary formula to match the pages to users search queries.

A directory, on the other hand, is assembled by a team of human editors. Thus, if you know what you are looking for, the directory option is probably the better route to follow. The largest web directory is DMOZ, also known as the Open Directory Project (ODP), and is constructed and maintained by a community of volunteer editors. Like other directories DMOZ is highly structured and ordered; thousands of human editors trawl through sites. Once a site has been accepted for inclusion, the editors write a review for the site and assign it a category. So the bottom line is if you require a more structured, targeted search, then a directory is your best option.

(See Fig. 39 below.)



Fig. 39 - DMOZ Directory https://www.dmoz.org/

To search the directory type a keyword into the search box and click the search button. What is returned to you looks like a standard search screen. However, if you know the category you wish to search, click on one of the links in the directory window. There is a range of categories from 'Arts' to 'Science' to 'Computers'. Click on one of these links to begin browsing.

3-5-3-3 Search within online libraries, archives, publishers.

Almost every website that archives information such as libraries, public archives, and publishers typically have a built-in search engine for their database that you can use to search for specific information.

A great example of an online library is the Internet Public Library (http://www.ipl.org/div/subject/) in which you can search by category or by using the search box provided. Your local university or library might also provide such a service as well.

If you know of a local publisher such as Reuters - Ann Arbor, USA (http://thomsonreuters.com/en.html), you can directly access their website and use their search engine to locate a title or information on a specific book published by them.

3-5-3-4 Online Search directories, or educational, scholarly information resources.

Google Scholar is an example of an online resource for scholarly information for projects, research, assignments, etc. It enables anyone - students, researchers and the general public - to search a database of scholarly journals and articles free of charge. When you search Google Scholar, you receive a list of matching articles, papers, theses and books along with a brief summary of each item. Much of the information is available free of charge, however some of the information will have to be purchased.

To search on Google Scholar, a query is entered into the search box and the 'Search' button is clicked. Scholarly research, however, is a little more demanding than typical web searching. More often than not, you are searching for articles by a particular author or for articles from a particular publication.

Exercise – Search for Articles about Isaac Newton Using Google Scholar:

- 1. In your browser's address bar key in 'scholar.google.com' and press Enter
- 2. In the search box key in 'author: Newton' (shown in Fig. 40 on the next page) for articles by all authors with the last name of Newton, or 'author: "Isaac Newton" for articles only by Isaac Newton, and click on the search button



with the last name of Newton

Google Scholar doesn't only scan the public web for scholarly information. It also includes articles, journals, and books from major scholarly publishers. If the full text of a document is not available for dissemination via the public web, Google still includes an abstract from the document; you can then choose whether or not to pay for the access.

Other examples are:

DMOZ (Open Directory Project) http://www.dmoz.org/Reference/Education/Directories/

International Medical Education Directory - https://imed.faimer.org/

3-5-3-5 Search images, videos, audio, maps and directions.

Search engines and social media sites offer the facility to search for a wide range of things, such as people, images, places, things, etc.

While searching on Google, if you want results that are for images or videos only, key in your query as normal and click on either the 'Image' or 'Video' links (see Fig. 41 on the next page).

+You	Search	Images	Maps	Play	YouTube	News	Gmail	Drive	Calendar	More -	
Go	ogle										Q
	0										

Fig. 41 - Search for Images or Videos using Google

You can also search on Bing (www.bing.com), YouTube (www.youtube.com), Twitter (https://twitter.com/) or Instagram (https://www.instagram.com/) for images and audio content.

Online maps can be accessed, viewed and printed if required. To get directions for travelling by car or on foot from one place to another you can access a search engine, key in the start and end point of your journey and get directions for driving or walking.

Bing Maps, for example, offers different options (see Fig. 42 below) including the opportunity to view current traffic, or explore map imagery.



Fig.42 - Bing – map and direction options

Another example is Google Maps (http://maps.google.com/) where you can also get directions for driving or walking between different places.

3-5-3-6 Search for an address, or a landmark.

Bing and Google Maps enable you to type in an address or landmark and see a map of an area, a satellite photograph of the same area, or both superimposed. You can search for a map for any part of the world. See the example in Fig. 43 on the next page that illustrates a search for the location of the fuel stations in Dubai using Google Maps.



Fig. 43 - Google Maps: Gas Stations in Dubai

The exercise below uses Google Maps to find a map of Central Park, New York, USA.

Exercise – Search for an Address



Fig. 44 - Search for Central Park, New York, USA using Google Maps.

- 2. Zoom in to any part of the Park by clicking on the **slider bar** or the **zoom in** button.
- 3. To change the map view to Satellite view, click on the 'Satellite' button on the top right corner of the map.
- 4. Click and drag the yellow image of a person (immediately above the zoom in button) to any place on the map to change the view to street view.

3-5-3-7 Switch between different map views: satellite, map or hybrid views.

The previous section illustrated Google Maps use of map and satellite options and that you can switch between the views.

Bing Maps offers several views and has options for saving or sharing. Fig. 45 shows a search for Farah International Academy of Hair Design, the map view is the default.



Fig. 45 - Bing Maps – map view

Click on Traffic to see what the current traffic is like, or Zoom in to get a closer look. Bird's Eye offers a better view of aerial photography and Aerial gives a detailed view from above. (See Fig. 46 below)



Fig. 46 - Bing Maps - map view options

Click on each option to switch between views.

Quiz

Q1- You wish to refine your search to only give results which are in PDF format. Which file extension option below will work best?

a- -pdf b- +pdf c- -pdf d- *pdf

Q2- Which search specification will give results for website URL's containing a particular word?

a- NONURL: b- ATURL: c- INURL: d- ALLURL:

Q3- What is the name for a website that is updated frequently with commentary, links to other websites, and anything else the author is interested in, called?

- a- Calendar
- b- Journal
- c- Diary
- d- Blog

Q4- You wish to access a database of scholarly journals and articles which is free of charge. Which URL will you enter?

- a. www.scholar.google.com
- b. www.expert.google.com
- c. www.guru.google.com
- d. www.research.google.com

Q5- You are searching for directions to a local restaurant. Which website is the best place to look?

a- LinkedIn
b- Facebook Maps
c- Google Maps
d- Twitter

Answers Overleaf

Answers

Q1- a- .pdf

- Q2- c- INURL:
- Q3- d- blog
- Q4- a- www.scholar.google.com
- Q5- c- Google Maps

Chapter 3-6		
Review		
	 264	Polovanco
	3-0-1	Relevance
	3-6-2	Respect
	3-6-3	Reference

3-6-1 Relevance

3-6-1-1 Assess the search results by reference to quality, relevance, objectivity, authority, currency, etc.

Once you have accessed a site through a search engine you will want to know some additional information. For example is the source of your information reliable, unbiased and carries with it some authority.

Do not assume that the top results are credible, each search engine has different criteria for sorting results. Do not just rely on the domain type, such as ".org", ".com", or ".edu".

Instead, focus on the following questions:

- Is the organisation running the site well known?
- Is the author affiliated to the organisation or independent?
- Who is the author and is there any information on that person?
- Does the source or author mention details of where the facts come from?
- Is the information the most recent, or has later research superseded it?

3-6-1-2 Assess the quality and currency of the information by considering: extent of errors, timeline date, frequency of updates, comments, etc.

Use sites that have a track record of being reliable and secure. The great thing about the web is that there is extensive user feedback on most things. For example, if you visit sites like www.amazon.com there will be extensive user feedback on all products. In addition, there are many forums on the Internet that provide information.

Look for a current date on the site. If it is being maintained regularly and is up to date it will most likely have the date on it. For example, if you are using Wikipedia, you can see from the example in Fig. 47 on the next page that there is a section **On this day** ... and the current date is also shown.



Fig. 47 - Wikipedia – current date example.

Wikipedia is a rich source of information which is updated and maintained by users and is frequently a first point of reference for searching.

If you are buying goods or services, check to see if a company has an endorsement from a trade body and also has a physical address and telephone number if you need to contact them or if there is a problem. Checking these things before using their service or buying their product, could prove beneficial in the long run. See the example for Oxford Book Shop in London in Fig. 48 below.



Fig. 48 - Physical address and telephone number example (http://bookmanager.com/1682091/?&STG=924746027)

3-6-1-3 Assess the relevance of the information by reference to purpose and profile of intended audience.

The information you retrieve online should be relevant by providing you a solution or at least contribute to that solution. Your purpose and the intended audience are a great reference to use in assessing the relevance of that information.

Purpose relates to what information is needed and how the information shall be used, whether it is to state facts or influence an audience.

Profile of the intended audience is the second reference that should dictate the type of information that is most appropriate. Younger students might not enjoy information written for a more mature audience, for example, and vice versa.

3-6-1-4 Assess the objectivity and authority of the information by reference to purpose, bias, author's credentials and peer review.

Factual information requires a greater assessment to ensure it is credible. Anyone can put information online, and therefore the source and credibility of that information is important.

Bias is when information favours one side of an argument, or in other words when it is for something or against something. People are almost always biased on subjects that matter to them and, therefore, if they take the time to put information online they most likely have a subjective opinion on the matter. You must take the time yourself to assess each source on their information bias.

Author credentials show if the person writing is a specialist on the subject. It is recommended that you try to identify if the person had an education related to the subject, if he or she is well known in the field, if other publications or books have been published by the author, and if other experts have reviewed their work (peer review). These elements will help determine the strength of that author's credentials and the overall credibility of the information.

3-6-1-5 Recognise any gaps in the information retrieved.

For many searches, we find what we want by simply clicking a few page titles on the first search results page. However, we should never assume that the only relevant results would appear on the first search results pages. There could be many quality pages further in on returned searches. For this reason make it a habit to at least investigate additional results pages that may lead to websites of interest to you.

In the example in Fig.49 below, if we click on the '7' this means we have gone in seven pages on a Google search.



Fig. 49 - 7th page of a Google search

If you feel there may be gaps in the search you can add additional terms to your query and click the search button again. This lets you narrow your results by refining your query and applying a new search solely to the original returned results. Thus if you feel the pages you require are still within the original batch of returns, this function allows you to search only the returned pages with a modified query.

To avoid unnecessary time spent searching you need to construct a plan before you begin searching. Write down on a piece of paper what you want to achieve. Use as many keywords as possible that best describe what it is you are searching for. This will give you the best opportunity to achieve a positive outcome.

3-6-1-6 Enhance the search plan/strategy to address gaps in the search results.

Try to ensure that the search plan / strategy does not leave gaps in the search results. Does the information cover the full time-span of your search? Does the information cover the entire geographic area of your search? If not, add terms to your search query to fill gaps and search again.

3-6-2 Respect

3-6-2-1 Recognise legal and ethical issues involved with publishing research results: intellectual property rights, copyright, plagiarism, referencing and citation.

We all use the Internet to search for information and all that information comes from other people. Therefore, every time you choose to use any of that information there is a legal and ethical obligation to protect the information and its author. Plagiarism, copyright, and intellectual property rights are the three key factors that need protection.

Properly planning your paper to include referencing or citing, which means acknowledging the source of the information, will help you avoid any legal or ethical issues.

3-6-2-2 Understand the concept of Intellectual Property (IP).

Intellectual Property is the ownership of any creative work or invention. Common types of intellectual property rights include copyrights, trademarks and patents. Owners of intellectual property have the exclusive right to publish creative work, either physically or on the Internet, and to license the manufacture and distribution of inventions.

3-6-2-3 Understand the terms 'plagiarism' and 'copyright infringement'.

Plagiarism is using someone else's words or ideas and presenting them as your own.

Copyright is the right to copy creative material, it includes the right to be credited for the work and the right to benefit financially from it. For example, the United Nations publish a copyright statement which sets out the terms for using, reproducing and transmitting their materials, see Fig. 50 on the next page.



Fig. 50 - Copyright Statement – United Nations Website (http://www.un.org/en/aboutun/copyright/)

3-6-2-4 Understand the impact of plagiarism and copyright infringement.

Plagiarism occurs when someone claims credit for ideas which are not their own. It prevents sources from being verified correctly and disregards the efforts of the people who created the content in the first place.

Copyright infringement has the same impact as plagiarism with the addition of depriving the copyright-holder of the financial benefit that they are entitled to. For example, downloading music or movies from illegal file sharing sites is an infringement of copyright and prevents recognition or royalties for the use of the material from reaching the owners of the material.

3-6-2-5 Distinguish between copyright infringement and plagiarism.

Some works are copyrighted, that is, somebody owns the right to publish the works. Some works are in the public domain. These include works where copyright has expired, works published by, for example, a government body or educational establishment and works that the creator has decided to make available to the public.

Copyright infringement is reproducing copyrighted material without permission (such as downloading music or movies from illegal file sharing sites). There is an exception, under the 'fair use' rule, you can quote from copyrighted research resources in order to comment on the material. In general, copyright infringement is illegal.
Plagiarism can apply to both copyright and public domain material. Plagiarism can be turning in someone else's work as your own, copying words or ideas from someone else without giving credit or even failing to put a quotation in quotation marks. Plagiarism is unethical, but it is not illegal. Although, many education organisations place heavy penalties against their students for such an act that could lead to suspension or even expulsion.

3-6-3 Reference

3-6-3-1 Appreciate the benefits of referencing, such as apportioning of due credit to the author, showing evidence of research, allowing others to consider your interpretation.

A **reference** is the way you tell your readers that certain material in your work came from another source. It also gives your readers the information necessary to find that source again, including:

- Details about the author
- The date the copy was published
- The name and location of the company that published your copy
- The title of the work

You should use a reference whenever you:

- Use quotes
- Paraphrase
- Use an idea someone else has already expressed
- Make specific reference to the work of another

Referencing sources is important because giving credit to the original author by citing sources is the only way to use other people's work without plagiarizing.

But there are a number of other reasons to cite sources:

- References are extremely useful to anyone who wants to find out more about your ideas and where they came from.
- Not all sources are valid your own ideas may often be more accurate or interesting than those of your sources. If some of the facts or theories you rely on turn out to be incorrect, proper references may show that your interpretation is correct based on the information you were given.

3-6-3-2 Recognise different referencing styles: Harvard, Vancouver, Modern Language Association (MLA), American Psychological Association (APA).

Reference styles can broadly be divided into styles common to the Humanities and the Sciences, though there is considerable overlap. The various guides specify order of appearance, for example, of publication date, title, and page numbers following the author name, in addition to conventions of punctuation, use of italics, emphasis, parenthesis, quotation marks, etc., particular to their style.

A number of organisations have created styles to fit their needs, consequently a number of different guides exist. Individual publishers often have their own in-house variations as well, and some works are so long established as to have their own reference methods too:

The Harvard Vancouver system, also known as the 'author-number' system, is a way of writing references in academic papers. It is popular in the physical sciences, and is one of two referencing systems normally used in Medicine, the other being the Harvard system.

The Modern Language Association (MLA) Style Manual and Guide to Scholarly Publishing is an academic style guide widely used in the United States, Canada, and other countries, providing guidelines for writing and documentation of research in the humanities, especially in English studies, of the study of other modern languages and literatures.

The American Psychological Association (APA) style originated in 1929 used to ensure clear and consistent presentation of written material, and within that style a guideline was established for citation of references.

3-6-3-3 Write a reference using a defined referencing style.

Formats for references are consistent so that others may quickly identify and locate the sources you used. Each style format includes the same basic parts of the reference but organises them slightly differently.

Two examples of referencing styles from the previous section:

MLA style:

Author. "Title." City: Publisher, Year published. Page number(s)

Example: Dickens, Charles. "Bleak House." London: Penguin, 1971. 234-36.

APA style Author. Year published (in brackets), Title (in italics). City: Publisher, page number(s)

Example: Dickens, Charles. (1971) *Bleak House*. London: Penguin, 234-36.P.72

Good Practice for Referencing

If you use images, text, websites, other people's words in your own documents, webpages, etc. you should reference it. Always quote the author or website so that the source is recognised. If you use references in your own work you are less likely to be accused of plagiarism.

If you want to download music or movies always use a legal file sharing site and do not be tempted to download illegal copies that are usually free of charge.

Quiz

Q1- Your search results about the effects of greenhouse gases on the environment have returned entries for the 1990's only. How will you address this gap?

- a- Refine your search to within a defined time period
- b- Carry out your searches again
- c- Remove all references to time from new search activities
- d- Refine your search to results relating to 1990 to 2000 only

Q2- What does IP stand for?

- a- Input Property
- **b-** Intelligent Property
- c- Inspection Property
- d- Intellectual Property

Q3- What term describes the exclusive right to prevent others from using or selling your written work without your permission?

- a- Copyright
- b- Patent
- c- Trademark
- d- Protection

Q4- Which one of the following is not recognised as an academic referencing style?

- a- Harvard
- b- MLA
- c- Vancouver
- d- Princeton

Answers Overleaf

Answers

- Q1- a- Refine your search to within a defined time period
- Q2- d- Intellectual Property
- Q3- a- Copyright
- Q4- d- Princeton