

Basics

Research – finding information about something or someone – is a skill we use a lot in everyday life. Whether you're comparing similar products before purchasing an item, or reading reviews of new films, you will notice that you use a certain method, which will vary according to the exact information you are looking for and what use you have for it. Academic research follows the same principle, but should have a stricter and more thorough methodology.

The academic context

Academic research will provide you with a deeper understanding of the concepts you are faced with, shaping your opinions or changing them altogether. It will allow you to express your ideas using proven facts or the opinions of reputable experts.

In **Research (1)**, you looked at the basics of research, focusing mainly on online searches. In this Factsheet, you will refine your online research skills and learn how to access and use books and journals in libraries.

Key features

- Before you start your research, carefully analyze the task you were given. What are the key issues you have to research? Think about the type of information you need to research in order to fulfil the assignment (e.g. definitions, statistics, quotations, causes, examples). If you know what you're looking for, it's a lot easier to find it!
- When you are looking for research sources in a library, your starting point will probably still be online. You can use Google or Google Scholar (for academic papers) to find authoritative sources, or go straight to the library website, if there is one. Many libraries nowadays offer a digital archive, along with various services to help you locate the publication you need in the physical library.
- When searching online, you might need to limit your search (if you have too many sources and are struggling to find relevant ones) or expand it (if you don't have enough suitable sources). The best way to do this is to use advanced search methods. These are some of the most used operators:
 - **X AND Y** returns only results related to both X and Y.
 - **"X"** searches for the exact phrase within speech marks only.
 - **X -Y** excludes Y, which can be a term, phrase or site.
 - **X OR Y** returns results related to X or Y, or both.
 - **define:X** gives you the meaning of X.
 - **X site:Z.com** limits results related to X to those from a specific website.
 - ***** searches for unknown words or wildcards, e.g. *X is * times bigger than Y.*
 - **(X -Y) site:Z.com** groups the terms and search operators in parentheses to control how the search is executed, e.g. on a particular website.
- Another more traditional – but still effective – way of researching in libraries is by checking on the shelves dedicated to the subjects you study. To do so, it's important to get to know your library well, including:
 - The physical environment, including any reading/study areas and the different sections of the library. Where is the section for your area of studies? How are the shelves organized there?
 - The staff: knowing who can assist you at the library can be invaluable. Is there anyone who specializes in your area of studies?
 - The services it offers: photocopiers, computers, internet access, resources for locating material, reading areas.
 - The rules: what you can and can't do on the premises, which books you can take home, how many books you can take out at once and for how long.

- How you can reserve and renew books, and whether it is possible to reserve books from other libraries through yours.
- Once you have found the books you are looking for, you would very rarely have to read them from cover to cover to extract the information you need. Instead, follow these steps:
 - 1 Identify the relevant chapter(s) on the contents page.
 - 2 Use the headings and subheadings within the chapter to locate the exact page(s) you need.
 - 3 Read the first sentence of each paragraph, which usually contains the main idea. If it's relevant, continue reading. If you are reading a digital version, you can also search for keywords within the document.
 - 4 Once you have identified the key sections of text you want to use, flag them with Post-it notes so you can find them easily later. PDFs and other types of digital document also allow you to highlight extracts.
- One publication can lead you to others: if you can't find the exact information you need in a specific article or book, have a look at the reference section or bibliography. This is also a useful way to locate the primary source of the idea you want to use (who originally proposed it).
- For environmental and practical reasons, it might not be a good idea to take large numbers of photocopies. Try taking photos of the relevant pages instead. If the name of the book isn't stated on the page, take a photo of the cover too. The same goes for online material: instead of printing out lots of pages, save each site in your bookmarks, or take screenshots. Make sure you organize photos and screenshots into folders and subfolders.

Challenges / difficulties

In the past, the main difficulty for researchers was to access enough information from authoritative sources. Nowadays, by combining online and physical resources, you will probably be able to find almost endless information on any existing topic. The main challenge has become to optimize your use of your research time; by using the techniques above, you will be able to more efficiently locate the exact content you need.

How can I develop this skill?

Every time you finish researching, take some time to reflect on the process. What research methods were more effective? Where did you waste time? Which sources were the most useful?

Learning outcome

Developing and fine-tuning your research skills will ensure that you have access to reliable sources of information and will help you to progress with your studies.

Theory to practice

If you needed to find the information below, what would you type into the search engine?

1 Examples of the gender gap, but not from Wikipedia.

- a site:wikipedia.com examples gender gap
- b "gender gap" examples -Wikipedia
- c (examples gender gap -Wikipedia)

2 How much less women earn than men in Britain.

- a "women earn * less than men" Britain
- b "how much less do women earn than men in Britain?"
- c (women earn less than men) AND Britain

3 The causes of the gender gap, according to the *Guardian*.

- a** causes gender gap AND guardian
- b** "what are the causes of the gender gap, according to the Guardian?"
- c** causes gender gap site:theguardian.com

4 Academic articles about the gender gap by either of the two authors you're interested in.

- a** "gender gap" Kahn OR Baxter
- b** "gender gap" Kahn AND Baxter
- c** define:gender gap articles by "Kahn+Baxter"

Open your search engine and try the formulas above. What interesting information can you find?

Ways to get more practice

With all the distractions of the modern world, libraries remain an ideal place to get some peace and quiet. In a place specifically designed for study, you might feel more able to concentrate on your work. Make a habit of visiting your library regularly, find your favourite spots, and make it a space where you feel at home.