

PREPARE FOR UNIVERSITY AND YOUR STUDIES

Improving your reading skills



How can I improve my understanding of academic papers?

In this handout we will look at:

1. Reading a journal article
2. The structure of academic papers
3. Initial questions to consider
4. Reading strategies
5. Active reading
6. Doing a literature survey



Reading a journal article

Reading academic articles can be difficult and perseverance may be necessary. The writer may use terminology that you are not familiar with or may assume that you are familiar with theories or models you haven't yet studied.

This leaflet outlines some strategies you may find helpful in reading academic journal articles. Before you read an article from beginning to end, skim through it to get an overview of its content and how the different sections contribute to the overall argument.

The structure of academic papers

Most scientific journal articles are presented more or less in a standard format: the abstract gives the purpose of the article and problem or question answered; the introduction details why the authors decided to do this research; the method explains how they did it, and how they analysed their results; and the results describe what was found. This is often followed by a discussion of what the results mean, and the conclusion which is a summary of the key findings. Non-scientific articles still follow a similar structure, albeit with less rigidity around method and results as the article will act as an exploration or discussion of ideas, or a contribution to an ongoing debate. All academic articles will always list references, which are a list of articles and information referred to by the writer, and sometimes appendices, which consist of additional information referred to in the article (eg images, extracts or tables/graphs/data).

Initial questions to consider

- 1) Who is the intended audience?
- 2) How does this article fit with your assignment question(s) or the topics covered on your course?
- 3) What do you intend to do with the information gained from the article?

An understanding of the structure of journal articles and these questions can help you to decide which sections to focus your attention on.

Reading Strategies

There are two strategies that can help; the multiple reading approach and 'SQR3' method:

The multiple reading approach

Follow the steps and strategies outlined below.

First reading: Check that the article is relevant.

If you are deciding whether a paper is worth reading for your assignment, it will be helpful to read the abstract which gives a brief overall summary of the research including the methods, results and conclusion. You may also find it helpful to look at the section headings and conclusion.

Before you read an article skim it to get an understanding of its overall structure.

Second reading: Overview of key points

Read the abstract and introduction then skim through the article reading the section headings and sub-headings as this can give you an overview of the key aspects covered and the overall structure. Don't try to understand the detail; this will come in the next reading.

At this point you now have three choices:

- i) set the paper aside as it is not directly relevant
- ii) persevere and continue to the next step
- iii) return to the paper later after reading your lecture notes or other papers you need to help develop your understanding

Third reading: Examine in detail

After steps 1 and 2 you will have a clearer understanding of which parts of the article are more relevant that you need to focus on. This reading requires close attention to detail and if you are new to reading academic articles, you may need to read it multiple times.

SQ3R reading method

A comprehensive reading method with five steps: survey, question, read, recite, and review. It provides an active and efficient way of reading academic articles.

1. Survey - To get a general idea of what you're about to read, skim the article or text which should take about 10 minutes. Look at the headings and sub-headings as well as examine any diagrams, graphs or charts included. Also, review the introduction.

2. Question - To give your reading a purpose, create questions which you want to see if the article answers.

3. Read - Read the article in order to be able to answer the questions you raised in the previous step. It is important to take your time as you read as you need to understand the content of the article. In order to do this, you may need to re-read sections. It is helpful to make notes whilst reading.

4. Recite - Now try to state out loud in your own words the answers to your questions and any other useful points you noted from the text. This will help you to develop your understanding.

5. Review - To help you remember, review your answers by asking yourself the questions again. If you can't answer the question, examine your notes and have another try.

(Adapted from Robinson, 1946)

Active reading

All reading requires active thinking skills; you should think of reading an article as being like having a conversation with the writer. Ask yourself these types of questions as you read articles:

What aspects do I agree with?

Which areas do I need clarification or further understanding of?

Which points need further evidence or support?

How does it relate to information I have read in other articles?

What further reading do I need to do?

Doing a literature survey

Using key words related to your assessment's learning outcomes, search for relevant journal articles using the library system. Then complete the reading steps outlined above. It is also useful to look at the reference lists of these articles to see if they share any authors' names as these may be key authors or papers related to this area. It is also worth looking at the websites of these key authors to see what other articles they have recently published which may be relevant.

Remember, all new strategies require practice.