1.28 Writing abstracts

An abstract is a concise summary of a body of information should as a report, dissertation, thesis or article. Its purpose is to make it possible for potential readers to quickly find out if the work is relevant to their needs and worth reading.

Writers of articles for journals will always be asked to provide an abstract, and these are usually included on CD-ROM and online databases for worldwide reference.

You may be asked to include an abstract at the beginning of a piece of academic work, although this may also sometimes be called a summary, executive summary or executive abstract. Check with your department which term you should use.

There are in fact two different kinds of abstract: the **descriptive abstract** and the **informative abstract**.

Descriptive abstracts

These provide a description of the report's main topic and purpose, together with an overview of the contents. They are usually very short – just a sentence or two – and may even appear on the title page (or at the beginning of a journal article). All this type of abstract does is give a very general idea of what the writing is about; it like a slightly extended title, or a topic sentence in an introduction. Consequently, it is not necessary to summarise any details or conclusions found in the text.

A descriptive abstract will look something like this:

> *The research analyses the different approaches to reducing traffic congestion in the UK and provides conclusions and recommendations for future implementation.*

However, if you are asked to provide an abstract here at Birmingham City University, you will probably need to produce an informative type.

Informative abstracts

As the name implies, informative abstracts should inform the reader: they should make clear what the research is about and give the key information from each section of the report; indicate how it was carried out; and summarise what the main findings and conclusions are. You should not, however, indicate the structure of the writing – this would be included in your introduction.

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As suggested by Reading University, the essential parts of an informative abstract are:

- **Background**: A simple opening sentence or two placing the work in context.
- **Aims**: One or two sentences giving the purpose of the work.
- **Method(s)**: One or two sentences explaining what was done.
- **Results**: One or two sentences indicating the main findings.
- **Conclusion/s**: One sentence giving the most important consequence of the work.

They also give the following advice:

- Do not commence with "this paper…", "this report…" or similar. It is better to write about the research than about the paper. Similarly, do not explain the sections or parts of the paper.
- Avoid sentences that end in "…is described", "…is reported", "…is analysed" or similar. These are simply too vague to be informative.
- Do not begin sentences with "it is suggested that…", "it is believed that…", "it is felt that…" or similar. In every case, the four words can be omitted without damaging the essential message.
- Do not write in the first person in any form. Thus, not only should you avoid "I", but also "we", "the author", "the writer" and so on. Again, this is because the abstract should be about the research, not about the act of writing.

Other useful advice:

- Check with your tutor/lecturer/supervisor what length of abstract is expected; normally they will be short and concise, with the result that the sentences will be fairly dense and information-heavy.
- Don’t include any secondary information, and take out any unnecessary words, obviously keeping everything grammatical.
- Don’t include any references in the abstract, but do include relevant numerical data.

Here is a sample abstract

Abstract

Computerized speech recognition takes advantage of the most natural form of communication, the human voice. During speech, sound is generated by the vocal cords and by air rushing from the lungs. If the vocal cords vibrate, a voiced sound is produced; otherwise, the sound is unvoiced. The main problem in speech recognition is that no two voices produce their sounds alike and that an individual voice varies in different conditions. Because voices do vary and because words blend together in a continuous stream in natural speech, most recognition systems require that each speaker train the machine to his or her voice and that words have at least one-tenth of a second pause between them. Such a system is called an isolated word recognition system and consists of three major components that process human speech: (1) the preprocessor which removes irregularities from the speech signal and then breaks it up into parts; (2) the feature extractor which extracts 32 key features fromthe signal; and (3) the classification phase which identifies the spoken word and includes the training mode and reference pattern memory. Spoken words are identified on the basis of a certain decision algorithm, some of which involve dynamic programming, zero crossing rate, linear pre-dictive coding, and the use of state diagram.Voice recognition systems offer many applications including data entry, freedom for mobility, security uses, telephone access, and helpful devices for the handicapped. However, these same systems also face problems such as poor recognition accuracy, loss of privacy among those who use them, and limited vocabulary sizes. The goal of the industry is the development of speaker-independent systems that can recognize continuous human speech regardless of the speaker and that can continually improve their vocabulary size and recognition accuracy.

Source - Online Technical Writing