Writing an abstract

Understanding and developing abstracts

What is an abstract?

An abstract is a concise summary of a research paper or entire thesis.

It is an original work, not an excerpted passage. An abstract *must be fully self-contained and make sense by itself*, without further reference to outside sources or to the actual paper. It highlights key content areas, your research purpose, the relevance or importance of your work, and the main outcomes.

It is a well-developed single paragraph of approximately 250 words in length, which is indented and single spaced. The function of the abstract is to outline briefly *all* parts of the paper.

Although it is placed at the beginning of your paper, immediately following the title page, the abstract should be the last thing that you write, once you are sure of the conclusions you will reach.

Why write an abstract?

Abstracts are important for both **selection** and **indexing** purposes.

Selection: Abstracts allow readers who may be interested in the paper to quickly decide whether it is relevant to their purposes and whether they need to read the whole paper.

Indexing: Most academic journal databases accessed through the library enable you to search abstracts. This allows for quick retrieval by users. Abstracts must incorporate the key terms that a potential researcher would use to search.

When is it necessary to write abstracts?

Abstracts are usually required for:

- submission of articles to journals
- application for research grants
- completion and submission of theses
- submission of proposals for conference papers

What to include in an abstract

The format of your abstract will depend on the discipline in which you are working. However, all abstracts generally cover the following five sections:

1. Reason for writing:

What is the importance of the research? Why would a reader be interested in the larger work?

2. Problem:

What problem does this work attempt to solve? What is the scope of the project? What is the main argument, thesis or claim?

3. Methodology:

An abstract of a scientific work may include specific models or approaches used in the larger study. Other abstracts may describe the types of evidence used in the research.

4. Results:

An abstract of a scientific work may include specific data that indicates the results of the project. Other abstracts may discuss the findings in a more general way.

5. Implications:

How does this work add to the body of knowledge on the topic? Are there any practical or theoretical applications from your findings or implications for future research?

(This list of elements is adapted from: **http://www.unc.edu/depts/wcweb/handouts/abstracts.html)**

The importance given to the different components can vary between disciplines. You should look at abstracts of research that are similar to your own work as models.

Edit carefully

As your abstract is an important way to promote your work it is worth taking time to write it well. You will likely have to revise several drafts to produce a precise, concise outline of your paper which is clear, complete, includes key search terms and fits within the word limit.

Types of abstracts

Abstracts can be **informative** and **descriptive.**

Descriptive abstracts describe the work being abstracted. They are more like an outline of the work and are usually very short - 100 words or less.

The majority of abstracts written at the University of Melbourne are informative. **Informative abstracts** act as substitutes for the actual papers as all the key arguments and conclusions are presented; specifically, the context and importance of the research, reasons for methods, principal results and conclusions.

Examples of abstracts

Example abstract 1: History/ Social Science

Julie Pham (2001) *"Their War: The Perspective of the South Vietnamese Military in Their Own Words"*

Despite the vast research by Americans on the Vietnam War, little is known about the perspective of South Vietnamese military, officially called the Republic of Vietnam Armed Forces (RVNAF). The overall image that emerges from the literature is negative: lazy, corrupt, unpatriotic, apathetic soldiers with poor fighting spirits. This study recovers some of the South Vietnamese military perspective for an American audience through qualitative interviews with 40 RVNAF veterans now living in San José, Sacramento, and Seattle, home to three of the top five largest Vietnamese American communities in the nation. An analysis of these interviews yields the veterans' own explanations that complicate and sometimes even challenge three widely held assumptions about the South Vietnamese military: 1) the RVNAF was rife with corruption at the top ranks, hurting the morale of the lower ranks; 2) racial relations between the South Vietnamese military and the Americans were tense and hostile; and 3) the RVNAF was apathetic in defending South Vietnam from communism. The stories add nuance to our understanding of who the South Vietnamese were in the Vietnam War. This study is part of a growing body of research on non-American perspectives of the war. In using a largely untapped source of Vietnamese history; oral histories with Vietnamese immigrants; this project will contribute to future research on similar topics.

Abstract from
http://research.berkeley.edu/ucday/abstract.html :
accessed 12 December 2010

Example abstract 2: Engineering

"Quantifying the Mechanics of a Laryngoscopy"

Laryngoscopy is a medical procedure that provides a secure airway by passing a breathing tube through the mouth and into the lungs of a patient. The ability to successfully perform laryngoscopy is highly dependent on operator skill; experienced physicians have failure rates of 0.1% or less, while less experienced paramedics may have failure rates of 10-33%, which can lead to death or brain injury. Accordingly, there is a need for improved training methods, and virtual reality technology holds promise for this application. The immediate objective of this research project is to measure the mechanics of laryngoscopy, so that an advanced training mannequin can be developed. This summer an instrumented laryngoscope has been developed which uses a 6-axis force/torque sensor and a magnetic position/orientation sensor to quantify the interactions between the laryngoscope and the patient. Experienced physicians as well as residents in training have used this device on an existing mannequin, and the force and motion trajectories have been visualized in 3D. One objective is to use comparisons between expert and novice users to identify the critical skill components necessary for patients, to identify the mechanical properties of the human anatomy that effect laryngoscopy, and thus enable the development of a realistic training simulator. In the future an advanced training mannequin will be developed whose physical properties will be based on our sensor measurements, and where virtual reality tools will be used to provide training feedback for novice users.

Abstract from
http://research.berkeley.edu/ucday/abstract.html :
accessed 12 December 2010

Works Cited

Koopman, Phil. *How to Write an Abstract* http://www.ece.cmu.edu/~koopman/essays/abstract.html> accessed 12 December 2010

University of North Carolina Abstracts http://www.unc.edu/depts/wcweb/handouts/abstracts.html accessed 12 December 2010

Further Resources

http://darwin.bio.uci.edu/~sustain/Abstract.html

http://www.cognitrix.com/pages/tips-hints/abstracts.pdf