

The Scientific Abstract: Function, Structure, Style

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Function

The scientific abstract functions in several related ways:

- The abstract can be published at the opening of a scientific article. The abstract can also be published separately, as in a database or in a conference program.
- The abstract points to the social activity of science: it serves as a means for circulating information, and makes possible the cross-fertilization of ideas.
- An abstract is both a summary of your work, and an invitation to read your work

Structure

It is useful to think of the scientific abstract as having four parts:

- PROBLEM
Why was the work needed?
What is the problem or question at issue?
What scientific conversation does this research contribute to?
- METHOD
How did you proceed?
Describe the method of research or analysis appropriate to the problem
- RESULTS
What are the results; what is your claim?
State what you found, and relate your answer to the problem or question at answer
Summarize the major results of your study
- SIGNIFICANCE / RELEVANCE
So what? Why are these results useful?
State the relevance, implications, or significance of your findings
Note recommendations or implications for future work

Style

Here are several suggestions for writing an abstract:

- Start by writing one sentence answering each of the questions in **bold** above.
- Using these four sentences as a starting point, add detail where appropriate to fully answer these questions.
- Consider multiple audiences: Give enough background to allow the educated generalist as well as the specialist to approach and appreciate your work. Don't unduly narrow your audience.
- Write clearly and concisely. Is the abstract comprehensive and accurate? Is it able to stand on its own?
- Explain abbreviations and acronyms at their first occurrence, even in an abstract.
- Have a colleague read your abstract and then tell you what your project is about. If he or she has difficulty explaining your research, consider revising your abstract.