

Tips for Writing an Abstract

What is an abstract?

An abstract is a very concise statement of the major elements of your research project. It states the purpose, methods, and findings of your research project.

Why write an abstract?

The abstract allows readers to make decisions about your project. Your sponsoring professor can use the abstract to decide if your research is proceeding smoothly. The conference organizer uses it to decide if your project fits the conference criteria. The conference audience (faculty, administrators, peers, and presenters' families) uses your abstract to decide whether or not to attend your panel. Your abstract needs to take all these readers into consideration.

How does an abstract appeal to such a broad audience?

The audience for this abstract covers the broadest possible scope--from expert to lay person. You need to find a comfortable balance between writing an abstract that both shows your knowledge and yet is still comprehensible--with some effort--by lay members of the audience. Limit the amount of technical language you use and explain it where possible. Always use the full term before you refer to it by acronym [for example, portal venous transfusions (PVT)]. Remember that you are yourself an expert in the field that you are writing about--don't take for granted that the reader will share your insider knowledge.

What should the abstract include?

Think of your abstract as a condensed version of your whole essay. By reading it, the reader should understand the nature of your research question.

Abstracts for experimental research projects should include:

- A specific and detailed title.
- A brief introduction to the topic-providing context or background.
- A statement of the study's objectives--what is the research question?
- A summary of results.
- A statement of conclusions (or hypothesized conclusions).
- Possibly some discussion of the relevance of the conclusions.
- Possibly some call for future research.

Abstracts for research projects that are primarily text-based should include:

- A specific and detailed title.
- A brief introduction to the topic-providing context or background.
- A statement of the study's objectives--what is the research question?
- A summary of the key subtopics explored—what argument are you proposing about the topic?
- A brief reference to the nature of the source material and methodology (if relevant)—library research? analysis of fictional texts? interviews or observations?
- A statement of conclusions (or hypothesized conclusions).
- Possibly some discussion of the implications of the conclusions.

Whatever kind of research you are doing, your abstract should provide the reader with the answers to the following questions: What are you asking? Why is it important? How will you study it? What will you use to demonstrate your conclusions? What are those conclusions? What do they mean?

Stylistic Considerations:

The abstract should be one paragraph and should not exceed the word limit. Edit it closely to be sure it meets the Four C's of abstract writing:

- Complete — it covers the major parts of the project.
- Concise — it contains no excess wordiness or unnecessary information.
- Clear — it is readable, well organized, and not too jargon-laden.
- Cohesive — it flows smoothly between the parts.

How do I go about writing the abstract?

1. Assess your writing task. Figure out the basics--Deadline, Length (250 words, maximum), Purpose (to communicate clearly to your various audiences what you have researched), and Audience (faculty, students, etc).
2. Write a draft and get feedback from your sponsoring professor, from peers, from TA's, etc.
3. Revise the abstract based on feedback you receive. Plan on several revisions with time away from the draft.
4. Be sure your abstract is grammatically sound. See a writing specialist at the Learning Skills Center for final revisions.

Examples:

Here are three successful sample abstracts—for an experimental research project, for a cultural studies project that combines field research with library research, and for a literary research project:

Estimating Gas Transfer Rates in Bag Cultivation of Shiitake Mushrooms

Previous studies have shown that growth rate and fruiting quality of *Letinula edodes* may be affected by levels of O₂, CO₂, and H₂O. By knowing the gas exchanges rates within the growth substrate and across the filter patch on cultivation bags, growth and quality of shiitake mushrooms may be maximized. This study was performed in an effort to develop a simple, non-invasive method for measuring the rate of gas exchange within the substrate and across the filter patch. The mushroom growth substrate consisted of sawdust supplemented with rice bran and millet at an initial moisture content of 65%. Air was supplied to cultivation bags continuously at various constant airflow rates. Patch permeability was also tested using *Trichoderma harzianum*. Both experiments showed that for identical aeration rates, patch permeability varied considerably. Patch permeability did not seem to be affected by autoclaving time. Another set of experiments was conducted to measure the rate of water exchange across the patches. Patch permeability to water vapor was approximately the same, regardless of aeration rate or autoclaving time. (172 words--Biological & Agricultural Engineering)

A Bit Bright: The Rise and Fall of Neon Signs in Las Vegas

Paris may be the city of light, but Las Vegas is the city of neon. People associate Las Vegas not only with gambling, but also with the glittering neon signs that cover the city. My area of research is the rise and fall of neon signs as an architectural presence. Using a mixture of field work, interviews, and library research, I have traced neon signs from their earliest days as roadside signs, to their incorporation into buildings, to the Golden Age of the 1970s when signs became separate structures independent of the casinos they were advertising. I would argue that in the past fifteen years, with the rise of the mega-resort in Las Vegas, signs are falling in importance. Now the architecture of the casinos themselves are the primary advertisements for resorts like the Venetian and New York, New York. However, the reality is more complicated than just saying "casino architecture has risen at the expense of neon signs": up and down the Strip, many buildings still have large signs in front to advertise to the drivers and pedestrians who cannot see the buildings. I hypothesize that, now, a casino's position on the Strip and its architectural style influence the type of sign it has in this, the most complex era of signage. (213 words—American Studies)

There's Something About Harry:

Representation of Females in J. K. Rowling's "Harry Potter" Series

The "Harry Potter" series—like all children's literature—reflects the ideologies of the society of its time, including attitudes about women's roles. The object of my research is to examine (1) the evolution of the traditional female characters Rowling draws from; (2) the ways in which Rowling's use of female archetypes in her works acts as a retrograding agent; and (3) the reasons why traditional representations of women continue to appeal to the general audience. Even though late 20th – early 21st-century society encourages female empowerment and gender equality (as demonstrated in recent movements in children's literature which have attempted to construct bolder, more contemporary female figures, such as the "Girl Power" and "Feminist Fairy Tale" movements of the late 1990s), Rowling has met critical, popular, and commercial success by reverting to traditional, stereotypical characterizations of women. Thus far, I have traced the origin of many of Rowling's female characters and have done preliminary research into the psychology of children's reading habits. Through a close analysis of popular children's literature, I have discovered ways in which female characters have evolved over time to suit the ideas of society in and for which they were written. Through further research, I hope to discover how authors of children's literature can create modern female characters that appeal to the young reader with equal success as traditional representations. (223 words—English)

Some things to avoid:

Including too much introductory material:

The Black-Capped Chickadee (*Poecile atricapillus*) is a species of North American songbird inhabiting the United States and Canada. Unlike many other songbirds whose songs vary geographically, previous studies done on chickadee populations from Massachusetts, Pennsylvania, New York, Ontario, Missouri, Wisconsin, Alberta, Utah, British Columbia, Washington, and California have shown that males sing a typical two tone song, "fee-bee-ee," with little variation between populations. Researchers have also shown that an isolated population from Martha's Vineyard, an island offshore of Massachusetts, demonstrates singing patterns different from the usual two note songs. I am studying a second isolated population of chickadees in Alaska, which has not been systematically

investigated previously. There is one anecdotal report that suggested the males from the Alaskan population have unusual singing patterns. For example, the males sing songs with multiple notes accompanied with frequency shifts. The goal of my research...

Using too much jargon:

Within the historiography of North American studies, my research attempts to combine criticisms of Them vs. Us historical paradigms with recent psychological findings on stereotype formation, self-esteem and implicit self-theories.

Not using complete sentences:

To determine and describe the ancient Mayan calendar system. To ascertain how they tracked time for their civilization. Included is...

Not giving the reader sufficient context and completeness:

We have used infrared reflectance to study the effects of melt recrystallization on the structure of thin polymer films. We hypothesized that slowly melting and then resolidifying the thin polymer films will lead to higher levels of crystallinity and orientational order in very thin polymer films. (46 words for the whole abstract)