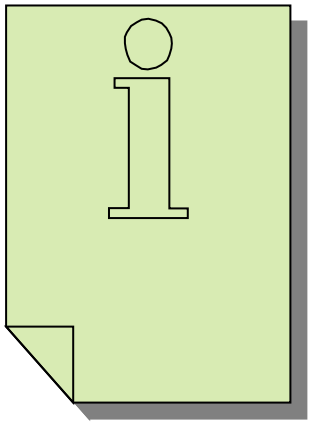
Writing Scientific Abstracts

Purdue OWL staff
Brought to you in cooperation with the Purdue Online Writing Lab

Abstract: What is the Purpose?

Scientific abstracts:

- **introduce** journal articles
- **inform** readers about the article's content
- **help readers decide** whether or not to read article
- **overview** conference programs, abstract collections, and book chapters



Why Should I Know How to Write Abstracts?

- Helps you **present** complex information in a clear, concise manner
- Helps you **read** abstracts more effectively
- Helps you **conduct** research
- Helps you **write** abstracts for future publications
- Helps you **condense** report information into a short format for database searches

Qualities of an Effective Abstract

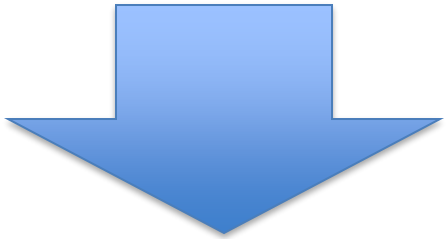
Effective Abstracts:

- Are one or more well-developed paragraphs, which are unified, coherent, concise, and able to stand alone (200-300 words)
- Use an introduction-body-conclusion structure in which the parts of the report are discussed in order: purpose, research questions, methods, findings, conclusions, recommendations
- Follow strictly the chronology of the report
- Add no new information - merely summarizes report
- Contain stand-alone qualities - the abstract can be understood without reading the paper
- Are intelligible to a wide audience

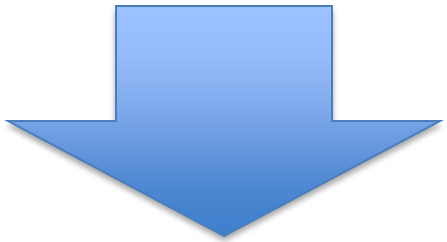
How Do I Write an Abstract?

Writing an Abstract:

1. Remember that an abstract typically contains: **topic, research question, methods, results, and conclusion**.



2. Read your paper in its entirety. Keep the above categories in mind and **underline key points** (outlined in #1) as you read.



3. After you finish reading, **create your abstract step-by-step** based on your underlined material.

Writing the Parts of My Abstract

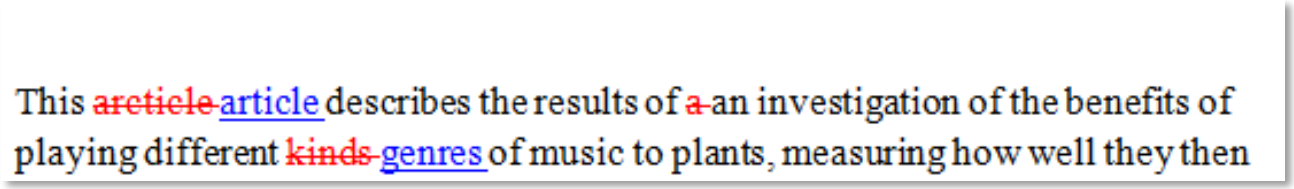
Step-by-Step Process:

1. Write 1-2 introduction sentences that explain topic, purpose, and research question(s).
2. Write 1-2 sentences describing your research methods (this may also include the type of data analysis you used).
3. Write 1-2 sentences describing the results / findings.
4. Write 1-2 sentences containing your conclusions and recommendations.

Revising the Abstract

- Read your abstract all the way through:

  - add transition words to tie ideas together,
  - eliminate unnecessary content and add in things that are missing,
  - correct errors in mechanics, and proofread.


This ~~arreticle~~ article describes the results of ~~a~~ an investigation of the benefits of playing different ~~kinds~~ genres of music to plants, measuring how well they then

Example of a Scientific Abstract

Usability and User-Centered Theory for 21st Century OWLs

By Dana Lynn Driscoll, H. Allen Brizee, Michael Salvo, and Morgan Sousa from *The Handbook of Research on Virtual Workplaces and the New Nature of Business Practices*. Eds. Kirk St. Amant and Pavel Zemlansky. Hershey, PA: Idea Group Publishing, 2008.

This article describes results of usability research conducted on the Purdue Online Writing Lab (OWL). The Purdue OWL is an information-rich educational website that provides free writing resources to users worldwide. Researchers conducted two generations of usability tests. In the first test, participants were asked to navigate the OWL and answer questions. Results of the first test and user-centered scholarship indicated that a more user-centered focus would improve usability. The second test asked participants to answer writing-related questions using both the OWL website and a user-centered OWL prototype. Participants took significantly less time to find information using the prototype and reported a more positive response to the user-centered prototype than the original OWL. Researchers conclude that a user-centered website is more effective and can be a model for information-rich online resources. Researchers also conclude that usability research can be a productive source of ideas, underscoring the need for participatory invention.

Purdue University Writing Lab
Heavilon 226

Web: http://owl.english.purdue.edu/
Phone: (765) 494-3723
Email: owl@owl.english.purdue.edu

The End

Writing Scientific Abstracts

Brought to you in cooperation with the Purdue Online Writing Lab