Writing Scientific Abstracts

An Overview of Helpful Guidelines

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What is the Purpose of an Abstract?

Why should I Know How to Write Abstracts?

What are the Qualities of an Effective Abstract?

How do I Write an Abstract?

How do I Write Each Part of My Abstract

How do I Revise My Abstract?

What are Some Abstract Examples?

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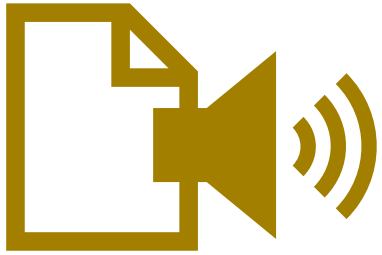
What is the Purpose of an Abstract?

Scientific abstracts:

- Introduce journal articles

- Help readers decide whether to read article

- Inform readers about the article's content



- Overview conference

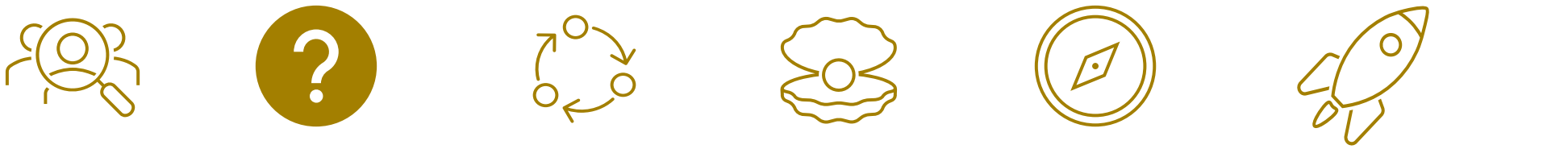
Why Should I Know How to Write Abstracts?

1. **Enables you to present** complex information in a clear, concise manner
2. **Improves your ability to** read abstracts more effectively
3. **Supports you in** conducting research
4. **Prepares you to** write abstracts for future publications
5. **Guides you to** condense report information into a short format for database searches

What are the Qualities of an Effective Abstract?

Effective Abstracts:

1. Consist of one or more well-developed paragraphs, which are unified, coherent, and concise
2. Use an introduction-body-conclusion structure in which the parts of the report are summarized in order:



Purpose | Research questions | Methods | Findings | Conclusions | Recommendations

3. Contain stand-alone qualities that allow it to be understood without reading the rest of the paper
4. Are intelligible to a wide audience

How Do I Write an Abstract?

Writing an Abstract:

1. Remember that an abstract typically contains: purpose, research questions, methods, findings, conclusions, and recommendations.

2. Read your paper in its entirety. Keep the above categories in mind and underline key points as you need.

3. Outline or write your abstract using the information you underlined in the previous step, following the same order as step 1. Then, follow the step-by-step process in the next slide.

How Do I Write Each Part of My Abstract?

Step-by-Step Process:

1. Write 1-2 introduction sentences that explain the background, purpose, and research question(s).

2. Write 1-2 sentences describing your research methods including the data analysis techniques you used.

3. Write 1-2 sentences describing the results and findings.

4. Write 1-2 sentences containing your conclusions and recommendations for future studies.

How Do I Revise My Abstract?

Read your abstract all the way through:

- Add transition words to tie ideas together
  - Example: Assemble your ingredients on a clean surface. Next, mix your dry ingredients together in a large bowl.

- Eliminate unnecessary content and add in things that are missing
  - Example: This article highlights the environmental dangers of plastic waste. ~~The environmental dangers of plastic waste are not often discussed in marine environments.~~ Our research focuses primarily on marine environments, striving to offer valuable solutions to protect aquatic life.

- Correct errors in mechanics and proofread
  - Example: Color plays a large role in ~~bring~~ bringing a story to life by ~~settling~~ setting the mood.

Example 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.

Example Scientific Abstract

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Research Question(s) | Background | Methods | Findings | Conclusions/Recommendations

Thank You

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