

How to Write an Abstract

An abstract is a succinct summary of the work you are presenting. Most often, abstracts are used in a research context, but can also be used when presenting curriculum, classroom activities and outcomes, or student learning outcomes. The ability to write a good abstract will serve as a valuable skill for anyone who wishes to effectively communicate ideas, scientific or otherwise. This document is intended as a guide for teachers and students who may not be directly involved in scientific research.

The following are the basic components of an abstract:

- 1) Relevance/motivation/problem statement:** Why do we care about the issue? What scientific, practical, educational or theoretical gap is your project addressing? What did this experience enable or prepare you to do as a science teacher or student?
- 2) Methods/procedure/approach:** What did you actually do to get your results? (e.g. designed and piloted science curriculum and conducted an experiment(s) with students, conducted split-luciferase assay, characterized double-mutant phenotypes, interviewed 10 teachers)
- 3) Results/findings/products:** As a result of completing the above procedures, what did you learn or create? What did students learn and create?
- 4) Conclusion/implications:** What are the larger implications of your findings, especially for the problem/gap identified in step 1? This will answer the question, "So what?"
- 5) Discussion and next steps:** describe how you plan to follow up on or build upon what students have learned, or how the research project enables them to engage in future scientific practices.

An abstract is the first section of a scientific paper and is also used as a screening tool for conference poster sessions. Abstracts are submitted as a type of application. Accepted abstracts are published in conference proceedings or booklets, and authors are invited to present a poster during the conference. Guidelines will vary, but generally speaking, abstracts are limited to about 250 words.

Reference:

Hess, G.R., K. Tosney, and L. Liegel. 2014. Creating Effective Poster Presentations. URL=<http://www.ncsu.edu/project/posters>, visited May 29, 2015.