



Public Speaking in Science and Mathematics Courses

Original Research Presentation (also called oral scientific presentation): describes original research you have done

Format:

1. Introduction describing the research questions or issues and the scope and objective of the study
2. Description of methods used to investigate the research question, including where it took place and the conditions under which it was carried out
3. Results of the study describing the key results and highlighting the answers to the questions/hypotheses investigated
4. Conclusion (also called “Discussion”), in which the speaker interprets the data or results and discusses their significance

Methods/Procedure Presentation: describes how an experimental or mathematical process works and under what conditions it can be used

Format:

1. Identifies the conditions under which the process should be used
2. Offers a detailed description of the process
3. Discusses the benefits and shortcomings of the process

Research Overview Presentation: provides background for a research question that will form the basis of an impending experiment or investigation

Format:

1. Overview of research that is relevant to the question at hand
2. Discussion of key studies that are central to the question
3. Analysis of the strengths and weaknesses of research in light of the current hypothesis or question

Field Study Presentation: describes a field study project

Format:

1. Overview of the field research
2. Methods used in the research
3. Analysis of the results of the research
4. Timeline indicating how the research results will be used in the future

Features of Effective Presentations

- Credible presentations must clearly illustrate the nature of the research question and the means by which results were achieved
- Use observation, proofs, and experiments as support
- Be selective in your focus on details, highlighting critical information but not overwhelming listeners with details they can learn about by referring to the written paper and the cited sources