A POCKET GUIDE TO PUBLIC SPEAKING

4TH EDITION

Chapter 31

Science and Mathematics Courses

Math and Science Presentations

- Primary purposes:
  - Inform listeners of research results
  - Identify processes for arriving at results

Research (“Scientific Talk”) Presentation

- Introduction
  - Describes research question
  - Identifies scope and objective of study
- Description of methods
  - Identifies research location and conditions

Research (“Scientific Talk”) Presentation (cont.)

- Results of the study
  - Summarizes key results
  - Highlights insights to the questions/hypotheses
  - The “body” of the presentation

Research (“Scientific Talk”) Presentation (cont.)

- Conclusion or discussion
  - Interprets results and discusses their significance
  - Should:
    - Link back to the introduction
    - Reiterate the research question
    - Highlight the key findings

Methods/Procedure Presentation

- Identifies conditions for using a process
- Offers detailed description of the process
  - May include a demonstration
- Discusses the benefits and shortcomings

Research Overview Presentation

- Provides background for a research question
- Sections:
  - Overview of relevant research
  - Discussion of key studies
  - Analysis of strengths and weaknesses
- Individual presentation or panel discussion

Field Study Presentation

- Describes research conducted in naturalistic surroundings
- Individual, team, or poster-session presentation

Field Study Presentation (cont.)

- Typically addresses
  - Overview and scope of field research
  - Description of the site
  - Methods used in the research
  - Interpretation/analysis of the data
  - Future directions for the research

Preparing Effective Presentations in Science and Mathematics

- Credible presentations must
  - Be grounded in the scientific method;
  - Illustrate the nature of the research question;
    - Audience must find it compelling and relevant
  - Describe methods for gathering/analyzing data;
  - Explain the results.

Preparing Effective Presentations in Science and Mathematics (cont.)

- Typically expected to
  - Support points with observation and experiments
  - Be selective in focus on details
  - Use analogies, build on prior knowledge
  - Demonstrate underlying causes
  - Use graphics to illustrate important concepts