

7.02/10.702 SciComm Meeting 6: Title and Abstract

SciComm Agenda--Meeting 6

1. Some end-of-semester announcements.
2. Oral presentations on Halloran and Moore articles.
3. Assessing SciComm goals.
4. PPT on writing Abstracts and Titles.
5. Abstract-writing exercises.
Ex. 1: Abstract scramble.
Ex. 2: Abstract assembly.
6. Peer feedback on LTP Discussion
 - Respond to the person who posted his/her LTP Results BEFORE yours.
 - Response should be as an attached file.

Some end-of-semester announcements

- Final draft of long-term project is due **Friday, May 6 by 5 p.m.** in my office or in my mailbox. Note: you're welcome to turn it in early! **You may also request an extension (via email) up to 5 p.m. on May 12.**
- Sign up for a 15-minute conference to meet with me in my office where you'll submit and get feedback on your LTP title and abstract, get back remaining work with my comments, and have an opportunity to ask me questions.

Tips for Revising Long-Term Projects

- Be sure that all of your sections correspond but at the same time are capable of being understood on their own (i.e., interdependent *and* independent).
- Include illustrations (at least two) on a separate sheet after the body text (i.e., don't fitz with inserting illustrations into your text).
- You do *not* need to turn in preliminary drafts with your final draft.
- Hand in 7.02/10.702 SciComm assessment form with your LTP.

Grading Criteria for L-T Projects

- Project is complete.
- Abstract summarizes effectively.
- Introduction orients the reader.
- Methods, Results, and Discussion contain appropriate information.
- Conclusion provides broad perspective.
- Details specified to appropriate length.
- Needless complexity avoided.
- Illustrations clarify or augment text and legends provide appropriate information.
- Language is clear, concise, accurate, and scientifically correct.

Taking stock of your start-of-semester SciComm goals

1. Read over the goals for SciComm that you sent me at the start of the term (which I emailed to you yesterday).
2. Reply to that email with the following:
 - How well have you met the goals you established at the start of the term?
 - What factors have helped/hindered your meeting of those goals?

What is the purpose of an abstract?

- A stand alone, mini-version of the paper (250 words or less).
- Describes the main sections of the paper.
- States the purpose, findings, and impact of the work.
- The goal is an economy of words.

The Essentials of an Abstract

See: <http://www.wisc.edu/writing/>

In an abstracts you address this question:

- What is the report about, in miniature and without too much detail?

By doing the following

- *State main objectives*: What did you investigate? Why?
- *Describe methods*: What did you do?
- *Summarize the most important results*: What did you find out?
- *State major conclusions and significance*: What do your results mean? So what?)

What are Some Pitfalls of Abstracts?

- Contains extraneous detail or information or conclusions not stated in the paper.
- Contains abbreviations, chemical formulas, jargon or references to material only in the paper itself.
- Failure to state the purpose of the work at the outset.
- Failure to state the importance of the work and where it leads at the end.

Essential to abstracts is an economy of words

- **Extract** key points from each section of your paper. Condense in successive revisions.
- **Do not include** references to figures, tables, or sources.
- **Do not include** information not in report.
- **Choose** each word carefully. Make them clear and significant.

Language: Needless Complexity

See Table 8-1 in Alley, Michael. *The Craft of Scientific Writing*. 3rd ed. New York, NY: Springer, 1997. ISBN: 0387947663.

Language: Needless Words

- (already) existing
- At (the) present (time)
- (basic) fundamentals
- (completely) eliminate
- (continue to) remain
- (currently) being
- (currently) underway
- (empty) space
- Had done (previously)
- Introduced (a new)
- Mix (together)
- Never (before)
- None (at all)
- Now (at this time)
- Period (of time)
- (private) industry
- (separate) entities
- Start (out)
- Write (out)
- (still) persists

Alley, Michael. *The Craft of Scientific Writing*. 3rd ed. New York, NY: Springer, 1997. ISBN: 0387947663.

Language: Weak Versus Strong Verbs

- made the arrangement for
- made the decision
- made the measurement of
- performed the development of
- arranged
- decided
- measured
- developed

Alley, Michael. *The Craft of Scientific Writing*. 3rd ed.
New York, NY: Springer, 1997. ISBN: 0387947663.

Active and Passive Voice

from Successful Scientific Writing, 2nd ed.

Vague passive phrasing

- It is recommended by the authors of the present study that . . .
- The data which were obtained by Johnson were probably indicative of . . .
- The following results were obtained . . .
- It was discovered that a sustained coordinated effort will be required . . .

Active, precise wording

- We recommend . . .
- Johnson's data probably indicate . . .
- We obtained these results . . .
- We need a sustained coordinated effort . . .

Alley, Michael. *The Craft of Scientific Writing*. 3rd ed.
New York, NY: Springer, 1997. ISBN: 0387947663.

Language: Too Many Abstract Nouns

- Original:
 - *The existing nature of Mount St. Helens' volcanic ash spewage was handled through the applied use of computer modeling capabilities.*
- Revised:
 - *With Cray computers, we modeled how much ash spewed from Mount St. Helens.*

Alley, Michael. *The Craft of Scientific Writing*. 3rd ed.
New York, NY: Springer, 1997. ISBN: 0387947663.

What is the Purpose of a Title?

- Indicate the **subject** of your research.
- **Distinguish** your research from others of its kind.
- **Show continuity** with research that has come before or will follow.
- Provide **key words** for indexing.

Michael Alley on the Importance of Titles

“The title is the single most important phrase of a scientific document. The title tells readers what the document is. If your title is inexact or unclear, many people for whom you wrote the document will never read it.”

Alley, Michael. *The Craft of Scientific Writing*. 3rd ed. New York, NY: Springer, 1997. ISBN: 0387947663.

Some Bad Titles

- Plantar’s Wart Removal: Report of a Case of Recurrence of Verruca after Curative Excision
- Characteristics of Columbine Flowers are Correlated with Their Pollinators
- Panda Mating Fails: Veterinarian Takes Over
- Gleanings on the Bionomics and Behavior of the East Asiatic Nonsocial Wasps. III. The Subfamily Crabroninae with a Key to the Species of the tribe Crabronini Occurring in Formosa and the Ryukyus, Contributions to the Knowledge of the Behavior of Crabronine Fauna, and Changes in the Taxonomic Position of Three Species of Crabronini Occurring in Japan
- Report of New Health Data Results from the 1999 National ASAP-FYI-ERGO Health Study: Lung Cancer in Women Mushrooms

Matthews, Janice R., et al. *Successful Scientific Writing Full Canadian Binding: A Step-by-Step Guide for the Biological and Medical Sciences*. Cambridge, UK: Cambridge University , 2000. ISBN: 0521789621

Some Good Titles

- Effect of Husband's Education on the Fatness of Wives
- Retrotransposons as Engines of Human Bodily Transformation
- Enhanced Recovery of Bitumen by Steam with Chemical Additives
- Adaptive Nulling in the Hyperthermia Treatment of Cancer

Upcoming Due Dates

Due during your scheduled conference

- Write a title and abstract for your long-term project, which we will discuss during your conference.

Due by 5 p.m., May 5

- Revise critique of Lupus article and submit.

Due by 5 p.m., May 6

- Submit final versions of long-term projects to me in my office or in my mailbox (unless you request an extension to May 12). Turn in course evaluation form with your long-term project.