

Communicating with other Scientists – Tutorial I

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Previous homework tasks

- Any issues?
- Is your website published for others to see?

Science's current view of itself

The Role of Science and Technology in Society and Governance 1998

- a) What are 3 recent, major changes in the way science is done?
- b) What are the implications of these for communicating science?

Previous Homework

1. Create a dot-point summary of a journal article from your discipline. Each dot should state the important message that is contained in each paragraph.
2. Using this, summarise in general terms what types of information is contained in each section of the paper e.g., introduction contains hypothesis and a reasons that led the authors to that hypothesis.
3. Bring this to Friday's tutorial.

Outline of a scientific paper

- Is the outline a logical flow of ideas and information?
- Is there only one main idea in each paragraph?
- Is each paragraph a new idea? If not, is the idea discussed important enough for two or more paragraphs?
- Are your ideas clearly and concisely expressed? Can the reader easily understand what you are saying?
- Is the idea in the appropriate section of the paper? (e.g., discussion not in results section)

Summary of dot-point summaries

- Introduction
- Background, problem, other studies, gap/why this question, hypothesis, overview results, significance/important
- Methods
- Detailed, specific, little/no explanation, how, mini method sections
- Results
- Raw data, stat analysis, summary data, diagrams and images, same order as methods, no explanation, prioritise result
- Discussion
 - major finding, relative to other papers, justification, interpretation of lesser results, future/remaining questions, synthesis, online appendices

Tasks

- What is the structure of an abstract?
- Using your dot point outline, write your own abstract for your scientific paper in 200 words.
- Exchange with person next to you – can it be understood without the rest of the paper?
- Write 2 new versions of a title for your scientific paper

Turning an outline into an abstract

- Start by using the topic/summary sentence from each paragraph.
- Take these sentences or ideas from your dot-point outline to create an abstract.
- Read through the abstract – does it make sense on its own. Can someone understand it if they have not see the rest of the paper? Change your abstract if the answer is no.
- Swap abstracts with the person next to you – do they think it stands alone? How can it be improved?
- Reduce it to 200 words

Great reference!

“Scientific Writing = Scientific Thinking”

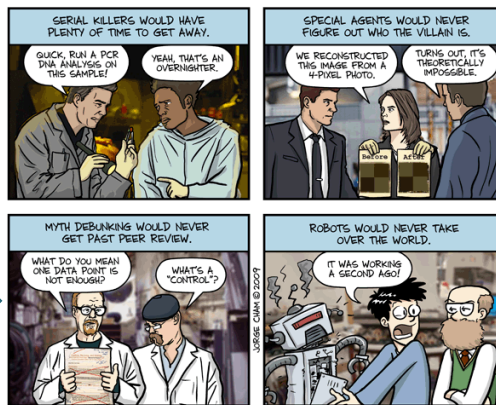
By David Lindsay

2011, CSIRO publishing

117 pages = short!

- scientific writing
- also oral presentations
- also writing for non-scientists
- also theses

IF TV SCIENCE WAS MORE LIKE REAL SCIENCE



Peer review in detail...

- What do you think reviewers look for and comment on?

Tasks

- Find two articles about how to write journal peer-reviewer comments (in your discipline). NB be aware there is a difference between a review article (ie, literature review) and reviewer comments about an article.
- Add these to your website in author-date reference style e.g., Harvard ref style (a link to the document is not sufficient, but you may wish to do this in addition)
- Find 3 journals in your discipline and add the mission statement (ie purpose or intended audience) to your website.

Assignment: Peer Review Template

- Go through details