Presenting your result (Some tips for academic writing)

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A Typical Structure

- Abstract
- Key words
- Introduction
- Methods
- Results
- Discussion/Conclusion
- Acknowledgment
- References



The Abstract

- The abstract, although it heads the article, is often written last, together with the title.
- The function of an abstract is to allow readers to judge whether or not the paper is of relevance to them.
- Many scientists browse research papers outside their area of expertise. Abstracts should be self-contained and written for as broad a readership as possible.

The Abstract

- Why did you do this study or project?
- What did you do, and how?
- What did you find?
- What do your findings mean?



Key words

- A wise choice of key words increases the probability that a paper will be retrieved and read, thereby potentially improving citation counts and journal impact factors.
 - Avoid terms that are too common.
 - Do not repeat key words from the title.
 - Include alternative terminology.

Introduction and Conclusion

Introduction

- Moving from general to specific
- Moving from problem to solution
- Engage your readers' interest

Conclusion

- Moving from specific to general
- Stimulate further thought



The Introduction Section

- The create-a-research-space (CARS) Model
 - Move 1: Establishing a research territory
 - Move 2: Establishing a niche
 - Move 3: Occupying the niche

In ecology, a niche is a particular microenvironment where a particular organism can thrive

Source: Swales and Feak (2009) Academic Writing For Graduate Students.

Ann Arbor: University of Michigan Press



Move 1: Establishing a research territory

- Show that the general area is important, problematic, or relevant in some way
 - Recently, there has been a growing interest in_____
 - The development of _____is a classic problem in____
 - The _____ has been extensively studied in recent years
 - The relationship between ____and ___ has been investigated by many researchers
- Review previous research in the area
 - Beginning with established major theories then moving to theories associated with individual authors

Source: Swales and Feak (2009) Academic Writing For Graduate Students. Ann Arbor: University of Michigan Press



Move 2: Establishing a niche

- Indicate a gap in the previous research, or extend previous knowledge in some way
 - However, little information ...(attention, work, data, research, few studies, investigations, researchers, attempts)
 - However, it remains unclear whether ...
 - Previous research has not addressed ...
 - Although considerable research has been devoted to ..., less attention has been paid to ...
 - The findings suggest that this approach might be less effective when ...
 - It would seem, therefore, that further investigations are needed in order to ...

Source: Swales and Feak (2009) Academic Writing For Graduate Students. Ann Arbor: University of Michigan Press



Move 3: Occupying the niche

- Make an offer to fill the gap that has been created in Move 2.
 - Outline purposes or state the nature/value of present research
 - List research questions or hypothesis
 - Announce principal findings

Source: Swales and Feak (2009) Academic Writing For Graduate Students. Ann Arbor: University of Michigan Press



The Methods Section

- Write the method section in such a way that readers can repeat the method from the descriptions given.
- Authors are sometimes too close to what they did and thus tend to forget to mention tiny but key details.
- This is a crucial section since the validity of the study will to a large extent depend on the care taken in the implementation of the research.

The Results Section

- Justifying the methodology
- Interpreting the results
- Citing agreement with previous studies
- Commenting on the data
- Admitting difficulties in interpretation
- Pointing out discrepancies

There is some merit in indicating what you did not find, or what surprised you.



Presenting Your Data

- Active verbs following reference to a table/figure
 - Shows
 - Presents
 - Illustrates
 - Summarizes
 - Demonstrates
 - Contains
 - Provides
 - Depicts
 - Lists
 - Reports

- Passive verbs in reference to a table/figure
 - Shown in
 - Illustrated in
 - Presented in
 - Given in
 - Listed in
 - Seen in
 - Provided in
 - Summarized in
 - Seen from



Presenting Your Data: Example

Which is a better description for a pie chart?

(a) The chart shows the quantity of tea consumed by the world's leading tea-consuming nations. India and China together consume more than half the world's tea production, with India alone consuming about one third. Other significant tea consumers are Turkey and Russia.

(b) The chart shows that 31% of the world's tea is consumed by India, 23% by China and 8% by Turkey. The fourth largest consumers are Russia, Japan and Britain, with 7% each, while Pakistan consumes 5%. Other countries account for the remaining 12%.

(Source: Bailey, Academic Writing: A handbook for International Students, 2nd edition, 2006)

You may need to interpret your visuals by briefly commenting on their main features.

Data Commentary

Highlight key findings from the data and judge the right strength of claim

Deregulation of the U.S. banking industry _____ the 1989-91 banking crisis.

- caused
- may have contributed to
- was probably a major cause of
- was one of the causes of
- might have been a small factor in

(Source: Kayfetz, Academic Writing workshop, 2009)



The WALTER Model to Present a Visual

- W-Why: set up the expectation/motivation for the visual
- A-Axis: describe the parameters in your visual
- L-Lines: describe each line/bar on a multi-line/bar graph
- T-Trends: the overall trends of your data
- E-Exceptions: try to explain outliers/exceptions
- R-Recap: describe why these results are significant and move on to the next result

(Credit: Tim Sherwood, UC Santa Barbara)



The Discussion/Conclusion Section

- Discussions should be more than summaries.
 - They are difficult to write because their aim is to discuss and comment on the findings, rather than just to report them.
- They should go beyond the results.
 - more theoretical or
 - more abstract or
 - more general or
 - more integrated with the field or
 - more connected to the real world or
 - more concerned with implications or applications.
 - or combination of the above.

(Source: Kayfetz, Academic Writing workshop, 2009)



The Discussion/Conclusion Section (a typical structure)

- Consolidate your research space; evaluate how the results fit in with the previous findings
- List the limitations of your study
 - what cannot be concluded from the study
- Offer an interpretation/explanation of the results and ward off counter-claims.
- State the implications (connect the objectives) and recommend further research

(Source: Kayfetz, Academic Writing workshop, 2009; James Hartley, Academic Writing and Publishing: A practical handbook. 2008)



The Discussion/Conclusion Section

- Indicate limitations of your study
 - It should be noted that this study has been primarily concerned with ...
 - The findings of this study are restricted to ...
 - We would like to point out that we have not ...
 - The results of this study cannot be taken as evidence for ...
 - Unfortunately, we are unable to determine from this data ...
 - Notwithstanding its limitations, this study does suggest

There is some merit in indicating limitations of your study.

(Source: Kayfetz, Academic Writing workshop, 2009)



Acknowledgements

- Most academic articles contain acknowledgements to various sources of help received during their preparation.
- "It is always appropriate to check with the people named in acknowledgements that they are happy with what is said and, if necessary, to reword it in the light of their comments." (Day and Gastel, 2006)

Main Styles of Referencing

- The APA style, or the 'name(date)' system
 - Zammuner, V. L. (1995). Individual and co-operative computer writing and revising: Who gets the best results? Learning and Instruction, 5(2), 101–24.
- The Modern Languages Association (MLA) style
 - Speck, Bruce W., Teresa R. Johnson, Catherine Dice, and Leon B. Heaton.
 Collaborative Writing: An Annotated Bibliography. Westport, Connecticut:
 Greenwood Press, 1999.
- The Institute of Electronic and Electrical Engineers (IEEE) style
 - [2] V. L. Zammuner, 'Individual and co-operative computer writing and revising: Who gets the best results?' Learning and Instruction, vol. 5, no.2, pp. 101–24, 1995.
- The Vancouver style
 - 4 Speck BWM, Johnson TR, Dice CP, Heaton LB. Collaborative writing: an annotated bibliography. Westport, CT: Greenwood Press, 1999.

(Source: James Hartley, Academic Writing and Publishing: A practical handbook. 2008)



Find readers! And request feedback

- Ask people to read what you've written. Let them know what sort of feedback you want. Ask them to point out where they find it difficult to follow.
- Don't wait until your writing is "perfect" because then people may suggest changes you won't want to make them!

Cons

- You might get feedback that rocks your confidence in your writing.
- You may loose face if the work is not great.

Pros

Opportunities to improve as a writer



Writing a Thesis/Dissertation

Writing a thesis is like writing an academic article, only worse. The thesis is much longer.

Unfortunately, students normally write their thesis before they start on articles, and they only write one. Thus, thesis writers typically have less practice and are less skilled at academic writing than are the more experienced authors of papers.



Generate a Timetable for your Thesis/Dissertation

- Once you know the submission date for your thesis/dissertation, you need to draw up a timetable with clear deadlines.
- Set yourself targets to allow you progress little by little

 a step at a time. Plan to write a small amount
 regularly every day if possible.

Writing Tips

- Start writing early, even before you think you are ready to write.
- Don't try to write a paper from beginning to end in order, but rather write what seems readiest to be written.
- Use outlines help you divide the writing project into many smaller, easy-to-handle pieces.
- Read your text aloud to yourself.

Common Traps

- Content
 - Miss out key literature
 - Claim too-much from the evidence
- Style
 - Poor organization
 - Lengthy sentences, redundancy
 - Ignore the style guide provided
- Process
 - Stopping after the first draft

