

Scientific Writing in English: Techniques and Tools



Reading Scientific Publications Part III

Ethel Schuster, Ph.D.
Northern Essex Community College, USA
eschuster@necc.mass.edu

Strategies for Reading Scientific Publications

- **GOAL**
 - “Sift” through text
 - Identify publications that are of interest to you

Suggested Strategy: Order

- **Examine, in this order**
 - 1. Title**
 - 2. Abstract**
 - 3. Conclusions**
 - 4. Introduction**
 - 5. Section headings, figures, captions**
 - 6. References**

Examine: Title

- Read Title carefully
- Is it of interest to you?
 - NO? >> Discard
 - YES? >> Proceed

Examine: Abstract (1)

- A good abstract should explain
 - what paper is all about
 - what problems it deals with
 - what contributions it offers to field

Examine: Abstract (2)

- Many abstracts begin with
 - background of problem to be discussed
- Most abstracts refer specifically to paper itself about
 - one-half to two-thirds into text

Examine: Abstract (3)

- Search for first sentence with
 - “in this paper ...”
 - “this paper ...”
 - “we show/demonstrate...”
- Begin reading there
 - Soon, you will find paper’s contribution

Examine: Conclusions

- Find conclusions section
- Most conclusions provide
 - summary of paper
 - emphasize paper's contributions and results
 - may outline
 - what is missing and future work

Examine: Introduction

- **May follow similar pattern of abstract**
 - longer and more detailed.
- **Having read abstract and conclusion**
 - **Focus on last part**
 - **Find outline remaining parts of paper**

Go on?

- Relevant?
- Interesting?
- >> ... continue

Examine: Sections, Figures, Captions

- **Examine**
 - **section headers**
 - **figures and captions**
 - **tables and their captions**
- **Any mathematical content (and interesting to you)**
 - **Examine formulae, expressions**

Examine: References (1)

- Finally, examine bibliographic references
- Look for references and authors familiar to you
- When you find any, go back to text and search where they cited

Examine: References (2)

- You may find explanation about difference between this paper and earlier
- If you are well familiar with previous work, easy to understand what THIS paper is offering:
 - new and original

Wrapping-up (1)

- Repeat strategy with every scientific publication
- Book?
 - Begin with Table of Contents
 - Pick the chapter(s) that seem interesting
 - Repeat for each chapter/section

Wrapping-up (2)

- Journal?
- Same...
 - Read table of contents
 - Follow with relevant parts

Advantages

- Thus, if follow strategy
 - Will discover that
 - + content:
 - can cover more material
 - time:
 - less time than before

Contact Information

- Ethel Schuster
eschuster@necc.mass.edu