

Different Types of Scientific Writing

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Overview

- Different types of papers
- Types of reviews
- Organization of papers
- What to leave in; what to leave out

Types of Papers

- Review Articles
- Editorials
- Book reviews
- Letters to the Editor
- Book chapters
- Lay writing

Review Articles

- Is not an original article
- Can be general compared to a research paper
- Literature review tends to be the focus
- A good review provides conclusions based on the literature

Types of Reviews

- Compile published papers during a defined period of time
- State of the art review
- Can include some results

Structure of a Review Article

- Introduction
- Materials and Methods
- Results
- Discussion

Review Articles

- Wider audience
- Writing style is more general
- Writing tends to be expansive

Introductory Paragraphs

- Should be well written
- Skimmers and skippers
- Basis for reading further

Conclusions

- An important component
- Can be painful
- May influence future readers

Opinion Writing

- Editorials
- Book reviews
- Letters to the Editor

Opinion Writing

- Your scientifically informed opinion
- Evidence based
- Creative style but rigorous

Editorials

- Perspective editorial
 - Comments on paper in the journal
- Persuasive editorial
 - Argues for a specific point of view

Perspective Editorial

- Miniature review
- Note strengths and limitations of the research
- Discuss implications

Persuasive Editorial

- Structure depends on audience
- Supportive: present main point early
- Include arguments for and against
- Acknowledge view points
- Adds credibility

Book Reviews

- Should describe and evaluate the book
- Provide background of authors or editors
- What is the scope of the book?
- What is the main point?
- Are there special features?
- Compare to other books; strengths and weaknesses
- Who would benefit from it?

Book Reviews

- Not an advertisement
- Don't ridicule
- Serve the readers of your review

Letters to the Editor

- Comment on recently published paper
- Post-publication peer review
- Authors may have opportunity to reply
- Case reports can be letters

Letters to the Editor

- Check journal's instructions
- Maybe maximum length
- May limit figures, tables, or references
- Maybe time limit relative to article publication

Letters to the Editor

- Be concise
- Focus on points
- Support your position clearly

Book Chapters

- Write it well
- Submit it promptly
- Follow instructions

Book Chapters

- Can be like a review article
- Plan the chapter carefully
- Investing in the organization can save time later
- Meet the deadlines

Book Types

- Monograph; focused on a special topic
- Handbook; provide technical details
- Textbook; students of science

Why or Why not?

- Research papers count
- Can be time consuming
- For profit

Tips for Book Writing

- Protected time
- Copyright issues
- Representative intended readers

Lay Writing

“Regard readers not as being ignorant but, more likely, innocent of your topic and its jargon. Write for them, not at them.” Alton Blakeslee

Know Your Audience

- Peers likely interested in topic
- Engage the reader
- Consider what they are likely to care about
- Use human interest

Convey Content

- Use analogies
- Provide visuals
- Support what you say with examples
- Learn from good writers