

# Effective Technical Writing: Reports, Papers, Theses

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## OUTLINE

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Publishing

Where

Why

Editing and refereeing process

How to write

Know material and reader

Method

Helpers

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Typical structure

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## REFERENCES

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# WHERE and WHY to Publish

Book

Thesis

Journal Paper (the editorial/refereeing process)

Proceedings paper

Proposal (the reviewing process)

Technical report

Informal report

The Internet

# REFEREEING

## Structure

Editor-in-Chief ----- Managing Editor

Department Editor

Associate Editor

Referee #1, #2, ...

## Questions \*

1. Are the problems discussed in the paper of substantial interest? Would the solutions of these problems materially advance either theoretical or methodological knowledge?
2. Does the author either solve these problems or make a contribution toward a solution that improves substantially upon previous work?
3. Are the methods of solution novel? Do they hold promise of being of use to solve other unsolved problems of interest?
4. Does the exposition in the paper help clarify our understanding of the area of research? Does it hold our interest and make us want to give the paper the careful rereading that we give important papers in our area of research?
5. Do the topic and nature of this paper seem appropriate for this journal? Could typical less-expert readers of this journal read this paper with profit and interest?

\* Leon J. Gleser (1986). Some notes on refereeing. *The American Statistician* **40**, 310–312.

## COPYRIGHT: POLICIES AND LAW

Stanford Website: < <http://fairuse.stanford.edu> >

Primary materials

Current Legislation, Cases and Issues

Resources on the Internet

Overview of the Copyright Law

Policy Example: Winter Simulation Conference (quoting)

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# HOW to Write

## Know

Topic

Reader

## Method

Outline incrementally

Rough draft then edit, or write carefully?

My way

## Helpers

Word processors: wysiwyg versus formatters

Spell checkers

Grammar checkers

OWL: On-line Writing Lab

< <http://owl.english.purdue.edu/> >

English-department graduate students

I.E. professors and students

# WHAT to Write

## Typical structure

Title

Abstract

Keywords

Introduction

Body

Appendices

References

## Composition

Reader knows big picture, and knows why

Hierarchical structure: everything has a topic

Not a mystery: state problem and contribution early

Parallelism

Simplicity

## Grammar

Hyphen is not a dash

Set mathematics in italics

Distinguish between "which" and "that"

See list of 15 grammar rules

## GRAMMAR RULES \*

1. Don't use no double negatives.
2. Make each pronoun agree with their antecedent.
3. Join clauses good, like a conjunction should.
4. About them sentence fragments.
5. When dangling, watch your participles.
6. Verbs has to agree with their subjects.
7. Just between you and I, case is important too.
8. Don't write run on sentences they are hard to read.
9. Don't use commas, which aren't necessary.
10. Try to not ever split infinitives.
11. Its important to use your apostrosphe's correctly.
12. Proofread your writing to see if you any words left out.
13. Correct spelling is absoluteley essential.
14. Don't abbr.
15. You've heard it a million times: avoid hyperbole.

\* From the *Bulletin of the Minnesota Newspaper Association*.