

A QUICK REFERENCE FOR GRANTWRITERS

# WRITING AND EDITING TECHNICAL ARTICLES AND PROPOSALS

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**\*Note:** In this booklet, the abbreviations 'GM' and 'PM' are used to indicate the Grant Manager and Project Manager, respectively.

## Lesson 1 | Nine Rules for Scientific and Proposal Writing

1. Always begin by knowing your audience(s) and your goals.
2. Write!
3. "KISS": KeeP It Simple and Short.
4. Your goal is always to present information clearly, and reason with it to a conclusion.
5. Avoid jargon.
6. Use the first, person active voice.
7. Get the grammar and spelling right!
8. Help your readers.
9. Show your data.



## Lesson 2 About Writing Proposals

### Your Main Tasks

In this order:

0. First! Know your audiences! Then write thus:
1. State the problem. Define the question, preferably in one sentence.
2. Connect the problem to the rest of knowledge. Think context: where does it fit?
3. Tell why it is interesting. Why should the reader care?
4. Explain how you will approach the problem.
5. Ask for the resources to do a good job.

### Page Set Up

- Under 10 pages single-spaced (unless otherwise specified in the RFP)
- 1" margins
- 12 point type (data, text, figures, literature) but not CV's

### Getting Ready

- Read the RFP slowly, carefully and in depth.
- Re-read it.
- Underline every active verb.
- Outline stated goals, seek unstated goals.
- Make a complete list of all RFP sections, topics, and requirements.
- Use words and terms from RFP as headings in your text.
- Use the list as an outline for writing.

### Writing

- Your goals must clearly speak to program goals (often not science).

## About Audiences (plural)

- You must enthuse, inform, and educate *all* your audiences—simultaneously.
- Investigate, understand, address specific needs of RFP-issuer.

## About Reviewers

- Make it easy for GM/PM to sell your idea to others.
- Do not assume reviewers know everything you do.
- [Quickly] give non-specialists any/all background needed to evaluate your ideas.
- Provide enough detail so specialists see you know the field.
- Cite only for unexpected, critical, or controversial points.

## About Length and Timing

- Follow page limits strictly.
- Be brief, with clarity and precision.
- Send proposal well before deadline.

## About Preliminary Review

- Have people unfamiliar with the subject review your text, preferably at an early stage. *They should* provide detailed comments; *you should* accept comments, not argue, and make necessary changes.

## About Failure

- It is your fault, not that of the reviewers or PM.

## About Success

- Keep managers involved (phone calls, draft documents, informal reports).
- If you have problems ask for help early: PMs love to help, and they have a vested interest in your success.

## References

1. William Strunk, Jr. & E.B. White, "The Elements of Style", 4th Ed.

## Lesson 3 Proposal Strategy and Tactics

### Study the RFP

- Study the RFP in detail.
- Mark action verbs.
- Make a checklist of stated requirements & recommendations.
- Look for *implied* requirements.
- Address *every* requirement. If it occurs twice, address it twice (e.g., by reference to earlier text).
- Understand the submission timeline.

### Audiences

- Identify your audiences (plural).
- You must intrigue and satisfy each audience's needs.
  - a. Programmatic audience: Meet GM's scientific and political needs.
  - b. Technical audience: Who are likely reviewers and what are their backgrounds? How are the backgrounds of your reviewers, yourself and one other individual different? How do you interest all?

### Do Your Homework

1. Call and talk to the GM before writing. Questions: What is GM trying to accomplish in general, in program? How does this RFP fit into the master plan? Ask about upcoming RFP's.
2. Choose your approach. Use the tactically best presentation—even if you do not personally like it.
3. Special RFP? Find out who invented it, why, and where the money came from.

### Make the Reviewers' Job Easy

#### Language

- Avoid jargon. Yes, you can say it without jargon!
- Use Anglo-Saxon English: "The man ran down the hill."
- Use the active voice, first person—use "I" and "we".

### Rules for Sentence Structure

- No more than three commas in a sentence.
- No more than 20 words in a sentence.
- Get the grammar right—clarity is the goal, so ask for (and accept) help.

### Actual Writing: The Meat

Do all these in sequence and in five pages of text plus one figure:

1. Define the problem: What is the question?
2. Put it into context: Relate it to the universe.
3. Tell why it is interesting: Why should the reader care?
4. Tell how you will investigate it.
5. List your needs.

### Length

Keep it short, pare text down repeatedly, drop any figure or table that can be summarized in a sentence.

### Citations

- Fewer is better.
- Use short citations (e.g., AAAS's "Science" format).
- Cite only for controversial or critical points or to support unexpected arguments and conclusions.

### Budgets

- Ask for what you need to do a good job. No padded budgets.
- Prepare two, fall-back positions in advance.
- Have a 'drop-dead' minimum figure.

### Format

- Understand and precisely follow stated guidelines.
- Text: Keep it short, use big, plain fonts, leave white space.
- Headings: Bold, frequent, informative, short, take from RFP's requirement checklist.
- Inform: Where am I? Where have I been? Where am I going?"



## Partners

- Put together a dream team...ignore all boundaries in assembling it.

## Do a Preliminary Review

- Get technically competent literate people, from outside the field, to critique a draft in vicious detail. Accept their advice and rewrite.

## Tactics

- Submit early.
- Information copies. Co-funding from other sources? Send cross-referenced copies to all, suggesting co-funding.
- Suggested reviewers. Pick good people who can do a good job especially for esoteric subjects.

## If You Are Not Funded

- Remember, most proposals are not funded!
- Get the reviews, study them, learn from them.
- Discuss formal reviews with outside reviewers who critiqued your draft.
- Call the GM and discuss both the failed proposal and ideas for improving it.
- Implement suggestions and re-submit.

## After You Are Funded

- Keep the GM informed. On progress, send a note about interesting or exciting developments in field generally.
- Make the GM's job easier. Keep them loaded with current visual aids, designed for drama and the non-specialist.
- About problems. Be frank. Ask for help, and ask early.



## Lesson 4 Ideas About Group Writing

### Why You Are Writing?

- Your objective is to produce a coherent, useful, readable and persuasive text. Be prepared to have, and to work through, disagreements amongst participants.
- Know your purpose and your audience. Analyze these, and write them down.

### Organization and Process

1. Choose a leader. Leader duties include “forcing, hounding, writing, leading, soothing, accommodating, and *deciding*”. A leader must be forceful and diplomatic, act on their own in unpopular ways, and have time, enthusiasm, and talent.
2. Choose an editor. They must be experienced, forceful, and thorough.
3. Set a time line. Set group final due-date a week earlier than real due-date. Develop a schedule of specific events, tasks, task due-dates by working backward from due date. Make a Gantt chart, agree upon it, give everyone a hard copy.
4. Assign specific tasks and due dates. Tasks should be specific pieces of text or analysis: executive summary, introduction purpose, procedures, assessment, matching funds, etc.

### For the Group at Large: About Writing and Editing

1. Use the outline. Keep to it unless changes are agreed to.
2. For each writing task:
  - Draft #1, write a lot, write fast, be sloppy. Get all ideas down, or you will lose them.
  - Print draft #1 out double-spaced. Re-read it. Modify. Keep it short , simple, remove jargon.
  - Adjust text. For every paragraph and section put the conclusion first, provide trailing text explaining how you arrived at it. Put a short (three word) bold heading at the start of each paragraph; these headings by themselves should tell the story.

- Reprint as draft #2 give it to all the others for written comment with red ink.
- Use to improve and building draft #3. Submit to editor/leader.

### **Editor: Take the Large View**

1. Assemble and distribute the overall draft. Print identical copies for people to chop on. Do this *on time*, even if incomplete.
2. Go through the entire document for details and consistency of style. Supervise overall structure, flow, and little details making the reader feel the document was written by a single author.
3. Require written comments. Set a firm deadline for comments. Study and use those comments that recur or genuinely help. Return a set of hard-copies to all for written comment—more red ink.
4. After incorporating second-round comments, print copies for review by a knowledgeable persons outside the topic area. Edit brutally. Face to face group discussion of outsiders' comments decide to use or address each comment.
5. The resulting draft is probably ready for submission.

## Lesson 5 Explaining Complex Ideas in Simple Words

1. Take the time to understand the topic (or question) yourself.
2. Take the time to explain without jargon; this requires advance thought.
3. Explain ideas in clear simple language, use single-syllable Anglo-Saxon words.



**Appendix** **Notes and Resources**

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