Research Communication Skills Training Day

Muhimbili University of Health and Allied Sciences
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putting research knowledge at the heart of development

Thanks and a Welcome

- Thanks to hosts, supporters, and others
- Main topics
  - Approaching a writing project
  - Writing and publishing a scientific paper: key points
  - Writing a case report: some basics
  - Preparing a grant proposal: elements of success
  - Giving oral and poster presentations: top tips
- Goals and objectives (distributed to attendees)
- Brief introductions of attendees

A Note

- AuthorAID workshops: usually several days
- This training day: condensed version (highlights)
- Less chance for discussion, small-group work
- To aid in assimilating and applying the content, hope you'll follow up, for example by
  - Discussing the content with other attendees
  - Starting to apply some points to your own work
  - Sharing the content with others

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Approaching a Writing Project

Overview

- Establishing the mindset (attitude)
- Knowing the ethics
- Preparing to write
- Doing the writing
- Revising your work
- Using well-chosen resources

Establishing the Mindset

- Remember that you are writing to communicate, not to impress.
- Realize that those reading your work want you to do well.
  - Journal editors
  - Peer reviewers
  - Professors

    The purpose of their constructive criticism is to help you succeed.

Knowing the Ethics

- Authenticity (not fabrication)
- Accuracy
  - Providing complete data (not only those supporting your hypothesis)
  - Avoiding inappropriate manipulation of images such as photographs
  - Using appropriate statistical procedures

Knowing the Ethics (cont)

- Originality
  - Not republishing the same findings (except under special circumstances, with the original source cited)
  - Not submitting the same manuscript to two or more journals at once
  - Not dividing one small research project into many tiny papers (“salami science” or “cucumber science”)

Knowing the Ethics (cont)

- Credit
  - Citing sources of information and ideas (also aids credibility, helps in finding out more)
  - Avoiding excessive use of others' words
    - Recording sources when copying items or taking notes
    - Placing in quotation marks, or indenting, items used verbatim
    - Perhaps drafting some items while not looking at the source materials

Knowing the Ethics (cont)

  - Observing copyright and obtaining needed permissions
- Ethical treatment of humans and animals (and documentation thereof in publications)
- Disclosure of conflicts of interest
  - Financial
  - Other

A Resource on Ethics

On Being a Scientist: A Guide to Responsible Conduct in Research, 3rd edition (2009)

- From the US National Academies
- Largely for graduate students
- Available online at http://www.nap.edu/catalog.php?record_id=12192
- Video available at the same website

Preparing to Write

- Use published items as models.
- Obtain and review instructions.
  - *If you brought a journal's instructions to authors, what kinds of things does it tell you?*
- Perhaps consult a style manual—for example:
  - Scientific Style and Format
  - AMA (American Medical Association) Manual of Style
- While gathering content, write down ideas that occur to you.

Preparing to Write (cont)

- Do lots of “prewriting”—for example:
  - Stack papers in the order you plan to cite them.
  - List points you want to make.
  - Perhaps make an outline.
- If you’re having trouble formulating ideas, perhaps do something else for a while.

Doing the Writing

- Schedule specific times to write.
- Start with whatever part you find easiest.
- Don’t interrupt your writing to search for small details.
- Realize that often in writing there is no “one right way” but rather a series of problems with more than one solution.

Revising Your Work

- Note: Good writing is largely a matter of good revising.
- First revise your writing yourself. Then get feedback from others and revise more.
- Consider having an editor help you.
- Avoid the temptation to keep revising your writing forever.

Questions to Consider in Revising

- Does the manuscript contain everything it should?
- Does it contain anything it shouldn't?
- Is all the information accurate?
- Is the content consistent throughout?
- Is everything logically organized?
- Is everything clearly worded?

Questions (cont)

- Are points stated briefly, simply, and directly? In other words, is everything concise?
- Are grammar, spelling, punctuation, and word use correct throughout?
- Are all figures and tables well designed?
- Does the manuscript comply with the instructions?

Using Well-Chosen Resources

Some Resources Mainly for Non-Native Users of English

- UsingEnglish.com (www.usingenglish.com)
- Academic Phrasebank (www.phrasebank.manchester.ac.uk)
- Scientific English (set of lessons accessible at www.authoraid.info/en/resources/details/1064/)

Some Other Useful Resources

- Getting the Most out of Words, from *Editing and Publication: A Training Manual* (available at www.authoraid.info/en/resources/details/652/)
- OneLook Dictionary Search (www.onelook.com)
- Grammar Girl (grammar.quickanddirtytips.com)
- *The Elements of Style* (www.bartleby.com/141/)

AuthorAID:
A “Meta-Resource”

www.authoraid.info

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Rhoune's View

"Through the AuthorAID website, I met my mentor - a PhD student at the University of Michigan. She has been very dedicated in offering me guidance on how to improve my writing skills."

Rhoune Ochako, Kenya

The AuthorAID community includes over 8100 researchers from around the world. If you are looking for help, want to share you expertise or a searching for someone to work with the AuthorAID community can help!

Find a researcher

Latest News

Good Research Writing: A Result of Repeated Revision

Yes, one draft isn't enough!

By Barbara Gastel | March 2, 2014

Resource of the Week #151: 'Scientific English for Hispanic Scientists'

A presentation with many helpful examples

By Barbara Gastel | March 1, 2014

Tip of the Week #170

Featured Researchers

ANGELA LUCIANA DE AVILA

Research interests: Sustainable forest management, tropical ecology, tropical silviculture, vegetation dynamics.

Looking for a mentor

Oluchi Emereuwa

Research interests: Medical science,

Upcoming Events

Call for applications to Newton International Fellowships

Jan. 24, 2014 | UK

A new round of Newton International Fellowships - an initiative to fund research collaborations and improve links between UK and overseas ...

AuthorAID Discussion

Reviewer for a chapter

March 3, 2014

AuthorAID News

Good Research Writing: A Result of Repeated Revision

By Barbara GastelMarch 2, 2014

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Read more...

Resource of the Week #151: 'Scientific English for Hispanic Scientists'

By Barbara GastelMarch 1, 2014

A presentation with many helpful examples
Read more...

Tip of the Week #170

By Bernard AppiahFeb. 25, 2014

Check both

Global news

- Secrets to a successful mHealth campaign — *March 4, 2014*
- Science for Humanity falters but hopes to reinvent itself — *March 4, 2014*
- Mobile technology improves water access in Rwanda — *March 4, 2014*
- Market forces 'insufficient' to roll out low-cost tech — *March 3, 2014*
- Tech can give women the space to fight for their rights — *March 3, 2014*

More ...

Upcoming Events

Resource Library

Search:

Search

Scientific English for Hispanic Scientists

By Barbara Gastel | Feb. 27, 2014

Presentation by Dr. Daniel Limonta, Pedro Kourí Institute of Tropical Medicine (IPK), Havana, Cuba, 20 February 2014.

Free e-learning course in research ethics

By Ravi Murugesan | Feb. 24, 2014

The Global Health Network has launched a free, open access e-learning resource: Research Ethics Online Training (http://globalhealthtrials.tghn.org/elearning/research-ethics/). This comprehensive course has been adapted from a training course and resource package designed and produced by the World Health Organisation (WHO).

Editing Your Own Papers and Proposals: How to Wow Reviewers and Aid Readers

By Barbara Gastel | Feb. 21, 2014

From the 2014 American Association for the Advancement of Science annual meeting.

Topic

Academic blogging 1
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Resource Type

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Wishing you much success with your writing projects!


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Writing and Publishing a Scientific Paper: Key Points

Main Source of Information

How to Write and Publish a Scientific Paper, 7th edition, by Robert A. Day and Barbara Gastel

Writing a Paper

The IMRAD Structure

- **I**ntroduction: What was the question?
- **M**ethods: How did you try to answer it?
- **R**esults: What did you find?
- **A**nd
- **D**iscussion: What does it mean?

A More Complete View

- (Title)
- (Authors)
- (Abstract)
- **Introduction**
- **Methods**
- **Results**
- **Discussion**
- (Acknowledgments)
- (References)

Some Other Structures

- With the methods section at the end (IRDAM)
- With a combined results and discussion section (IMRADRADRAD . . .)
- With a conclusions section at the end (IMRADC)
- Essay format, with headings chosen by the author
- Other
- Question: In your field, what is the usual structure of papers reporting research?

If you brought a sample paper, how is it structured?

Title

- The fewest possible words that adequately indicate the contents of the paper
- Important in literature searching
- Should not include extra words, such as “A Study of” or “Observations on”
- Should be specific enough
- Generally should not include abbreviations
- (Running title: short version of title—appears at tops of pages)

Authors

- Those with major intellectual contributions to the work
- Often listed largely from greatest contributions to least
- Head of research group often is listed last
- In some fields, listed alphabetically
- All should take part in drafting or revising the paper and should approve final version

Identifying Authors Clearly

- Advisable to list one's name the same way on every paper
- ORCID ("Open Researcher and Contributor ID") Identifier
  - A unique identification number
  - Can, for example, distinguish between researchers with the same name
  - For information on obtaining an ORCID ID, see http://orcid.org

Orders of Reading and Writing Sections of a Paper

- People read the sections of scientific papers in various orders.
  - What's your favorite order? Why?
- You can write the sections of a scientific paper in any order.
  - What's your favorite order? Why?
- A convenient order in which to write the sections: Methods, Results, Discussion, Introduction

The Methods Section

Purposes of the Methods Section

- To allow others to replicate what you did
  - In order to test it
  - In order to do further research
- To allow others to evaluate what you did
  - To determine whether the conclusions seem valid
  - To determine whether the findings seem applicable to other situations

Methods: Basic Information to Include

- In most cases, overview of study design
- Identification of (if applicable)
  - Equipment, reagents, organisms, etc used (and sources thereof)
  - Approval of human or animal research by an appropriate committee
  - Statistical methods

Methods: Amount of Detail to Use

- For well-known methods: name of method, citation of reference
- For methods previously described but not well known: brief description of method, citation of reference
- For methods that you yourself devise: relatively detailed description

Methods: The Words and More

- Should be written in past tense
- In some journals, may include subheads
- May include tables and figures—for example:
  - Flowcharts
  - Diagrams of apparatus
  - Tables of experimental conditions

Methods: A Suggestion

Look at the methods sections of some papers in your target journal. Use them as models.

The Results Section

The Results Section

- The core of the paper
- Often includes tables, figures, or both
- Should summarize findings rather than providing data in great detail
- Should present results but not comment on them
- (Note: Some journals, however, combine the Results and the Discussion.)

Verb Tense for the Results Section: Past Tense

Examples:

- A total of 417 patients were studied.
- _____ increased, but _____ decreased.
- The median score among health science students was _____.
- Three participants were lost to follow-up.
- This difference was not statistically significant.

Results Sections of Papers with Tables or Figures

- How much should the information in the text overlap that in the tables and figures?
  - Not extensive overlap
  - In general, text should present only the main points from the tables and figures
  - Perhaps also include a few of the most important data
- Remember to mention each table or figure. Do so as soon as readers might want to see it.

Mentioning Tables and Figures: Some Writing Advice

- In citing tables and figures, emphasize the finding, not the table or figure.
  - *Not so good*: Table 3 shows that researchers who attended the training day published twice as many papers per year.
  - *Better*: Researchers who attended the training day published twice as many papers per year (Table 3).

Results: A Suggestion

- Look at the results sections of some papers in your target journal.
- Notice items such as the following:
  - Length
  - Organization
  - Inclusion of subheads (or not)
  - Number of tables and figures
- Use these results sections as models.

Tables and Figures: Some Basics

Tables: Some Good Habits

- Use tables only if text will not suffice.
- Design tables to be understandable without the text.
- Organize each table in a logical way.
- If a paper includes a series of tables, use the same format for each.
- Be sure to follow the instructions to authors.

Figures: Some Good Habits

- Use figures (graphs, diagrams, maps, photographs, etc) only if they will help convey your information.
- Avoid including too much information in one figure.
- Make sure any lettering will be large enough once published.
- Follow the journal’s instructions.

A General Suggestion

- Look at tables and figures in journal articles presenting research similar to yours
  - In your target journal
  - In other good journals
- Use these tables and figures as models when designing your own tables and figures.

Sources of Further Information

- "*Almost* Everything You Wanted to Know About Making Tables and Figures," Department of Biology, Bates College, posted at abacus.bates.edu/~ganderso/biology/resources/writing/HTWtablefigs.html
- Writing and Publishing Scientific Papers, Part 2 (from China Medical Board course), posted at www.authoraid.info/en/resources/details/1065/

The Discussion

Discussion

- One of the more difficult parts to write, because have more choice of what to say
- Often should begin with a brief summary of the main findings
- Should answer the question(s) stated in the introduction (or address the hypothesis or hypotheses stated in the introduction)

The Discussion: Some Possible Content

- Strengths of the study
  - For example, superior methods, extensive data
- Limitations of the study
  - For example: small sample size, short follow-up, incomplete data, possible sources of bias, problems with experimental procedures
  - Better to mention limitations than for peer reviewers and readers to think that you're unaware of them
  - If the limitations seem unlikely to affect the conclusions, can explain why

The Discussion: Possible Content (cont)

- Relationship to findings of other research—for example:
  - Similarities to previous findings (your own, others', or both)
  - Differences from previous findings
  - Possible reasons for similarities and differences

The Discussion: Possible Content (cont)

- Applications and implications—for example:
  - Possible uses of the findings (in clinical care, health policy, etc)
  - Relationship of the findings to theories or models:
    - Do the findings support them?
    - Do they refute them?
    - Do they suggest modifications?

The Discussion: Possible Content (cont)

- Other research needed—for example:
  - To address questions still unanswered
  - To address new questions raised by the findings
- Other

Discussion (cont)

- Typically should move from specific to general, rather like an inverted funnel
- In some journals, may be followed by a conclusions section
- In some short papers, is called “Comment” rather than “Discussion”

The Discussion: A Suggestion

- Look at the discussion sections of some papers in your target journal.
- Notice items such as the following:
  - Length
  - Types of content
  - Organization
  - Phrases commonly used
  - Citation of references
- Use these discussion sections as models.

The Introduction

Purposes of the Introduction

- To provide background
  - In order to help readers understand the paper
  - In order to help readers appreciate the importance of the research
- To identify the question(s) the research addressed
  - Sometimes presented as 1 or more objectives
  - Sometimes stated as a hypothesis or hypotheses

Length of Introduction

- Articles in medical journals (for physicians): tend to have short introductions (a few paragraphs or less)
- Articles in some other journals (for example, some nursing journals): tend to have long introductions
- How about introductions to articles in your research area?

Gearing the Introduction to the Audience

- Papers in relatively general journals: Introduction must provide basic background information.
- Papers in specialized journals: Introduction can assume that readers have more knowledge about the research topic.

Structure of the Introduction

- Introduction typically should be funnel-shaped, moving from general to specific
- A common structure:
  - Information on importance of topic
  - Highlights of relevant previous research
  - Identification of unanswered question(s)
  - Approach you used to seek the answer(s)
  - (In some cases, the main findings)

Overall Structure of a Paper: Like an Hourglass

The Introduction: A Suggestion

- Look at introductions of some papers in your target journal.
- Notice items such as the following:
  - Length
  - Types of content
  - Organization
  - Citation of references
- Use these introductions as models.

When to Write the Introduction

- Sometimes wise to write the introduction last
  - "Until you know what you're introducing, you can't introduce it."
- Sometimes useful to write it first, to help provide focus
- After writing all parts of the paper, revise the paper as a whole (typically several times).

The Abstract

- Briefly summarizes the paper
- Should be organized like the paper
- In some journals, should be a structured abstract (with standardized headings)
- Especially important because it
  - Provides a first impression
  - Often appears alone
- Sometimes is best written after the paper
- Should be revised after rest of paper is finalized

Thank you! Asante!

Publishing a Paper

Deciding What (or When) to Publish

- Some factors to consider: quality of the work, extent of the work, interest to others
- Suggestions:
  - Seek guidance in this regard from others in your field who are more experienced in publishing journal articles.
  - Present your work orally first. Doing so can help in deciding whether the work is publishable and in shaping the paper.

Submitting the Paper

- Traditional submission (by mail)—now rare
- Electronic submission
  - Commonly via online submission system
  - Sometimes as e-mail attachment
- Inclusion of a cover letter (conventional or electronic)
- Completion of required forms

Some Categories of Editors at Journals

- Helpful to know because you might interact with each
- Main categories:
  - Editor-in-chief (and sometimes associate editors etc)—concerned mainly with content
  - Managing editor(s)—concerned mainly with administration of the journal
  - Manuscript editor(s)—improve the writing and maintain a consistent style

Initial Screening by the Journal

- For appropriateness of subject matter
- For compliance with instructions
- For overall quality (sometimes)

Peer Review

- Evaluation by experts in the field
- Purposes:
  - To help the editor decide whether to publish the paper
  - To help the authors improve the paper, whether or not the journal accepts it

The Editor's Decision

- Based on the peer reviewers' advice, the editor's own evaluation, the amount of space in the journal, other factors
- Options:
  - Accept as is (rare)
  - Accept if suitably revised
  - Reconsider if revised
  - Reject

Revising a Paper

- Revise and resubmit promptly.
- Indicate what revisions were made.
  - Include a letter saying what revisions were made. If you received a list of requested revisions, address each in the letter.
  - If requested, show revisions in Track Changes.
- If you disagree with a requested revision, politely explain why in your letter. Try to find a different way to solve the problem that the editor or reviewer identified.

Answering Queries

- Queries: questions from the manuscript editor
- Some topics of queries:
  - Inconsistencies
  - Missing information
  - Ambiguities
  - Other
- Advice: Respond promptly, politely, and completely yet concisely.

Reviewing Proofs

- Proofs: typeset material to check
- Review the proofs promptly.
- Some things to check:
  - Completeness (presence of all components)
  - Accuracy (absence of typographical errors in text and references)
  - Placement of figures and tables
  - Quality of reproduction of figures
- Note: This is not the time to rewrite the paper.

A Final Step: Celebrate Publication of Your Paper!


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Writing a Case Report: Some Basics

The Case Report

- Basic definition: description and discussion of a clinical case
- “The archetypal medical article”
- Popular with readers
- Perhaps the easiest type of journal article for clinicians to write

Functions

- Presenting newly found
  - Conditions
  - Manifestations
  - Disease mechanisms
  - Effects of drugs
  - Etc
- Teaching
  - Students
  - Health professionals

Potential Publication Sites

- Research-oriented medical journals
  - General medical journals
  - Specialty and subspecialty journals
  - (Note: sometimes include cases as letters)
- Teaching-oriented publications
  - Journals
  - Textbooks etc
- Journals specializing in case reports

Examples of Case-Report Journals

- *BMJ Case Reports* (casereports.bmj.com/)
- *Journal of Medical Case Reports* (www.jmedicalcasereports.com/)
- *Case Reports in Gastroenterology* (content.karger.com/ProdukteDB/produkte.asp?Aktion=JournalHome&ProduktNr=232833)
- *Journal of Surgical Case Reports* (jscr.oxfordjournals.org/)

Case Reports: Some Structures

- Usual structure: introduction, case description, discussion/conclusions, references
- Modified IMRAD structure: (Mainly) introduction, methods, results, discussion
- Clinico-pathological conference (CPC)
- “Case presentation” (case description followed by topic discussion)

Examples of Case Reports

- Classic type of case-report
- IMRAD-style (research-oriented) case report
- CPC
- “Case presentation”

General Pointers

- Consult the journal's instructions to authors.
- Use other case reports in the same journal as models.
- Review the literature.
- Cite the literature selectively. (Case reports generally have short reference lists.)
- Consider including one or more figures or tables.
- Provide an informative title.
- Write in a style that clinicians will find readable.

Section-by-Section Advice

- Introduction:
  - Provide background to help readers appreciate the case.
  - Note why the case is being reported.
- Case description:
  - Focus on aspects relating to why the case is being reported.
  - Therefore include mainly pertinent positives and negatives.

Section-by-Section Advice (cont)

- Discussion/conclusions:
  - Again, focus on items relating to why the case is being reported.
  - Note evidence supporting the conclusions being drawn.
  - Discuss ambiguities and alternative interpretations, if any.
  - Relate content to previously published material.
  - Discuss implications for clinical care and, if applicable, for research.

Case Reports: Some Issues

- Obtaining data and documentation on potentially publishable cases
- Confidentiality of information and photos
- Sensitivity of wording
- Style Points
  - “Case” versus “patient”
  - Drug names (generic or trade, capitalization)
  - Avoiding excessive capitalization of disease names

Thank you! Asante!


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Preparing Grant Proposals: Elements of Success

Overview

- An introductory message
- Preparing to write a proposal
- Drafting the proposal
- Writing a proposal clearly and persuasively
- Some take-home messages

An Introductory Message

Grant Proposals as Persuasive Writing

- The goal of a grant proposal is to **persuade** the recipient to provide funding.
- Everything about the proposal should support the conclusion that the work is worth funding.
- Nothing about the proposal should undermine this conclusion.

Persuasive Proposals

Proposals must persuade funders that

- The goal of the proposed work is worthwhile
- The goal is relevant to the funder's mission
- The proposed approach is sound
- The staff is capable of doing the work
- Adequate facilities will be available
- The requested amount of funding is reasonable

Items Helping Make a Proposal Persuasive

- Inclusion of reasons for choices (for example, of techniques, sample sizes, durations, consultants, venues)
- Inclusion of supporting evidence (for example, published findings, preliminary data, calculations, CVs, letters of agreement)
- Competent writing (helps show capability, including capability to publish the work)

Preparing to Write a Proposal

Identifying Funding Sources

Funding Sites: Sources of Ideas

- Colleagues, mentors, administrators
- Grant offices at some institutions
- Acknowledgments etc in journal articles
- Published or posted calls for proposals
- Email lists in your field or at your institution
- Published or posted guides
- Internet searching

Seeking a Match: Two Approaches

- Identifying something you wish to do and then seeking a suitable funding source
- Looking for a *request for proposals* in your field and then developing a proposal that meets the criteria
- (Note: Sometimes a request for proposals has another name, such as *call for proposals* or *program announcement.*)

Looking for a Good Match

Seek funding from entities

- With goals that are consistent with what you want to do
- That tend to give grants of the size you are seeking
- If possible, with programs that match your intended work

Consulting a Program Officer

Consulting a Program Officer

- Program officer—funding-source employee who helps run one or more grant programs
- Duties often include advising current and prospective applicants
- Can provide valuable guidance on
  - Whether to apply
  - How to apply
  - What to include

Starting Early Enough

Starting Early Enough

- Even a short proposal can take a long time. Therefore start early.
- For large grant proposals, starting at least 6 months before the deadline can be wise.
- Consider establishing a timeline.

Items to Consider Including Time For

- Searching literature
- Doing preliminary experiments
- Recruiting collaborators
- Gathering documentation
- Drafting and revising the proposal
- Obtaining approvals
- Other

Analyzing Instructions and Examples

Analyzing Instructions and Examples

- Carefully review materials from the funding source. Read instructions thoroughly.
- Consult the program officer, if appropriate.
- If possible, look at examples of successful proposals to the funding source.
  - From colleagues
  - From the program officer
  - Published or posted

Doing the Groundwork

Doing the Groundwork

- Review the literature on work related to yours. Be prepared to cite it.
- Start developing a persuasive explanation of why the proposed project is valuable.
- If your proposal will be for research, formulate one or more well-defined, potentially productive hypotheses or research questions.
- Beware of proposing a project that is unrealistically large.

Assembling Collaborators

Assembling Collaborators

- If you want others to join the project team, invite them—early. Ask them for needed items, such as information and CVs.
- If you want outside participants, such as consultants, invite them. If appropriate, obtain CVs and letters of support.
- Consider including a writer or editor on the proposal-preparation team.

Gathering Budgetary Information

Gathering Budgetary Information

- Start identifying items that you'll ask the funding source to pay for.
- Start determining the cost of each.
- If your institution or others will contribute resources, identify them, and determine how much they are worth.

Doing Other Groundwork

Doing Other Groundwork

- If advisable, do preliminary studies.
- If appropriate, consider sustainability.
- If required, submit a letter of intent or a letter of inquiry (“pre-proposal”).
- Other

Drafting the Proposal

Drafting the Main Text

Drafting the Main Text

- Start early.
- **Follow instructions exactly.**
- Organize the text carefully.
- Match the technical level to the backgrounds of the reviewers.
  - National and international scientific institutions: scientists
  - Some foundations: community leaders etc

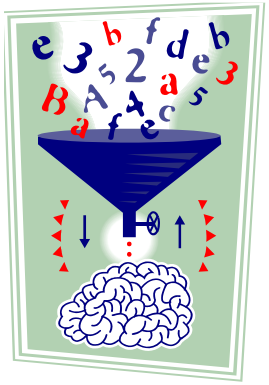
Drafting the Main Text (cont)

- Remember to include the 5Ws and an H: who, what, where, when, why, and how. *(This advice also applies to other writing.)*
- Include enough context.
- Include reasons for your choices.
- If relevant, include a timeline.
- Consider including tables and figures.

Drafting the Main Text (cont)

- If the potential funder has forms to use, complete them carefully.
- If part or all of the proposal will consist of freestanding text, format it readably:
  - Standard typeface
  - Large enough type and margins
  - Unjustified (ragged) right margin unless otherwise requested

Writing the Title and Abstract



Title and Abstract

- Short but important
- Provide the first impression
- Sometimes used in choosing peer reviewers
- Help administrators and reviewers grasp the essence and importance of the work
- Also remind reviewers of what they have read
- Should be clear and concise
- **Give them the time they deserve!**

Preparing CVs

Preparing CVs

- If a specific format is required, use it.
- Observe length limitations.
  - Total length
  - Number of publications listed
- Be selective, and gear the CV to the proposal. Emphasize content that will help persuade reviewers that you're qualified to do the work.
- If others' CVs are needed, request them early.

Some Common Pitfalls to Avoid

Common Problems

- Failure to follow instructions
- Seeming unfamiliarity with previous work
- Lack of a valid rationale
- Lack of originality
- Superficial or unfocused plan; lack of detail
- Unrealistically ambitious plans
- Incomplete budget
- Unrealistic budget

Common Problems (cont)

- Failure to justify budgetary items
- Problems with the proposed methods
- Lack of experience with key methods
- Lack of preliminary data, if needed
- For service projects or training projects, insufficient evaluation plans
- Inconsistencies in content
- Excessive use of acronyms or abbreviations

Writing a Proposal Clearly and Persuasively

Making the Organization Clear

Making the Organization Clear

- Clear organization: important for guiding peer reviewers and others
- Some helpful devices
  - Subheadings
  - Overviews before details
  - Topic sentences
  - Numbered or bulleted lists
  - Italics or boldface (but shouldn’t be overused)

Writing Simply and Readably

Writing Simply and Readably

- Write to communicate, not to impress.
- Remember: Readers should notice the content, not the wording.
- Beware of long sentences.
- Beware of long paragraphs.
- Where possible, use the shorter word.
- Condense wordy phrases.

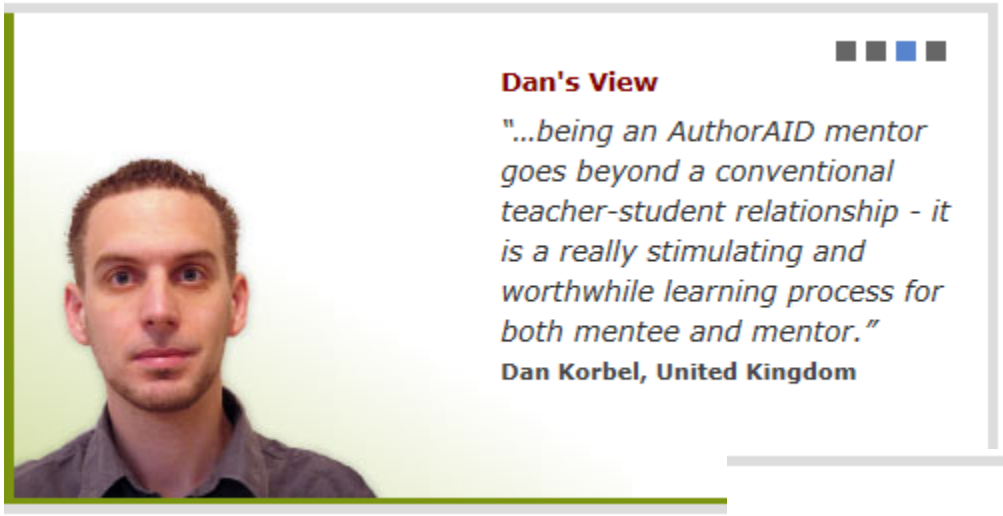
Examples: Shorter Words or Phrases

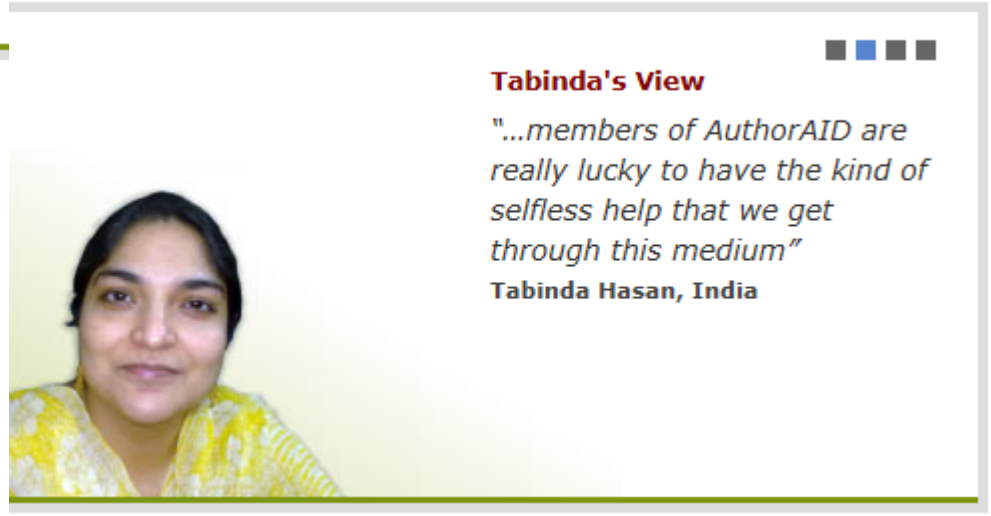
- Demonstrate → show
- Attempt → try
- At this point in time → now
- In the event that → if
- To provide relief of → to relieve
- Fellow colleagues → colleagues
- Red in color → red

Abbreviations and Acronyms

- Consider what would be clearest to readers.
- Consider tradeoffs between space saved and clarity.
- Beware of coining new abbreviations/acronyms.
- Remember to define abbreviations/acronyms.
- Maybe provide a table of abbreviations and acronyms used.

Considering Working with a Mentor





Considering Working with a Mentor

- Some potential sources of mentorship
  - Professors who have taught you
  - Colleagues more experienced in proposal writing
  - AuthorAID volunteers
  - Other
- Can help with planning, revision, proofreading
- Advice: Involve the mentor early.

Things to Look for When Revising

- Compliance with instructions
- Completeness
- Consistency of content
- Mechanics of writing
- Mechanics of figure/table design
- Readability
- **Persuasiveness of every aspect** (and absence of items undermining persuasiveness)

Revising, Revising, Revising

Revising, Revising, Revising

- Good proposals tend to be much-revised proposals.
- Plan to leave ample time for revision.
- Consider having colleagues give feedback on drafts (“pre-submission peer review”).
- Consider having an editor help with revision.

Some Take-Home Messages

Some Take-Home Messages

- Seek a funder that matches your goals.
- Start preparing your proposal early.
- Follow instructions carefully.
- Prepare a detailed, realistic budget.
- Devote special care to the title and abstract.
- Write readably.
- Revise, revise, revise.

Now here’s a little grant for you!

Oral and Poster Presentations: Top Tips

Tips for Both Oral and Poster Presentations

1. Start early.

2. Obtain—and follow—any instructions.

3. Consider the audience.

4. Condense.

5. Get feedback from others (including good proofreaders).

6. Revise.

7. Rehearse.

8. Be positive.

Tips for Oral Presentations

9. Structure the talk largely as a story.

(IMRAD format—Introduction, Methods, Results, Discussion—basically a narrative)

10. Consider building up to the most important content.

11. Include much less detail than in a journal article.

12. Begin and end strongly.

13. Remember: People must understand what you say as you say it.

14. Avoid unfamiliar abbreviations and acronyms.

15. Beware of using too many slides.

(Typically, about 1 slide per minute is the limit.)

16. Keep slides simple and uncrowded.

(a guideline for text: no more than 7 lines of 7 words each)

17. Generally use bullet points, not paragraphs.

(OK to use phrases rather than sentences)

18. Make sure all lettering is legible.

(For main text, beware of using less than 28 point.)

19. Time the presentation carefully when you rehearse.

20. Arrive early, and make sure audiovisuals are working.

21. Speak slowly and clearly.

22. Look at the audience.

23. Show enthusiasm.

24. Avoid distracting habits.

25. Briefly repeat each question.

26. Answer each question briefly.

27. If you don’t know an answer, don’t fake it.

Tips for Poster Presentations

28. If you can, base the poster on images that present key messages and attract viewers.

29. Plan to include little text.

(a general guideline:
500–1000 words)

30. Plan to make the poster understandable on its own.

31. Organize the poster logically.

32. Place the text in vertical columns.

33. Include plenty of white space.

34. Unless required, don’t include an abstract.

35. Use large enough type for the title.

72 point or more

36. Don’t write the title in all capital letters.

- TITLE OF YOUR POSTER
- Title of Your Poster
- Title of your poster

37. Choose images that both attract and inform.

- Photos
- Flow charts
- Graphs
- Other

38. Keep images simple, so they are quick to understand.

39. If feasible, use graphs rather than tables.

40. Make images large enough.

41. Remember to label each image.

42. Keep each section of text relatively brief.

43. Make the text large enough to read easily.

(at least 18 points)

44. Where feasible, use bulleted or numbered lists (not paragraphs).

45. If paragraphs are used, keep them short.

Also: Don’t right-justify.

46. Include your contact information.

47. Prepare presentations of various lengths.

(for example: 1, 3, and 5 minutes)

48. Think ahead about questions you might be asked.

49. Perhaps have handout material available.

- Copies of the poster
- Reprints of papers
- CVs
- Business cards

Some Resources on Posters

- “Designing Scientific Posters” by Colin Purrington (posted at http://colinpurrington.com/tips/academic/posterdesign)
- “Better Posters: A Resource for Improving Poster Presentations” (blog at http://betterposters.blogspot.com/)

A Final Tip for Both Oral and Poster Presentations

50. Use the experience to enhance your future presentations, publications, and research.

Thank you! Asante!


AUTHORAID

Some Closing Items

Using Material from the Training

- What are the few most important points you gained from this training day?
- What, if anything, do you plan to do differently as a result of this training day?
- Do you plan to share anything from this training day with others? If so, what do you plan to share with whom? How?
- How else, if at all, will you follow up?

Evaluation

Again: Thank you! Asante!

Wishing you much success!


AUTHORAID