



Tomorrow's Doctors, Tomorrow's Cures

Learn

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What Editors Want: Tips for Good Scholarly Writing

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Association of
American Medical Colleges

Writing matters

Jan Feld, Corinna Lines, Libby Ross^{*}

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Abstract

For papers to have scientific impact, they need to impress our peers in their role as referees, journal editors, and members of conference committees. Does better writing help our papers make it past these gatekeepers? In this study, we estimate the effect of writing quality by comparing how 30 economists judge the quality of papers written by PhD students in economics. Each economist judged five papers in their original version and five different papers that had been language edited. No economist saw both versions of the same paper. Our results show that writing matters. Compared to the original versions, economists judge edited versions as higher quality; they are more likely to accept edited versions for a conference; and they believe that edited versions have a better chance of being accepted at a good journal.

3 Ways to Write Better

Concentrate on

- The word
- The sentence
- The paragraph

The Word

Use plain language, avoid jargon

Use terms consistently

The Word

Use plain language, avoid jargon

- Who will read your article? Will they understand the terms you use?
- Do YOU understand the terms you use?
- Does using jargon save space?

The Word

We queried the PGY1s' clinical reasoning skills pre and post workshop.

The Word

- a. We queried
- b. the PGY1s'
- c. clinical reasoning skills
- d. pre and post workshop.

The Word

- a. We queried
- b. the PGY1s'
- c. clinical reasoning skills
- d. pre and post workshop.

The Word

We assessed the first-year residents' clinical reasoning skills pre and post workshop.

The Word

Use terms consistently

- Instruments
Pre-intervention questionnaire vs Pre-seminar survey
- Participants
Community preceptors vs Clinician-educators
- Study stages
Post-course vs Six-month follow-up

The Word

Think twice before using

- In order to / In an effort to
We used a survey in order to vs
We used a survey to
- Adverbs
She talks loudly vs
She shouts

The Sentence

Use active voice

Use verbs, avoid “zombie nouns”

Avoid forms of the verb “to be”

The Sentence

Use active voice

- Tell readers who did what
- Save space (passive voice requires more words)

The Sentence

If students without the necessary competencies can be identified early in training, an intervention can be undertaken before the final assessment.

The Sentence

- a. If students without the necessary competencies
- b. can be identified early in training,
- c. an intervention can be undertaken
- d. before the final assessment.

The Sentence

- a. If students without the necessary competencies
- b. **can be identified** early in training,
- c. an intervention **can be undertaken**
- d. before the final assessment.

The Sentence

If **faculty can identify** students without the necessary competencies early in training, **they can intervene** before the final assessment.

The Sentence

Use verbs, avoid “zombie nouns”

- Look for verbs hiding as nouns (think, I shun “tion”)
- Convert those nouns to verbs

The Sentence

Operationalization

Operationalize

Operation

Operate

The Sentence

An investigation was undertaken to determine the possible effects of a workshop on physician well-being.

The Sentence

- a. An investigation was undertaken
- b. to determine the possible effects
- c. of a workshop on physician well-being.

The Sentence

- a. An **investigation** was undertaken
- b. to determine the possible effects
- c. of a workshop on physician well-being.

The Sentence

The researchers **investigated** the effects of a workshop on physician well-being.

The Sentence

Avoid forms of the verb “to be”

- Including the sentence starters “There is,” “There are,” and “It is”
- This forces you to tighten your sentences and look for more active, explicit, and informative verbs.

The Sentence

There was careful selection and training of the standardized patients.

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There was careful selection and training of the standardized patients.

- a. The standardized patients were carefully selected and trained.
- b. We carefully selected and trained the standardized patients.
- c. Careful selection and training of the standardized patients took place.

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- a. The standardized patients were carefully selected and trained.
- b. **We carefully selected and trained the standardized patients.**
- c. Careful selection and training of the standardized patients took place.

The Paragraph

The topic sentence should be clear, concise, and informative.

The middle sentences should clearly relate to each other and provide sufficient examples / evidence to support your argument.

The last sentence should be either a summary statement or a transition to the next paragraph.

- a. Yet, a major bottleneck remains.
- b. Program directors simply lack the time to thoroughly appraise the multiple pages of narrative content, such as experiences, letters, and the personal statement, present in each application.
- c. Reining in application numbers through caps or other methods has been repeatedly proposed but not widely implemented.⁶
- d. Likewise, increasing faculty time for application review is untenable given an already costly process.⁷
- e. New tools to facilitate more efficient holistic review could be an achievable and impactful path forward.

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- e. **New tools to facilitate more efficient holistic review could be an achievable and impactful path forward.**

The Paragraph

Transitions can

- Add information or examples (*in addition, such as*)
- Indicate cause and effect (*hence, accordingly*)
- Show sequence or time (*then, next*)
- Compare or contrast (*likewise, in contrast*)
- Summarize or conclude (*in summary, finally*)
- Show purpose or emphasis (*for this reason, above all*)
- Call out concessions or exceptions (*of course, yet*)

In addition to the egalitarian desire for the diversity of the physician workforce to reflect that of the patient population, increasing physician diversity improves patient outcomes and may help diminish structural racism.³ For example, Black and Hispanic patients are more likely to be seen for medical care for new or ongoing problems if their physician comes from the same background.⁴ Racial/ethnic concordance is also associated with improved communication and patient satisfaction and with lower infant mortality.⁵

In the past decade, there has been a shift in U.S. births, with a majority of newborns now coming from “minority backgrounds.”⁶ Hence, the pediatric workforce must lead the way in increasing workforce diversity. Furthermore, diverse representation in academic medicine and health care leadership can influence research, education, advocacy, and budgets in ways that promote equity and address structural racism. This work is especially pertinent given the health disparities highlighted by the COVID-19 pandemic.⁷

- a. In addition
- b. For example
- c. Also
- d. In the past decade
- e. Hence
- f. Furthermore

Escalante E, Smiley Y, Agrawal D, Teach SJ, Cora-Bramble D, Barber A. Increasing pediatric residency class diversity to improve patient outcomes and address structural racism. *Acad Med.* 2022;97:850-854.

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The Paragraph

Use transitions to “glue” sentences and paragraphs together

Paragraphs = Punctuation

Break up long paragraphs to help readers

Use subheadings to break up long sections

Next Steps: Editing Your Work

At the WORD level, think about the precision of your ideas.

At the SENTENCE level, think about the clarity of your ideas.

At the PARAGRAPH level, think about the structure of your ideas.



SEARCH

STUDENTS & RESIDENTS

NEWS & INSIGHTS

DATA & REPORTS

ADVOCACY & POLICY >

PROFESSIONAL DEVELOPMENT >

SERVICES >

WHO WE ARE >

WHAT WE DO >

MEDICAL EDUCATION

Fostering Scholarship in Medical Education: Resources for Authors and Reviewers

SHARE: [f](#) [t](#) [in](#) [✉](#)

Scholarship drives the practice of medical education forward, affecting how we educate trainees and ourselves, what we know about each other and our institutions, and how we identify and close gaps in our understanding of important topics. The AAMC supports scholars and their work through its journals and professional development offerings and its role connecting people and convening groups from across the community.

Below you'll find a curated set of resources to advance your work as a health professions education researcher, writer, and reviewer. All resources are available to access and download for free unless otherwise noted.

This list is but a sample of the resources available to support scholars in their work. If you use other (free) resources, we want to know! E-mail icollaborative@aamc.org with a link to the resource and a brief description of it and why it's helpful to you. We'll update this page periodically with new and newly uncovered resources.

Getting Started

Sometimes figuring out where to start can seem impossible. These resources will guide you through the before, during, and after processes of conducting research. They're the perfect place to begin for those new or newly returned to health professions education scholarship.

- The [Conducting Research in Health Professions Education: From Idea to Publication eBook](#) is a collection of one-page infographics offering guidance on each step of the process of conducting and publishing research in health professions education from writing good research questions to analyzing quantitative and qualitative data to responding to reviewer feedback to promoting your published work.
- The [Research in Medical Education: A Primer for Medical Students](#) includes an overview of medical education research as well as strategies and recommendations for getting started.

Writing Up Your Work

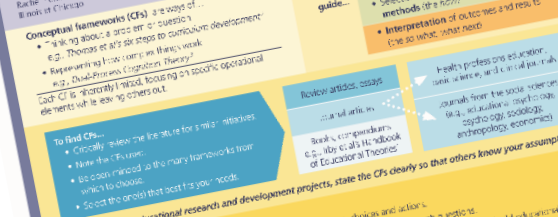
Writing up your work can take time, and there is an art to communicating your argument and findings. These resources will help you improve your writing, no matter the type of publication.

- The [Handbook for Academic Medicine Writing Workshop](#) is a handbook with annotated examples of successful manuscripts published in *Academic Medicine*. It includes a variety of article types.

Conducting Research in HPE: From Idea to Publication (eBook)

Conceptual Frameworks to Guide Research and Development (R&D)

Conceptual frameworks (CFs) are ways of... thinking about a process or question. They are used to guide the development of a study or project. CFs are often used in research and development to help researchers understand the relationships between different variables and to guide the design of their studies.



Why CFs?

- CFs are a way to organize your thoughts and ideas.
- CFs provide a clear structure for your research and development projects.
- CFs help you to identify the key variables and relationships in your study.
- CFs can be used to guide the design of your study and to help you to interpret your results.

Key questions addressed	Content	Variables and their relationships	Educational	Methods	Investigation
Basic concepts	What are the important elements of the study?	How are the variables related to each other?	How might design influence outcomes, or "bias" the results?	How might design influence outcomes, or "bias" the results?	How might design influence outcomes, or "bias" the results?
Example study	Problem: Teachers are making mixed parts from their own state and putting them under stress. The stressors in the operating room are able to transfer that learning into practice.	Variables: Log in, Log out, Log in, Log out	Variables: Learning, Memory, Anxiety	Methods: Suggestion that changes in the way that the skill is taught will affect the skill level of the learner.	Investigation: Suggestion that changes in the way that the skill is taught will affect the skill level of the learner.
Major insight gained from the use of CFs	Interpretations for how a learner's cognitive load will affect their performance in a task, but may be the result of a learning curve that is not accounted for in the study.				

It's a Story, Not a Study: Writing an Effective Research Paper

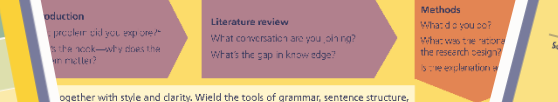
Advice for authors on how to write an effective research paper. The book covers the structure of a research paper, including the abstract, introduction, methods, results, discussion, and conclusion. It also provides tips on how to write a compelling narrative that engages the reader.



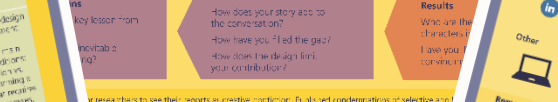
What's the difference between study and story?

- First, the difference is structural.
 - A study lists the methods and results of a research.
 - A story starts with the introduction and discussion (or a story arc).
- Second, the difference is in the narrative.
 - The study must be reported accurately.
 - The story must be told as a compelling narrative.

As we illustrate the standard manuscript format according to the **IMBE/AMA** concept, detailing for each section of the manuscript what you should do to achieve a good story. We will distinguish between study and story for the sake of clarity and story. Many researchers struggle to write a good story.



Put it all together with style and clarity. We'll discuss the tools of grammar, sentence structure, graph organization wisely to engage and hold readers' attention.

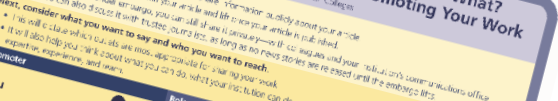


Remember to use their words in the introduction. It is not a good idea to select a topic that is already being studied. The introduction should provide a clear context for the study and explain why it is important.

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Congratulations! Your Article Has Been Accepted. Now What?

First, know the journal's embargo policy. Second, consider what you want to say and who you want to reach. Finally, consider these communication strategies for crafting your message and reaching the right audiences.



Finally, consider these communication strategies for crafting your message and reaching the right audiences. This includes identifying key stakeholders and using appropriate communication channels.

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WEB PAPER

Writing for academia: Getting your research into print: AMEE Guide No. 74

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Abstract

The authors identify and describe strategies for success in writing for publication, including how to choose an educational research topic, define the question and choose the correct design, know the anatomy of a research paper, write each of the sections, optimize the writing before publication, choose a journal, and respond to editors and reviewers. The research question should be focused, modest, and achievable given the constraints of the setting, significant, and appropriately imbedded in the available literature. The choice of methods is determined by the nature of the educational research question and should conform to ethical standards. Specific strategies for writing include starting where it is easiest to do so, spontaneously and uncritically writing the first paragraphs through, minimizing external impediments to the work, and knowing how each section of a manuscript is routinely structured. All papers require a number of revisions with careful attention to content and detail as well as to specific requirements.



The writer's craft

Lorelei Lingard

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A medical education research colleague asked me for career advice recently, and in the course of our conversation I asked her, ‘How’s your writing?’ I didn’t intend it to be a loaded question, but it clearly was: she squirmed in her seat and avoided meeting my gaze. The pause stretched awkwardly as if I’d asked an intimate question like ‘How’s your marriage?’, and she was deciding how to handle this faux pas. Finally she answered, ‘I guess I’m okay at it...I don’t know...I’m not one of those people who’s a *writer*,

writing is a skill many feel they lack, the question ‘How’s your writing?’ gets at one of the dark hearts of imposter syndrome among medical education researchers. And, let’s be frank, a lot of our scientific writing is *terrible*: dry, chalky, convoluted stuff that even an engaged reader struggles to choke down. We find ourselves in a troubling situation: one of our valued practices—writing—is highly fraught, both because many individual writers feel unskilled and because our community perpetuates a shared genre we love to hate



Review Criteria for Research Manuscripts

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Scholarly Publishing Webinar Series

- Writing Effective Titles and Abstracts
June 30, 1:00 - 2:30 PM ET
- Using Inclusive Language in Scholarly Writing: A Roundtable Discussion
July 13, 12:00 - 1:00 PM ET (*registration to open soon*)
- Responding to Peer Review: Insights for Successfully Revising Your Manuscript
Sept. 29, 1:00 - 2:00 PM ET

Register at <https://www.aamc.org/about-us/mission-areas/medical-education/scholarly-publishing-webinar-series>

Questions?

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Scholarly Publishing
Webinar Series

