Description

For first-time authors, the prospect of writing their very own scientific research article may be both exciting and overwhelming. Faced with a mountain of data, notes, and other remnants of the research process, it may be difficult to figure out where and how to begin the manuscript writing process. However, if the research has been done well and the topic is appropriate for classroom submission or journal publication, authors will be off to a good start by approaching the writing process in a methodical way.

Authors can also get assistance from the various tools available online to improve their writing. One tool that is widely recommended is Trinka– world's first AI-powered grammar checker and language enhancement tool specially designed for academic writing! With Trinka, authors can easily incorporate all the requirements of academic writing such as technical spellings, conciseness, formal tone, style guide preferences and much more.

It is always helpful to understand the objectives of scientific writing before diving into the task. Above all, scientific writing must aim for clarity, simplicity, and accuracy. These should be the touchstones or benchmarks for authors of research articles, particularly in the field of science, which has a reputation for being difficult to understand. It is a fine balance that authors of scientific writing must maintain: achieving the recognition and respect of those in their field as well as making sure their work is comprehensible to a wider audience.

Clarity – Work is unambiguous and free of extraneous detail or conjecture

Simplicity – Language and sentence and paragraph structure are easy to understand and follow without losing authority or scientific credibility

Accuracy – Data, Tables and Figures, and References and Citations are represented honestly and verifiably

Structure of a Scientific Manuscript

New authors are, no doubt, familiar with the structure of a scientific research paper – there is a standard in academic publishing. However, writing within that structure requires a deeper understanding of the role of each section. The following was discussed in an online resource from Bates College.

Section	Purpose/Description
Title	Gives a clear and enticing introduction to the to
Authors	Names each major contributor to the work
Abstract	Summary of paper's main focus – short
Introduction	Reveals main problem or question
Materials & Methods	How the problem or question was approached
Results	Reveals the findings
Discussion	Talks about what the findings mean
Acknowledgements	Optional – may recognize people or institutions assisted with the research
References/Literature Cited	Account for all supporting documentation

- Title and Abstract – focus on drawing in the reader with clear and concise language
- Introduction – highlight the key issues of the research, providing some context for the main question or problem
- Methods and Materials – describe specific protocols for and details of the experiment/research, which should be explicit enough that the research can be duplicated
- Results and Discussion – thorough yet succinct sections, focusing on critical findings, including those that were unexpected
- References/Literature Cited – need to match references within the body of the manuscript precisely. It is best to be selective when choosing which literature to cite, avoiding the use of too many references and selecting the most current literature when appropriate.

Writing Tips

The goal of any piece of writing is to communicate the author's message. For authors of scientific manuscripts, academic publishing requires that they adhere to a certain structure, but the goal is the same – to communicate the author's message or findings.

1. Achieving Clarity

Clarity in writing is achieved through the following:

A. Proper Sentence Structuring

Shorter paragraphs and sentences allow the reader to grasp concepts more easily. No one wants to go

back and re-read a sentence or paragraph several times, just to grasp what the author is trying to say. This is both discouraging to the reader and potentially off-putting to a journal editor. It is possible to write simple, informative sentences without sounding choppy or unsophisticated.

B. Correct Language and Grammar Usage

Proper language and grammar usage help improve the flow of the manuscript and enhance the readers' experience. This prevents a reader's bias against the author. No matter how excellent the research, poor language and grammar usage in manuscripts may cause the reader to question the author's educational background and assume that the research article is somewhat less worthy of consideration. A quick check with Trinka can assist you in correcting all language and grammar errors and achieving clarity in your writing.

2. Time management

Writing manuscripts is a massively time-consuming affair. For authors who are making their first attempt at writing a research article, it will be imperative to carve out time on a daily basis to work on specific sections of the article – make a schedule and stick to it.

3. Editing

Scientific research and manuscript writing is bound to be complicated and detailed. Each section of the research article will require re-reading and editing. It is likely that writers will grow weary of their article before it is ready to be handed to a professor or submitted to a journal.

Thus for research paper editing, it is helpful to ask peers to review the work and offer comments and suggestions for changes. Writers always benefit from the feedback received from the peers and in the end, the manuscript is significantly improvised.

Another convenient way of proofreading research papers is Trinka. With Trinka's Auto File Edit feature, authors can review and apply all language revisions in one go, bringing their research one step closer to publication.

A Global Endeavor

Whether writing for a university lecture or for journal submission, the academic world is no longer segmented into isolated cultures and nationalities. Even if a university classroom is filled with students with the same cultural and national background, they are being trained to move into the global community of scientists. Therefore, it is essential to consider one's audience while drafting the article and what guidelines exist for publication.

In addition, if the authors are non-native speakers of English and are attempting to write in the language, it is important to know whether the target language is American English or British English.

Category

1. Manuscripts & Grants

2. Reporting Research

Date Created
2017/03/24
Author
daveishan