

Chapter 3: Guide III

3.1 Journal Article Writing

The purpose of a research article is to publish scientific paper that communicates new findings and original information to readers. The research paper takes a hypothesis that has been tested by experimental methods to come to conclusions. Research article is the most common organ of communication in the academic community. Specialists in the field will want to read the entire paper to digest and comprehend the information. Other casual readers will only be interested in the results, or perhaps the experimental methodology employed, as background to the reader's own work.

3.1.1 Choosing Preferred Journal

Before a researcher starts preparing an article for pagination, he/she should target a journal in which his/her paper will be published. His/her ability to choose a good reputable journal will also influence the format and style of his/her article. Different journals have different styles and different rules of presentation for the material they publish. Many journals nowadays receive more papers than they can process, the best and reputable journals have high rate of rejected manuscripts. Only fake and profit driven journals accept every manuscript sent to them because they are after the pagination fee not the contribution to knowledge. If a researcher is a beginner, he/she stands a better chance of having his/her paper accepted in less reputable journals. It requires more effort to write a quality paper for an international journal, but the rewards are also greater because greater number of readers will come across his/her paper if it appears in an international journal. On the other hand, local journals need the support of good scientists and writers to increase their value and readership.

He/she must weigh these issues before making a choice. Is his/her paper of sufficient merit and of sufficient interest to a broad audience to send it to the very best journal? If not, it is better to send it to a less well-known journal, where he/she may have a better chance of getting it accepted.

3.1.2 The Scope and Aims of the Journal

A statement of a journal's purpose and scope is usually printed on the inside of the cover of the journal. Read it carefully. There is no point sending a research paper to a journal that only publishes review articles; nor is there any need sending a theoretical paper to a journal that only publishes practical research.

3.1.3 Frequency of Publication

Journal publication is usually a slow process, and a journal that is published twice a year will take much longer to publish an article than a journal that appears once every two weeks. Researcher should ask himself/herself, 'Will a 12-month publication affect the relevance of his/her paper?' If the article is required to be published quickly, send it to a journal that can publish it quickly; if rapid publication is not essential, the editors of a fortnightly journal are likely to reject your paper, in any case.

3.1.4 Type of Articles to be Published

Many journals require a specific format for the articles they publish. If your article does not fit this format, the paper may be rejected. For example, if the researcher's paper when printed will be 20 pages long and the journal publishes papers only up to 5 pages, his/her paper will be rejected not because of its scientific content but simply because his/her format did not match that of the journal.

3.1.5 Conditions of Submitting an Article

In some journals, one of the authors must be a member of the society that publishes the journal. Sometimes, certain types of statistical analysis must be used, or the experiments must have been repeated a number of times. Many journals have pagination charges that are exorbitant; you have to pay the journal to publish the paper. The charges are based on the number of pages that comprise the published paper. These charges can be extremely high. Some journals even expect money to be sent with the manuscript to cover the cost of considering the paper. Note, however, that some journals with page charges waive this fee for authors from certain countries. Look for these conditions in the journal's Instructions to authors. Researcher might have a series of photomicrographs or electron micrographs that are important to his/her paper. He/she should then look for a journal that prints such photographs well. Many journals do not print colour photographs, because they are expensive to reproduce. If his/her paper requires them, he/she will have to find a journal that will accept them, but note that many journals that print colour photographs charge the author for the colour.

3.1.6 Journal Style

Once you have decided on a journal to which you will submit your paper, you should start to prepare your manuscript in that journal's style and format. Most

journals publish a detailed guide to contributors, or Instructions to authors, usually in the first issue of the year but sometimes as a separate booklet. Write to the journal editor requesting these instructions or photocopy them from an issue in your local library. If a person other than yourself will type your paper, make sure that the typist also reads and follows the journal's instructions and specifications.

3.1.7 Review Article

A review article is a collection of findings and an extended version of the discussion in a research article. The article is divided into abstract, introduction, some sub – headings, conclusion, recommendations and references. An essential feature of a review is that the reader is led to the cutting edge of a given area of research. A good review article gathers together all important work on a topic, but it is not simply a catalogue of facts. It synthesizes work done, analyses and interprets existing facts and theories within a particular field.

3.1.8 Conference Paper

A paper delivered orally at a conference is prepared just like a journal article. It has all the characteristics of a journal article. It confines itself to a brief presentation of the objectives and the methods of the work and the results, the interpretation of which may be preliminary. Its clearly stated points can be brought out in the discussion. The paper may be criticized, corrections and observations made. Revised version of the oral presentation made for publication in the proceedings, can be more thorough.

3.1.9 Book Chapter

This is a contribution made by other writers if the text book is not single-handedly written by one author. Chapters of scientific works tend to synthesize information about a particular subject. A book chapter rarely sets out a fundamental hypothesis and objectives. A chapter in a text book with 1000 pages could be quite lengthy and this depends largely on the subject matter in which the chapter is talking about.

3.1.10 Annual Report

An annual report is a write up made to describe work completed in one year (12 months) period. The purpose is not to conclusively proof a hypothesis but rather to spell out objectives, describe activities and justify budget expenditure for a piece of research undertaken in the year.

3.1.11 Newsletter

The aim of an agricultural newsletter is to disseminate latest and hot information or innovation of interest to farmers and other stake holders quickly and in a readily digestible manner. Therefore, the content of most contributions carry little emphasis on justification or methodology. Technical writing usually starts by introducing the topic, then in a logical step-by-step approach, it presents research and leads to a conclusion. The sequence is exactly the reverse in a news story. A news story in a newspaper begins with the most important points, or the climax. This is called the lead. Then the facts are arranged in decreasing order of importance. The most important fact is at the beginning of the sentence, the most important sentence is at the beginning of the paragraph, and the most important paragraph is at the beginning of the story. News articles report timely events, ideas or situations of interest to farmers and readers of a particular publication. Most agricultural newsletters address a problem that affect generality of farmers, for example, disease outbreak, drought, crop failure, climate change, pastoral land shrinkage, conflict between livestock keepers and arable farmers, an epidemic, improvement methods, etc. There is always more news than space to report it. Thus, stories are shortened to fit the space available in the newspaper or magazine. Most news editors do not have time to read your article and rewrite it to fit the space. They 'cut from the bottom'. In other words, they will start chopping off paragraphs from the end of the story until it fits the space. This is why it is so important to put all the key facts in the beginning of the story. Agricultural newsletter should not be used as a substitute for publication of research results in referred journals or proceedings.

Features and articles which are longer and more literary than cryptic news stories are the most common format for science in popular publications. Most often, such articles are between 1000 and 5000 words long and editors expect the writer to keep to the number they request. Good and fascinating features capture and hold the reader's attention quickly, usually with the first two or three lines. This is called the hook or the caption and it often sketches a human story, perhaps, that of someone whose life has been changed by research results. It can also provide context for and, therefore, show the importance of the actual research. If the article is about research into how to manage tree fallows, it might relate some startling statistics about declining amounts of arable land around the world.

The body of the article contains the more detailed information on the actual research, when, where and why it was carried out, highlighting anything new or exciting in the way it was done. Even in the body, reference should be made to the ultimate purpose of the research, which will justify it to the public. The

conclusion of the article should tie together the story, much as it does in a scientific paper, but there is more room for human drama in a feature. Often, it is useful to return to the story used in the 'hook', showing how the research has changed someone's life, or helped solve a large problem. Writing good feature articles is not easy, it is a craft and art that takes time to perfect. However, it can be a great deal of fun and it allows the researcher to be more 'human' and 'personal' than is permitted in scientific papers. It provides an outlet for creativity that many researchers have, and the writing process will often help clarify, for the researcher and the reader, why the research is important. This is always useful, particularly when writing research proposals to solicit funding from government, non-governmental organizations and foreign communities.

3.1.12 Project Proposal

A project proposal is a summary of what a researcher intends to achieve at the end of the research work. Project proposal is just like a mini-research work that has not reached the stage of actual practice. It is always written in future tense and justifies a programme of work and states the expected outputs and clearly defines the objectives of the work. The write up will include an introduction, brief literature review, materials and methods. There will be no results and discussion because the work has not been conducted yet. If the proposal is to be sponsored by an organization or government, the breakdown of all the expenditure is paramount. The budget must be realistic, detailed, and accurate, listing personnel expenses, the materials required, their unit prices, supplies, travel, cost of the laboratory work and any other significant expenses. Do not include large amounts for contingencies or vague purposes. Also include a spending plan of when money will be needed through the life of the project. Cost each item carefully and allow for inflation. He/she may have to justify travel to meetings separately, outside of project travel. Different donors have well-defined priorities and specific requirements for their project applications.

3.1.13 Correspondence between Author(s) and Editor-in-Chief of a Journal

Any researcher who wants his/her work published in a reputable journal should carefully prepare his/her article in consonance with the below procedure or format. A full length article or short communication has to be sent to the journal company via e-mail or through post office, whichever method is available, even though the latter takes longer time to reach the editor in-chief than the former. The manuscript on receipt will be given a code number or article ID which the corresponding author will quote in all correspondences. In most cases, authors are asked to pay some amount as a review fee before their

article is reviewed. The manuscript takes two to four weeks to be reviewed by three different reviewers and the reviewers' comments or reports tell the writer whether the article is accepted for publication or rejected. Normally, if two out of three reviewers' comment state that the article is rich, informative, clearly written and could contribute to knowledge and, therefore, has met their criteria and fall within their scope, the paper will be accepted for publication as full length or short communication article with either major or minor review. The manuscript will then be sent back to the researcher as rejected or to effect the necessary corrections accompanied by a long provisional letter of acceptance indicating assessment of whole parts of the article, where to make necessary corrections. They will also send payment schedules of the pagination fee to be paid usually through the journal company's bank account or by bank draft in favour of the journal company. On fulfilling all conditions by the writer, a galley proof is sent to the correspondent author for proof reading and final corrections, if any. The publishers then publish the article on receipt of evidence of payment of pagination fee and a published copy will be sent to the author via e-mail as attachment in Pdf file or the reprint and some few copies of flyers will be mailed via post office to the correspondent author. Later, a copy of the journal issue in which the writer's article appears is mailed to the correspondent author through post.

3.1.14 Authorship of a Publication

This is a critical and confusing situation in the academic environment in Nigeria and elsewhere in the world where hard work and novelty is not respected. Authorship means, the person who holds the rights to the data, who did the research work and the researcher should be a person who has the mental capability to write and publish the work. If a researcher did some research in another country, perhaps, for MSc or PhD degree, he/she is entitled to use that material, but he/she should always get clearance from the supervising body of the university or institute in which he/she worked. If he/she intends to name other people as co-authors he/she must check with them to ensure that they have no objections.

It is very difficult to ascertain the true author of a published material since publication is considered as one of the most important criteria for accessing performance and qualification for staff promotions. A lot of authors plagiarize other people's work or copy materials from the pages of published books and articles claiming the ownership without acknowledging the real owners. In any case, the names of the author(s) should be complete enough to ensure proper identification; if there is any chance of confusion, use full names instead of initials. Include only people who are truly authors that have contributed

technically and financially to the success of the work and be listed in a logical order of importance. Note that, only people who have made meaningful contributions to planning and carrying out the research should be listed as authors. Anyone listed as an author should also have helped to draft the manuscripts or have revised important parts of it as collecting data is not enough to make a person an author, technicians and other research assistants are usually mentioned in the acknowledgements. Each co-author should give final approval to the version that is to be published. Unless names appear alphabetically, the first person listed is considered the senior author; others may be listed according to the importance of contribution to the work. Some researchers are too generous in enlisting friends, spouses, relatives and colleagues as authors for the benefit of promotions in places of their work, especially academicians, even when they have not contributed anything to the work. Researchers should not load up their articles with a long string of names. This is a bad habit in the field of research and technical report writing. It should be discouraged with impunity. It is wise to agree on authorship and individual input even before the study begins to avoid mist placed authorship of research publications.

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3.1.15 Conventional Publishing Ethics

This aspect will help a researcher to understand the fundamental ethics behind publication which conforms to the international recognized conventions surrounding copyright and intellectual property. Researchers should always keep in mind the way things are done and the strict code of conduct and ethics that exists in the field of publication.

Double publishing and multiple submissions are not allowed in publication of any kind. Double publishing is when the same body of data is used to produce two papers that are published in two different places. This is strictly forbidden and prohibited in article publishing circles. In addition, never submit the same article to several journals at the same time. Many international journals are becoming ruthless in their treatment of what they consider to be dishonest authors. Double publishing, and multiple submissions, are looked upon as cheating. Most journals make it a condition when they accept a paper for consideration that it is not being considered for publication anywhere else. Submit one article to one journal at a time. Never try to make two different articles out of the same block of data. The exception to this rule is writing for a general audience in a popular publication. After a research paper has been published in a journal, the author may then rewrite the material for a lay audience and publish it in the media. Not only is this ethical, it is to be encouraged. It is often only in this way that the public knows what researchers are doing. Even funding of project proposals can come about through popular write ups of research.

If an article has already been published in researcher's own language, the researcher should not expect to translate it, send it to an English-language journal and publish it there again. This may be seen as unethical and contravene the code of conduct of publishing companies. If a researcher intends to do this, he/she should tell the editor of the English-language journal what he/she has done when submitting the article.

If an article has already been published in another language, the researcher might still be able to translate and adapt the material for another journal, but it is

best to check with the journal first. Remember also that the researcher will probably need the original journal's permission to use the material in that way. If an article or a body of research has been published already as a preliminary communication or read at a major symposium or published in a proceeding, this should be pointed out to the editor. Publication like this may not mean that the paper is automatically rejected, but telling the editor is common courtesy and will protect the researcher from later disgrace and embarrassment. The researcher should also contact the conference organizers, if they hold the copyright to published proceedings.

3.1.16 General Format and Arrangement of the Journal Article

The general format and arrangement of the Journal Article write up should not be in chapters as in project writing. The entire work should be short but contain all necessary facts. Preferably, it should not exceed 20 pages for economic reasons during pagination. There should be consistency in the use of language. If British or American English version is used, it should be consistent throughout. The researcher should not be using British English in one place and American English in another place. Let there be a flow and logical arrangement of all the points for clarity and understanding of all readers.

The major sub- headings to use when preparing manuscripts are Title, Abstract, Introduction, Materials and Methods, Results, Discussion (or Results and Discussion), Conclusion, Recommendations, Acknowledgements (if any), References, Tables and Figures. Locally or internationally, manuscripts are usually typed on A4 size paper using double- spaced lining. Manuscripts should have, on page one, only the title of the article, name(s) and addresses of author(s), abstract and the key words. Then continue on page two with the Introduction, Materials and Methods etc. as the pages go on. In journal article writing, everything is the same as in Guide I except for key words which are not allowed in project writing. The Introduction and References may also differ from that of project writing depending on the journal.

(1) Key Words

Like the phrase implies, they are words usually written at the bottom of the abstract to give vital information to the reader about the work. Some journals instruct authors to state key words that are different from the ones used on the title and are not more than six words.

(2) Introduction

Introduction for this type of work is usually short and brief just as described

in Guide I but here, at the last paragraph; the problem statement and objectives of the study are indicated.

(3) References

References for journal articles are written based on the format and style adopted by the particular journal a writer wants to publish with. The list of references or literature cited is usually given at the end of the research paper or journal article. It normally begins on a fresh page in an alphabetical order of authors' surnames followed by initials (Harvard style). Others use numerical order. That is, the list of references is arranged numerically in order in which they are cited in the text of the article irrespective of the alphabetical sequence of authors' surnames. The items are numbered serially.