English Language Teachers versus the problem to write a scientific paper

Profesores de inglés frente al problema de escribir un artículo científico

Professores de inglês contra o problema de escrever um artigo científico

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Abstract
The advent to develop an investigative society, has urged professionals to experience a subit change in the field of higher education in Ecuador. However, the production of academic results in the Language Center at the National University of Chimborazo has been minimized and undervalued. Even though teachers of English are aware of the professional and financial benefits of writing a scientific paper, most of them believe that they were not trained enough to do so. Therefore, this paper pretends to provide the steps, hints or clues in order to assist and encourage novel writers to present their findings within scientific settings.

Keywords: English language; teachers; scientific paper; process, steps.

Resumen
El advenimiento de desarrollar una sociedad de investigación ha instado a los profesionales a experimentar un cambio secundario en el campo de la educación superior en Ecuador. Sin embargo, la producción de resultados académicos en el Centro de Idiomas de la Universidad Nacional de Chimborazo se ha minimizado y subvaluado. Aunque los profesores de inglés son conscientes de los beneficios profesionales y financieros de escribir un artículo científico, la mayoría de ellos creen que no fueron entrenados lo suficiente como para hacerlo. Por lo tanto, este documento pretende proporcionar los pasos, sugerencias o pistas para ayudar y alentar a los escritores noveles a presentar sus hallazgos en entornos científicos.

Palabras clave: Idioma inglés; maestros papel científico; los pasos del proceso.

Resumo
O advento do desenvolvimento de uma sociedade investigativa instou os profissionais a experimentar uma mudança no subitem no campo do ensino superior no Equador. No entanto, a produção de resultados acadêmicos no Centro de Idiomas da Universidade Nacional de Chimborazo foi minimizada e subvalorizada. Embora os professores de inglês estejam cientes dos benefícios profissionais e financeiros de escrever um artigo científico, a maioria deles acredita que não foi treinada o suficiente para fazê-lo. Portanto, este artigo pretende fornece as etapas, dicas ou dicas para auxiliar e incentivar novos escritores a apresentar suas descobertas em contextos científicos.

Palavras-chave: Idioma inglês; professores; papel científico; processo, etapas.
Introduction

Introduction to the problem

To be able to generate and produce knowledge constitutes one of the most challenging tasks that modern institutions of higher education have to face nowadays (Altbach, 2015). There is a wide variety of activities that involve the investigative process such as to be able to identify elements that should be properly socialized, the materials and methodologies applied in order to get the objective set at the beginning of a study as well as the ability to analyze and interpret the obtained results in such a way these can be discussed by experts on each specific area. All of these aspects should be communicated by writing outstanding scientific papers in prestigious and well-recognized journals of worldwide impact (Robson, & McCartan, 2016). In this way, educators should contribute to generate and produce knowledge by not only the investigation itself, but also sharing their findings in a way that can be reproduced by others.

Unfortunately, the challenge of writing a paper could present a number of constraints if there is a gap in the process and the structure that needs to be followed. That is why, the aim of this article is to assist students, educators, professionals and people in general who are interested in the process of writing a scientific paper, taking account of its different stages (Vitse, & Poland, 2017). We all know that upon completion of any study, researchers should be able to communicate their findings and results in such a way that these can be properly analyzed and reproduced by others for further studies. That is to say, these findings should be based on the study of any particular problem in order to be validated and tested by others. Unfortunately, the majority of educators but mostly English Language teachers in Riobamba, Ecuador lack the ability to do it due to there is a variety of factors that imply and may affect the acceptance of a paper. Although, we may encounter an abundance of studies on this particular issue, when we want to write a paper, it would be crucial to consider that the ability to share and communicate the obtained results relies on the experience and knowledge of the investigator. A lot of people think that at the end of a study, the only thing we get is numbers, tables and formulae with no specific and clear information which tends to confuse prospective readers causing them not to waste their time reading a paper (Lefevere, 2014). Therefore, it is urgent to change this misconception about papers through the careful analysis of previous and current studies LOES (2010). In spite of the regulations stated by the Ecuadorian
government on the need for university teachers to write papers, it has been observed that they but more specifically English language teachers have left behind. It’s worth mentioning that in academic settings, we should bear on mind that at the moment to present the results of an investigation, there may probably be a group of professionals who stand out against a high level of education and proficiency on the writing process of papers (Nordin, 2017), something that in our particular point of view terrifies less skilled people to present their findings. That is why we would like to present some hints that will surely serve others to write a scientific paper.

**Importance of the problem**

Recent developments in the field of higher education have led to a renewed interest to write scientific papers (Franco, et, al, 2014). In the teaching practice, it is crucial to incorporate the investigative capacity that educators have in order to improve their pedagogical performance. At the current time, the advent to develop an investigative society, has urged professionals to experience a subit change in the field of higher education in Ecuador. However, the production of academic results in the Language Center at the National University of Chimborazo has been minimized and undervalued. Even though teachers of English are aware of the professional and financial benefits of writing a scientific paper, most of them believe that they were not trained enough to do so.

On the one hand, a scientific journal is commonly considered as a valuable instrument for novel and experienced researchers due to the impact that a paper can cause in the name of science (Sinatra, et, al, 2016). Nevertheless, there is a controversy in terms of its importance or relevance. On the other hand, some researchers might probably reproduce the wrong idea that there exists an abundance of periodic academic publications and that they are well treated by readers, as they think electronic journals omit the need for peer reviewers. (Mulligan, et, al, 2013)

It is worth mentioning that throughout the years, scientists in general have been exposed to a simple fraction of knowledge they will require during their careers. As a matter of fact, a high percentage of new knowledge will appear with the pass of time (Csikszentmihalyi & Robinson, 2014), so they have to be updated, or else, they will take the risk to limit their professional growth in the field of research. Even though, these professionals may have difficulties in the process of analyzing,
revising and discarding information; they will undoubtedly find out rewards or incentives that may come from digging into reading, writing and publishing a scientific paper. (Lester & Lester, 2015)

The inevitable demand to connect the teaching practice and the investigative process within university settings has created the need to train professionals who may be able to produce and socialize their findings (Jarzabkowski, et, al, 2014), as these institutions must be able to contribute to strengthen this particular area which has been underestimated in the Ecuadorian academic society. Therefore, it seems essential to increase the production of academic papers, as they will become the primary factor that will surely boost the generation of knowledge. (Serrat, 2017)

The principle that emerges from the prior arguments has to do with the role of the investigation as an essential element to improve the quality of education which goes hand in hand to the teaching practice (Cuban, 2013). Consequently, it seems essential to motivate new generations of educators to identify the need to transform and innovate their careers in benefit of future generations. Although, this would be a challenge at the beginning, professionals will be capable to develop their skills, abilities and competencies that will surely allow to respond to the current social demands. (Howard, et, al, 2015)

This challenge requires the appropriate communication of information by the researcher due to there is no study that can be concluded without the corresponding and efficient manner to socialize the obtained results. As a matter of fact, there is a variety of scientific and academic events held throughout the country where these findings might be properly discussed by experts on different areas of knowledge. (Bromme, et, al, 2016)

It is worth pointing out that although the production of scientific papers might consume excessive amounts of time (Juve, 2013), this activity along with the socialization of results in recognized journals is not considered an optional activity for university teachers and has become an urgent need due to producing papers plays an important role in the future of the institutions they currently work as well as their personal benefits they might probably obtain such as promotions (Hamid, et, al, 2015) just to cite one.
Several attempts have been made to overcome the obstacles to write papers (Hyland, 2016). Unfortunately, over the past few years a number of researchers have sought to determine that the limitations they have in spite of the importance mentioned above is the lack of basic information on the process to write a paper. Researchers mentioned that they learnt the process in an informal way something that diminishes the quality of their writing (Snow, et al, 2016). On this score, let us present to future researchers some alternatives, hints, suggestions and recommendations that novel investigators at the English language staff should be aware of at the moment of writing a scientific paper so that they will be involved and engaged to contribute to science.

One of the most important benefits that a researcher may obtain upon completion of writing a scientific paper is unquestionably the development of science (Castle & Keane, 2016). This is a step by step process which is surely conducted by previous studies. Among some of the advantages that investigators may receive, we have the intellectual recognition they get as well as the reputation and prestige that writing implies, something that guarantees a continuous improvement of their academic position within a society of knowledge. (Tello, 2015). Moreover, this academic production is commonly utilized by governments and some organizations as a parameter to concede financial resources that permit any institution strengthen its undergraduate and postgraduate programs through a careful selection of its academic and investigative staff.

Hence, this paper pretends to provide a synthetic but an objective manner to structure a scientific paper in such a way that novel writers familiarize with the essential aspects that an article contains (Riddell, 2014). To carry out the present study, the main descriptive elements that include a paper were carefully and meticulously selected. The authors of this academic work consider that the obtained result is aimed to satisfy the necessary requisites to write a scientific paper.

It is also believed that this document will constitute a powerful tool in order that readers develop their competencies to present results in academic settings as the art of writing is acquired and polished with each passing day through a constant practice and a culture of tenacity and perseverance. Therefore, this product should be understood as the first step on an exciting journey towards the excellence in terms of socialization of academic and investigative experiences of novel or experienced researchers.
English Language Teachers versus the problem to write a científicas paper

**What do you need to know to write a paper?**

To be able to follow a logical order to guide the reader constitutes one of the various components on an academic paper. However, this order does not necessarily follow a logical connection. In reality, the introduction, conclusion or even the abstract are generally the last steps to take into consideration. Inclusively, sometimes the title is changed at the last minute according to what was written.

There have been several studies into the do´s and don’ts when writing a paper that researchers should know. For instance, Greenhalgh (2017) demonstrated that writing a scientific paper goes beyond than a simple reproduction of numbers or statistics. Therefore, a researcher should be capable enough to organize a paper considering the following aspects that go as follow:

1. The introduction that refers to the problem to be investigated. 2. The materials and methods that deal with the manner the problem was treated including a variety of concepts, the variables of the study, different studies developed in the area. 3. The results of the study that should indicate the respective findings. 4. The discussion of results that should carefully explain the significance of these findings. 5. The results of the study after the analysis of the information.

**The Title**

The title represents the primary factor that will determine the success of any investigative work, as it should cause an impact and get the attention of the reader. If the title of a paper is not well developed, rest assure that many readers will avoid to waste time checking out something that has not carefully considered. It briefly and logically describes the essence of the article. From time to time, it tends to divide the title in two parts, on the one hand, in a general way and on the other hand, to establish the context any specific situation.

Whenever possible, the title should be written just with a few words and it should contain the main idea from the study. It seems that short titles appear more attractive than extensive ones due to when they contain more than fifteen words, the majority of revisers lack of time to check everything
out in detail and they might probably think that the investigator is not skillful enough to synthetize the information.

Therefore, the title should specifically describe the most relevant components of any particular study. I need hardly say that this is not the moment to attempt to explain the study itself, so try to avoid complex words or unfamiliar expressions, abbreviations, acronyms, statistical analyses or formulae that would be described later on.

As for the writing style, there are some researchers who prefer to apply a descriptive analysis on their papers. On the one hand, for a group of researchers, the option to state the title in an interrogative form is considered valid. However, on the other hand, another group of experts argue that this affects the quality of a paper. In this way, what we have to bear in mind is that the title should not contain any type of conclusions, a frequent error when writing a paper.

**Authorship**

Even though it may not sound relevant for novel researchers, the manner we write the name of the authors of a study along with the institution they currently work should be carefully taken into consideration as it should be as clear as possible in case other investigators want to make use of our paper to reproduce the process or cite the source they find the information. It would be advisable to write in an alphabetical order the name of the authors who have really contributed to the paper.

To be able to correctly write the name of the institution and the electronic address of the authors constitutes another important factor on a paper since as you may already know, at the present time, every institution of higher education in Ecuador is judged by the contributions of its academic staff and or investigators. Therefore, it is necessary to standardize the form the institution will be mentioned as well as the institutional e-mail of the investigators, that is to say, whether you use its full name or its acronym in order to avoid future misunderstandings or confusion and give real credit to the place the study took place.

The Abstract
It is worth pointing out that the abstract might probably be the unique part that a reader will consider to decide to keep on the track. For this reason, a well-written abstract should synthetize the main points of each one of the sections included on a scientific paper. It should establish the objective of the study, the respective materials and methods applied without explaining them in details; to summarize, highlight and discuss the principal results and provide the corresponding suggestions or recommendations.

Unquestionably, the abstract represents the part of any study which is available to the reader who will determine if it is worth reading it or not. It should not contain any type of information related to figures, charts or bibliographical references. Likewise, it is necessary to avoid the use of ambiguous words, elements or phrases as an effective abstract should be directly stated. If there are elements that need to be mentioned in an abstract, well then, put them into it, or else you take the risk that a reader would simply discard your paper. Some prestigious journals recommends that an abstract should contain: The background and aims; the methodology applied; the key results and the respective conclusions. Generally, an abstract should not exceed 200 words and it must specify the study avoiding the description of particular details.

**Keywords**

Due to the multiple activities of investigators, it is important to consider the time as a key factor when writing a scientific paper. Scientific journals and researchers use keywords for the publication of their manuscripts, aspiring the widest possible dissemination of the content at a global level. Key words are short words or phrases that allow to classify and direct the entries in the systems of indexation and retrieval of the information in the databases of a particular manuscript or subject area. However, the most difficult aspect to bear in mind is the choice of the words that best represent and support the study. It is understood that preference will be given to those who present higher scientific level or better understanding by the technical groups. Therefore, it would be a good idea to utilize between five and seven “magic words” that will be useful to attract potential readers.

**The Introduction**

The introduction of a paper should impact the reader and explain the reason why the investigators conduct a particular study. A scientific paper is aimed to narrate the history of the investigation in
four chapters that must provide specific information on the question of the study (rationale) the way we solved the question (materials, patients and or methods), what we found (results) and the implications from the results obtained (discussion).

In this section, the research question is the key element of any study, due to it will tell us the exact value of the study in relation to the current information on a particular topic, this will support the type of the study which constitutes another important factor on a study that would be totally described in the section that corresponds to materials and methodology.

I am quite sure you are wondering “What makes a good research question?” right? Well, let me tell you that according to some experts, a good research question should include the following characteristics: feasible, interesting, attractive, ethical and relevant. It is feasible when the researchers are capable to respond the question, it means, if their knowledge and experience were sufficient to conduct a study.

The research question should be interesting for the investigators as they will spend valuable time trying to respond it. It has to do with the intrinsic and extrinsic motivation the investigators demonstrate to conduct the study. The question should be relevant to the scientific community because its answer may pose a significant contribution for future studies to make transcendental decisions on a specific area. It should also be attractive due to in many cases something that has been already answered deserves further explanations unless a new answer may provide another perspective to any particular problem.

A question should be ethically posed and answered in such a way that any study respects, protects and guarantees the rights of the participants such as their physical and mental health, privacy and the confidentiality of their personal information. Attractiveness and relevance constitute the core to consider a particular study as scientific. In the introduction of a paper, we should take into account why we want to conduct a study in order to establish the reason of the study in order to motivate the reader to analyze the information or the editor to publish it in a scientific journal.
In other words, we should provide the reader with the necessary information to comprehend the research question, starting from the general to the specific information of the topic; to move from what it is known about a topic, providing details on prior studies and pointing out what it is unknown of the study, and showing our attractive manner to deal with it. In the introduction, we also need to provide the reader how we pretend to answer the research question through a brief explanation of the type of design we have chosen for the study. Therefore, the introduction should provide the reader:

- The nature of the problem where its resolution is described throughout the text.
- The essence and the objective of the article plus its relevance.
- In some cases, it will include the methodology applied to carry out the study and also a description in which the paper is articulated.

**Materials and Methods**

This section pretends to explain the way the problem has been treated in order to replicate the study, something that constitutes a key factor in scientific publications. Another important reason is that this section allows to know if the model transmitted in another paper can be adapted to a different context. In this way, the most important rule at the moment of writing this section is to provide sufficient information to another investigator in such a way that the experience can be reproduced.

Regarding to the materials, it is necessary to describe their characteristics as they quantitatively and qualitatively affect the results of a study. These characteristics may determine if the materials are applicable or not in a different setting. As to the methods, it is convenient to provide a step by step explanation so they can be properly replicated by others. In case any particular method applied has suffered certain modifications, these should be carefully explained in details.

Consequently, the section called "materials & methods" should permit the reader to evaluate and assess the quality of the instruments, the sample and how the materials and procedures were determined, the variables along with the statistical analysis of information. Ethical issues should
also be presented as the information in this section is crucial to comprehend the obtained results as they reveal the manner in which they were found and allow the reproduction of a new study. (Abreu, 2015)

Results

This section presents the evidence of the original contribution of the paper to science. It should be as objective as possible without considering interpretative elements that might lead a study to subjective interpretations. This is the moment to explain what was and what was not found during the experience described in the section of materials and methods. However, a word of warning, it is not advisable to include information that is not related to the objective of the study because it might lead to confusion. To include non-relevant or unnecessary bits of information in this section, does not prove how much we have worked or how experts we are on a particular topic due to a future reader is exclusively interested to learn something new that can be useful for further studies.

A frequent error has to do with the redundancy that causes the text itself versus the tables and charts that can also present results. On the one hand, the text should definitely transmit essential information of the objective of the study, but must not never repeat information stated in graphics or charts. On the other hand, the information showed in graphics and charts should communicate a message by its own without taking a glance to the text to clarify doubts as figures provide a visual impact to the reader about the treatment or procedure implemented to get the respective outcome. Some elements to present results go as follow:

- Results from a statistical analysis
- Descriptive Statistics (standards, correlations)
- Inference statistics
- Highlight the significance of data.
- Post hoc additional analysis

Try to avoid:

- Incomplete figures and tables
- Repetition of information stated in the text.
- The application of the same writing style between the introduction and materials and methods.
- The presentation of results in the section called materials and methods.
- An ambiguous or an inadequate statistical analysis.

### Discussion

This segment is probably the most difficult part to write as it should avoid the simple repetition of results. This section serves to interpret the findings and put them in a broader context. Generally, when a person reads a scientific paper, this is not interested to know what happened in a particular case but to learn something new that can be reproduced in different conditions of time, location, population, characteristics, and so forth.

There are two important factors that should be emphasized in this section. First of all, the author should explain the significance of the findings and then how these are related to what is known at the current time. It is natural that the interpretation of results may contain a significant subjective dose but this can be justified if there is a conscious revision of theoretical issues. Nevertheless, this section should not include excessive speculation especially if it has not been scientifically analysed.

If the aim is to write an outstanding section of discussion, this should include the following elements: 1. to show the relationship between the positive and negative aspects derived form the results. 2. To identify how the results agree or disagree to the information encountered in scientific literature. 3. To present the possible theoretical and practical implications of the study in different areas. Finally, this section should conclude with a paragraph dedicated to state the respective conclusions and recommendations justified by the information presented throughout the study. These should necessarily be based upon the results in order to avoid ambiguous inferences.
When writing the conclusions of a research, it is necessary to be sure to present real conclusions. Although, it may seem obvious, it has often been used, in the wrong way, to merely reaffirm the results of a search. The result is a debate, however the conclusions must clearly understand a solution to the research problem. After drawing the conclusions, make a reflection of their scope; the conclusions are not necessarily the basis of the article, so limit its conclusions based on the results obtained in the research, which respond to the questions and objectives raised at the beginning of the article. (López, 2013)

It should not be forgotten that conclusions, as the final product of an investigation, should be considered provisional and approximate. Although, these may look brilliant in terms of science, the conclusions can exceed previous knowledge and, in turn, can also be overcome with the advancement of knowledge. (García & Alarcón, 2015)

**Conclusions**

The conclusion of a research report should summarize the content and purpose of the research without seeming unnatural or boring. Any basic conclusion should have several key elements, but there are also many tactics that you can use to come up with a more effective conclusion and many that you should avoid in order not to weaken the conclusion of your report. They go as follow:

- You should briefly restate the subject and also explain its importance.
- You should paraphrase the thesis which is a focused and more specific view of the topic.
- Briefly summarize the main points which basically means that you have to remind the reader of what you said throughout the paper.
- Avoid writing new information which was not mentioned in the paper.
- Whenever possible, you can tell your readers that more research is needed on the subject of your paper.

Acknowledgment
This section pretends to be kind with people or the institution that indirectly cooperated with the study in such a way that it can be improved. Even though, there are no specific rules to write this section, it would be positive to be clear, direct and precise. It would be the opportunity to be grateful with those who provided important information, resources or materials to test the hypothesis; likewise, it is the chance to thank someone who discussed or proposed fresh ideas to polish up the paper and invested part of his or her time trying to give us a wide perspective on the topic as well as the people who spent their valuable time reading the paper in order to provide constructive criticism or even those who gave the investigator an economical support to carry out the study.

Reference

When you write a paper, make sure to exclusively cite reliable references that have been published by scientific journals and reject material that has not been discussed by experts or information found on the web. Likewise it is customary to avoid referencing prior studies that did not appear in the text and also inform yourself the system that each journal requires you to follow. Consequently, it is necessary to respect the particular norms and regulations stated by a journal with respect to referencing scientific studies.

When writing a research paper it is essential to mention the documents that served as the basis for its production. In order such documents can be identified, it is necessary that these elements allow their identification to be recognized, and this will only occur through bibliographic references. The American Psychological Association (APA) defines standards for the submission of papers, without these patterns it is difficult to locate and identify the sources used in scientific work. If it is a mandatory element, the references constitute an ordered list of the documents actually quoted in the text. (Amezcua, 2015)

Conclusions

It can be concluded that writing a paper could be quite challenging for novel writers especially if they do not have sufficient information or knowledge to do it. Hence, this paper pretends to provide useful information to people who are interested in the process of writing a scientific paper, taking
account of its different steps. Sadly, a lot of teachers of English in the Language Center at the National University of Chimborazo situated in Riobamba, Ecuador lack the ability to do it in spite of the personal and professional benefits that papers could have. Even though, several attempts have been made to overcome the obstacles to write papers (Hyland, 2016) researchers have found that more studies on the topic are needed to lay the foundations on how to write a scientific paper. Nevertheless, these experts agree that a scientific paper should cover the following aspects: 1. The introduction that refers to the problem to be investigated. 2. The materials and methods that deal with the manner the problem was treated including a variety of concepts, the variables of the study, different studies developed in the area. 3. The results of the study that should indicate the respective findings. 4. The discussion of results that should carefully explain the significance of these findings. 5. The results of the study after the analysis, comparison and contrast of the information.

References


Referencias


Referências


