**Abstract**

One of the least understood elements in joint authorship, especially in publishing a student’s work is that who should be the corresponding author. Some supervisors may ask their students to submit the paper to avoid the hassle of going through the seemingly tedious on-line submission process. In the process of a paper submission a student often puts his name as the corresponding author. By doing so, the supervisor not only takes the risk of the paper being rejected but loses some of the pertinent benefits of becoming the corresponding author. This article shares the view of the author as to why the supervisor should take the lead role as the corresponding author for the work carried out by a graduate student.

**Introduction**

Huge amounts of money, time and resources are spent on research activities in universities. The research work is usually undertaken by postgraduate students, which leads to a higher degree if the minimum quality set by the university is met. A student’s concern is often the need to complete the study and produce a thesis within a reasonable time. In some universities, publishing a paper in a peer reviewed journal is a mandatory requirement before a candidate is awarded a PhD degree, but these are rare.

Usually, having a number of journal papers published before submitting a thesis adds credibility to the originality of the work. Moreover, the student can have his work checked by others and serious errors can be corrected before the work is presented in the thesis for examination. On the contrary, there is no guarantee that having published several papers in even high impact factor journals automatically qualifies a candidate for an MSc or PhD degree.

This is simply because the examination is based on the thesis submitted rather the journal papers. A student can fail a PhD examination because of a poorly written thesis although he/she may have published numerous peer reviewed papers. This, however, by no means implies that journal publications are not important. It is quite the contrary. The main reasons for publishing research findings are well known and will not be discussed in this brief article. The focus here is on why a supervisor should take the lead role in journal publications and act as the corresponding author, instead of leaving everything to the student.

**Student’s work or supervisor’s work?**

A major unspoken paradox looms in academic research carried out by postgraduate students. One of the criteria to qualify for an MSc or PhD degree is that the student should demonstrate that he/she is able to carry out the research work independently, that is, with minimum supervision. On the contrary, any paper published by the student includes the name of the supervisor as a co-author and adds towards the CV of the supervisor, implying that the supervisor played a role in the student’s work. Worse still, any major discovery by the student is shared by the supervisor, who sometimes claims a larger portion of the cake. How is this possible or is this ethical?

A student who freshly registers to undertake a higher degree usually lacks the skill and experience to conduct an extended research. Thus, it is mandatory for him to conduct the research under guidance from a more experienced academic staff member. The supervisor usually drafts a preliminary proposal that helps the student to formulate a more detailed research plan. At each stage of the project, the supervisor closely monitors the student’s progress and guides the student towards work that can lead to a thesis that meets the minimum standard set by the university. Since the goal of any academic research is publication and academic staff are assessed based on the quality and number of peer-reviewed journal papers, it is natural for a supervisor to urge the student to write as many papers as possible during his candidature. Since the work was carried out under the supervision of the academic staff, it is usual to include the name of the supervisor as a co-author. But, should the supervisor be the first author of a piece of research work carried out by a student? Who should be the corresponding authors? Who qualifies to be an author of a research paper? Let us look at the meaning attached to the word ‘author’ of a scientific paper.
Who are authors?

According to the International Committee of Medical Journal Editors [1], an author is a person who has made substantive intellectual contribution to the work reported in the paper. The committee has set three conditions that must be met before a person qualifies as an author. These are:

a) An author should have made substantial contribution in the conception and design, acquisition of data, analysis and interpretation of the results.
b) An author should have drafted the paper or critically revised it for important intellectual content.
c) An author should have approved the final version of the paper to be sent for publication.

With the above conditions in mind, one could easily disqualify people who masquerade as authors and fall into any one of the following categories:

a) Those who write the paper based on the work carried out by others due to their writing prowess.
b) Those who merely help in the collection of the data, such as technicians, laboratory assistants, field surveyors etc.
c) Those who have not read and approved the final draft of the manuscript.
d) Those who merely help in acquiring funding, providing research space, initiating collaboration, providing test samples and other non-intellectual contributions, e.g. heads of research groups, heads of departments, industrial partners etc.

People who have helped in the course of the research but do not qualify as authors should be duly acknowledged in the paper. It is unethical to include them as co-authors. As the academia rests upon honesty and integrity, breach of either of these in reporting research findings by people who do not qualify as authors is considered an act of academic dishonesty.

Having understood who qualifies to be an author or a co-author, let us consider the reasons why the supervisor should be the corresponding author. But before that, let us ponder why journal papers get rejected.

Why papers get rejected?

A research paper can be rejected due to many reasons, such as the lack of originality, lack of supporting data, lack of rigor in the argument that supports the claim or hypothesis, unsound methodology or simply because the reported work is outside the scope of the journal. Graduate students generally lack the experience to formulate a succinct problem statement, clearly highlight the limitations of the existing work, describe the methodology in sufficient detail, discuss the research findings and guide the reader to understand how the problem has been solved. If left alone, an inexperienced research student may hastily submit a paper that may be poorly prepared to the editor of a journal. Editors usually have the tendency to see where the paper originates from. If the paper is poorly prepared, other papers submitted from the same department or university may be treated with skepticism. As the reputation of an academic institution is at stake, it is extremely crucial that the supervisor has the final say before the paper is submitted or knows that it is the final version that is being submitted. This is best done if the supervisor plays the role of the corresponding author.

Most journals these days have facilities for on-line paper submission. In fact, the entire process can be done on-line, without having to send a single print version of the paper or other documents. Supervisors who are too busy usually ask their students to submit the paper as they do not want to go through the tedious process of uploading the paper. But then, they run the risk of not having the final version being uploaded. To increase the chances of having a paper accepted, the final version should be checked by the supervisor and preferably uploaded by himself. It is a tedious effort but the time spent is worthwhile considering the fact that successful publishing in a high quality journal is measure of research quality.

Reviewer invitation

The university ranking exercises over the recent years have put universities on a neck-to-neck competition to grab the top rankings. Since one of the criteria used for university ranking is the number of citations per academic staff, the number of journal papers worldwide has increased tremendously. Journals are also increasing the number of publications with the hope of increasing their impact factors. Due to the large number of papers received by journals, editors are under constant pressure to get them reviewed as quickly as possible. Thus, it is not surprising that just anyone who submits a paper is invited to review other papers submitted to the same journal, including students. This is to
uphold the noble effort of the peer review process, which has been the hallmark of the scientific method for centuries. But, can a graduate student qualify as a peer?

In any field of research, peers are people who have several years of research experience and are experts in the field. It is bewildering to hear that a student is invited to review a paper, just because he is a corresponding author of a recently submitted paper. Can an average student from a mediocre university adequately assess the scientific paper of a senior professor from a top university from another part of the world?

A supervisor stands to gain tremendously by becoming a corresponding author, particularly being invited as a reviewer. By becoming a reviewer, the supervisor can critically evaluate the research carried out by others against his own knowledge and expertise. The supervisor can enhance his knowledge further and get ideas for future research that will advance his own career. Most importantly, the supervisor will get to know the editor via e-mails and this may lead to other benefits, such being invited to the editorial board, provided that a significant contribution in terms of number of publication has been made to the journal.

**Summary**

Since the objective of any academic research is publication, the supervisor should take the lead role in getting the work done by his students to the archives of high quality peer reviewed journals. It is pointless to carry out a piece of research work if there is no intention to disclose the findings to the scrutiny of others. The student, being the first authors, should draft the paper and revise it based on critical but intellectual comments from the supervisor. After several revisions, the final version should be checked carefully by the supervisor who then should submit the paper to the journal editors, thus taking the role of the corresponding author. This is a crucial way of increasing both the quality and number of journal publications in any academic institution.

*(Feedbacks on this article are welcome. Send your comments to mmaran@eng.usm.my)*

**References:**