ASSESSING GRADUATE STUDENTS' ACQUISITION OF RESEARCH SKILLS IN UNIVERSITIES IN CROSS RIVER STATE NIGERIA FOR DEVELOPMENT OF THE TOTAL PERSON

Basil A. Akuegwu Department of Educational Administration and Planning University of Calabar, Calabar &

Felix D. Nwi-ue Department of General Studies Rivers State Polytechnic, Bori

ABSTRACT

This paper assessed graduate students' acquisition of research skills in universities in Cross River State Nigeria for development of the total person. Survey design was adopted. Two research questions and one hypothesis were isolated to give direction to this investigation. 3018 graduate students in the two universities constituted the population. 300 of them were drawn as sample using stratified random sampling technique. Data were collected using researchers-constructed instrument called "Students' Acquisition of Research Skill Questionnaire (SARSQ). Data collected were subjected to statistical analysis with the use of descriptive statistics (Mean Rating) and Independent t-test statistical techniques. Results obtained indicated that graduate students have low research skills acquisition. They acquire the highest skills in reading, oral presentation/communication and information gathering and least skill in analysis. A significant difference exist between male and female graduate students in their research skills acquisition with the male having upper hand. It was recommended that graduate students should be made to participate in more research oriented activities, so as to enhance their research skill acquisition for development of the total person.

Keywords: Graduate Students, Research Skills Acquisition, Total Person Development, Gender, Universities,.

INTRODUCTION

Research is one of the core tripartite mandates of university education all over the world. Apart from teaching responsibility (knowledge transmission) it is an integral part of university system. It constitutes the bedrock of universities core functions because it is vested with the onus of knowledge generation. Of course, without generated knowledge, there will be no knowledge transmission (teaching) and knowledge application (community service). It

is the quantum and quality of knowledge generated that determines the effectiveness of transmission and application.

Aside from this, the place of research in students' learning in universities has long been recognized. It is the key to effective learning because knowledge generated there from is used to enhance academic performance and solve life's problem. Therefore, students' learning is incomplete without research. This underscores the premium attached to it in higher educational institutions, to the extent that it is mandatory for students to participate in it. It is in this regard that the age-long tradition of students writing research project at the undergraduate level and thesis at the postgraduate level still subsists. No student in any of these levels can graduate without successfully conducting research, even though the fellow passes his/her courses in the teaching/learning situation creditably.

However, the relevance attached to research in university education appears to be more pronounced at the graduate level because it is at this level that more rigorous and cutting-edge research is conducted. It therefore follows that the training given to post graduate students is more of research based. In addition, post graduate students are trained for career in higher education to replace ageing workforce especially in teaching and research. To get something tangible out of this training requires their acquisition of research skill. This is necessary in order to cope with the demands of this career.

Research is a systematic attempt, search or investigation to find solutions to problems or questions in order to increase the sum of knowledge (Bako, 2005). It consists of a study and investigation to discover facts, insights and other elements central to the matter at issue. Research is students actively finding information new to them. It involves developing knowledge that is commonly known to humanity, commonly unknown and totally unknown (The University of Adelaide, n.d). It is motivated by the desire to acquire information about something or a curiosity about how things are, what they may do or have done. Research skills on the other hand, are skills required to search for answers to questions, to construct reasoned argument or theories based on evidence and to increase understanding in a particular field of study (Higher Education Academy, n.d). It is the ability to identify a problem, determine what sorts of informational resources are needed to respond to the problem, find those resources efficiently, evaluate the gathered information for quality and relevance, and use the information effectively to address the problem (Badke, 2012). There is no consensus among authors as what constitute research skills. However, the researchers

European Journal of Research and Reflection in Educational Sciences

were able to summarize and modify a number of them for use in this study. They include: Critical thinking, organizing ideas, sense of direction, Information gathering, sorting information, Information and communication skill, reading skills, writing research reports, methodological knowledge, analytical skills, time management ability and oral presentation/communication skills. Graduate students in this study are both males and females, classified as gender. Total person is one who is prepared mentally (cognitive - head), emotionally (affective - heart) and physically (psychomotor - hands) with knowledge, values and discipline to face the challenges in life. Acquiring research skills for developing total person involves graduate students possessing the ability to search for answers to questions and construct reasoned argument or theories expertly for the purposes equipping themselves with knowledge, values and discipline to face life's challenges.

The importance of research in developing total person has long been established in colleges and universities. It has become more important today than ever to acquire research skills because of the ill-defined global environment where solutions are no longer housed in one book, in one classroom, on one website, in one person or in one institution (Badke, 2012). Research skills assist graduate students to critically investigate issues and where appropriate, generate and evaluate relevant data, form and test ideas, theories and hypotheses, and successfully navigate their way through the sea of information that characterizes the information age (Webb, Smith & Worsford, 2011). The essence of this is to enable students build strong and virile intellectual base and practically connect research frontiers to their own learning both academically and real life situations.

To acquire research skills, Badke (2012) identified a number of abilities which graduate students need to possess:

- a. Understanding the nature of the information resources available in their discipline.
- b. Stating research problems clearly and concisely
- c. Knowledge of research databases e.g. google
- d. Capabilities for critical thinking to be honed in realistic research situations.

Furthermore, acquiring research skills may be enhanced by addressing and improving students' perceptions of their research environment as well as raising their awareness of

variations of conceptions and approaches to research. This is institutional responsibility, which ought to be seriously undertaken to achieve the desired goals and objectives.

However, acquiring research skills for developing the total person is not a mean task. It requires concerted efforts from the students, managers of Post graduate programmes and institutional leaders. Poorly-defined research skills have posed daunting challenges to graduate students. They find it very difficult to write their theses and dissertations resulting to their inability to complete their post graduate programmes on schedules. Prolonged and low graduation has adverse effects to the students, universities and the society. To the students, there are increased expenditures for tuition and textbooks, a potential negative impact on career advancement, reduced professional status and psychological outcomes such as feeling a sense of failure and personal loss. On the part of the university, these reflect poorly on their images and reputation, negative impact on accreditation, financial aid programmes, external funding, research grant, publication opportunities and institutional resource allocation. The society is deprived of highly-prepared professionals who could contribute to advanced levels of leadership in academic, healthcare and research settings (Ewing, Mathieson, Alexander & Leafman, 2012; Lovitts, 2001; Kerlin, 1995).

These adverse effects have underscored the need to ascertain the level of preparedness of students for the post graduate programme research-wise. To realize this objective requires an investigation into their acquisition of research skills for the development of the total person. This is what this paper set out to accomplish.

Statement of the problem

Graduation rate of graduate students in universities in Cross River State has attracted a lot of concern to managers of the graduate education programmes and institutional leaders. Low percentage of students who enrolled in a particular session graduate at the stipulated period while majority are left behind. Even at that, most of those who graduate have not been able to engage themselves in productive ventures as a way of tackling the challenges of life. Reasons for poor graduation rate and incapability to cope with life challenges have been placed on inability to complete their theses and dissertation on schedule. This should be attributed to the poor research skills possessed by graduate students.

Series of seminars and workshops have been conducted on research skills acquisition for graduate students, yet the problem of low graduation rates persists. Furthermore, none of the studies involving graduate students and their academic programmes in universities in Cross River State has focused on their acquisition of research skills. This study is therefore targeted at correcting this anomaly. Against this backdrop, the problem of this study is: what is the level of research skills acquisition among graduate students for development of total person?

Research questions

- 1. What is the level of acquisition of research skills among graduate students in universities?
- 2. Which research skill does graduate students in universities have the highest level of acquisition?

Hypothesis

1. There is no significant difference between male and female graduate students in their acquisition of research skills.

Literature review

Given that the primary purpose of graduate school is to prepare graduate students to assume professional responsibilities especially in teaching and research, it is of utmost importance that they acquire research skills mainly. Acquiring research skills may enable them perform credibility in research and teaching responsibilities as well as providing solution to life challenges. A number of studies have demonstrated this.

A study by Ward, Bennett and Bauer (2003) revealed that students perceived that engaging in research facilitated learning to a greater extent. Students specifically acknowledged the extents to which their practical and advanced technical skills had been developed. Similar benefits were identified by Reisberg (1998), who found that for students researching was more exciting and academically rewarding than lecture-based approaches to teaching and learning.

A number of benefits of acquiring research skills have been enunciated by Webb, Smith and Worsfold (2011). They are:

a. Inducting students into their disciplines values, practices and ethics

- b. Ensuring course content include cutting-edge research finding
- c. Increasing students understanding of how their chosen discipline contributes positively to the society
- d. Developing and enhancing students skills and capabilities including generic skills such as critical and analytical thinking, information retrieval, evaluation and problem solving; skills in conducting and evaluating research that are helpful to students' ongoing personal and professional lives; methods that have been linked to positive learning outcomes for students. Dominick, Buffington, Rowland and Warren (2000) found that through research activities, students gained deeper understanding of their subject matter, while Seymour Hunter, Laursen and Deantoni (2004) identified a raft of skills and attitude-based benefits including personal/professional gains, improved thinking as a scientist, clarification or confirmation of career plans and enhanced career/graduate students preparation.

Research by Trigwell and Dunbar-Goddet (2005) revealed that students agreed in high proportions that the library facilities support research, that supervision is available when needed and it is of high quality, that a range of important skills are being developed and that college provide an opportunity for social contacts with other graduate students. Nearly 75 percent of students agree that they are satisfied with the quality of their research experiences, about 10 percent disagree, and a neutral response was received from 15 percent. This implied that universities are saddled with the responsibility of providing enabling environment for research skills acquisition, which when keyed in by students produced tremendous results. In the same study, they also found that gender differences exist where male students self-rated the quality of their research higher than their female counterparts.

In another development, Lyons, Fisher and Thompson (2005) found that graduate students reported improvement in their research skills as a result of participating in their graduate teaching fellowship programmes. Gilmore and Feldon's (2010), study disclosed that specific research skills that graduate students reported the most growth in across an academic year include oral communication skills, information gathering and methodological knowledge.

For the research skills slated for use in this study, critical thinking connote thinking tailored towards developing research problem, sharpening the thoughts and weighing the odds and gains to conceive a clear research problem. Organising ideas has to do with organisation of thoughts with a view to narrowing research problems to specific disciplines. Sense of direction is a skill aimed at having a sense or mental picture of the length, width and breadth so as to set a limit or clearly define a research problem's direction. Information gathering has to do with searching for materials or finding information, assembling relevant ones and checking them to ensure that they conform to the requirements of the topic under investigation. Sorting information involves separating relevant materials from irrelevant ones, and arranging such materials for proper utilization in conducting the research work. Information and communication skills are the ability to use computer and other digital gadgets to search for information, prepare such information and manage it for effective use.

Reading skills is the ability to read materials for the purpose of selecting or defining their relevance. It also aids in correcting the prepared work to produce the final output. Writing research report is a skill specifically meant for using appropriate language, expression or technique in presenting research report. Acquiring this skill enables graduate students to use appropriate language or tenses to present each segment of research work. Methodological knowledge is having a clear understanding of the road map leading to the conclusion of research work such as the design to adopt, target population, technique for selecting sample size, instrument(s) for data collection and statistical tools. Analytical skill has to do with the ability to use statistical tools to analyse correctly the data collected for the study and interpreting the results accurately. Time management ability is a skill aimed at developing discipline in allotting and utilization of time. Research works have stipulated time and periods for their conception and completion. Oral presentation/communication skill is a skill needed to present completed research reports orally. It is also used to communicate with fellow graduate students and supervisions about research activities and how they are being undertaken.

Research methods

This study was conducted in Cross River State of Nigeria. The state is located in south-south geopolitical zone, as well, part of the oil-rich Niger Delta region. Her economic and political capital is Calabar. Two universities are cited herein, each running a post graduate programme. Survey design was adopted for this study. 3018 graduate students (Masters and Doctoral degrees only) constituted the population in which 300 of them were drawn as sample size using stratified random sampling technique. The researchers used a self- developed instrument called "Students' Acquisition of Research Skills Questionnaire

(SARSQ)" to collect data. It had two sections – A and B. Section A contained 2 demographic variables while section B, arranged on 5 point rating scale, contained 36 items – 4 of which measured each of the 12 variables isolated for this study. The instrument was face-validated by 2 experts in measurement and evaluation and 2 professors who have so many years experience in teaching and supervising graduate students. A trial test was conducted involving 50 graduate students from a university located in a nearby state. Cronbach Alpha method was used to establish the internal consistency of the instrument. The result yielded coefficients ranging from .80 to .87, thus confirming that the instrument was reliable in achieving the objectives of this study.

The instrument was administered to the sampled subject in the two universities with the help of 3 trained research assistants. This measure gave rise to a 100 returns rate. Data collected were subjected to statistical analysis using descriptive statistics involving Mean (\overline{X}) and Standard Deviation (SD), and Independent t-test statistical analysis. The results obtained were presented in tables in summary form.

RESULTS

Research question

 What is the level of acquisition of research skills among graduate students in universities? The variable identified in this research question is level of acquisition of research skills among graduate students. Descriptive statistics (X and SD) were used to analyse the data obtained. A summary of the results are presented in table 1.

Table 1

Summaries of descriptive statistics (\overline{X} and SD) of the responses of graduate students regarding their level of acquisition of research skills.

N = 300						
Research Skills	$\overline{\mathbf{X}}$	SD	Decision			
Critical thinking	13.16	2.80	L			
Organising ideas	13.53	2.27	L			
Sense of direction	13.35	2.90	L			
Information gathering	15.20	3.11	Н			
Sorting information	14.13	2.82	Н			
Information and Communication Technology	13.86	2.18	L			
Reading	17.36	2.30	Н			
Writing research reports	12.79	2.96	L			
Methodological knowledge	12.48	2.57	L			

N = 300

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Analytical	11.89	2.74	L	
Time management	12.42	2.45	L	
Oral presentation/communication	16.82	2.68	Н	
Grand mean (\overline{X}) and SD	13.92	2.65	Н	

Decision Range: mean (\bar{x}) score of 13.92 and above is taken to be high, while mean (x) score below 13.92 is taken to be low.

Summaries of the results presented in table 1 showed the grand mean (\bar{x}) score of graduate students' acquisition of research skill for the development of total man to be 13.92, with a standard deviation of 2.65. This laid the foundation for decision regarding the level of acquisition of research skills for the development of total man by graduate students. Thus, graduate students had high level of acquisition of information gathering ($\bar{X} = 15.20$), sorting information ($\bar{X} = 14.13$), reading ($\bar{X} = 17.36$) and oral presentation/communication skills ($\bar{X} = 16.82$).

Conversely, the results disclosed that graduate students had low level of acquisition of critical thinking ($\overline{X} = 13.16$), organising ideas ($\overline{X} = 13.53$), sense of direction ($\overline{X} = 13.35$), information and communication technology (X = 13.86), writing research reports (X = 12.79), methodological knowledge (X = 12.48), analytical (X = 11.89) and time management skills (X = 12.42).

Generally therefore, graduate students had low level of acquisition of research skills, and so, may not be able to develop as total men and women. This arose from the fact that they had low level of acquisition of research skills in eight of the skills studied as against four where they had high acquisition level.

2. Which research skill does graduate students in universities have the highest level of acquisition? The variable identified in this research question is graduate students research skills' acquisition. Descriptive statistics (X and SD) were used to analyse the data obtained. Summaries of the results are presented in table 2.

Table 2

Summaries of descriptive statistics (\overline{X} and SD) of the responses of graduate students on the research skill they have highest level of acquisition

N = 300						
Research skills	$\overline{\mathbf{X}}$	SD	Ranking			
Reading	17.36	2.30	1^{st}			
Oral presentation/communication	16.82	2.68	2^{nd}			
Information gathering	15.20	3.11	$3^{\rm rd}$			
Sorting information	14.13	2.82	4^{th}			
Information and Communication Technology	13.86	2.18	5^{th}			
Organising ideas	13.53	2.27	6 th			
Sense of direction	13.35	2.90	$7^{\rm th}$			
Critical thinking	13.16	2.80	8^{th}			
Writing research reports	12.79	2.96	$9^{\rm th}$			
Methodological knowledge	12.48	2.57	10^{th}			
Time management	12.42	2.45	11^{th}			
Analytical	11.89	2.74	12^{th}			

Summaries of the results presented in table 2 revealed that graduate students have highest level of acquisition of reading skill ($\overline{X} = 17.36$) judging from its highest mean (\overline{x}) ranking, followed by oral presentation/communication skill ($\overline{X} = 16.82$). Ranking third is information gathering ($\overline{X} = 15.20$), while information sorting appeared on the fourth position ($\overline{X} = 14.13$). Information and communication technology ranked fifth ($\overline{X} = 13.86$), on the sixth position is organising ideas ($\overline{X} = 13.53$). Placed on the seventh position is sense of direction ($\overline{X} = 13.35$). Critical thinking is ranked eight ($\overline{X} = 13.16$), while writing research reports is on the ninth position ($\overline{X} = 12.79$). On the tenth position is methodological knowledge ($\overline{X} = 12.48$), followed by time management ($\overline{X} = 12.42$), while analytical skill ($\overline{X} =$ 11.89) took the rear position.

It therefore followed that graduate students are at best with reading skill, while at worst with analytical skill. However, they are not spectacular in acquiring one of the core research skills – writing research reports.

Hypothesis

1. There is no significant difference between male and female graduate students in their acquisition of research skills. Two variables are identified in this hypothesis – the independent and dependent variables. The independent variable is gender, while

acquisition of research skills is the dependent variable. Independent t-test analysis was used in analysing the data obtained. Summaries of the results are presented in table 3.

Table 3

Gender differences among male and female graduate students in their acquisition of research skills.

	Male,		Female,		
	N = 159		N = 141		
Research skills	$\overline{\mathbf{X}}$	SD	$\overline{\mathbf{X}}$	SD	t
Reading	17.82	2.88	16.90	1.72	3.407*
Oral presentation/communication	17.16	2.54	16.48	2.82	2.184^{*}
Information gathering	14.89	3.36	15.51	2.86	-1.726
Sorting information	15.11	2.99	13.15	2.65	6.036 [*]
Information and Communication Technology	13.12	2.10	14.60	2.26	-5.845*
Organising ideas	14.22	2.39	12.84	2.15	5.261*
Sense of direction	14.03	3.01	12.67	2.79	4.060^{*}
Critical thinking	13.08	2.63	13.24	2.97	-0.491
Writing research reports	12.36	2.88	13.22	3.04	-2.506*
Methodological knowledge	11.54	2.94	13.42	2.20	-6.267*
Time management	13.56	2.29	11.28	2.61	7.992^{*}
Analytical	12.94	2.85	10.84	2.63	6.635*

*p. <.05; df = 298; critical t-value = 1.968

Summaries of the results presented in table 3 indicated that the calculated t-values were found to be higher than the critical t-value of 1.968 at 0.05 level of significance and 298 degrees of freedom. This result is in respect of reading skill (t = 3.407, p <.05), oral presentation/communication skill (t = 2.184, p <.05), information sorting (t = 6.036, p <.05), information and communication technology (t = -5.845, p <.05), organising ideas (t = 5.261, p <.05), sense of direction (t = 4.060, p <.05), writing research reports (t = -2.506, p <.05), methodological knowledge (t = -6.267, p <.05), time management (t = 7.992, p <.05) and analytical skill (t = 6.635, p <.05). Thus, the null hypothesis was rejected at these skills, and so, there is a significant difference between male and female graduate students in their acquisition of these research skills. In contrast, the result revealed that the calculated t-values were found to be lower than the critical t-value given the same level of significance and degrees of freedom with respect to information gathering (t = -1.726, p >.05), and critical thinking (t = -0.491, p >.05). With this result, the null hypothesis was not rejected at the skills, and so there is no significant difference between male and female graduate students in their acquisition of these research skills.

Further observation of this result indicated that male graduate students had higher mean values in 7 of the research skills studied. Conversely, female graduate students had an edge over their male counterparts in five of the research skills studied.

DISCUSSION OF FINDINGS

Summaries of the results presented in table 1 revealed that generally, graduate students had low level of acquisition of research skills having been found to possess low levels in acquiring eight of the research skills studied. This implies that graduate students do not acquire most of the research skills that may enable their theses and dissertations to be outstanding. This has a disturbing effect on their low rates of graduation at the stipulated time. With this result, it is unlikely that graduate students will find themselves in a better pedestal to provide solutions to their myriads of life's challenges. Thus, their development as total men and women may continue to be stunted.

Undoubtedly, research skills enable graduate students to search for answers to numerous life problems with a view to arriving at answers that expand their horizon of knowledge, and lead them to new discoveries that can be applied to tackle some challenges of life. The reason for this finding might be attributed to the fact that graduate students nowadays exhibit poor perception of what graduate programme is all about. Furthermore, some of them take to graduate programmes as a means of forestalling the harsh realities of unemployment. By keeping themselves busy through enrolling in graduate programme, unemployment challenges may not affect them. As fallout of graduate students' acquisition of low research skills, the development of the total man through this means may not achieve tangible results. There is the likelihood of having graduate students who are deficient in knowledge of finding solutions to lives challenges and so cannot contribute meaningfully to their personal and societal development. It therefore follows that the unprepared outlook of some of our graduates to face life challenges has roots in poor or low acquisition of research skills.

This finding is corroborated by Ewing et al (2012) who found that low graduation rates attributed to graduate students' failure to complete their dissertation on schedule is posing a major challenge to graduate programmes. Thus, the inability of graduate students to engage in productive ventures after graduation can be traced to their acquisition of low research skills.

Summaries of the results presented in table 2 revealed that graduate students have highest level of acquisition of reading skills, followed by oral presentation/communication skills and information gathering while their lowest level of acquisition of research skill was observed on analytical skill. This means that among the research skills studied, graduate students were best in acquiring reading skills above every other research skill.

This finding is not surprising. Reading, information gathering and oral presentation/communication skills are ubiquitous in every university education programme. At least every student is expected to read and communicate orally with their peers and other members of the university community as well as gather information about the latest developments in their programmes and the university as a whole. Furthermore, graduate programmes involve lots of reading, information gathering and oral communication. A student must read in order to cope with the rigours of graduate programme, and must also interact with others to find acceptance and belongingness. So, through the demands imposed on them by reading and communication with others, there is the tendency that these skills may have edges over others in their acquisition. It therefore follows that graduate students may develop attributes common with these skills such as searching for solutions to life's problems through reading, gathering information as well as communicate actively with others in their preparations for tackling life's challenges more than other skills.

This finding is in consonance with the outcome of Gilmore and Feldon's (2010) study that graduate students reported that specific research skills they experience most growth in across an academic year include oral communication and information gathering. It therefore follows that graduate students all over the world share common features. What those in Nigeria find themselves mostly preoccupied with is likely to be same with their peers elsewhere.

Summaries of the results presented in table 3 showed that there is significant difference between male and female graduate students in their acquisition of research skills. Specifically, male graduate students had superior advantage over their female counterparts in seven of the research skills studied, while their female counterparts had an edge over their male colleagues in five of the research skills. Moreover, it was found that male and female graduate students do not differ significantly in their acquisition of information gathering and critical thinking skills. That is, the attitude exhibited by male students towards acquiring these research skills is the same with their female counterparts. As shown in the table, the

way and manner male students go about acquiring seven of these research skills studied are not the same way with the females. On the other hand, how female students acquire research skills they have higher mean values is not the same with their male counterparts. In these two scenarios, male graduate students outshine their female colleagues in those skills they have higher mean values; the same is applicable to female graduate students.

This result is supported by the findings of Trigwell and Dunbar-Goddet (2005) that gender difference exists where male students self-rated the quality of their research higher than their female counterparts. As the nature of post graduate programme is, where male and female students are taught and exposed to the same learning environment, lecturers and opportunities to develop themselves research wise, they are supposed to acquire research skills equally. However, for the fact that male graduate students had higher mean values in most of the research skills studied, they work harder than their female counterparts in acquiring research skills. From this finding, it can be pointed out that male graduate students show more concern and commitment in using research skills to develop themselves as total men. It therefore implies that they work towards preparing themselves towards tackling the challenges of life more than their female counterparts. This may be attributed to the role of providing for their families as well as providing leadership to their families imposed on them by societal demands. So, in order to cope with this responsibility, they must work harder and outclass their female counterparts.

CONCLUSION

From the outcome of this study, it could be concluded that graduate students have low research skills acquisition. They acquire the highest skills in reading, oral presentation/communication and information gathering and least skill in analysis. A significant difference exist between male and female graduate students in their research skills acquisition with the male having upper hand. Even though, graduate programmes throw up opportunities for students to acquire research skills, students in the two universities studied have not utilized such opportunities maximally to enhance their research capabilities, and so are poorly prepared and equipped to face challenges of life.

RECOMMENDATIONS

Arising from the results of this study, the following recommendations are put forward.

- Graduate students should be made to participate in more research oriented activities. This
 may enable them to sharpen their research skills, develop it and embrace research as an
 avenue to develop themselves into total men and woman. By this, they may be enabled to
 fit into the society creditably by contributing meaningfully towards her well-being and
 development.
- 2. Graduate students should channel more energy and resources to other research skills, other than reading, oral presentation/communication and information gathering. This may enable them develop such research skills adequately and so become all round researchers, instead of being masters to infinitesimal aspects of research, while largely becoming handicapped in other equally important research skills. Acquiring all round research skills may help them to be exposed to the world and the realities at present. This may enable them fit it adequately.
- 3. As much as possible, equal opportunities regarding acquisition of research skills should be provided to male and female graduate students. This may engender healthy competition among them. Any group observed to be lagging behind should be encouraged to catch up. Acquiring research skills may lessen or reduce the pressure on lecturers occasioned by graduate students' poor research skills. By so doing, two categories of graduate students may be helped to prepare adequately for life's challenges and develop to a status where they can contribute meaningfully to societal development.

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