OVERVIEW OF EDUCATION, ACADEMIC AND PhD RESEARCH IN NIGERIA

By

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Abstract

There are many things people do mindlessly without proper understanding of why those things are done. One of such things happens to be formal education as it currently is in Nigeria. Education has been narrowed down to acquisition of certificate and degree. An important question that is to be answered is, are those people acquiring certificates and degrees educated? Education is beyond certificate and degree. The understanding of what education is and why of it determines the process, content and practices. One of the core process or engagement in education is research. Research has been lowered to filling pages with words whether the person knows what is there or not. And this has negatively influenced terminal degree final projects which is PhD thesis and the process of carrying it out including the supervision procedure. By extension these things are influence the society as whole. Therefore, this study using qualitative approach to research interacted with plethora of literature to give and overview of what education is and how the understanding determines and affects academic practices and PhD research. The study presents what education is about and how ideal academic practices operate with the way PhD research should be carried out in order to have positive impact on the society.

Keywords: Formal education, academic practices, qualitative approach to research, PhD thesis, supervision procedure



Introduction

Although education can be categorized into three types which are, formal, non-formal and informal, there is more attention and emphasis on the formal and specifically on school education (Abolarin, 2019; Farooq, 2012). The reason for this could be the importance that is ascribed to the degrees and certificates acquired through the schooling system, especially in higher institutions. School certification is more recognized when it comes to getting high-paying jobs, particularly the white-collar jobs. Possibly as a result, education has been generally narrowed down to the acquisition of a degree or some form of certification from a recognized or accredited institution of higher learning. This prevalent but faulty view has undermined the significance of skill acquisition and emphasis has been shifted to paper qualification. Consequently, university personnel, parents and students do everything and anything to ensure that a particular degree is awarded and certificate given (Odia & Omofonmwan, 2007; Olukoju, 2014; Uriah & Wosu, 2012) in order to secure a well-paid job. The effect of this widespread orientation may not be farfetched considering different establishments, firms, organisations and the national terrain in general, where apparently, there are many "qualified" individuals but few skilled persons.

Knight (2006), argued that schooling does not necessarily indicate that someone is educated. This becomes a major concern when the discourse shifts to tertiary education; the level at which PhD degree holders are expected not just to go to school to become literate but to be well-educated. In order to address this all important concern, some probing questions should be aimed at the Nigerian schooling system especially institutions of higher learning, and more specifically institutions where various PhD degrees are being awarded. Are the products from these institutions truly educated? Are they equipped with useful skills? Is the system such that facilitates and motivates candidates of terminal degrees to see beyond mere certification

In order to enhance national development, education needs to go beyond abstraction to skill acquisition and development. This concerns especially those who are awarded PhD degrees in various disciplines, who apparently have been exposed to the highest level of education the nation has to offer. It is only natural to expect beneficiaries of such privilege to be skilful in their different areas of speciality since there is no course of study or discipline—engineering, computing, languages, history, religion, medicine etc.—that is devoid of skill acquisition. Considering the general situation of education, Or (2000), stated that education that focuses on theories rather than values, concept rather than human beings, abstraction instead of consciousness ideology and efficiency rather than conscience, will bring about barbarity. In an ideal situation, before a student reaches the level of being awarded a PhD degree, he/she is already equipped with skills in his/her area of speciality to go and impact the society.

This chapter gives an overview of what education is and then links it with academic research which is a product of education. The chapter goes ahead to elaborate on the two-in-one goal of PhD research project writing, which is the focus of the chapter. The steps to achieve the goals are briefly enumerated.

Overview of the Concept Education

Education has been viewed from different perspectives by people of different orientations over centuries. The etymology of the word sheds some light on its means as well as its field of signification. The word education is from the Latin words *educare* which means "to bring up" or "to nourish" and *educere* which means "to bring forth" or "to draw out". Scholars have also suggested that the Latin word was derived from another Latin word *educantum* which composes of two components; "e" which implies a movement from inward to outward and "duco" which refers to developing or progressing (Bhatt, 2005). Bringing these two components together reveals that education entails nourishing a person to bring out and develop the latent potentiality hidden inside him/her. It is, according to Froebel (1887), unfoldment of what is already enfolded on the gene. Education, according to Mahatma Gnadhi, is an all-round drawing out of the best in a person—body, mind and spirit. In the same vein, White (1903), also argued that education is the harmonious development of physical, mental and spiritual parts of a person.

The following definitions have been given to education by different individuals like Upanishad, Rigved, Gita, Shankaracharya, and Gunrunner.

- 1. Education is freedom.
- 2. Education is the path to self-reliance and selflessness.
- 3. Education is the realization of one's self.
- 4. Education is discovery of self and service to people
- 5. Education is the manifestation of the divine perfection that already exists in someone.
- 6. Education is the wide road that leads to the solution to the majority of human's problems.
- 7. Education offers the tools needed for someone to live for the divine, for the country, for oneself and for others.

According to Ozomon and Craver (2003), the Western philosophers such as Socrates, Plato, Aristotle, Rousseau, Spencer, and Pestalozzi viewed education as:

- 1. Bringing out of the ideas of universal validity which are latent in the mind of every human
- 2. Capacity to feel pleasure and pain at the right moment. It develops the body and in the soul all the beauty and perfection someone is capable of.
- 3. Creation of the sound mind in a sound body
- 4. Complete living
- 5. Natural harmonious and progressive development of human's innate powers.

From all the various definitions of education as given by different individuals listed above, it is clear that education is beyond going to school, taking a particular course of study and/or obtaining a paper qualification in a school. It is a systematic and planned process through which an institution imparts needed knowledge, skills, and attitude to people for the purpose

of development and combating social ills (Ogbodo, 2018). Education therefore, can be seen as,

- 1. Breeding, bringing up and/or rearing
- 2. Leading out to somewhere (goals)
- 3. Weaving together beliefs and behaviours
- 4. Embedding things into one's brain and bringing about a positive and permanent change in a person
- 5. Holistic development of the physical, mental, social, and spiritual
- 6. Going through chiselling/moulding/baking process that makes someone become the real person he/she ought to be
- 7. Unearthing process to discover one's potential and the wisdom to utilize the potential
- 8. Bring humans to the image of God in which they were originally made.

Academic exercises, especially research, is an integral part of education needed to achieve the ultimate goals of education listed in the foregoing pages. This is why academic research is a significant part of educational process; not just an end in itself but a means to an end.

Academic Research

Academic research is a careful and systematic investigation in some field of knowledge, undertaking to discover and establish truth or principles which are constructed to answer questions in solving societal problems; and truth seeking is the purpose of the academic research (Ho, 2014; Kwok, 2014). It is not just discovering and establishing the truth but also communicating the truth properly for onward transmission and utilization. The transmission of the truth requires students to develop academic writing skills which is one of the important skills students should master as they move from one stage of academic work to another (Topalov & Radic-Bojanic, 2013). Academic writing skills according to Abolarin (2015), entails:

- 1. Understanding and adhering to the discipline's style of writing
- 2. Keeping to the required formatting
- 3. Using language of research
- 4. Avoiding first-person perspective but using third-person perspective
- 5. Understanding and applying the rules of punctuation marks consistently
- 6. Acknowledging the fact that research writing is a formal writing
- 7. Always having the readers/audience in mind.
- 8. Avoiding colloquial and redundant expression or/and flowery language
- 9. Avoiding repetition if not necessary
- 10. Understanding analytical procedure and interpretation (qualitative and quantitative)
- 11. Being creative and original
- 12. Managing time effectively
- 13. Developing argument on the topic and not on personal opinion
- 14. Avoiding sentimental expression
- 15. Avoiding the use of idioms
- 16. Avoiding superlative/absolute language

- 17. Organizing ideas logically and coherently
- 18. Being consistent in writing.

Topalov and Radic-Bojanic (2013), stated that regardless of the field of study, academic writing plays an important role as a medium of transferring known or discovered information into a useful tool for development. Although some scholars have stated that academic research is usually intended to create knowledge and not necessarily designed to benefit company or organization, (Kwok, 2014), Ho (2014) argued that academic research will be a waste of time and energy if it does not help solve the societal pressing problems. Whichever way one looks at these standpoints, a consistent and incontrovertible claim is that faculty members of any institution of higher learning have the responsibility of ensuring that postgraduate students, especially the PhD candidates are equipped with the skills and knowledge needed for conducting and writing academic research.

One of the important ways by which PhD students are empowered in conducting academic research is through thesis/dissertation writing, which is called research project. A quality academic research project according to Ho (2014), should have the following characteristics:

- 1. Innovation
- 2. Relevance
- 3. Impact
- 4. Ability to enhance teaching.

Every PhD candidate during project writing should ask if the research project he/she is embarking upon is innovative, relevant, impactful, and has ability to enhance teaching. In order to have a worthwhile academic research project, proper guidance is a necessary factor that cannot be overemphasized (Mushtaq and Khan, 2012).

PhD Research

This book focuses on postgraduate work and specifically the PhD research project writing. It is the most extensive assignment a student goes through during his/her years of academic career. It is possible that it is the most important assignment a student will undertake while in university; and it is the indicator of the student's true capability as a student and a researcher. PhD degree is the highest degree awarded for academic achievement.

PhD research project is a cognitive intensive work that requires critical, creative and constructive thinking. It is an independent work that requires the researcher to consult all possible resources—human and non-human—that may be needed for the achievement of the objective of the research. Some of the characteristics of PhD research include:

1. Independence: the student/researcher is responsible for the outcome of the project. It is true that supervisor works with the students and possibly there are other individuals who assist in putting the project together however, it is the student that accounts for the work and defends it.

- 2. Collaboration: at the PhD level, it is impossible to say "I do not want people to know what I am doing" Students have to learn how to work with others in executing their research plan. Anyone and everyone who will play positive roles should be part of the study. It is the duty of the student to know the information needed, where the information can be accessed, and how it could be collected. A student needs to identify his/her challenge(s) in relation to academic research and by all means work to overcome the challenge. For instance, if a student has challenge in grammar, he/she should identify people who are well grounded in that area and work with them. In some parts of the world, each PhD student has a team/committee of supervisors. Once the main supervisor is chosen, he/she guides the student on choosing other members of the committee based on the strength of the student. In so doing, student has someone on his/her committee to assist in each area of weakness.
- 3. Larger than term paper: sometimes student expect their work to be approved after the first draft, just after putting some ideas together and adding some citations. PhD research, although not about volume but quality of content, is larger than other assignment papers for each course of study. It is larger not only in volume, but also in scope, audience, and goals. Students therefore have to broaden their horizon.
- 4. Focuses on answering question(s): the question to be answered serves as the determinant of the direction—participants and analysis—of PhD research. This question is answered based on the findings of the research. Therefore, irrespective of personal view or orientation of the students, the question is answered based on the findings.
- 5. Contribution to knowledge: this is a well-known characteristic of PhD research. This makes the researcher an expert in his/her research area; because it is assumed that new knowledge in that area has been discovered solely by candidate.

The usually unacknowledged but very critical issue in the ideal postgraduate studies is the understanding of the goals of PhD research writing. It is a well-known fact that when a PhD student successfully completes and defends his/her research project, the person is awarded the degree. In essence, the uppermost goal often emphasised is the finishing of the writing, defending the thesis and then being awarded the degree. The imperceptible but more important goals are self-discovery and eagerness to change the world.

Reason for Undertaking Academic Research

Since the focus of this book is on postgraduate research, I have narrowed down the focus of this chapter to PhD research. However, the points made here can be generalized on every other aspect of postgraduate studies and academic research generally.

Self-Discovery

Studying for a PhD degree can be tedious, challenging and sometimes costly. There are different reasons why people embark on the degree, some of which may include:



- 1. Promotion/opportunity
- 2. Status/recognition
- 3. More income
- 4. Pleasure/passion
- 5. Drive for research
- 6. Becoming an expert in one's area.

Bantely (2021), categorized the reasons into two, bad and good reasons. The bad reasons according to him are:

- 1. Peer pressure
- 2. Horrible job
- 3. Fulling the ambitions of others
- 4. Rebelling
- 5. Misplaced genius complex
- 6. Insecurity.

The good reasons include:

- 1. To achieve something significant
- 2. To improve oneself and life
- 3. To discover or learn something new.

I have decided to put all the good reasons for PhD degree under one goal which is self-discovery. Self-discovery is encountering and coming to terms with something about yourself (Katherine, 2019), gaining understanding of oneself and one's motivations and needs (Collins English Dictionary, 2021). It is becoming aware of one's true potential, character, motives, passion, mental capacity, personal ability etc. (Makedonas, 2017). It is knowing and acknowledging one's strength and weakness. Self-discovery is not an easy process according to Katherine (2019). One of the objectives of the PhD research process is to take someone through the journey of self-discovery. In his "Academic research writing: A metaphor for personal and national development" Abolarin (2019), presented metaphorically, how each step of research process represents different aspects of making someone discover himself/herself. PhD research writing process can be likened to baking or refining process in which the real person comes out at the end of the process. It is the role of faculty, especially the supervisors to encourage student to understand this and go through the process sincerely and judiciously.

Those who truly go through this process are diligent, thoughtful, humble, and impactful in universities and society at large. Establishment of universities depends on the needs and priorities of society (Alemu, 2018). As a result PhD degree holders ultimately turn out as people who have identified themselves and can take proper hold of human's daily endeavours and positively impact the society.

When someone is done with the PhD research, the person's thought process and worldview is expected to be different from the general, conventional way. Such individual is a transformed person who sees deeper and clearer than the average individuals who have not been exposed to such rigorous academic work. This is why I subscribe to the colloquial and trivial full-meaning given to PhD by some people. To them, PhD stands for "Permanent Head Damage". I see the damage being referred to as positive in the sense that the head—brain—an individual begins a PhD studies with should not be the same he/she finishes it. The PhD holder who emerges at the end of the process should be positively and permanently transformed.

Wherever the person appears and whatever the person does, the evidence that he/she is no longer a "regular" individual should be demonstrated. This calls to mind another saying that "By their contribution and impact they will be known". This refers to PhD degree holders. This means that it is not enough to bag the title but the quality of change and flow of progressive ideas contributed by an individual are evidences that can justify a person's claim of having a PhD degree. In essence, by going through the process of acquiring a PhD degree the candidate discovers his/her latent abilities and this automatically brings about transformation. Part of the transformation that takes place in a person through PhD process is the emergence of the ability to identify prevailing issues in the community and in the society at large, and the development of corresponding passion for proffering solutions to such issues. Ideally, the concern for the plights and problems plaguing humanity is the catalyst that creates a longing to conduct a research.

Some of the experiences a PhD students would need to have before finishing his/her programme, depending on the discipline are:

1) Basic understanding of applied statistics: This will demystify analysis and interpretation of data. It is difficult for anyone to be motivated to do that which he/she is not equipped to do, and basic understanding of analytical tools and software can motivate someone to be a life-long researcher. There are different tools and software just as some of the previous chapters have discussed. PhD students should not go through such classes just for grades but should be intentional about equipping themselves with vital skills. Emphasis should be laid on application and not only on abstraction in analysis and interpretation. Statistical calculation is good and has its place in academic work. It can serve as introduction to helping students to become acquainted with outputs that are gotten from analytical software, but there should be more emphasis on hand-on practices and assignments using analytical software. It has become abundantly clear in this era that there are more than one factors that are responsible for every human behaviours therefore researchers, especially PhD students should be able to engage as many factors (variables) as possible in determining a behaviour. By this, it is possible to have a comprehensive understanding of what is going on and what to do to bring about a better behaviour. It is not mandatory that PhD students become statisticians before embarking on research projects; but it is advantageous if they understand what analysis is to be done and how interpretation should go. They should be able to instruct whosoever their analyst is of what they want and the kind of analysis applicable to a particular study.

The duty of statistics lecturers therefore, goes beyond making students to understand and carry out every kind of statistical calculation. They are to equip students with the ability to manipulate statistical software to come up with outputs, analyse and interpret the findings. Statistics is the language of research for many disciplines therefore PhD students need to understand the language in order to understand research.

2) Acquiring research skills: This is another experience students should have while going through PhD programme. With the experience of working with postgraduate students on research, I have discovered that many student do not have solid background in research before they embark on a postgraduate programme, especially PhD programme. This poses a challenge to teachers who take research methodology classes. Research teachers are to bring students from the known to the unknown and they are to make research simple and interesting. Everybody goes through one research process or the other as long as there is a question to ask and the question requires an answer. Academic research is only different from this day-to-day type in that it is systematic, logical, intentional, rigorous and is written with close observance of academic writing rules. Not anyone who has a PhD degree should be assigned to teach research methods rather, such persons should have a certain number of units in research to qualify them to teach research courses. The research skill, according to Topalov and Radic-Bojanic (2013), is one of the most important general skills that students should master during their course of studies.

When PhD students are well grounded in these two areas, they understand why PhD degree is an initiation into conducting research and not the end of research. The end-product of PhD research project is a humble, committed individual who cannot be bought or sold, who in his/her inmost soul is true and honest, who do not fear to call sin by its right name, his/her conscience is as true to duty as the needle to the pole, and he/she stands for the right though the heavens fall (White, 1903).

The preparation process for PhD students varies, while some disciplines do not have courses, others have courses students go through before they begin the research project writing. In whatever way, there is always a period within the programme when students' thinking ability is built and developed. A PhD student is a deep thinker and a lover of wisdom. The degree by its name indicates that thinking should be the persons' moment by moment lifestyle. The PhD is "Doctor of Philosophy" which according to *Collins Dictionary* (2021) indicates that someone has done advanced research into a particular subject. From the etymological point of view, the title "Doctor of Philosophy" is from the Latin phrase *philosophiae doctor* with part of the name from the Greek work *philosophia*, which means "love of wisdom" (Harper, 2021). It is implied therefore, that PhD students are lovers of wisdom which has to do with

the ability to think and apply the product of the thinking to improve daily living or human endeavour in general. In essence, PhD research process should expose students to some dimensions of thinking in order to fulfil the philosophy part of the name. These dimensions include:

- 1. Critical thinking
- 2. Creative thinking
- 3. Analytical thinking
- 4. Reflective thinking
- 5. Logical thinking.

A thinking PhD student should be focused, organized, analytical, a compiler, able to generate ideas, and connect ideas. These are components of thinking as shown in Figure 4.1. A PhD student is expected to be broad thinker and able to synthesize and bring similar ideas together, compare issues and identify differences and similarities.

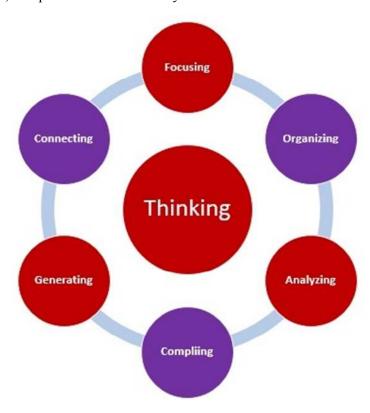


Figure 4.1: Thinking Skills

Source: thepeakperformancecenter.com (2021)

Some of the experiences one may have during PhD research process that can enhance self-discovery include:

1. Opening of heart/mind to new information: academic generally does not promote closed-mindedness or narrow-mindedness; rather, it inculcates the desire to learn

new ideas into students. With such experience, students learn not to worship the status quo but to interrogate it. As such, they learn not to evade or shun criticism of their opinions or that of other people. The PhD process ought to throw open the mind of students to new knowledge using the thinking skills discussed above. Quoting Charles F. Kettering, the Institute for the Study of Human Flourishing in the University of Oklahoma (2021), stated that though open-mindedness is difficult to define, it is the setting aside of personal biases so that a judgement can be made free of prior beliefs. Wood (2015), itemized some of the benefits of open-mindedness which are essential attributes every professing PhD degree holder should have:

- i. Wider range of intellectual discourse
- ii. Thoughtful consideration of differing opinions for understanding of reasoning
- iii. Thinking through the logical argument of those with opposing ideas for strengthening personal arguments and improve ability to communicate effectively in the presence of different opinions
- iv. Allowing for self-expression
- v. Advancement of mutual understanding
- vi. Opportunity to converse constructively
- vii. Obtaining a universal respect for legitimate differences
- viii. Exposure to and sustained engagement with a wider range of perspectives on pressing issues which allows for informed critical thinking and problem solving in different field of human endeavours.
 - ix. Ability to try new things and taking critical risks that can be potentially rewarding.
- 2. Going through the rigor of the process: rigor, according to Biggs and Buchler (2007), is one of the cornerstones of high-quality academic research. It is the ability to thoroughly put in all that is needed to search deeply and discover new knowledge. It is the strict enforcement of not only research but also academic rules in general. Davies and Dodd (2020), referred to rigor as encompassing detachment, objectivity, replication, reliability, validity, exactitude, measurability, containment, standardization, and rule. According to them, rigor is the universal standard by which research is judged. If research is not rigorously conducted, there may not be new knowledge and understanding; it may likely be a repetition of the existing knowledge. And since the key qualities of PhD researcher are, a capacity for original and autonomous thinking, an ability to command a field of knowledge, research skills, an understanding of the appropriate research methods, ability to produce a cogent argument and to engage in critical thinking, and ability to communicate at a high level, students should not expect to sidestep the needed rigor during the PhD process. Rigor in research is the strength of the chain of reasoning, it is an imperative element of the process.

- 3. Interactions with colleagues and faculty: interaction among students and between students and lecturers is an important factor in students' academic development and success (Gonzalez, 2016). When there is positive interaction between students and lecturers, students discover new knowledge and potentials. There is need to emphasize the positivity and security of the relationship because Nyadanu, Garglo, Adampah and Garglo (2015), argued that if relationship between lecturers and students is not positive, it will be counter-productive. A positive student-lecturer relationship will drive students' self-esteem. Peer interaction among students also plays an important role in self-discovery. It enhances emotional stability development of students (Filade, Bello, Uwaoma, Anwanane & Nwangburuka, 2019). Collaboration through teamwork and group projects can be ways of facilitating meaningful interaction among students. These can be very helpful for students in the area of their holistic development
- 4. Assignments: as part of requirements for different courses, students are given assignments to enhance the learning experience. Study indicates that graded assignments have positive and significant relationship with students' performance (Latif & Miles, 2011). Assignments, especially the ones that are done outside the classroom, allow students to consult different sources; and the consultation allows for personal discovery of facts and information which brings about further acquisition of knowledge.
- 5. Relationship with supervisor: the role of supervisor is crucial in determining the outcome of a research project and in the self-discovery of the researcher especially a PhD student. The practical role of a supervisor will be considered later in this chapter. Suffice it to say for now that students' experience with supervisors, among some other factors, is a major factor responsible for the extent and quality of change students experience by the end of their PhD course.

Impacting the Society

Establishment of universities and the different disciplines being offered in them are determined by the needs of the societies in which they were established. In order to have adequate, validated and reliable recommendations to answer the various societal questions and deal with the problems, programmes that involve research at a higher level through which individuals acquire PhD degrees were established. Therefore, another goal for PhD research apart from self-discovery, is to positively impact society, bringing about innovation and growth of the nation (Halse & Mowbray, 2011). Kirchherr (2018), opined that PhD should be about improving society and not just chasing academic prestige. And in her own opinion, Teasdale (2019), stated that a PhD is an opportunity to develop the skills needed to deliver impact. Mhunpiew (2013), argued that the societal demand in the 21st century is for people who are more qualified, knowledgeable, changeable, and adaptable to situation. PhD research is to make people develop these characteristics for the purpose of impacting the society. As stated earlier, PhD research is not merely for the degree or certificate, it is also for

creating novel knowledge, for creativity and innovation, for critical thinking and problem-solving (Mhunpiew, 2013). The following are the specific ways PhD is to impact the society.

- 1. **Social Impact**: PhD degree influences the day-to-day interaction and relationship between and among people. It enhances how people understand one another and generates social intelligence. A PhD degree holder is skilful in verbal and non-verbal fluency and in diverse conversations with others; he/she is slso knowledgeable in social rules and roles. As a result of the higher level academic exposure, candidates emerge with effective listening skills, and emotional intelligence through which they play social roles efficiently, and effectively manage self-image and impression. PhD degree holders interact with people and help them develop better orientation as well as a progressive worldview.
- 2. **Environmental Impact**: environment is a depiction of those who live there. Research, specifically PhD research engenders a positive environmental structure. In fact, there are some degrees on environmental issues which focus on making human environment more conducive and manageable for its inhabitants.
- 3. **Health Impact**: there are many health -related programmes with PhD degrees; the essence is to work towards improving the healthful living of people. PhD research helps people to understand otherwise obscure health principles thereby encouraging them to develop healthy habits.
- 4. **Technological Impact**: the world is becoming extremely technology dependent and any society that does not improve its technology in communication, power, health, education, etc. will be cut off from the rest of the world. PhD research enhances technological development in that research brings about innovation which ultimately births new technology.
- 5. **Agricultural Impact**: the fact that food will remain a basic and essential need of humans requires no hair-splitting exposition. Therefore, the PhD research impact in the area of agricultural sustainability is very germane to human existence. PhD research into different agricultural processes and productions ensures food production, supply and sustainability. There are other agricultural products that may not necessarily be food but are also important to human existence. Research into all these areas have major impacts on human society.
- 6. **Economic Impact**: new knowledge and ideas from PhD research programmes have been beneficial to economic development in different nations. With the competitive nature of economy, research plays a critical role in the development of new economic strategies that place nations on the competitive edge.
- 7. **Political Impact**: there are a political science departments in many universities where PhD degrees in political science are awarded. The essence is to generate innovative ideas that will revolutionise politics and governance both locally and internationally.

Outcomes of positive developments in politics have the tendency to reach more people through provision of social amenities and ameliorative policies.

- 8. **Religious Impact**: religion is one of the volatile sectors in human society. Research in religion promotes understanding of different religious organizations. And the understanding promotes peaceful co-existence among different religious organizations and their adherents. There are different PhD degrees in many universities that aim at making religion meaningful and impactful in the society.
- 9. **Educational Impact**: PhD research has positively impacted the educational sectors. Research has brought different innovations into the teaching/learning process which continue to prepare the next generation of researchers. No sane human society should go to sleep without the assurance that its younger generation is being prepared for purposeful living through quality education. This huge responsibility lies in the hands of researchers in the different institutions of higher learning.

While many people are acquiring PhD degrees in different disciplines and many more are seeking admission, there are many who are already in their various programmes of study awaiting the days they will be pronounced "Doctor". It is essential for all such individuals as well as those working with them towards that goal to understand that the most important goal is the discovering one-self and be equipped to impact society. This makes PhD degree meaningful and desirable. The supervisor plays a major role in creating the perspective highlighted in this chapter.

The Role of Supervisor

The success of PhD research project and writing relies, to a large extent, upon the role of supervisor. The supervisor ensures quality in the process of having the possible output of an excellent research project. According to Mhunpiew (2013), the roles of a supervisor are professional. Some of the roles include, management, administrative, technical support, broadening intellectual support, and personal support. While not trying to replicate chapter two of this book, some practical roles of a research project supervisor are hereby enumerated. These roles are considered in specific terms. A supervisor serves as the following to a student:

- 1. Coach
- 2. Teacher
- 3. Colleague
- 4. Friend
- 5. Trainer
- 6. Good role model
- 7. Guide.

A study by Mhunpiew (2013), revealed students' expectation of supervisors. The expectations are more specific than the ones above and they are as follows:



- 1. Make student feel more confident when working with the supervisor
- 2. Guide on structuring the dissertation
- 3. Agree to have the goal together
- 4. Listen to student problem
- 5. Enforce and help student to overcome obstacles
- 6. Guide student to gain high level of knowledge
- 7. Give student an emotional support
- 8. Set up the plan/manage time with student's agreement
- 9. Guide to read related document and researches
- 10. Provide the experts and researcher related to the field of study
- 11. Meeting schedule and contract set up based on students' agreement
- 12. Train student to present and defend
- 13. Aware of deadlines
- 14. Guide/direct student for the research publication
- 15. Train student how to think critically.

No single individual is a repository of all knowledge. While a supervisor is expected to be knowledgeable in the specialty of his/her supervisee, there may be an aspect in which the supervisor may not have the expertise. This is why having a team of supervisors for each PhD student is a laudable approach. In a situation where there are not enough hands to form teams, a supervisor should not hesitate to refer a supervisee to an expert to guide him/her where and when necessary.

It is good to ensure that the PhD research project comes out excellently, but it is even better to know that the paper is not the ultimate focus but the student. The supervisor uses the writing project to get across to the person (student) with the aim of building and equipping the student, working together towards self-discovery and the development of passion and skill to impact the society. A supervisor's concern should be "after the degree is awarded, what will be the real worth of the student?" A supervisor should look beyond the immediate supervisory role into the future of each supervisee.

Conclusion

Education has the goal of making people discover their potentials and then productively use the potentials for societal development. One of the tools in achieving this goal especially in formal (school) education system, is academic research. The chapter specifically focused on PhD research being the major academic programme having research as its focus. The PhD research programme leads to the award of the highest academic degree called "Doctor of Philosophy (PhD)" and consequently positions an awardee as an expert in a specific discipline or academic subject. The PhD research process itself aims at helping students discover themselves and also at equipping them to impact society. These goals are one and the same, which is discover-to-impact, hence the dual-goal of academic research. Different elements serve as determinant factors in the achieving of this highly desirable dual-goal of academic research, however the role of the supervisor has been given considerable attention in this chapter. The student, the process and the supervisor are key players in the actualisation

of the dual-goal of self-discovery and positive societal impartation. When the stipulated goal is achieved, one can safely claim that the PhD programme has truly served its purpose and that the products of such academic endeavour are educated indeed.

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