ADOPTING ALTERNATIVE METHODOLOGIES AND PRACTICES IN EDUCATIONAL RESEARCH IN HIGHER EDUCATION IN NIGERIA

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ABSTRACT: *Alternative methodologies and practices have gained prominence in educational research in the 21st century. The application of other research methodologies and practices challenges the one-fit-all approach associated with a single research methodology in educational research. The current practice is one that has developed to re-position the subsisting culture of research to rather assume a multidirectional trajectory in educational research in higher institutions of learning. While this is the case in the educational systems of other contexts, it raises concern about whether alternative methodologies and practices also apply in educational research in higher education in Nigeria. This literature examines what obtains in the Nigerian context, and where there seems to be gaps, strives to inspire a rethink of the existing research methodology and practices in educational research for better research in higher education in Nigeria.*

KEYWORDS: *methodologies, practices, educational research, higher education, Nigeria*

INTRODUCTION

The application of alternative methodologies and practices has become prominent in educational research in the 21st century. A research methodology is the general approach a researcher takes to conduct educational research. It can also be viewed as the study of research methods. Alternative methodologies and practices have developed as another technique of doing educational research that can meet current educational challenges. The development reconceptualises educational research and ups the commitment to undertake research, thus creating the capacity to further enhance researcher skills, media of contributing to knowledge via research and standards of research. This engenders a paradigm shift from a one-fit-all approach to a multidirectional way of researching. Having such a multiple approach of doing educational research raises the activity of the researcher during access and analysis of data. As such, the inquirer becomes more actively involved in examining the experiences of the participants. However, the situation where other research methodologies and practices now feature in educational research in the 21st century raises concern as to what obtains in the same realm in higher institutions in Nigeria also in the present era.

Educational research occupies a very important position in national education in Nigeria. All versions of the National Policy on Education (NPE) 1977, 1981, 1990, 1998, 2004 and 2008 and the National Policy on Science and Technology (NPST) 1986, 1999, 2003 have placed emphasis on educational research as an integral part of Nigeria's national planning (Yusuf, 2012). Educational research is the systematic application of scientific procedures to address educational problem(s). It forms part of the minimum academic requirements in higher education in Nigeria. Higher education comprises all state and private institutions that provide courses and programmes of study beyond secondary education in Nigeria. These include universities, polytechnics, monotechnics, colleges of technology, colleges of education,

colleges of agriculture, although the focus in this literature is on education based programmes offered in some of these institutions.

The National Universities Commission (NUC), for example, in its benchmark, describes (educational) research as a tradition of Nigeria's varsities. Obviously, educational research is inevitable in tertiary education in Nigeria. It is so because research is fundamental to knowledge generation, dissemination, challenge of existing epistemologies and to development issues. Regardless of the crucial role educational research plays in higher education in Nigeria, there are however indications that the general strategy that is often adopted to access and analyse data does not reflect latest practices in educational research. This paper examines available research methodologies and other relevant issues in educational research in relation to what takes place in the field of education in higher education in Nigeria and makes effort to chart a new course to enhance educational research in the context.

THE PREVAILING RESEARCH METHODOLOGY IN EDUCATIONAL RESEARCH IN NIGERIA

Quantitative methodology

Educational research executed by students and staff in the faculties/schools/departments of Education in tertiary institutions in Nigeria arguably always follows a single methodological trajectory. The application, particularly of quantitative procedures, involving statistical measures to analyse data (Cohen, Manion, Morrison, 2000; Singleton & Straits, 2002; Baxter & Babbie, 2004; Muijs, 2004; Fraenkel & Wallen, 2006) is commonplace among student research projects and publications of some practitioner researchers. Perhaps, this is the only methodology prescribed (or required) for use in research or known to the research community.

Both practitioner researchers and students utilises a one-way tradition to undertake inquiries on virtually all topics, thus limiting the investigator to look at every issue that is researchable just from the quantitative lens. For instance, some of them often apply quantitative measures to examine some real world issues like attitudes, values, cultural dynamics etc. In doing so, they are likely to lose important information during data analysis. The inquirer will be unable to use numerical data to analyse emotions, dispositions, tensions, tone of the participants and the research context in good details. The analysis of data, in this case, does not align with the notion of 'vicarious analyses' formulated by Stake (2006) as a method to richly analyse data in qualitative research.

Quantitative research can be traced to the physical sciences, particularly Physics and Chemistry (Creswell, 2002; Williams, 2007). Researchers in these fields use mathematical methods to analyse data. Data has to be usually in numeric forms to facilitate analysis via statistical tools. Three trends are characteristic of quantitative research including research design, test and measurement and statistical analysis (Williams, 2007). This strand of research methodology is underpinned by the empiricist paradigm (Creswell, 2003), always following a standardised procedure of data collection and analysis so as to be able to achieve an objective form of reporting the findings, and positivist paradigm (Carcary, 2009) in establishing trustworthiness of the research. Quantitative research employs specific strategies of inquiries such as quantitative case study (Yin, 2009), experimental and survey designs (Creswell, 2003) to access and analyse data and to report the research outcome.

ALTERNATIVE METHODOLOGIES AND PRACTICES IN EDUCATIONAL RESEARCH

Other vital methodological strategies and practices in educational research that are seemingly unfamiliar to or not commonly being utilised by members of the research community in Nigeria include the qualitative and mixed methods approaches (Merten, 2011). As stated earlier, these methods have helped to move the practice forward from a one-fit-all to a multidirectional approach of conducting educational research. Each of these alternative methodologies and related research practices will be examined as follows:

Qualitative methodology

Quantitative methods are not facilitative to conduct inquiries on the social world involving human behaviour, attitudes and lived experience in relation to education. Human attitudes, behaviour and experience are real world and naturalist issues and are lived by the persons being studied. As such, these concepts have to do with feelings, values and construction of meanings. It aligns with the social constructivist (or constructionist) formulation emanating from the work of Vygotsky (1978) and contained in later literature like English & Halford (1995), Steffe & Gale (1995), Heylighen (1997), Vrasidas, (2000) and Matthews (2005). Social constructivism is the notion that knowledge does not exist independent of the learner; knowledge is constructed via interaction of the person with the events and phenomena that occur around the individual in the context (Vrasidas, 2000). The inquirer stands as an instrument to dig into the meanings and work to relate them to phenomena, contexts and experience of the research subjects (Stake, 2005; Ewa, 2015).

Since it is real world it is qualitative and that enables the researcher to tell the story as it is, rather than disguise it in the formalised straitjacket of the quantitative based report (Robson, 2005). Quantitative methodologies are also important and useful approaches in educational research. They can serve as suitable methods insofar as they aid the inquirer to address the issue under research in ways deemed appropriate and adequate.

However, qualitative method is particularly useful in exploring issues that otherwise would not be possible with other methods of data collection (*cf.* Creswell, 2007; Baxter & Jack, 2008). It generally concentrates on discovering and understanding experiences, opinions and thoughts of the participants. In an interpersonal encounter people are more likely to disclose feelings and values than they would in a less human situation (Cohen, Manion & Morrison, 2000). "One identifier of a qualitative research is the social phenomenon being investigated from the participant's viewpoint" (Williams, 2007:67). It involves a detailed but less structured description, explication and interpretation of collected data. This methodology is originally linked to the arts and humanities, specifically history and anthropology, in which the researcher collects and analyse textual data; not numerical data.

Qualitative research methodology is usually associated with these research designs: qualitative case study, ethnography, phenomenology, grounded theory and content analysis (Leedy & Ormrod, 2001). These areas build their premises on inductive reasoning; not on deductive reasoning as it is the case with the quantitative approach. Though also follows an empirical pattern in data generation and analysis it however adopts a naturalist/interpretivist philosophy (Lincoln & Guba, 1985, 1986; Guba & Lincoln, 1994; Robson, 1993), Miles & Huberman,

1994; Whittemore, Chase & Mandle, 2001; Shenton, 2004) to address issues of trustworthiness of the research. The idea of trustworthiness in research is treated below.

Mixed methods approach

The mixed methods strategy, (Caracelli & Greene, 1997; Tashakkori & Teddlie, 1998, 2003a; Creswell, 2007; Merten, 2011; Harwell, 2011), on the other hand, is the mid-sectional methodology combining elements of the quantitative and qualitative components to facilitate access to and analysis of data. According to Tashakkori & Teddlie (1998, 2003a), the mixed methods approach started in the mid-to-late 1900s. Drawing from Caraceli & Greene (1997), Harwell (2011:151) argues that mixed methods approach '(1) tests the agreement of findings obtained from different measuring instruments, (2) clarifies and builds on the results of one method with another method, and (3) demonstrates how the results from one method can impact subsequent methods or inferences drawn from the results'.

It supports a rigorous examination of the issue from multiple and flexible sources. Consistent with the views made by western authors on the issue, two Nigerian writers, Johnson and Onwuegbuzie (2004), added that in applying the mixed methods model, the researcher incorporates methods of gathering and analysing data from the quantitative and qualitative methodologies in a single study. The perspective discernibly indicates the importance of this type of research methodology even for the Nigerian educational system. Connotatively, this methodological strand bridges the differences between the quantitative and qualitative methods in the service of addressing the research questions and/or hypotheses.

Although it may require adequate skills for the researcher to be able to use it appropriately, it nevertheless enables the inquirer to adopt a combined technique, thus allowing the use of multiple data sources to collect numerical and text data to examine the issue under research. The researcher collects or analyses not only numerical data that is customary for quantitative research, but also narrative data, that is the norm for qualitative research so as to address the research question(s) defined for a particular research study (Williams, 2007). It is opposed to mono research procedures associated with the application of either quantitative or qualitative methodological framework that restricts an inquirer's choice to singular numerical or textual data. In combining both quantitative and qualitative methods there is an opportunity to use both standardised and interpretive elements to analyse data.

A researcher, for example, might decide to use the survey, or ex-post facto (Singleton & Straits, 2002; Baxter & Babbie, 2004; Muijs, 2004; Fraenkel & Wallen, 2006) and qualitative case study (Merriam, 1998; Stake, 2005; Robson, 2005; Yin, 2009) as an ideal research design to correspond with the quantitative and qualitative direction of his or her inquiry respectively. However, for the mixed methods, the researcher now uses both the survey and qualitative case study as suitable research designs to ease collection and analysis of data (*cf.* Williams, 2007). The idea is for triangulation whereby the researcher will have the opportunity to look at the issue from different angles to be able to establish the fact, strengthen available evidence and/or achieve some level of objectivity. This is not to imply that this methodology supersedes the other components mentioned earlier. Each of them performs distinct functions that are equally important in research, and that depends on the research title, researcher ability and the perspective from which the inquirer has decided to examine the overall issue of interest. It is consequently not appropriate to stick to one research strategy in educational research as the current practice in the field of education in the Nigerian higher education has shown. It is

recommendable, at least for the sake of variety and drive for excellence, that members of the research community are familiar to all three methods and apply them suitably in educational research.

ETHICAL PROTOCOLS

Ethics is founded on the philosophical inquiry of moral life within the social world. Research that involves particularly humans has been on since the 18th century (Fouka & Mantzou, 2011). Human exploitation by researchers during research drew attention to the need for the creation of professional codes of conduct to protect human rights in research (Fouka & Mantzou, 2011). Educational research that involves human and even non-human participants raises unique and complex moral, legal and social issues that must be addressed in the course of carrying out the inquiry. Research ethics is an aspect of the methodology that is concerned with the awareness and analysis of the risks that may arise when working with participants during research. Ethical protocols therefore are the principles of research that have to be applied to prevent breach of the laws and regulations of research (Resnik, 2011). In a simple language, it is the code of conduct of research, and it is directed at preventing activities that can place the participants and/or researcher at risk during the inquiry and render the research unacceptable. Ethics are designed to protect the integrity and the findings from the research.

There are three objectives in research ethics: to protect human participants, to ensure that research is conducted in a way that serves the interests of individuals, groups and/or society as a whole and to examine specific research activities and projects for their ethical soundness, looking at issues such as *the management of risk, protection of confidentiality, the process of informed consent and assurance of anonymity* (Storch, Rodney & Starzomski, 2004; Fouka & Mantzorou, 2011).

It is highly unlikely to experience a situation where practitioners make adequate effort to address ethical issues in any research project, be it at undergraduate or postgraduate level in tertiary institutions in Nigeria. Ethical considerations sometimes merely reflect in information sheets and when that happens the researcher provides information only about the confidentiality of participant data. Other very important issues such as risk management and informed consent (Polit & Beck, 2004) as well as anonymity of the identities of the research participants are ignored. By implication, that piece of research that lacks these qualities fails quality assurance assessment by international criteria. Ethical clearance is necessary from the start of an educational research. Unfortunately, virtually all higher institutions of learning in Nigeria do not have ethics committees to handle ethical issues in educational research. That could be due to lack of experts in research ethics or nonchalant attitude to the issue by both policymakers and practitioners. It is also likely that the management and staff of the institutions are not clear about the role of research ethics in educational research. Issues such as these problematize ethical practices in Nigeria's education. This lacuna in research serves as a call on responsible authorities in the context to review laid down criteria for educational research in the institutions to give room for ethical considerations during research.

Research ethics abhors the application of overt or covert coercion to achieve participation in research and the practice that places both researcher and research subjects at risk during research. Participation in research can cover a wide range of individuals, groups and phenomena. Sometimes the investigation might require the investigator to work with vulnerable people including children, disabled people, prison inmates, patients, migrants, cattle

rustlers, nomads etc. Participants or their carers have to get adequate information about the study and also have to be made aware of their right to withdraw participation from the research at any time without giving a reason. Participants are under no obligation to take part in research. Participation is voluntary (Beauchamp & Childress, 2001). Should a participant decide to change his or her mind to volunteer information to assist the progress of the research, the person has the legal right to do so freely without fear of intimidation or victimisation.

Most of the time fieldwork may require that the researcher would have to stay alone to generate data. At that time s/he becomes a lonely worker in the 'wilderness'. It is likely that s/he will encounter some unpleasant situations during data collection in the field. One important reason for research is to solve a problem. It follows that a researcher is a problem solver. In that case s/he has to be able to address all or virtually all possible barriers to data collection and ensure the research is completed. And the person is expected to do so in ways that conform to approve codes of research conduct for quality assurance. Thus, from the outset of the research the researcher has to work with the research supervisor or peer to conceive workable ideas that can prevent or mitigate the occurrence of unforeseen circumstances. Consultation with the supervisor or peer debriefing are essential to help the inquirer apply methods that are ethically appropriate, adequate and facilitatory for the study.

THEORETICAL AND CONCEPTUAL FRAMEWORKS

Mentioning of theoretical framework or conceptual framework to researchers and educationists is likely to be met with either silence or shrug of the shoulder. Some of them might say to you, 'I know what you are talking about, but don't ask me for too much details about them' (Sinclair, 2007). It is hoped that this essay will help policy makers, novice researchers and educationists to have a clear understanding of the concepts and to grasp their essence in educational research. When traveling to an unfamiliar place people require a map, seek as much knowledge possible, use previous experience and accounts of others who are familiar with the terrain. 'Survival advice' and 'top tips' enable the new traveller to check abilities, expectation and the equipment needed to undertake the journey successfully to achieve good results, objectives and to return to base safely (Sinclair, 2007). Theoretical framework is an established assumption, belief and idea about what constitutes reality. It is different from theoretical perspective, although both perform similar roles in research. Theoretical perspective is the view of the researcher about what constitutes reality within a context. The purpose of having a theoretical perspective is to challenge the existing theory/ies with the aim of developing a new one unlike the theoretical framework whose focus is to test or confirm existing theory/ies.

Theoretical framework is the knowledge base of the issue being studied. At the start of a study, it is important to consider a relevant theory that forms the knowledge base of the phenomenon to be researched. It gives a mental diagram about the central idea, the variables and all interlinking issues in relation to the research. Maslow's pyramidal hierarchy of needs theory, for example, provides a mental picture of what motivation is all about. It should however be known that only one relevant theory can serve as a theoretical framework at a time in educational research irrespective of the research topic. It means that a research title needs to have a clearly defined focus; not focuses. It problematizes the identification of an underpinning theory when an overall research topic contains more than one independent variable. The practice where a researcher produces a catalogue of different theories to examine the overall research topic is inappropriate. Such a practice does not provide a definite theoretical identity for the research.

Furthermore, sometimes researchers, writers and educationists conflate theoretical framework with conceptual framework. These concepts do not share similar meaning, though they are closely connected and work hand-in-hand in educational research. A conceptual framework is the actual idea, either graphical or narrative, that you hold about the phenomenon to be studied (Miles & Huberman, 1994; Robson, 2011). For example, if you decide to use the *'hierarchy of needs theory'* as the theoretical framework for your study on *'motivation'*, then concepts such as *'basic needs'*, *'social needs'* and *'psychological needs'* might serve as your conceptual framework. The function of a conceptual plan is to assist to identify and address the problem in educational research. With this in mind, it is likely that your arguments, explanations and claims will have a definite direction. This is what the critical reader expects to see in research projects and journals. You cannot do educational research without having theoretical and conceptual frameworks. Doing so is akin to attempt to build a concrete block without a mould.

ESTABLISHING TRUSTWORTHINESS

Establishment of trustworthiness, as mentioned earlier, is a vital and integral part of the methodology in educational research. It constitutes part of research report. The methods the investigator applies to generate, transcribe and analyse data might raise queries about how the inquirer was able to establish trustworthiness in the entire processes and procedures. Trustworthiness in research is the ability to persuade others that the research process, procedures and findings are worth paying attention to. It is a means of developing research audit trail (Heopfl, 1997). Audit trail is when a reader is able to authenticate and follow the events, influences and actions of the inquirer (Koch, 2006). It is a way of ensuring quality assurance in the study (Akkerman, Admiral, Brekelmans & Oost, 2006). According to Carcary (2009), it is an indication that the research was executed with considerable care and rigour without error or fraud (*cf.* Koch, 2006). It is a measure to evaluate the quality of the research.

As most research projects in the field of education in Nigeria tend to always lean onto the quantitative paradigm, the notion of *quality of the research or evaluation of the research* (other names for establishing trustworthiness) often does not appear in the methodological section of student research projects. Where it does it is usually not treated in details. Instead, it is sparingly explained under test of reliability. Researchers within the context commonly refer to this part of the methodological chapter of the project as *validity (validation) of the instrument* and work in this section always concentrates more on reliability, and sometimes on validity. It can be difficult to ensure clarity and detail to present the work in this way.

Evaluation of quantitative research varies from qualitative studies. Quantitative methods emphasise *reliability*, *validity* and *generalisability* in research (Muijs, 2004; Akkerman et al, 2006). Reliability refers to the consistency of results, that is; reliability is the extent to which a measure, if repeated, would be reproducible (Joppe, 2000; Muijs, 2004). The degree of reliability depends on the inherent qualities of the test and on its mode of administration.

A common way to test reliability is to administer the same test again – *test retest*, and examine the relationship between the two outcomes. A huge gap between the two results would indicate that the test is unreliable unless, of course, the opinions of the population have changed during this period. Another inherent error is the contamination of the results by familiarity of the topic. The reliability of an instrument can be enhanced by duplicating questions and by using carefully worded statements. According to evidence based finding the best way to increase reliability is by using multiple-item to indicate internal consistency, demonstrating an item-to-

item correlation and applying the same measure to which questions are asked about similar issues (Oppenheim, 1992). Therefore, the consistency of the responses can be established by using several different methods.

Validity focuses on the degree of accuracy with which any instrument measures what it is designed to measure (Winter, 2000; Golafshani, 2003). Establishing the validity of quantitative data used to measure views and opinions can be a difficult task. The validity of quantitative data, however, can be verified by using a technique called *'triangulation'*, which refers to the use of different research methods to collect the same data (Robson, 2005, 2011; Creswell, 2007). The appropriateness of validation tests is determined by the nature of evidence, which is required, and by type of research instruments used as well as, whether the research is qualitative or quantitative.

Generalisability refers to the extent the findings of the research can be generalised to the sample population used for the study (Muijs, 2004). These strategies: reliability, validity and generalisability are developed as a scientific and standardised way to check and authenticate the quality of quantitative studies. It is done in pursuit of objective criteria for verifying the theories and findings of the study.

Criticisms by positivist researchers favouring validity, reliability and generalisability consider qualitative research strategies unscientific (Carcary, 2009; Ewa, 2015). In response to such arguments, various researchers, for example, Lincoln & Guba (1985, 1986), Robson (1993), Guba & Lincoln (1994), Miles & Huberman (1994), Whittemore, Chase & Mandle (2001) and Shenton (2004), proposed different ways of determining trustworthiness within qualitative studies. From a naturalist/interpretivist perspective these researchers developed the ideas of *credibility, transferability, dependability and confirmability*. These four canons are seen as alternative measures on which to evaluate qualitative studies and ensure the methods and findings are therefore trustworthy (Carcary, 2009; Lietz & Zayas, 2010).

'Credibility' is the way in which the inquirer is able to establish confidence in the findings; the applicability of these findings to other settings is referred to as *'transferability'*. *'Dependability'*, like reliability, is the consistency of the methods being applied so that when reapplied they can produce almost similar results. The reliability of qualitative data is also enhanced by keeping detailed records of the results of investigation and thoroughly explaining the process of analysis. As stated earlier, it is what Stake (2006) refers to as *'vicarious analyses'* of data - leading the reader to have a feeling of participant experience via detailed description and explication of the context and its ambience. However, the extent to which it can be believed that the findings emerged from the participants, situations and contexts, and not through researcher subjective biases, assumptions, interests and perspectives is called *'confirmability'* (Guba & Lincoln, 1994; Robson, 2005, 2011; Creswell, 2007; Ewa, 2015).

CRITICAL REVIEW

Within the social world, people construct knowledge and share their perspectives, either orally or in literature on daily basis, depending on idiosyncrasies, personal experience of the phenomena within particular time and contexts. The narratives could contain ideas, facts, biases, assumptions, beliefs, values and attitudes. Access to the information, be it in reading or writing, especially in educational research, requires a critical exercise. In performing such exercise it is expected that the views of others are not to be taken at face value in form of a

'copy-and-paste' practice. Taking the views of other researchers and writers at face value especially in writing limits you to a compilation of a catalogue of literature rather than actively engage with it.

While reviewing literature, for instance, in educational research you criticise the ideas. The mention of *'criticise'* should not be understood in the negative sense of the word to mean 'exclusively condemning another person's work'. Criticism rather implies having an inquisitive mindset and the purpose is to achieve objectivity, without however losing subjectivity entirely. No man is omniscient regardless of age, rank, level of education, intelligence and experience. When every person knows all there is to know there will be no need to learn. Efforts to criticise the views of other writers in educational research is a courageous way to conquer fear and inferiority complex to also share your opinion and have a voice on the issue. Such a review poses questions to determine whether the literature is relevant, current and has passed peer review. It strives to ascertain the evidence, strength of the evidence, whether the evidence is specific, context based or universal, whether the author under-emphasises the evidence, whether the evidence is compelling, whether the evidence is clear or vague and whether the evidence is credible.

Although there is always the drive to go for breadth to examine interlinking issues so as to give a holistic picture, critical reviews, however, concentrates more on digging down to unpack the concept and ensure that there is the possibility for a deeper understanding of the issue under examination. It is therefore unhelpful and inappropriate in this case to use literature just to support particular viewpoints. That cannot ensure a balance in a review. Use of literature does not only serve to bolster an argument. In addition to using the literature to strengthen and/or substantiate the idea in a debate, you also make sure you use the literature to expand the idea, critique the idea and provide an alternative idea. Coupled with this analysis is the idea of self-criticism, a practice in which the researcher also does self-check of what s/he is documenting so as to address identifiable areas of weaknesses. The reviewer engages with the review in this way in order to produce an essay that is water tight and objective, to be able to innovate, develop something novel in the area and to also achieve originality in the research. As such, there is the endeavour to check for the comprehensiveness of the issue being reviewed, coherence and consistency in ideas and clarity in wording the arguments and seeking for comprehension.

Critical review also takes into account the paradigms and philosophies that shape the propositions, and ensure originators of the ideas are acknowledged where necessary to avoid plagiarism. The engagement in critical review also inevitably leads to analysis of the ideas. The analytical process involves splitting the concept into various components for a thorough examination. Analytical reviews focus on gaining insights and comprehending through comparing, contrasting, linking and hypothesising about the relationship between concepts.

RESEARCH PROPOSAL/PLAN

Considering the weaknesses often noticed in students' projects as beginner researchers, even in some practitioner researchers' work, the production of a research proposal at the start of the research is becoming very essential. Research proposal or plan is a document that sets out your ideas in an easily accessible way (Dawson, 2002). It helps to direct your research ideas and serves as a useful document for reference should your research wander off track.

For a college or university student, the research proposal can serve as a course requirement, preceding the actual execution of planned research. Such academic requirement creates ample opportunity for the student, tutor and school to determine whether the researcher has the skills to successfully complete the study. By adopting the strategy for research projects the school sets research standards that will meet international best practices. The institution can provide general outline and guide as to what should constitute the main features of the research plan, the order of the content and how many pages to produce for assessment and approval (*cf*. Dawson, 2002).

It is not to suggest that the research proposal has a rigid structure. As the student submitting the research proposal has the right to produce a structure that is suitable and unique, in educational research, however, the following contents must feature in the document: the research title, name of researcher, background/introduction, research rationale, aims/objectives, research questions and hypotheses, theoretical framework, literature review, research methodology, research design, ethical protocol, data analysis, establishing trustworthiness, timescale, contribution to knowledge (or expected outcomes), conclusion, reference and appendix.

Research proposal plays a crucial role in helping to enhance educational research practices among researchers. Consequently, it is important to upgrade research methods course to include the methods mentioned previously to benefit the novice researcher and to also further sharpen the skills of the practitioner researcher. Implementation of the upgraded courses can commence from a new academic session for both undergraduate and postgraduate students so as to give sufficient time for the responsible authorities to prepare. The practice where students propose research topics and submit same to the project committee for approval is not very helpful. It does not provide enough motivation for the student to engage in research. The project committee can make it a requirement for all project students to now submit research proposal/plan to it for approval prior to the start of the actual study.

Aspects of the new course may be unfamiliar to a considerable number of staff in the institutions and that may have adverse effects on supervision of students' research projects following the new idea being proposed herein. An in-service training on academic writing and research proposal can be organised to equip the staff with new skills. In addition, it will be ideal for the research committee to produce a document called *'guidelines on presentation of research project, dissertation and theses'* and make it available to students and staff. Electronic copies of the document can be uploaded onto the Faculty of Education intranet for public use. The Information and Communication Technology (ICT) department of the institutions can assist to perform this job. The document will serve as a handy manual for both students and staff in regard to research execution and publication.

CONCLUSION

An examination of current practices regarding what research methodology and practices often features in educational research involving students and staff in the field of education in higher education in Nigeria has been done. There is the concern that the existing practice is unidirectional, overemphasising quantification of measurement strategies in educational research. It ignores other important methodologies and methods that are useful in the 21st century's educational research. This work has made a case for a change in the present practice. It calls for a review in educational research within the research community by adopting other

strategies in order to add variety, address ethical protocols of research and further enhance standards in research in education based programmes across higher institutions in Nigeria.

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