Addressing the Curriculum Deficit in Enhancing Research Competencies of Nigerian Higher Education Students

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Abstract

Research skills are essential for addressing societal challenges, advancing knowledge, and driving economic development. In Nigeria, as in many other countries, higher education institutions are tasked with equipping students with the competencies required for independent research. However, concerns have been raised about the quality of research skills among Nigerian higher education students. This paper examines the issue of research competencies among Nigerian higher education students and explores the curriculum deficit as a contributing factor. The paper argues that there is a need for a comprehensive review of the research methodology curriculum in Nigerian higher education institutions to address the deficit and equip students with the necessary research competencies. The paper also suggests that hands-on research experience should be prioritized to enable students to develop critical thinking and problem-solving skills. Ultimately, the goal is to equip Nigerian higher education students with the research competencies needed to contribute to national development and thrive in academia.

Keywords: Higher education, research skills, curriculum, planning, Instruction

Introduction

This paper endeavors to scrutinize the curriculum deficiency that impedes the cultivation of research competencies in the higher education students of Nigeria. The primary focus of the inquiry involves a rigorous review of academic articles of reputable journals, appertaining to the research proficiencies of higher learning students in the Nigerian context. Notably, the paper highlights the linkage between the portrayal of research incompetence in graduates and the curriculum planning, with the objective of identifying not only the shortfall in the curriculum but also means of improvement. To render this exposition accessible, the paper is structured into six discernible sections. Section one discusses the demands of contemporary university education in the twenty-first century, expounding on its catalytic effect on research and innovation. Furthermore, it provides a comprehensive elucidation of the concept of research, the process it entails, and its primacy as a prerequisite for university graduation. Section two highlights the problematics associated with the curriculum planning stage in many Nigerian institutions of higher learning, and how it impedes the development of research proficiency in students. Section three outlines the curriculum planning stage's essential components, detailing the requisite substances and commitments, as per the tenets of classical *curricularists*. Section four interrogates the views of scholars concerning the curriculum's dearth in advancing research competencies in higher learning students, proffering insights into other attendant factors. Finally, section five, concludes this discourse with an emphasis on the pressing need to realign the Nigerian universities' impact, stimulate technological development in the country, and reestablish quality research competencies. As a corollary, the paper appends a set of poignant observations and recommendations that attend this praxis.

Background

The era of the 21st century university system of education remarkably focuses on manpower production in order support economic advancement. In this course, driven-economy knowledge has now taken over the traditional curriculum practices of many countries. This emerges as the trending measure through which nations prosper economically; and maintain their competitive superiority. In addition, the driven-economy knowledge continues to change with the world's dynamic nature and advancement in technology. Thus, nations aspiring for prosperity and to compete globally, should also indulge research activity and innovativeness as their priorities . In this course, university education ultimately represents the endeavoring-path that encourages, supports, and advocates research activity and innovation as its cardinal principles ; and , emphasized that these are imperatively paramount in actualizing sustainable knowledge-driven economy. University education does not only promote research and innovativeness; but it also designs its curriculum and instructional process to cultivate the bestowed potentials of individuals . Naturally, human beings have an in-built instinct to utilize the endowed capabilities and make meaning for survival in their lives. From a philosophical point of view, education aims at strengthening those natural urges and help students to realize their potentials, make meaning out of it and construct a worldview. Thus, the university education, prepares students in these aspects. Accordingly, it emulates culture of transformation through research, to seek and design curriculum that prepares students to understand their world and adjust appropriately. This stresses on becoming critical, which is the main concern in adult education .

Research process demands facts, justifications, and empirical evidence; hence, it subjects individuals to critical thinking. Again, it is a

process that intends to propose solutions to an apparent problem; or provides information on a phenomenon that becomes conspicuous. Thus, qualitative research outputs depend on the researcher's ability to be grounded with the required scientific research knowledge and skills . In addition, research involves investigation and updating knowledge. It is a means through which nations find out salient solutions to economic, political, and social problems . Relatively, many developed countries such as China, Japan, United States of America, UK, Canada, and others, have attained their positions because of commitments to research . Accordingly, universities all over the world are embodiments of civilization that primarily enhance students' intellectual capabilities through research training . Similarly, research and producing manpower are the fundamental role of establishing universities; hence, in the 21st century, research emerges as the primary concern of universities. It serves as a transformative process through which universities come up with new inventions, approaches and innovations that improve the lifestyle of societies and boost the economy . The university students are youths, whose societal future rests in their hands. As such, they are being trained to learn how to carry out research activity to provide a profound solution to their societal problems; and enhance the national economic development. Students' capacity to undertake successfully, research with scientific steps is an epitome of excellence and a promising ground for finding an ultimate solution . Research is a path to tackle existing problems and to address all the bedeviling challenges. It only necessitates identification of the problem; formulate logic and systematic steps to execute actions; involving theories and models to guide the research framework .

Universities in Nigeria like others in the globe, examine undergraduate students' skills in research by making it prerequisite to conduct a research, compile a report in form of project and submit for the completion of studies. Students are attached to a supervisor who guides, facilitates, and monitors their research work. They normally carry out such work either in group or individually and strictly follow a research template provided by the university or specific department . Similarly, Nigerian undergraduate students are expected to show mastery of the basic research skills in their course of conducting the research work. This signifies that they should present their completed project exhibiting basic elements of research ranging from background of the study, literature review, the research methodology, the data analysis and presentation of results, and the discussion and conclusion and reference section. Most importantly, the research must be primarily grounded in well-defined problem. A Problem statement is what gives ways to all sections of research. It is the basis of the research process; without it all subsequent procedures will never exist. From it, objectives are formulated, research questions are raised; and hypotheses are formed. It is similarly important that undergraduate students should display mastery of some data analysis techniques; use the suitable technique to test a given hypothesis; or to answer the raised research question .

Statement of the Problem

Research skills are crucial for addressing complex societal challenges and advancing knowledge. In Nigeria, the government has prioritized research as a means of driving economic development and promoting sustainable development. To achieve this goal, higher education institutions play a vital role in equipping students with the requisite research competencies. To reiterate, it is a norm in the Nigerian universities that undergraduate students must undertake and complete a research project. It should also be augmented with a substantial problem of investigation; and emulates logical objectives, questions, and testable hypotheses. Again, the methodology and data analysis techniques must be scientifically correct. To realize this, the students at the university level are usually exposed to two research courses, namely research method and Educational Statistics. These nomenclators depend on an institution's choice. The courses are designed to prepare students for appropriate steps and skills to conduct research. However, the quality of research skills among Nigerian higher education students has become a major concern in recent years. Several studies have reported a significant gap in research skills among Nigerian higher education students. Many students lack the necessary skills to conduct independent research, analyze data, and communicate findings effectively . Affirmatively, this deficit is partly attributable to the curriculum planning stage deficit in Nigerian higher institutions of learning. The research methodology courses offered in many Nigerian higher education institutions are often inadequate, leaving students ill-prepared for the rigors of research. Additionally, there is a lack of emphasis on hands-on research experience, which is crucial for developing critical thinking and problem-solving skills .

Curriculum Planning Stage: What is Expected?

Curriculum is a framework that comprises what students should be taught; how it should be taught; instructional strategies to be used; and methods of evaluation to be utilized. In addition, curriculum portrays set of desired objectives, contents and learning experience expected for the students to encounter . On the other hand, curriculum planning is designated as a process of creating a curriculum. As such, a curriculum planner serves as an instrument who uses expertise to choose and organize different components of curriculum including subjects, contents, activities, resources, and assessment methods. Curriculum planning is a complex process that involves a careful selection of teaching and learning elements, resources and pedagogical requirements that can facilitate achievements of the intended objectives . While

instruction in curriculum context, refers to the process of delivering the selected content to the students. It is a process of actualizing the curriculum through which students encounter the desired learning experiences . Curriculum planning and instruction are two cardinal processes that determine the level of an outcome. Research have indicated that institutions that strive to plan a desirable and efficient curriculum; and plan to assure effective implementation, will surely accomplish the stated objectives . However, a flabby and loose curriculum planning coupled with shallow implementation are fundamentals to prevent accomplishment of the set objectives .

Furthermore, curriculum planning is a continuous process that comprises collective efforts of individuals (*curricularists*), working relatively as a group towards achieving a common goal. The group strives interrelatedly to study, plan, develop and improve the curriculum to realize change of behavior from the students. In this process, effective planning and appropriate decision making are important elements that determine success of an educational program . Additionally, curriculum planning provides roadmap to quality teaching and learning process; it coordinates assessment procedures; it chooses and designs content and techniques to instill desired knowledge, skills and behaviors among students Curriculum planning has never been a hitch-free process; however, even good planning encounters obstacles. These come up at a one or throughout the three levels of the process, which are planning of policies, planning of programs and the lastly, planning of lessons .

In Nigeria, educational policies are proposed and planned without involvement of teachers. It is a top-bottom approach whereby teachers receive the blueprint document of educational policies . Likewise, some scholars see this approach as constraint or havoc that leads to the failure of many educational programs. They added that teachers, parents, and students are all stakeholders of curriculum planning. In fact, teachers are the implementers who daily, interact with the students and are assumed to be engaging in research activities to update their knowledge Hence, teachers should be accommodated in planning educational policies and in developing curriculum framework.

, stated that ideally, a good curriculum planning should ensure the following:

- To explain the three levels of curriculum planning (i.e the policy, the programs, and the lessons).
- To scrutinize and verify on selected knowledge, skills and other priorities integrated in the curriculum planning, firmly by the major stakeholders such as teachers, students, and parents as the external facilitators of the implementation process.
- To become acquainted with the key challenges embroiled in the curriculum implementation.
- Continuity of learning experiences between domains across levels of learning
- Maximum coverage of all learning experience within the curriculum
- Addressing the students' learning needs
- Providing learning opportunities for the students to develop critical thinking.
- Organization and consistency in teaching, learning and evaluation practices.
- Avoidance of repeating learning activities across level, without in-depth exploration
- To ensure utilizing a uniform language in the school community

Moreover, school curriculum encompasses the planned activities, organized to promote learning, enhance students' personal growth and development, and obtain positive change in behavior. It does not only involve the formal written curriculum; but rather, it also comprises the extra-curricular activities organize by the school and facilitated by teachers to have an optimum achievements of learning activities. Again, it also involves 'hidden curriculum' that signifies what students learn as they interact with each other; or what occurs between teachers and students . These are interactions and activities that are not planned within the curriculum. For instance, students are asked to conduct group assignments or carry out a group presentation. In this process, one student will emerge as a team-leader who oversees, monitors and report back the group's activities. Students also must communicate, share ideas and understandings. As such, students learn other skills like leadership skills and communication skills. Therefore, curriculum planning and instructions are key determinants of success or failure of educational programs.

Nigerian Higher Education Curriculum: Deficit for Enhancing Research Competencies

Among all the skills, a student of higher institutions whether universities, colleges of education or polytechnics is expected to acquire, the ability to design and conduct independent research projects, those experimental, exploratory, or fieldwork. This is because research is not just a component of knowledge dealing with social and scientific enquiries, but also it forms the bedrock upon which the foundation of sustainable progress, technological advancement, and national development of a country rest. Research uncovers new paths to human progress. This explains the reason why higher institutions serve not only as repositories of knowledge, but also as training ground for researchers in all aspects of human development . Nigeria, as a developing state, appears fully conscious of the importance of research to national development. This is evident from the way it integrates and makes the teaching of research methodology courses a vital component of curricula in all tertiary institutions. This is further reinforced by the fact that graduating students in these institutions are required to not only design and conduct research projects under assigned supervisor, but to also present the reports of their findings to their respective departments for evaluation as part of the necessary requirements for graduation. The purpose is

to equip the graduating students with the necessary and critical skills for conducting research to expand the frontiers of knowledge and enhancing Nigeria's national development . Despite the efforts made by the tertiary institutions in providing ground for students to undertake and write their projects, most of the student researchers' lack skills and expectancies needed while writing their projects. This could be associated to several factors such as poor supervision, poor reading habit, inability to access research literatures and negative attitude of students towards research itself .

It has been lamented that most of the Nigerian undergraduate students lack skills in using statistical analysis; and they have been reportedly found to apply unsuitable statistical tools in analyzing their works ; likewise, majority of them do not even know the basic research skills . Given the critical role of research in driving national development, addressing the deficit in research competencies among Nigerian higher education students has become a matter of urgency. The implications of this deficit are significant. Inadequate research competencies limit students' capacity to contribute meaningfully to research projects, reducing their ability to impact national development positively. It also limits their ability to secure scholarships, research grants, and research opportunities, which require students to demonstrate a high level of research skills and competencies . Moreover, scholars argue that the university curriculum is obsolete; and fails to emulate 21st century trends in doing research, resulting in a gap in knowledge and skills among students.

In addition, it has been observed that in some Nigerian universities, lecturers teaching research courses are not experts in the field; hence, they lack the rigors and desired knowledge and skills to deliver the course content optimally . These and other factors arise from the curriculum planning and instructional process in the Nigerian universities all together hammer on the inability of the students to learn the appropriate research skills. Again, inadequate funding is one of the major factors responsible for the lack of quality research skills among Nigerian students of higher learning . Due to insufficient funding, higher education institutions in Nigeria struggle to provide the necessary resources and facilities needed for students to conduct research effectively. This includes access to research materials such as textbooks, journals, and databases, as well as the necessary equipment and technology to carry out research projects. Without these resources, students may be limited in their ability to conduct quality research, leading to a lack of necessary research skills .

Likewise, poor access to information and resources is another challenge faced by Nigerian students. Access to scientific journals, research databases, and other relevant resources is often limited in many Nigerian universities, which limits the scope and quality of research that can be conducted by students ; equally inadequate institutional support is also a significant factor. Many Nigerian universities lack the necessary institutional support, such as research grants, to enable students to conduct quality research and publish their work in reputable journals. This lack of support makes it difficult for students to pursue research, even when they have the necessary skills and interest . Finally, a lack of motivation among Nigerian students is also a contributing factor. Due to a lack of awareness about the importance and relevance of research to their career goals and national development, many students may not be motivated to pursue research .

Conclusion

National development rests on the level of technological advancement of a country defined in terms of the ability of its citizens to discover new ideas and invent new products. Without Universities fully positioned to impart the necessary skills for conducting research and the students to imbibe these skills, however, development is impossible. Nigerian as country, is technologically backward, has economic problem and exist many socially and political crisis. These problems are associated with lack of developing quality research skills among graduating students in the Universities. The aftermaths also demonstrate the implications of these problems on national development. Literature has supported that the problems originated from the nature of the Nigerian curriculum planning and instruction. The university curriculum is outdated. It fails to emulate 21st century trends of conducting research. Also, some of the lecturers teaching the research courses are not well acquainted or well trained in research.

Recommendation

Nigeria as a country needs to find steadfast solutions to address the outlined problems to further strengthen the research culture in Nigeria as a way of facilitating greater national development. To achieve this, the followings are recommended:

To address the curriculum gap and improve the research competencies of Nigerian higher education students, a multi-faceted approach is needed. This approach should include a review of the research methodology curriculum to ensure that it provides students with a strong foundation in research methodology, including quantitative and qualitative research methods, data analysis, and academic writing.

- Faculty training on current research methodologies, analytical tools, and academic writing should also be provided to ensure that they are equipped to deliver quality courses.
- In addition, research internships and other experiential learning programs should be integrated into the curriculum to provide students with hands-on research experience.
- Collaborative research among faculty and students should be encouraged to expose students to different research methodologies,

analytical tools, and academic writing styles, which will expand their knowledge and skills.

- Adequate research funding should also be provided to support research projects and provide students with the necessary resources to conduct independent research.
- By implementing these strategies, Nigerian higher education institutions can ensure that their students are equipped with the necessary research skills and competencies to succeed in academia and contribute meaningfully to national development.

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