

THE NATURE, ELEMENTS, AREAS AND METHODS OF PHILOSOPHICAL RESEARCH IN EDUCATION: A CALL TO INTELLECTUAL ORDER IN NIGERIA

Sulyman, Abdulganiy Aremu^{1*}

Eliasu, Surajudeen Ajao²

¹ Federal University Lokoja, Nigeria

² University of Ilorin, Nigeria

*corresponding author: aremuabdulganiy@gmail.com

Citation: Sulyman, A.A. & Eliasu, S.A. (2020). The nature, elements, areas and methods of philosophical research in education: a call to intellectual order in Nigeria. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 1(2), 112-126

ABSTRACT

In Nigeria, philosophy of education is viewed as inferior to empirical sciences of natural and social domains due to their successes and their styles of investigating the truths through sense experience/observation, statistical analysis, hypotheses testing and experiments, the cause-effect phenomena, the problem-solving and useful products of sciences such as medical discoveries, information and communication technology, and many more. Sciences have been rated high that many people in the learning institutions would believe that empirical research approach is the only research method that can lead to the acquisition of knowledge and would try to limit philosophers to the method not technically theirs. However, philosophical research approach in philosophy of education, which involves logical and critical reasoning, has also been validated and proven by its advocates to be an authentic source of knowledge. To disclaim a source of knowledge in favour of another is like claiming that it is only 3 and 3 can equal 6 or it is like saying there is only one entry to a central city in a country. In order to make a call to an intellectual order regarding this misleading assertion by scientists, this paper defended philosophical research in education as authentic and applicable to life.

Keywords: Research, Philosophical Research, Empirical Research, Philosophical Research in Education

INTRODUCTION

Philosophy is the holistic knowledge which comprised all departments of knowledge from the beginning, but later the sciences both natural and social sciences split from their parent, philosophy. In support of this, the 17th French philosopher and mathematician, Rene Descartes in Bamisaiye (2012) described philosophy as a tree whose roots are metaphysics, whose trunk is physics and whose branches are other sciences. She further opined that that in 17th century scientists like Galileo,

Copernicus, Kepler and many more demonstrated scientific might with their discoveries. Science then was nothing but a part of philosophy. The argument is premised on the fact that intellectual erudition is still associated with philosophy, and the research degrees are awarded as Master/Doctor of Philosophy (M.Phil/Ph.D). In addition to the Bamisaiye's observation, people with good foresight, impressive analytic and critical intelligence, and other strengths of intellect are usually called philosophers even though they have not studied philosophy in a formal sense. More on this, Akinpelu (1984) noted that philosophizing had passed through stages. During the days of Socrates, philosophizing was in form of analysis of concepts and issues. Later, it became speculation about the world and its events. At a stage, it graduated to logical empiricism which employed empirical methods and later came back to analysis of concepts and issues which is a rational exercise. It can be argued here that in all these stages in the history of philosophizing especially in the Western world, there is a basic tool of philosophizing that has remained valid, and this is reason.

Natural and social sciences now employ empiricism as their method of research on one hand, and philosophy or philosophy of education uses philosophical research method, which is rational approach, on the other hand. The main goal of both methods of research is to acquire knowledge of truth about various issues of existence by following different but related paths of investigation and contemplation. However, Akinpelu (2005, 2012) has complained that social scientists in the universities in Nigeria are forcing their empirical approach of attaining knowledge on the philosophers of education whose research approach is a rational one. He furthered that this intellectual injustice might be as a result of incompetence of research supervisors in defending the authenticity of philosophy of education's rational approach. Babarinde (2012) described this academic restriction forced upon educational philosophers as tyrannical.

In a bid to convince the readers or audience that philosophy is not a mother penguin which dies after giving birth to her children as philosophy gave birth to sciences, that philosophy or philosophy of education as a discipline has its own unique nature and methods and that its own approach is not inferior but complementary to empirical one, this research work on the nature, elements, areas and methods of philosophical research in education is conducted.

What does research mean?

In an attempt to answer the conceptual question or question of meaning asked above, there is the need to explore ideas on the meaning of the concept of research to see what really constitute it. Badmus and Okonkwo (2012) clarified that word 'research' was derived from a French word 'recherche' which means to travel through or to survey. They defined research as orderly investigation of matter for the purpose of adding to knowledge. They also defined research as systematic, controlled, empirical and critical investigation of hypothetical propositions among presumed relations among natural phenomena. Umar and Tata (2015) described

research as scientific search for knowledge or any systematic study to confirm facts, solve problems, justify new ideas, or develop new theories. Osuala (2005) and Sambo (2005) opined that for an activity to be considered as research, it must be an intellectual activity using specific tools to gather findings for a particular purpose such as solving problems. Research, according to Enoh (2012), has three components which are problem, activities to solve the problem and a result/solution. He maintained that any search and re-search that fail to have the three components are not qualified to be called research. This means that research is a problem-solving activity. In line with Enoh (2012), Akinpelu (1984) reported that Dewey's method of research is problem-solving method which has stages from identification of problem, formulation of hypotheses, data collection, testing of hypotheses to see the result. Akinpelu added that at the completion of research, the research experience or finding becomes a piece of knowledge. Thinking about this, it can be seen that the purpose of research is not only to solve the present problem but it is also to acquire knowledge for knowing sake or for solving future problems and improving the quality of life.

To add more, no matter the approach adopted, philosophical or empirical, what is important is that the approach leads to knowledge or solves problems. After all, the nature of problem determines the type of research to be carried out. For example, Coronavirus becomes a problem or case study in the world in 2020. This type of problem requires empirical research to determine the cause so that the virus can be prevented. However, in the course of conducting empirical research to defeat the war of coronavirus, a lot of rational thinking (also known as philosophical reasoning) is needed as both senses and reason must be in operation. Enoh stressed that thinking as a form of research must be rigorous and systematic, especially as the idea being sought must fit into a problem or doubt. He continued that research must satisfy the conditions of openness to the epistemic community for verification, clarity and value element. When research is based on the acquisition of knowledge for knowing sake, it is understood as pure research. Adopting research tools and findings to address a problem is called applied research. Research, according to Fawole, Egbokhare, Itiola, Odejide and Olayinka (as cited in Bamisaiye, 2012) defined research as an endeavour to study or obtain knowledge through the use of a systematic approach with the intent of clarification. Looking at their definition of concept of research, it shows that research can be purely for the acquisition and clarification of knowledge words (as put by Bamisaiye (2012), which is the focus of theoretical studies like philosophy/ philosophy of education. Any activity short of systematic processes through which knowledge can be gained or problem solved does not amount to research.

Further, before examining the nature of philosophical research, it is important to note that every research with its findings and methods is limited due to the limitation of human researchers. The perennial problems of death, sadness, sickness and epidemic, low level of intelligence, political tyranny and injustice, immoral and

anti-social evils cannot just be wiped out by the findings of both empirical and rational researchers that ever-existed, though we are not certain if there will be solution to all problems of existence in the future. The researchers lack omniscience and omnipotence, two of the supreme rational concepts, and that is why they cannot put all problems to zero. In fact, their findings as solutions usually come with new problems. Considering irresistible continued problematic existence, non-existence is preferred (as a zero is better than a negative number) or a perfect existence is desired. This is one of the arguments and postulations of this study.

Philosophical research and empirical research: The meeting and the departure

Philosophical research and empirical research are examined here from different points as follows: -

Reason and physical senses: - Philosophical approach employs reason as the basic source of knowledge, while empirical approach employs senses as the major source of knowledge. Philosophical approach deals with rational questions. The questions include what is reality?, what is knowledge?, what is consciousness? what is education? what is reason?, what is good governance? how can we develop our economy? what is science? what is research?, what is value?, how did world come into being? is man free? why do man and world exist? , does God exist and how?, etc. These questions cannot be answered using physical senses. On the other hand, empirical research answers questions that can be handled by physical senses in observation and experimentation. The questions include: are you hungry? did you smell the aroma of the soup? how does my voice sound to you? can you see me now? and did the sweet you licked yesterday taste sweet? All these questions can be answered through our physical senses of feeling, smelling, hearing, sight and taste. The data obtained from senses are referred to as sensations or sense data. However, in the interpretation of these data, reason still has a role to play as no interpretation is possible without reason or consciousness or mind.

Complementarity of rational and empirical approaches: - In order to acquire knowledge, both reason and senses complement each other. For instance, for one to think about the contents of the news as aired on the TV, one would need to employ one's senses of hearing and sight alongside reason. This shows that both empirical and rational/philosophical approaches have value and ability to lead to knowledge.

Purpose: - Both approaches of empiricism and rationalism have the same research purposes of facilitating knowledge, solving problems and ensuring development.

Statistical analysis and philosophical appraisal: - Data analysis techniques such as t-test, chi-square, analysis of variance, and more are among the statistical analyses employed in the empirical researches. On the other hand, philosophical appraisal techniques which include critical analysis, logical analysis, exposition of issues, and more, are used for data analysis in the philosophical studies.

The nature of ideas, knowledge and wisdom: - The nature of ideas, knowledge and wisdom is not empirical as these three are not within the physical senses though their products may be physical. The nature of these three is rational. Ideas are thoughts, knowledge is awareness of truth, while wisdom is knowledge that is applied to solve problem and improve the quality of life.

The nature of philosophical research in education as authentic rational source of knowledge

First, it should be noted that the nature of philosophy is the nature of philosophical research or the nature of philosophical research in education. Philosophy, as it has been described by many philosophers such as Russell (as cited in Schofield, 1972), Akinpelu (2005), Abiogu (2014), Oyelade (2018) is a rational enquiry. That is, the basic source of knowledge in philosophy is reason. Okunade (2015) described philosophy as a rational rigorous examination of the origins, extent and validity of human ideas.

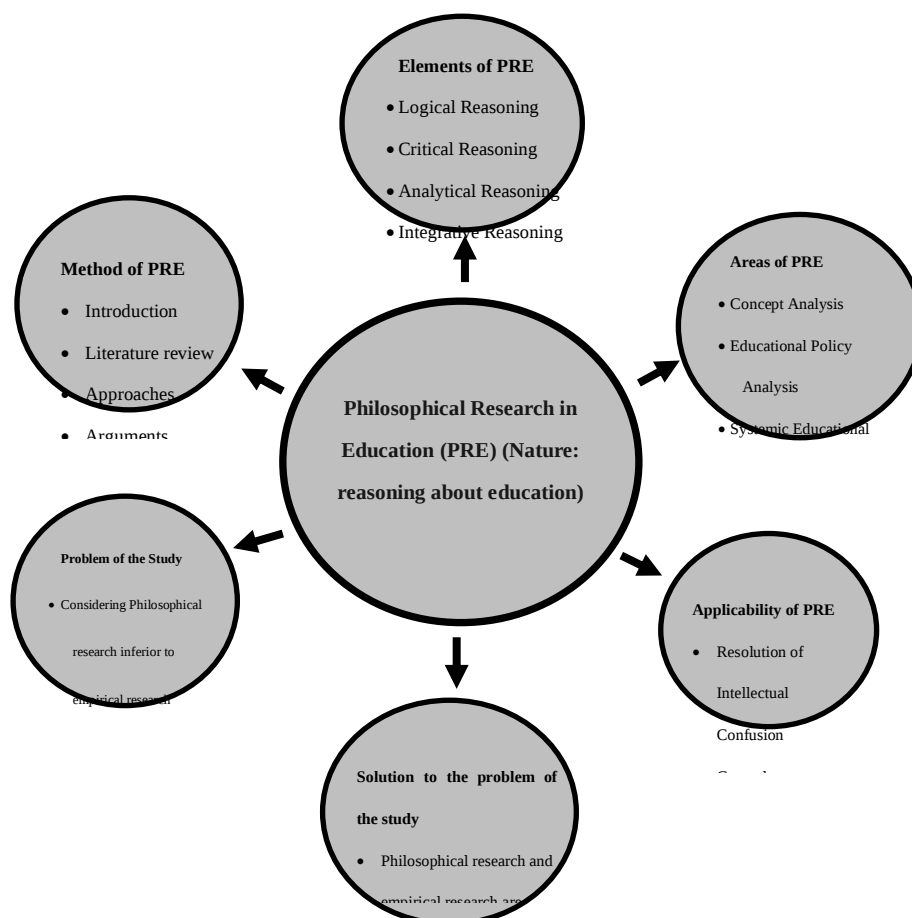
Both rational and empirical methods belong to philosophy from the beginning but it can be argued that the rational is more basic as we need reason to explain all the sense data to gain understanding. In other words, reason is the basic source of knowledge to which all sense data must be subjected to for scrutiny and it should be the major tool of philosophising. This is not to say empiricism is empty but to say reason is the basic. Thus, the nature of philosophical research in education is reason, reasoning or rationality. Philosophical research in education is reasoning about education. Reasoning, the activity of reason, according to Waller (2012) is objective and dispassionate examination of all facts surrounding any claim in order to know the truth. It must be understood that incoherent and unintelligible thinking cannot be regarded as reasoning. Reason is the power of the mind to think logically to understand things and to have opinions. However, researchers in other fields of study also reason in their course of enquiry but reason may not be central to them but it is to philosophical research and philosophy of education research. Empirical researches differ from philosophical because even without experiment, sensation, statistical analysis and other features of empiricism, the validity of philosophical research results can still stand as long as the results are consistent with logical reasoning. And if philosophers decide to employ empirical approach in their investigation, the results would still be subjected to critical reasoning for validation since reason is the basic source of knowledge.

Psychologists may focus on human behavior, sociologists on the society, curriculum experts on the curriculum but philosophers focus strictly on reason and the basic path to knowledge of all fields and all types. This is the distinctive position of philosophy, philosophical research and philosophical research in education. In support of this emphasis on reason, Akinpelu (1984) affirmed that if one is to mention a basic feature of philosophy, one should mention 'reasoning'. It can be

argued that reason validates all knowledge from itself and from all sources. For example, sense data can be accepted as true if they are consistent with reasoning. Reason satisfies the three conditions of knowledge: the truthfulness of the claim; the belief of the claimant in the truthfulness of the claim; and the proof of the truth. In other words, rational knowledge can be truthful, believed to be true by the claimant and be justified or proven (Okunade, 2015). At this point, one can make a proposition: If people are physically sick, they should see physician, but if they are 'reason-sick', they should see philosophers, the doctors and angels of reason! Philosophical research, in the words of Bamisaiye (2012) can be library-based or book-based since it is theoretical reasoning.

In education, philosophical researches are applied to teaching, learning and other educational processes. The findings of other experts in other disciplines of education are analysed and utilized for effective educational policies and practices. This is why philosophy or philosophy of education is regarded as second-order discipline. The philosophical instruments, findings and thoughts of previous educational philosophers, educational psychologists, sociologists of education, curriculum experts, counsellors, and more are rationally examined and wisely utilized to move education upward.

Philosophical Research in Education Conceptual Framework



The framework shows philosophical research in education as the centre of this study. It also reveals elements, areas, method and applicability of philosophical research to education and general life. The diagram shows the problem of the study as well as the solution to the problem. However, it should be noted that the problem and the solution are not treated as separate in this work. They are subsumed in the abstract, introduction, and other parts of this work.

The elements of philosophical research in education and their relevance to education

The elements of philosophical research are various key features that constitute philosophical research. Understanding these elements is key to comprehending philosophy, philosophical research and philosophical research in education. The elements and their relevance to education are discussed below.

Logical reasoning and education: - This is a system of reasoning in which the premises and conclusion are coherently linked. Logical reasoning may be deductive or inductive. It is deductive when the conclusion that follows the premises is true. In this, the argument is valid and sound. For example, the syllogism: Every teacher knows something; Socrates is a teacher; therefore, Socrates knows something. This argument features logicity and coherence. It is the deduction from general assumption. Enoh (2012) asserted that for any presentation of ideas, writing or thinking to be philosophical, it must be logical, has all its parts coherently linked. On the other hand, inductive reasoning is the one whose conclusion may not be coherently linked with the premises. For example, the syllogism: Many leaders are corrupt; Alabi is a leader; therefore, Alabi is corrupt. The fault in this argument lies in its conclusion because Alabi may not be corrupt.

More, one should understand that in education, the teachers must understand logic and use it to present his ideas sequentially considering the findings of experts in education for effective and enhanced learning. The contents of the scheme, the unit lesson plans, the stages of lesson, all must be sequentially presented and all his ideas must be sound. All the topics in the textbooks and the themes of the curriculum should be in logical order. For example, the contents should start from the simple to the complex just as in Mathematics that numbers must be taught first before addition or subtraction of numbers. In fact, the curriculum, processes of education, practice of education and educational purposes must all be consistent with one another for the success of educational system. Level of learners, their age, the contents, the method of education, the method of evaluation, the instructional resources and the objectives, all must form a harmonized and unified whole. To realize the logicity in the educational system, all educational stakeholders should reserve no relevant efforts. In order to foster logical reasoning, Nigerian education features subjects like Philosophy and Mathematics (Federal Republic of Nigeria, 2013).

Critical reasoning and education:- Critical reasoning has been viewed by different

authors in different ways but there is a common or basic characteristic which is systematic reasoning. Critical reasoning can be seen as criticism, that is, opposition or objection (Waller, 2012). However, this philosophical objection differs from political objection in which the struggle for power may be the major cause of the objection, not because there are logical and objective justifications. It is also different from marital disagreement in which the spouses base their points on jealousy, hearsay and pessimism. Critical reasoning in form of objection is based on the consistent reasoning that finds fault in an assertion as Dewey found fault in the traditional approach to education (Akinpelu, 1984), or as philosophers see the weaknesses in the social and educational structure of their societies. This discovery of flaws is the basis for new thoughts. In a classroom, the problem may be poor performances of the learners. It is then the work of teacher to identify this weakness and the root cause and then find a way out. That is, the flaw is the floor of the flawless! The weakness is the flaw that serves as the basis for the strength gained through critical analysis.

Critical analysis is an indispensable tool and precious mark of philosophers. Enoh (2012) affirmed that criticism is the hallmark of philosophizing. Critical analysis can also be understood as being different in the pattern of reasoning especially when there is nothing to criticize objectively, not because of the personality of the author of the idea. It can be argued that in the educational system, teachers, learners, policy makers, curriculum planners and others could introduce new effective ways of promoting educational standard. More, critical analysis can also be explained as examination of strengths and weaknesses, and finding ways to correct weaknesses and improve the strengths. In the words of Okunade (2015), critical reasoning involves clarification of ideas and beliefs based on reasonable and objective evidence in order to gain understanding, and identify strengths and weaknesses of those ideas and beliefs. The educational stakeholders can apply this dimension called critique to improve educational system. The teachers should critique the textbooks, instructional materials, methodology, teacher-learner relationship, and many more. Federal Republic of Nigeria (2013) encourages critical thinking as one of the educational objectives in the national policy on education. Argumentative essay in English studies, philosophy and many other subjects in Nigerian education can enhance critical thinking.

Dialectical reasoning and education:- Dialectical reasoning is construction, deconstruction and reconstruction of ideas (Enoh, 2012). That is, when a thesis is upheld, antithesis with a superior position can destroy it. Then, a new thesis can emerge which is formed by parts of thesis and antithesis, this new idea is called synthesis. This process continues. This teaches the learners, teachers and others in education that knowledge and its end-product which is development, are endless and that every discovery is fallible. Thus, it encourages intellectual humility and endless extension of frontiers of knowledge and knowledge application for development. The curriculum of Nigerian education contains subjects like History through which past and present events and the changes involved can be taught to enhance dialectic reasoning.

Objective reasoning and education:- Objectivity involves searching and establishing the truth through unbiased proofs. Bamisaiye (2012) pointed out that philosophical objectivity differs from scientific objectivity in that philosophical objectivity is about the eternal, while the scientific is about tentative facts which may be changed at the emergence of the superior discoveries. This notion is not held by all philosophers. Philosophers such as pragmatists hold that truth is changeable. Objective reasoning is void of prejudices, wishful thinking and inconclusive proof. Objective reasoning is characterized by conclusive evidences. Bamisaiye in her attempt to clarify objectivity as a principle of philosophical study in education, she stressed that the use of necessary information on the subject of research interest; critical questioning of contemporary educational issues; unbiased chain of thought; avoiding prejudice; openness to contrary ideas and their positive use; universalisation of findings; and application of philosophical principles and methods are all contents of objectivity. Objectivity in education helps teachers and other stakeholders in education eliminate all pseudo-problems and wrong solutions to the real problems. Outside the school system, the students would be able to address the issues of life as dispassionately as they can, and ready to face the consequences of their actions. Federal Republic of Nigeria (2013) supported objective reasoning as it promotes sciences in Nigerian institutions.

Integrative reasoning and education:- Integration of different ideas to gain holistic comprehension of an issue is a philosophical exercise. This is because philosophers are expected to be critical and being critical requires integrating all pieces of information in order to draw a sound conclusion (Enoh, 2012). Children must be taught at the right age the method and importance of integration of ideas and multidisciplinary approach to solve the problems of education and the problem of the society. Teachers and parents in Nigeria should encourage learning integration.

Reasoning for the best and education:- No matter the reasoning the teachers, philosophers and others engage in, if such reasoning is not for the best situation or best result ('best' is relative), the reasoning is still away from the highest point. Philosophers should employ their professional reasoning capacity to achieve the best in the processes of education and societal development. This will distinguish them from other thinkers. Reasoning for the best as an element of philosophical research can be applied while choosing among many alternatives whose values are different in scale. In the classroom, at the policy-making level, curriculum planning stage as well as in-school administration, teachers and others should reason to choose the best among the alternatives for the best result. Nigerian education should encourage pursuit of the best.

Speculative and prescriptive reasoning and education: - When one thinks or assumes about the world, the origin of the world, the forces that govern the events in the world, the final point of the world, the happenings beyond this world, one is speculating thus philosophizing. Speculation in philosophy focuses on careful examination of fundamental, general and unempirical issues (Okunade, 2015). Enoh (2012) saw

speculation as seeing beyond now and here. Speculation is usually done without conclusive evidence. Akinpelu (1984) submitted that the speculative components of philosophy of education include metaphysics (theory of ultimate reality), epistemology (theory of knowledge and the truth) and axiology (theory of ethical and aesthetic values). Prescriptive reasoning is value judgement. Understanding and recommendations of aims of education as well as activities to actualize those aims are in prescriptive philosophical thinking. This is also applicable to Nigerian education.

Analytic reasoning and education:- One of the major foci of philosophy is analysis of concepts, statements and issues for the purpose of understanding of the real meaning of the analysed items and to ensure positive implications of these meanings for education and other aspects of life. Concepts like freedom, education, equal opportunity, discipline, knowledge, teaching and many other concepts have been analysed by philosophers to a meaningful degree (Bridges, 2017). The analysis is to remove incorrect elements and ambiguity so as to see the correct meaning. Enoh (2012) noted that in the process of analyzing a particular concept, there is need to also analyse the related concepts. For example, in the process of analyzing the concept of education, the analyst would need to clarify the concepts like training, skills, knowledge, understanding, etc. He furthered that analysis involves the asking of conceptual questions; examining the concepts in different contexts; examining the concept as it is related to other concepts; providing counter-examples; providing unacceptable consequences; application of logic; and use of concrete examples. He affirmed that the best way to see how analysis of a concept or issue is done is to study the analysis of various educational and philosophical concepts done by renowned philosophers especially those that subscribe to the analytic tradition. There are many concepts in the curriculum of Nigerian education which are analysed in the textbooks by experts for understanding of the learners.

Areas of philosophical research in education

The areas of research that are usually explored in philosophy of education include concept analysis, educational policy analysis, analysis and review of history of educational ideas, philosophical schools of education and analysis of contemporary situations. Concept analysis is usually done as suggested by Enoh (2012) and discussed under analytic reasoning above. Other approach to concept analysis may also be employed. Educational policy analysis can be done employing all the elements of philosophical research and establish how best the policy can lead to realization of national goals. Analysis of educational ideas of the intellectual greats such as Plato, Rousseau and Dewey can be applied for educational and societal development. Their educational ideas usually have four parts: the background to the ideas, the body of ideas, the application of ideas and effects (success or failure) of the application. Furthermore, certain situations that are contemporary and have implications for education and society can also be philosophically researched into. Finally, the systemic schools of thought which comprise metaphysics, epistemology and axiology can be examined and see their applicability to education for educational and societal

prosperity. The schools include idealism, realism and pragmatism. In all these five areas, philosophical reasoning with all its elements as discussed above should be employed to the greatest degree (Bridge, 2017) in Nigerian education, education and other walks of life.

Methods of philosophical research in education

‘Method’ in this context means the steps taken in carrying out philosophical research in education. Philosophy of education as a discipline that is offered in every region of the world has recorded a great number of researches with different methods at different institutions across the globe. However, before we examine the steps as employed in Nigeria, one can see what Rene Descartes (as cited in Enoh, 2012) thought on the research or analysis. According to him, the steps to be taken in the pursuit of knowledge or research include: a. never to accept anything to be true which was not clearly known to be such; b. to divide each difficulty which was examined into as many parts as was possible; c. to deal with problems in order of difficulty, starting with the simplest and easiest; and d. to make exhaustive general reviews to ensure that nothing had been left out. In addition, the steps taken in the philosophical research in education at University of Ibadan, Nigeria, is presented below.

Chapter one: This is the chapter of introduction. Here, the researcher discusses the background to the study, statement of the problem, and other subtopics similar to the layout of research in other institutions.

Chapter two: This is review of literature. Here, the past philosophical ideas on the topic of research will be explored. The review is theoretical.

Chapter three: At this stage, the scholar explains the traditional approaches (speculation, prescription and analysis) and justifies the choice of one or more methods.

Chapter four: At this point, the researcher raises issues, arguments and counter arguments in discussing main ideas or theories of the research.

Chapter five: The scholar employs dialectic approach here as he builds, deconstructs and reconstructs intellectual positions.

Chapter six: This chapter contains summary, conclusions and recommendations (Bamisaie, 2012).

Applicability of philosophical research to education and general life: Rationale for a call to intellectual order

Philosophical studies are rich in their rational nature, conceptual clarification, analysis of issues and problems in education and other areas of life, analysis of past ideas and many more. Philosophical researches in education and other aspects of life resolve

intellectual confusion so as to make wise decisions for specific and general development of learners, teachers, counsellors, parents and the entire society. This superb service that can be rendered by philosophical research is a sufficient reason that philosophical research, using its own rational approach to deal with areas of learning that can be best tackled through reason and that empirical researches cannot clarify (such as analysis of fundamental concepts which include reality, knowledge, value, mind, holiness, reason etc.) should be promoted in the learning institutions to complement the empirical researches in their investigations and findings. Researches in philosophy of education should not be hindered or forced to adopt empiricism where rationalism can excellently function. This is a call to an intellectual order!

CONCLUSION

This research has discussed issues in philosophical research in education and established that philosophical research in education is an authentic source of knowledge through its rational approach. In the process, concept of research; philosophical research and empirical research; philosophical research in education; elements of philosophical research in education; areas of philosophical research in education; methods of philosophical research in education; and applicability of philosophical research in education to education and general life have been discussed. Research is a process of investigating events in order to acquire knowledge and solve problems using any valid method, which could be philosophical or empirical. Philosophical research is use of reason to obtain knowledge; while empirical research is use of senses and experimentation to gather facts about certain events. Both empirical and philosophical approaches have similarities and differences. They are similar because their goals involve obtaining knowledge and solving problems. They differ because philosophical research employs reason as the basic source of knowledge while empirical research employs senses, experimentation and statistical analyses as the sources of knowledge.

Philosophical research in education is reasoning about education. Elements of philosophical research in education include logical reasoning, critical reasoning, analytical reasoning, dialectical reasoning, reasoning for the best, speculative and prescriptive reasoning, integrative reasoning and objective reasoning. Logical reasoning involves examining and establishing coherent link between premises and conclusion in an argument. Critical reasoning explores weaknesses and strengths of arguments, actions, systems, and so on. Analytic reasoning has to do with clarification of concepts and issues to expose the conceptual errors and identify the correct meanings. Dialectical reasoning is construction, deconstruction and reconstruction of ideas to enhance intellectual progress. Reasoning for the best is a rational activity aimed at attaining excellence in life. Speculative reasoning involves thinking beyond facts obtainable here and now, while prescriptive reasoning deals with value identification and judgement; it answers the questions of wrong and right, good and bad. Integrative reasoning is directed towards combination of various ideas to form an

intelligible whole; while objective reasoning is reasoning based on conclusive evidences to support claims. All these elements of reasoning are relevant to education as they enhance stability and progress in education in a variety of ways.

Areas of philosophical research in education include conceptual analysis, review of educational policies, history of educational ideas, schools of philosophical thoughts and examination of contemporary situations in the society. All these areas of philosophical research in education are to add to educational knowledge, solve educational problems and enhance educational progress. Methods of philosophical research which involve certain steps to take to arrive at a reasonable conclusion were looked into in the process of discussion. Resolving intellectual confusion in order to make rational wise decisions for specific and general development of learners, other educational stakeholders and the entire society, and analysis of fundamental concepts that cannot be handled by empiricism are among the functions of philosophical research in education. These important functions show that philosophical research in education is applicable to education and general life and that it is a unique approach that should be complemented by empirical approach in order to enhance educational and national development.

RECOMMENDATIONS

This paper has examined the nature, elements, areas and method of philosophical research in education. It has also pointed out that philosophical research in its rational nature should be allowed to employ its approaches in the research activities in philosophy of education as this is also part of academic freedom of educational philosophers. The following recommendations are then made:

1. Philosophers of education should have broad knowledge of their discipline and the unique importance of its rational nature.
2. Philosophers of education should defend their research approaches and explain how those approaches complement empiricism so that other specialists especially social scientists and scientists in education will not force their empirical approach on the philosophers.
3. Other specialists in academics should understand the difference between empiricism and rationalism so that they can support philosophers of education in adopting their rational approaches.
4. Government should make philosophy of education a discipline and a department from undergraduate level to allow the students explore widely the contents of philosophy of education and appreciate the discipline while they apply it for solving problems.

REFERENCES

- Abiogu, G. (2014). Philosophy of education: A tool for national development? *Open Journal of Philosophy*, 4, 372 – 377.
- Akinpelu, J.A. (1984). *An introduction to philosophy of education*. London and Basingstoke Macmillan Publishers.
- Akinpelu, J.A. (2005). *Essays in philosophy and education*. Lagos: Stirling; Horden Publishers (Nig.) Ltd.
- Akinpelu, J.A. (2012). Is there philosophy of education research method? In E. Owan and B. Kola (eds) *A guide to philosophical research in education*. Ibadan: Stirling-Horden Publishers Ltd.
- Babarinde, K. (2012). 'Tyranny of socio-science paradigm of knowledge over PRM-issues and possibilities for philosophers of education' in E. Owan and B. Kola (eds) *A guide to philosophical research in education*. Ibadan: Stirling-Horden Publishers Ltd.
- Badmus, G.A. (Ed.) & Okonkwo, C.A. (2012). *Advanced educational research method*. Abuja, Nigeria: National Open University of Nigeria.
- Bamisaieye, O.A. (2012). 'Philosophical research methods in education' in E. Owan and B. Kola. (eds) *A guide to philosophical research in education*. Ibadan: StirlingHorden Publishers Ltd.
- Bridges, D. (2017). *Philosophy in educational research: Epistemology, ethics, politics and quality*. Gewerbestrasse, Switzerland: Springer International Publishing AG.
- Enoh, A.O. (2012). 'Patterns of philosophical research in education'. in E. Owan and B. Kola (eds) *A guide to philosophical research in education*. Ibadan: Stirling-Horden Publishers Ltd.
- Enoh, A.O. (2012). 'The nature of philosophical research in education'. in E. Owan and B. Kola(eds) *A guide to philosophical research in education*. Ibadan: Stirling-Horden Publishers Ltd.
- Enoh, A.O. (2012). 'What is research?'. in E. Owan and B. Kola (eds) *A guide to philosophical research in education*. Ibadan: Stirling-Horden Publishers Ltd.
- Enoh, A.O. (2012). 'Writing philosophically in education'. in E. Owan and B. Kola(eds) *A guide to philosophical research in education*. Ibadan: Stirling-Horden Publishers Ltd.

- Federal Republic of Nigeria (2013). *National policy on education*. Lagos, Nigeria: NERDC.
- Osuala, E.O. (2005). *Introduction to research methodology* (Rev. ed.). Onitsha, Nigeria: African Fab Publishers.
- Okunade, B. (Ed.) (2015). *Introduction to philosophy*. Ibadan, Nigeria: University of Ibadan, Distance Learning Centre.
- Oyelade, A.F. (2018). Pragmatism and its implications for Nigerian education. *KIU Journal of Humanities*, 3(2), pp. 173-178.
- Sambo, A.A. (2005). *Research in education*. Ibadan, Nigeria: Sterling Horden Publishers.
- Schofield, H. (1972). *The philosophy of education: An introduction*. London: George Allen & Unwin.
- Umar, M.K. & Tata, U.S. (2015). Is there a philosophical research method in education? *IOSR Journal of Research and Method in Education*, 5 (3), pp. 21-23.
- Waller, B.N. (2012). *Critical thinking: Consider the verdict* (6th ed.). United States of America: Pearson Education, Inc.