

APPLYING SKEPTICISM AND CERTAINTY IN PHILOSOPHY TO EARLY CHILDHOOD EDUCATION: A WAY OF LAYING QUALITY FOUNDATIONS FOR NIGERIAN TERTIARY EDUCATION

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Abstract

It is an undeniable fact that the foundation or the beginning of any life endeavour has to be made strong in order to achieve a sustainable success in the target endeavour. It is in the vein of this line of thought that this paper attempts to explain the laying of a solid foundation for Nigerian tertiary education. Using philosophical research method, the paper explains how the philosophical concepts of skepticism and certainty can be adopted to early childhood education as a way of laying a solid educational foundation which will eventually lead to the achievement of quality in Nigerian tertiary education. The treatment of the application of skepticisms and certainty in early childhood education is analysed in the area of the cognitive, affective and psychomotor development of children which revealed that children at early years learn better with learning aids. Certainty is applied to children's learning with the use of various developmentally appropriate teaching aids. Based on the polemics of the paper, it is recommended that the application of skepticism and certainty should be utilised in the learning of children at early years as a way of laying a good foundation for Nigerian tertiary education.

Keywords: Skepticism, Certainty, Philosophy, Early Childhood Education, Teaching aids.

Introduction

This paper attempted the application of the concepts of skepticism and certainty in philosophy to early childhood education as foundations for quality tertiary education in Nigeria. Early childhood education being the foundation-laying level in educational pursuits needs to be well nurtured for the eventual quality tertiary education. There is no gainsaying the fact that the importance of higher education is enormous as the production base for Nigeria's manpower among other noble functions. Another fact that cannot be gainsaid is that, if the higher education has to be the one of great quality, efforts have to be made to give a strong commitment to the other levels which serve as prerequisites for admission of students into higher institutions. Of all the levels that are prerequisites levels, early childhood education is

the foundation, as it is the first level of education. This level can be compared to the foundation of a building which needs to be done well in order to have a strong building.

The need to have a strong foundation in any human endeavours for assured quality future is captured in a Yorùbá adage, “*Wón ní, ‘amúkùn-ún, ẹrù rẹ wọ’*, *ó dá wọn lóhùn, ó ní, ‘òkè lẹ́ n wò, ẹ ò wo ìsàlẹ́*” translated as, “They said to a lame person, “the load you are carrying on your head is bent, the lame person replied them that they said so because they did not focus downwards but only concentrated on the upper side. This analogy in relation to the thrust of this paper asserts that before one can have a good finishing, the start has to be good as well which all foreground the need to have a solid early childhood education in order to have a quality higher education. This is also captured in the saying that, the traces and signs of a good Sunday will be known right from Saturday. To achieve the purpose of the thrust of this paper, speculative, normative and analytic philosophical methods are utilised in the study of the use of skepticism and certainty in early childhood education for a quality higher education in Nigeria. Speculative method as a systematic thinking is combined with normative method, an axiological-natured method which dwells on standard of values on what is right or wrong, thereby giving prescription on actions that can be considered right or not in the application of skepticism and certainty in early childhood education as a foundation for quality Nigerian higher education. The speculative and normative methods served as backgrounds and complements for the general use of analytic method, which is a breaking down of complex concepts for the purpose of examination and clarification in clearer form.

For a clearer analysis, this paper was delineated into sections starting with this introduction. After this, the definitions and descriptions of skepticism and certainty were given and treated in line with their connection to education. The need for using skepticism and certainty in ECE was discussed which led to a description of the use of skepticism and certainty in ECE as a foundation for quality tertiary education in Nigeria.

Subsequently, the various ways by which the concepts of skepticism and certainty can be utilised in early childhood education for laying solid foundations for quality tertiary education were discussed, which include the incorporations of the concepts in the pedagogies of children in their cognitive, affective and psychomotor stimulations which all served as means of preparing children for quality higher education for the benefits of the children and Nigeria as a whole. Based on the polemics of the paper, a conclusion was later drawn in addition to a recommendation for a strong commitment towards early childhood education which would culminate to quality higher education in Nigeria.

Clarification of Concepts

Early Childhood Education: The level and process of early childhood education (henceforth, ECE) has engaged the attention of many philosophers but for time and space economy, the descriptions of ECE according to Socrates and Froebel were treated in addition to the conception of ECE by Nigerian government. Starting from Socrates, he was quoted to have said that the young should be taken care of first, in order for them to be the best possible adults just as a good farmer properly took care of the young plants first, and after this, of others as

well.¹ The comparison of young children by Socrates to young plants suggested an early childhood care. In clearer terms, his idea is that, children at their early childhood periods should be taken care of, so that they can be the best adults possible. In another instance, Socrates was quoted to have said that compulsion should not be used in educating children as it was counterproductive in the learning of children. He emphasised the use of play and other fun-filled methods in imparting knowledge to children which he called amusements, and that, it was only through play as a method that positive results could be achieved which he called, the natural bent. That is, a kind of learning that is fun-filled which achieve the best result for children.²

Froebel asserted that each child at birth has internal spiritual essence which were brought into external manifestation through the child's self-activity. He made the following postulations on child's learning at an early stage:

1. Learning started as soon as a child's consciousness begins. This means that education of the child started at birth.
2. He created the idea of kindergarten which according to him means a garden of children where children can observe and interact with nature, and a garden where they can grow and develop in freedom.
3. Play is the highest expression of human development in childhood due to its ability to make the child express himself/herself freely.
4. The child's health, physical development, the environment, emotional well-being, mental ability, social relationships and spiritual aspects of development are very important.
5. Many construction toys were developed by Froebel. The most popular of his invented toys are gifts/ball, cylinder, cube and the building blocks.³

The deduction from the two philosophers examined is that ECE is very important. Learning begins at birth and should be given a strong commitment in order to have a strong and sustainable future for the society. Aside the quoted philosophers, Nigeria as a country also has its own description of early childhood education as contained in its national policy on education. Nigeria's early childhood education was described as the care, development, and education given to children up till four years in a crèche or nursery.⁴ The objectives of this level of education in Nigeria include preparing the child for primary school in the form of maintaining an easy change from home to primary school, providing committed care for children while their parents are at work, that is, standing in the position of the parents, pending when the parents will return from their official engagement, providing moral and social training, and using methods of music, toys, art and nature study for the development of spirit of inquiry and creativity in the child, and the teaching of numbers, letters, colours and shapes through play method. For the purpose of this paper, early childhood education as described in Nigerian national policy on education is the definition adopted.

¹ [http://www.literaturepage.com> readsocratesideaofearlychildhoodeducation](http://www.literaturepage.com>readsocratesideaofearlychildhoodeducation) (Accessed May 29, 2023)

² MLA Plato, *The Republic* (New York: BOOKS, Inc, 1943)

³ Early Education. *Fredrick Froebel*, earlyeducation.org.uk. 2021 (Accessed, Jan 27, 2023)

⁴ Federal Government of Nigeria, *National Policy on Education* (NERDC; Lagos. 2013).

Skepticism and Certainty Explicated

On the surface level, when it is said that one is skeptical about something, it means one doubts the authenticity or the truth of that particular fact. The meaning of skepticism in philosophy also goes in line with an act of doubting something. Skepticism, in western philosophy is the attitude of doubting knowledge.⁵ Philosophical skepticism arose when there are some degree of doubt regarding claims that are elsewhere taken for granted. That is, there is doubt because the views are not justified.⁶ Synonyms for skepticism include doubt, distrust, mistrust, query, reservation, suspicion, uncertainty and disbelief.⁷ Deductions from the philosophical definitions of skepticism revealed that claims are not just accepted in philosophy but have to be in the first instance doubted so as not to accept the claim dogmatically which is not in congruence with philosophical tradition.

A type of skepticism is philosophical skepticism, which is an approach that questions the possibility of certain knowledge. Philosophical skepticism is further sub-divided into two categories of radical philosophical skepticism, which is a type of skepticism that denies that knowledge or rational belief is impossible and urge us to suspend judgment on many or all controversial matters. The second type of philosophical skepticism, moderate philosophical skepticism claims that nothing can be known with certainty, or that we can know little or nothing about non-empirical matters, such as whether God exists or not, whether human beings have free will, or whether there is an afterlife.⁸

Aside the philosophical skepticism and its subtypes, another type of skepticism is known as scientific skepticism which advocates for testing beliefs for reliability by subjecting them to systematic investigation using the scientific method to discover empirical evidence for them. There is also Cartesian skepticism, propounded by a modern philosopher, Descartes, whose ideas were considered revolutionary and radical. He was one of the first to question the existence of the world through his skeptical doubt. His skepticism doubts not only bodily things but also takes a universal form. It does not only question events and experiences but also the existence of the world. The views of Descartes if examined suggests a thorough scrutiny of events/phenomenon before a partial or complete certainty can be achieved.

Of all the types of skepticism, radical skepticism was singled out for critique by St Augustine. Radical philosophical skepticism which borders on suspension of belief was critiqued by a famous middle ages philosopher, Augustine who criticised the radical aspect of philosophical skepticism using an illustration of an adulterer who suspended belief that adultery was bad and committed adultery with another man's wife because it was persuasive to him. He stated further that under radical skepticism, this man could not be charged because he acted on what was persuasive to him without asserting belief.

⁵ Stanford Encyclopedia of Philosophy. *Skeptism*. <https://plato>stanford.edu>entry>

⁶ Duncan Pritchard. *Contemporary skepticism*. iep.utm.edu(Accessed October 18, 2023)

⁷ Dictionary.com *Synonyms of Skeptism*. <https://www.dictionary.com>

What can be deduced from the position of Augustine on radical skepticism is that, while other types of skepticism can be said to be in congruence with morality and development, it is dangerous to imbibe the teachings of radical skepticism as it may lead to unproductive outcome. One may ask that, if it is said that it is in order to exercise doubt on any phenomenon which many people refer to as benefit of doubt, how can the doubter then assert the authenticity of the doubted claim or belief as it does not add to knowledge if the claim remains doubted without any method of ascertaining which is the truth. The adventure in this aspect leads to what is called certainty in philosophy which is analysed in the next subheading.

Certainty Explicated

Certainty also known as epistemic certainty or objective certainty is the epistemic property of beliefs which a person has no rational ground to doubt. One standard way of defining certainty is that a belief is certain if and only the person holding that belief could not be mistaken in holding that belief.⁹ Certainty was also defined as a lack of doubt about some state of affairs. An example was given that, if one has no doubt that the earth is the third planet from the sun, then, the person can be said to be certain of that fact.¹⁰ Like skepticism, certainty is also of various types. Psychological certainty means that the person holding the belief is supremely convinced of its truth. Certain issues in this sense is defective as the person holding the belief is psychologically incapable of giving the belief up. For example, a mother might be incapable of giving up a belief that her child committed murder and therefore tortured by doubt. Aside the psychological certainty, there is also a form of certainty known as, epistemic certainty in which the belief in this sense has the highest epistemic status which may be and may not be accompanied by psychological certainty.¹¹

The deductions from the concept of certainty are, one, when one is sure of a fact, then one is certain about it. Two, psychological certainty is not reliable as the person involved might have positioned his/her mind to believe that a claim is certain even if not so, just like the example given of a woman who was incapable of giving up a belief that her child committed murder and therefore tortured by doubt. Drawing inferences from these assertions on skepticism and certainty, it can be stated that skepticism is a very useful tool to ascertain knowledge. That is, after one has exercised doubt on certain claim, the doubt will then spur the next action of finding a way of proving the doubted claim, which leads to the attainment of certainty. Without going into complexities of involving the complex types of skepticism and certainty - in this aspect, referring to radical skepticism and psychological certainty which may be defective in bringing out the best from the two concepts, it can be said that the concepts of skepticism and certainty in philosophy is a process of arriving at a confirmed knowledge. That is, the act of being skeptic leads to the act of being certain. In the light of these, the educational usage of skepticism and certainty in any educational settings can be illustrated in the form of:

Science Practical: The science students in various institutions are in the habit of conducting practical to achieve certainty. This comes under a form of skepticism known as scientific

⁹ Ibid pg 4

¹⁰ John M, Frame, *Certainty*. frame-poythress.org. 2012(Accessed October 13, 2023)

¹¹ Stanford Encyclopedia of Philosophy. "Certainty" <https://plato.stanford.edu/entry>

skepticism which advocates for testing beliefs for reliability by subjecting them to a systematic investigation by using the scientific method to discover empirical evidence for them. It is because there was skepticism that led to the quest for evidence to achieve certainty. For example, in Agricultural Science, it is said that it takes three months for maize to reach harvest time. Being skeptic about it is fine and a practical can confirm or debunk this by planting maize's seeds and monitors its growth. If it is confirmed, this leads to certainty that it takes three months for maize to reach harvest time.

The Use of Teaching Aids: A pupil is told that two plus two will give four. This can be doubted by the child and therefore the teacher can make the pupil and himself be certain by using teaching aids as can be exemplified in the use of counters. Two stones and another two stones can be counted together to achieve certainty that $2 + 2 = 4$.

Research Work: All research works have their method of reliability and validity test to be certain that the research measures what it is supposed to measure, and this is another area where skepticism leads to certainty. The certainty after running the validity and reliability tests will then lead to certainty that the research can measure what it is supposed to measure in addition to being reliable. The next subheading treated the need for using skepticism and certainty in ECE and thereafter explained the use of skepticism and certainty in ECE as a foundation for quality tertiary education in Nigeria.

Issues with Existing Teaching Methods in Early Childhood Education

The common methodology with children's teaching in Nigeria has been that of rote learning. Rote learning is a kind of system whereby the caregiver/teacher stands in front of the class, say something and ask the children to say after him/her. This method is a form of parroting in which certainty cannot be ascertained whether all the children understand the lesson or not. In the aspect of cognitive gains, there may be some gains but one is not sure that all the children benefited. In the area of affective learning, efforts have not been particularly geared toward ascertaining the emotion status of children as the rote learning could be so rowdy that the teacher may not take care of the emotional status of all the children and a fact is that, when the emotion is affected, there cannot be effective learning in line with a Yoruba proverb, "*Inú dídùn ló n ò mórí yá*" translated as, "Happiness boosts emotion".

On the psychomotor gains of children, most of the nursery schools which are in the hands of the private sector operate in uncompleted buildings and unsaved environment without enough space which do not give room for children's play activities to ascertain certainty of psychomotor fitness of children. Play equipment that can ascertain children's fitness like merry-go-round, see-saw, swing, and the like are lacking in many of the ECE centres. Operating ECE programmes where there is no appropriate playground in terms of space, well grassed field, suitable and safe play materials are impediments to ascertaining the psychomotor gains of children. It is in the light of all these doubts and certainty on children's learning that this paper is conceived as an explication of the merits in applying skepticism and certainty in children's learning for effective learning outcome.

The Application of Scientific Skepticism and Episteme Certainty in Early Childhood Education

In order to lay a solid foundation for Nigeria's qualitative higher education, the foundational level of education, which is the early childhood education needs to be given committed attention by stimulating and developing the domains of learning in children, which leads to a suitable beginning for a quality higher education. The application of skepticism and certainty in their simplest forms of scientific skepticism and epistemic certainty can be suitably applied with children at their early years which are treated in line with the three domains of learning of cognitive, affective and psychomotor development in the next subheading.

Application of Scientific Skepticism and Epistemic Certainty in Cognitive Aspect of Children's learning.

In applying the concepts of skepticism and certainty in children's learning to ascertain cognitive gains, examples of literacy and numeracy learning are given thus: In teaching the children the numerals, take one to ten for example, skepticism can be done and certainty achieved in the form of using big, colourful plastic-made version of each of the figures. The figures are then shown and given to children which is a way of achieving certainty. As children admire and play with the figures, they are getting used to the shapes of the figures and learn better which eventually leads to certainty. In teaching simple addition, skepticism and certainty can also be achieved in form of using counters like bottle tops. For instance, $4 + 4$ can have the arrangement of four bottle tops separately and counted together which made the child ascertain the answer as 8. Small sticks or stones can also be used as counters.

The usefulness of exercising skepticism and achieving certainty by the use of these teaching aids is particularly useful in ECE as children at early years learn better when teaching aids are used to ascertain the learning. The step before the use of teaching aids in the first instance can be said to be the skeptic stage but ascertained by using teaching aids to remove all skepticism and this stage can be called the certainty stage. In teaching subtraction, $4 - 2$ can be done using same process by having the children take four stones/sticks/bottle tops as the case may be and thereafter remove two out of the four and be made to count the remaining ones which are two. In the same vein, the literacy aspect can also follow same process of application of skepticism and certainty. For instance, while teaching the children the letters of the alphabet, the letters can be converted into a song which made the lesson interesting and permanent as children are in love with songs. While they are singing, learning also takes place simultaneously.

Application of Skepticism and Certainty in Affective Aspect of Learning

The social and emotion of children can also be stimulated using skepticism and certainty. For instance, a handler of children is into skepticism on whether the children are happy or not, this can be ascertained through the use of songs. An example of such songs goes thus:

If you are happy and you know clap your hands (X 2)
If you are happy and you know, and you really want to show,
If you are happy and you know clap your hands.

The certainty tool in this song to test the emotions of children can be noticed from the response of each of the children. For instance, a child that is not clapping or not singing has his/her emotions tampered with in a way which can be in the form that, the parent at home did not treat

the child well, did not give the child food or the child is ill. After the achievement of certainty has taken place, the caregiver/ teacher of children takes appropriate actions.

Application of Skepticism and Certainty in Psychomotor Aspect of Learning

Another area of the use of skepticism and certainty in ECE for laying the foundation of quality higher education is in the area of the physical development of children. The certainty in the psychomotor wellness of children of early years' class can be achieved with the use of diverse play equipment including merry-go-round, swing, see-saw, and slide. In using a see-saw for example, the play equipment is made in such a way that it can take two children at a time and each child exerts weight/force where he/she sits which made him /her lift the other child up and vice versa. As for slides, each child climbs to the top of the slide and slides down as dictated by the sloppy structure of the material. All these physical exercises have a way of developing the larger muscles of children, known as gross motor development. There are also exercises that can stimulate the small muscles known as fine motor skills. The development and stimulation of fine motor skills in children can be done through the methods of scribbling, writing, drawing, and using scissors to cut papers. These learning processes are in the veins of giving developmentally appropriate skills and development to children in preparing them for other levels of education which terminates at tertiary education level.

Recommendations

- Based on the polemics of this paper, it is pertinent that care and education of children should be accorded priority, being the foundation level of education. Such priorities include the use of appropriate pedagogies, especially the system of skepticism and certainty as treated in this paper in order to be certain that the foundation education was not only given but given appropriately in such a way that all skepticisms regarding the foundation have been removed and there is certainty that a solid foundation has been laid for Nigeria's higher education.
- There is the need for a well-coordinated inspection of early childhood education centres which are presently in the hands of the private sector in which many of them are after the money they want to make from parents and paying little or no attention to the issue of certainty on the education of the children
- Government's responsibilities to maintain standard in ECE centres should include a periodical workshops for the owners and the teachers of the children's schools and sensitise them on the need to maintain standard as discussed in this paper.

Conclusion

Attempts have been made in this paper to treat the concepts of skepticism and certainty in philosophy as useful tools in ECE for laying a solid foundation for Nigeria's higher education. The study revealed that skepticism which leads to certainty is useful in education endeavours and has been applied in research, the use of teaching aids and science practical. The study also revealed that the use of skepticism and certainty can be applied in ECE to aid children's learning in the cognitive, affective and psychomotor domains of learning which subsequently culminates to laying quality foundations for Nigerian Tertiary Education.

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