METAPHYSICAL POSTULATES OF EDUCATIONAL PRAXES: APPEAL TO THE FIRST PRINCIPLES OF METAPHYSICS AND THE PRINCIPLES OF BEING.

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ABSTRACT

This study sought to investigate the metaphysical premises upon which educational praxes situate themselves. The study contends that education is a metaphysically laden activity. It uses analytic and speculative methods to pinpoint areas of metaphysical concern with special interest on the learner and the learning process. The study proceeds by elucidating metaphysics in relation to education, then analyses the first principles of metaphysics and how each one of them inform education praxis. In the second section the principles of being are discussed and applied on education. These principles include Potency and act, essence and existence, and causality and participation. The conclusion drawn in this study, points to the fact that education revolves around a composite being(with form and matter) and so cannot be handled simplistically , an Essential being and so its universal value should not be eroded during education and existential being with individuated experiences; pedagogical or otherwise.

KEY WORDS

Metaphysics, Contradiction, Substance, Accident, Form, Matter, Cause, Participation

1.0. INTRODUCTION

1.1. Back ground of the Study

Education is a process that is deeply embedded in theory, such that its collapse and irrelevance are made manifest if its theoretical foundation is not well ordered. The ordering of the educational theoretical foundation is best done by Philosophy especially educational philosophy. Abiogu (2014) observes that without philosophy, education may not achieve its envisioned goal of individual and national development. This assertion is further supported by Barker(1986) who posits that any system of education is expected to reflect directly the philosophy of the people for whom it is designed. It should however be noted that Philosophy is a very wide field such that

not everything philosophical may be relevant in ordering of education. It is categorized into General Philosophy, (which include but not limited to slogans, objectives, goals, general statements, quotes of famous philosophers, traditions and customs) and technical philosophy (formalized, westernized, systematized and highly specialized philosophy) (Njoroge and Benars 2001).

For purpose of precision, this study focused on Metaphysical aspect of technical philosophy. The other branches of technical philosophy will still be of use as reference points for deeper analysis of metaphysical issues in education. They include Logic (the study of reasoning, axiology (the study of moral and aesthetical values), and Epistemology (study of knowledge).Due to its nature Education seems to easily fit in with epistemology because it deals with knowledge and axiology because education is a value laden activity (Reference).

 The implication is that educational systems become victims of the undesired consequences of metaphysical errors in methods, content and teacher learner relations. One of the biggest flaws is the persistent dichotomization of the learners and the curricula into systems. Such kind of arrangement destroys the holism that a learner is.

1. 2. Objectives of the Study

i.   To examine the Educational Implications of the First Principles of Metaphysics

ii. To investigate the aspects of Principles of Being inherent in Educational praxes

1.3. Research Method

 Two research methods were dominant in this research, Analytic Method and Speculative Method. Nonetheless other methods like descriptive methods were not totally excluded. Analytic method focuses on concepts and their meanings (Barker, 1986). It aims at offering clarity and

logical basis for argumentations. Analytics has been used to simplify into manageable pieces, sets of metaphysical terms not so much isolation as it would be in a pure philosophy research, but in the context of educational thought and practice. Speculative Method on its part involves the stretching of the power of human reasoning with the objective of attempting to answer questions that do have ready -made answers. As such, it's the best method for this research, being a metaphysical study and thus stretching beyond the perceptual or empirical activities. Njoroge (2001) and Akinpelu (1988) observe that this method is best used in theoretical debates and in formulation of theories of teaching and learning. In this study it has been used to penetrate the grey area that is beyond the scope of empirical investigation.

2.0. METAPHYSICS

The term Metaphysics is derived from Greek word *Ta Meta ta Phusika* which means beyond(meta) nature(Phusika).It is the branch of technical philosophy which studies reality, its nature and the ultimate causes in absolute and general sense (Mattei, 2007). Metaphysics is as such considered as *philosophia prima* (First sense Philosophy or philosophy in the most pure sense).There are many problems that metaphysics addresses itself to including the Problem of Being, The Problem of Substance, The problem of Essence and Existence, The problem of Universals, The Problem of appearance, The problem of Freedom and Determinism, the problem of change and permanence among other (Enoh, 2003). While this study implicitly or explicitly touches on some or all of the afore-stated issues, it lays strong emphasis on First Principles of Metaphysics and Principles of Being.

2.1. THE FIRST PRINCIPLES OF METAPHYSICS: EDUCATIONAL IMPLICATIONS

The first principles of metaphysics refer to the rules of thumb used in metaphysical studies. These principles have direct influence on the theory and practice of education. Mattei (2007) list the following principles; The principle of non-contradiction, The principle of identity, the principle of the excluded middle, The principle of sufficient Reason, the principle of causality, The principle of Intelligibility..

2.1.1. The principle of Non-Contradiction

This principle sates that "a thing cannot at the same time be and not be" (Mattie, 2007). It serves to abolish contradictions as much as possible because contradictions are absurdities and consequently undesirable, yet that which is logically desirable is better than that which is not. The *Yin Yang* philosophy and dialectics which either consider contradictions as part of reality or simply deny contradictions exist (Hang, 2013)**.** In logic a contradiction is a set of propositions that are mutually exclusive and as such cannot be held conjunctively and if by chance it is held its leads to automatic Falsity of the whole set (Odhiambo, 2003). For instance it cannot be the case that that X is and X is not at the same time. In the field of education contradictions abound. Three major ones are here in discussed.

Passive Learners: It may not be uncommon that in some institutions and educational systems learners are treated as passive recipient of information (Freire,1993) and as such attributing passivity to their substantial nature yet metaphysics conceives a learner as a human being, properly so by virtue of being active, or being an *act* (Mattei, 2007). He is a reflection of God who is *Purus actus* (pure act) (Aquinas, Trans, Borruso, 2001). As an *imago Dei* the learner is expected to be exposed to learning methods that evoke mental, spiritual and physical activities.

So it cannot be the case that the learner is an active being (x) and not an active being (not x). One of the two must face exclusion, and most reasonably the unnatural one; the passivity.

Secondly, the concept of teaching as profession evokes contradictions. Generally teachers consider themselves as professionals and confidently so by virtue of having undergone training in teaching and possibly due to salaries they earn. Kibera and Kimokoti (2007) substantiate this point by asserting "…teaching is the largest and probably the most important profession in the world". The contradiction however is hidden in the premises that are supposed to support this proposition. They mutually exclude the proposition itself instead of supporting it, especially in third world countries: First premise is that a profession is expected have highly specialized body of knowledge yet most of the skills teachers teach can be learned/has been learnt by the general populace who were taught by the same teachers and perhaps are better than their teachers. For instance primary school mathematics and languages can be taught by parents or other professionals with much ease given they went through educational system in primary and secondary schools. The existence of Untrained Teachers whose work may be appreciable also acts as an evidence that the first time a learners steps into a classroom he could as well have begun training as a teacher, at least content wise. Secondly a profession is expected to have a high degree of power and autonomy and as Kibera and Kimokoti (2007) and Enoh (2003) put it, members of a profession are expected to make critical decisions about their professions which are not normally the case. In third world countries and some developed countries for instance, teachers are victims of decisions, rules and policies, including code of ethics, formulated by non-teachers or persons with little interest in pedagogical activities**.** The accruing contradiction then is teaching is an autonomous profession(x) and at the same time it's not autonomous (not x). Thirdly, members of a profession are expected to be committed to their profession. Their job

becomes their life style because of the joy they receive. Teaching however, is no longer a source of prestige; it's instead simply a means of financing higher studies or transition to a different career. Commitment levels are low (Kibera and Kimokoti, 2007).

2.1.2. The Principle of Identity

This principle states that "every being is determined in itself, is one with itself, and consistent in itself" (Mattei, 2007). Self-determination, inherent unity and inherent consistency are metaphysical qualities that give the most profound, ultimate nature and identity of a being. Self-determination means that any being in so far as it is a substantial being forges itself into whatever it wills and at its convenience. Inherent unity refers to non dualization, non-dichotomization or non fragmentalization of an entity.

A being that is consistent in itself has an inherent unity that persists beyond time and space. In education this principle can well be explained by the psychology of inheritance. Teklemariam(2008) observes that heredity gives us our inborn talents, physical and mental mechanisms with their strengths and weaknesses. He further observes that heredity confers individual uniqueness and similarity to fellow men and women. In this case therefore as long as each leaner has genetic differences they are unique and have identities proper to them. An ideal educational process respects this uniqueness and takes the patience of dealing with each learner not as a drop in an ocean but as an entire ocean. Apart from hereditary identity, a learner's identity is also shaped by his environment. Understanding a learners' environment is understanding the learner. Therefore a leaner is not just a natural entity; he is also a *nurtura*l entity.

2.1.3. The principle of the excluded middle

It contends that there cannot be an intermediate between contradictions (Mattei, 2007). Contradictions logically exclude each other because they are not only opposite each other but also divergent from each other .They pull in the opposite directions by necessity In logic contradiction may be expressed in terms of (p. −p), where p is place holder for an affirming proposition, the (.) expressing a conjunction and −p expressing a negating proposition . Contradictions are thus contradictions, and stay separately as such. The moment an attempt to synthesize them is made; the result is logical and metaphysical flaw. For instance the question of corruption in educational leads to an axiological dilemma however much stake holders attempt to reconcile it with what is right. When a learner fails to achieve in a certain test, such learner has simply failed to achieve, and justification for the failure can be provided. But in some cases it turns out that a learner who has not achieved a certain mark is made to achieve it through an intermediate influence such as financial favours, sexual favour, promotions .At the end of it all we then assert that the learner L failed his exams (explicit) and the same Leaner L passed the exam (implicit). The conjunction between (L.-L) is only possible as a matter of absurdity: Some of the related absurtidies in this case would be sexual favour, monetary inducement, and unfair promotions. Otherwise logically speaking such a state of affairs is impossible. The effect resulting from admitting such a position, of introducing intermediates between contradictions is that ethical dilemmas come about; questions such as "is it right to pass exam because you bribed your way out or failed exam because you did not have with you did not bribe?

Exam passing, deontologically speaking is not an effect of an extraneous cause. It is instead biconditional logic: that L passes an exam if and if only L's passing of the exam has a substantial cause necessarily related exam passing.

2.1.4 . The principle of Sufficient Reason

It states that everything that exists has sufficient Reason for its existence (Mattei, 2007). Reason refers to justifications or premises behind a proposition. In other words reason is a cause behind an effect. For instance the cause of 4 can be 2+2, or 3+1, etc. The cause of draught is deforestation. The reason for drop out from schools could be poverty or parental negligence et cetera et ceteri. Among the many reasons of things there is a reason that supersedes all of them—the sufficient reason. Sufficient reason is therefore a *ratio rationarum*, an existential concept deeply embedded in metaphysics of causality. It is the *prima causa* (first cause). A discipline master who receives a case from a student does not make judgment at first sight. For instance a student P accuses student Q of slapping him. The teacher who in this case acts as *juris* armed with metaphysical jurisprudence investigates by prodding and cross examination until s/he finds the sufficient reason.

In some scenarios teachers punish at first sight because they may be incompetent metaphysically or as a way of getting rid of a complex issues. Failure to metaphysically investigate learner's issues has led to feeling of injustices and reproach from students who may opt for other unorthodox means of resolving their predicaments.

2.1.5. Principle causality

This principle states enounces that "whatever comes to be has a cause" It means that nothing that is, is self-caused and that there is a prior entity that acts to produce an effect. A cause on its part "Is that from which something else proceeds with dependence on being" (Mattei, 2007). There are four major types of causes stipulated by (Mattei, 2007) namely Efficient cause- that by which a change is brought about in order of execution, Material cause

(that out of which a new being arises, formal cause, the act by which a material substratum is determined towards a new being, and final cause –that of which something is or becomes. In education causes and effects are glaring for example its claimed that violence in family is cause of poor performance, lack of life skills especially critical thinking (Kauka, 2015).

It is worth noting that not all causes are true causes. Some causes are real, others are only apparent. To distinguish between the two, learners and teachers undertake serious and critical investigations without prejudices, misjudgments, and trivialization.   ).

2. 1.6. Principle of intelligibility (Cognoscibility)

This principle states that "everything that is, in so far as it is, is intelligible" (Mattei, 2007).Something that is intelligible is one that is understandable, it can be mentally grasped. This principle has a cognitive backing and as such is related to epistemology (Nyasani & Ogwora, 2010). They further observe that "No knowledge whatsoever can be valid and sustainable unless it is made to rest on firm epistemological foundations". Therefore whatever lays claim of existence must be an object of the mind of the knower. That is, it must pass valid cognoscibility test. Education is charged with dispensing knowledge but it requires epistemological investigation to determine real knowledge, the nature of knowledge, the limits of knowledge and the structure of knowledge. When epistemological concerns in education are satisfactorily tackled then educational merits and demerits can be evaluated meaningfully. Otherwise pseudo knowledge masquerades as knowledge.

a) Structure of cognition and Education

An understanding of the principle of intelligibility necessarily leads to the appreciation of the cognitive structure. Cognitive structure as propounded by Lonergan is a three tier level entity beginning with Experience(sense knowledge), Understanding (comprehension) and the highest level being judgment (Cronin, 2005).

i) Experience

At the level of experience, the knower, who is an existent entity, possesses biophysical structure that enables him to perceive material objects of knowledge using sight, touch, test, smell, audio senses. This state of affairs is in congruence with realist philosophy of education and the epistemological postulates of Aristotle, Berkeley, and Thomas Aquinas among others. In education this rhymes well with the acquisition of scientific knowledge especially in physical and biological sciences. These sciences are best learned through senses…seeing, smelling touching. Such knowledge is best learnt when physical existences are appreciated.

Aside from science, in ideal teaching even abstract subjects employ the use matter and sense perceptions since it is in all humans to perceive before conception. Kiruhi, Githua & Mboroki (2009) observe that preparing to teach means "organizing, learning experiences for lea4ners for them to acquire intended knowledge, skills and attitude". They further that emphasis is on learning experiences,

Organizing learning experiences in our modest interpretation is achieved through teaching document called lesson plan. In the lesson there is a column for learning resources to be used

during the lesson (Kiruhi, Githua & Mboroki, 2009). Most of the learning resources are perception,

Sequencing of learning resources requires that before abstraction the beginning point of teaching should be perception based. This could include use of audio visual resources, tangible resources all that appeals to senses

In the introduction section teacher tactful creates anticipatory set of resources stop capture attention of students and the main concerns how to get the learners mind to transit to

ii) Understanding

According to Lonergan understanding is the questioning of experience. It's also the searching and inquiring attitude. (Lonergan, cited in Cronin, 2005). This kind of questioning is however untaught, detached and unrestricted desire to know how it looks for the following:

Causes, reasons, explanations, correlations, classifications, definitions, divisions, hypothesis…

This level is the initial level of distinction between humans from brute animals. It is the beginning of intentional and subjective thought. Thinking is properly human. Lonergan however insists that at this level thinking should not be formalized but spontaneous. (Lonernagan, as cited in Cronin, 2005) this is because formalized thinking cages the mind and thus interfering with free thought. A teacher therefore is challenged to creatively figure out ways in which learners can be facilitated to   naturally and feely pose questions. Facilitation teaching methods like problem solving, concept mapping, reflective discussions, …are learner centered and therefore allow a teacher to simply guide and support schemes used by learners in seeking new knowledge, self-directed and self-driven understanding learning(Kiruhi, Githua, Mboroki, 2009).

The backdrop against teaching for understanding is the fact that classrooms are never homogenous and there it is not automatic that all needs be addressed. However this issue can be dealt with through maneuvers and overtures to the individual students are employed by a teacher who helps learners relate what they are learning to their own lives. Mutwol (2013)   observe that such a teacher devolves literacy rich class rooms that incorporate a wide range of resources that improve students interests….they ensure that students develops skills of independence, self-direction and collaboration.

The teacher can also design lessons such that it has gaps or half information with leeways to questions. For instance a teacher may purposefully misspell a word or ignore some letters with anticipation that a leaner who is keen will pose questions. This principle is referred to as Gestalt principle. Hergenhahn and Olson (1997) explain this principle by positing that the human mind has the tendency to complete incomplete experiences. As such they fill gaps left. The principle of cognitive disequilibrium also applies in this context. It states that when an organism is confronted with a problem, a state of cognitive disequilibrium is set up and continues until the problem is solved and as such justifying the use of problem solving method(Hergenhahn & Olson, 1997. and Kiruhi, Githua & Mboroki, 2009). Perhaps is from these principles that Paulo Freire is opposed to the 'banking approach of education' because it views the learner as an absolute receiver, a container where the teacher deposits information to be withdrawn during examinations (Freire, 1993). A leaner is also a teacher and a teacher is also a leaner and in acting as a leaner a teacher also participates in posing questions. Being a guide, teacher must be able to pose good questions so that leaners also learn how to pose questions. Paul and Elder ((2011) observe that "it is not possible to become a good thinker and be a poor questioner, (understanding) is not driven by answers but by questions". An avid questioner does not just

question, they question purpose, information, interpretations and assumptions, implications and points of views, accuracy, consistency and logic...among others.

iii) Principle of intelligibility and the level of judgement

At this level, the learner seeks to Affirm or deny that he really knows what he knows. It leads to further questioning referred to as Reflective questioning (Cronin, 2005). Judgement gives a definitive and final verdict on a corpus of knowledge the learners has accumulated. It leads to metanoia or intellectual conversion.

2.2. THE PRINCIPLES OF BEING AND EDUCATION

Metaphysics considers Being as anything that is in whatsoever form or realm, be it physical realm, mental realm, spiritual and even supernatural realm (Jacquette, 2002). From this definition the concepts "thing" and "is" are the foundation stones to the being of any Being. A thing is any entity (latin translation Ens) that exists in reality or otherwise. In strict sense however a thing exists without dependence on another thing, that is, it is substantial as opposed to accidental (Mondin, 2016). A substantial thing is thus that which has constancy and stability in being while an accidental thing is that which has no capacity to exist on its own; for instance, Thought. A thought only exists if there is a thinker therefore it is an accident. In a classroom set up the learner is more of a real thing than the teacher (who plays an important accidental role though). Ultimately the learning process occurs at the volition and the efforts of the learner and not the teacher. If a learner blocks his mind it doesn't matter how much creative the teacher is. Learner is therefore the ENS Substantia (Substantial Entity).

The concept IS refers to the IS-ness, conveniently called Essence. An essence is what it is, to the extent that its existence is manifest in matter and form. To be there is to be perceived and to be conceived. To be Perceived because of matter and conceived because of form (Mattei, 2007). The concept appeals to the visible and the visible in education. The concrete versus the abstract, the empirical versus the rational. In an educational process Essence means mixing cognitivity and pragmaticity in content and method of teaching and learning.

2.2.1. Categorization of Being

Being can either be complex or simple, substantial or accidental (Aquinas, 2001)). A composite being is made up of matter and form while a simple being is made up of form alone whereby by matter is the perceivable aspect while Form is the conceivable aspect. In Supreme genera, Aristotle lists ten categories, namely Substance, Quantity, Quality, Relation, Habit, Action, Time, place, passion and situation. All things that exist, exist in any of the afore stated categories outside of which they cannot be considered as things (Jacquette, 2002). In the theory and practice of education, the learner is an entity that really exists, but his existence must properly be located so that it is clarified how he is treated. If he is an accident then he is treated as an accident, if not then he is treated otherwise.

2.2.2. The Metaphysical Nexus of the Learner

A learner is said to be so by virtue of an activity called learning. Learning is an activity that is essentially mental / cognitive. Any being with capacity to engage in mental activity is a rational being…which means that a leaner is a rational being. But there exist other rational beings;

supreme rational being, pure spirits and corporeal spirits. Learner is cannot possibly be supreme rational being because such a being is Omniscient (All knowing) (Nedoncelle, 1960). An omniscient does not need any extra knowledge, yet a learner goes to school to acquire knowledge. Neither is a learner a pure sprit because pure spirits have only Forms, yet a learner has matter and form, can be seen touched, heard … (Phenix, 1961). This leaves us with the corporeal spirit of which all learners are, since learners have body (matter) and need more knowledge, that's why they go to school. An embodied or corporeal spirit is in lay man's language referred to as human Being (Mondin, 2016) , a being with somaticity and pneumaticity.

When teaching learners therefore, the teacher understands that he is dealing with a composite, somatic and pneumatic being. Such teacher approaches leaner with seriousness, with caution and open-mindedness. Simplistic answers and solutions destroy an aspect of the learner. Based on this philosophy (Njoroge, 2001) posit Cognitive, Creative, Normative and dialogical dimensions of education. Education stake holders rampantly put mitigation measures like physical safety of learners, breaks and rests, midterms, Physical education, the need for teachers maintain contact hours because of somatic aspect. On the other hand pneumatic activities like intellective processes, reasoning, recalling, memory, decision making, critical thinking, inclusion of abstract subjects among others form part of human learning process.

It is therefore inferred that learning is a both-and activity but not an either-or activity. Dichotomized learning and teaching lead to disintegrated learners; though certified but imbalanced. Educating a learner as substance is *ipso facto* totally different from educating learner as accident. An accidental learner is a recipient, a container where the teacher stuffs information. In this case the teacher becomes the substance while the learner exists according to the whims of the teacher.

2.2.3. Principles of being: Potency & Act in Education

Principles of being refer to the guidelines that explain how being can be shared by so many entities and how these many entities while differing from one another can still be similar as beings (Mattei, 2007). They include Potency in relation to act, Essence and existence, causality and participation.

2.2.3.1 Potency and act in Education

Potence is the capacity in a being to receive perfection or perform some action while act is the fully present realization of potency (Mattei 2007). In metaphysics act comes before potence because it requires a being in act to transfer effect on a potence for it to be actualized. In other words, what is potential has all the aptitudes of becoming actual and what is actual was once potency. Education is a process that oscillates between potentiality and actualization. When a child enters a learning system he is potentially an A material. The method and the attitude that the learner is exposed to by the teacher or the society causes actual effects on the learner towards that Achievement or can convert the learner into an E and wasted material. A curriculum designed for an education system may have great potential benefits but when it does not receive the right act, it turns out to be a mess. In cognitive learning, stimulus is a potence and response is the act, concept formation and formal; thinking, concept formation is a potency that is fully realized in formal think, while associative learning and cognitive learning interrelate as potencies and actualities (Njoroge, 2001). The process of moving from potency to actuality is shaped by among others, Conditions for actualization, Range of potentialities, nature of entity, influence of

context, new opportunities and closed paths and types of potentialities. An educational program with keen interest in actualizing potentialities seeks to know the potentialities of the persons to be educated, immerse itself in critical decisions on which potentialities to be prioritized, establish conditions necessary or actualizing chosen potentialities and deploy resources for the same (Phenix, 1961).

2.2.3.2. Essence and Existence

Essence is "…mode or manner according to which reality might be fashioned ….and provides full explanation what a thing is" while existence is "…The primary component of actuality, it is the act whereby a thing is present in nature or in mind" (Mattei, 2007). Essence is more universal while existence is pegged on individuality and particularity of an entity. An educational program that lays emphasis on Essence tends to stress perennial truths and essential human values. It invests a lot in standardization and conformity while existential Approach emphasizes individual and specific methods and is open ton reconstructions (Phenix, 1961).

2.2.3.3. Causality and Participation

Having already discussed causality as that from which something else precedes we hereby by lay more emphasis on Participation as a metaphysical concept and its significance to education. Participation refers to the structural dependency of many entities on one Being (Jacquette, 2002). It implies to receive a part of what belongs to another fuller or more perfect being. A teacher is a human being because he/she participates in humanity. An education system is perfect to the extent to which it participates in what is considered as perfect education. Causality and participation are the philosophical referents that inform answers related to humanities like the origin of man, the meaning of life, whether evils exist among others. In religion and theology

God is considered as the uncaused first cause and the measure upon which what is good or true is measured (Makumba, 2006). Participationism also tends to incline towards existentialism of education and progressivism with the aim of getting the best out of education.

3.0. CONCLUSION

From the investigations that this study sought to undertake, and having established that man in his daily endeavours is governed by metaphysical principles, knowingly or unknowingly, and that these principles so much influence his educational activities explicitly and implicitly, it is therefore permissible not only to conclude that metaphysics is a vital force that stake holders in education need to meticulously understand in order to pump back the *pneuma,* the spirit of learning and teaching, but also to recommend that as many educators as possible be taught elementary metaphysics in general and ontology in particular.

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