

LOGIC AND CRITICAL THINKING: THE MISSING LINK IN HIGHER EDUCATION IN NIGERIA

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ABSTRACT: *Sustainable development and good living condition in the modern world are determined by people who possess more than normal reasoning abilities. The present Nigerian socio-political, economic and technological dilemma therefore results from the redundancy of mind paved by gross deficiency in logic and critical thinking competencies. This deficiency broadly stems from Nigerian poor educational system which has neglected acquisition of reflective and critical reasoning skills in theoretical and practical terms. This hampers critical competence, and results to irrational judgments, biased policies and dishonest governance. Consequently, problem solving and critical competence in various sectors of Nigerian existence have remained a mirage resulting to unsustainable development. This paper analytically investigates the meaning, cradle, essence, relevance and state of logic and critical thinking in Nigerian higher education and existence. The research finds that logic and critical thinking has been negligently relegated to one of those optional General Studies' courses rarely needed to make up the required credit load. As such, not every department of education in Nigeria offers logic and critical thinking. This is coupled with the fact that in some Nigerian Higher Institutions, logic and critical thinking is managed by unqualified staff. The paper as well finds that knowledge of logic and critical thinking is indispensable in the daily human expressions, decisions, right choices and actions. For deficiency in reasoning skills paves way for errors, deceptions, violence and false democracy. The paper concludes that for Nigeria to initiate and sustain true democracy and development, logic and critical thinking should be centrally paramount in her education system because of its quality of impacting critical reasoning skills and competency in the students and citizenry.*

KEYWORDS: Logic, Critical, Thinking, Education, Study, Development

INTRODUCTION

Sustainable development and good living condition rests on constant and consistent critical thinking. Critical thinking is an exercise, a habit, a manner of perception and reasoning that has principles of logic as its fulcrum, and dynamically involves various reasoning skills that ought to be human approach to issues and events of life. Indeed, man can only navigate through varied information, and consistently arrive at required results only through persistent critical thinking. Hence, optimal sustainable development is possible in a political state when the greater number of the citizenry constantly and consistently display a high amount of sound, valid and critical reasoning. This makes logic and critical thinking a prerequisite for human happy existence. This is more so as critical thinking consistently shapes, updates and sharpens human reasoning faculties, abilities, thought, expression and positive actions. In this way, man becomes capable of consistent sound and valid reasoning that produce positive ideas necessary to surmount the vicissitudes of life and initiate, facilitate and foster societal development.

Indeed, the modern world is more complex and complicated. It is a world replete with distractions, diverse and conflicting ideas speedily available through the forces of information and communication technology (ICT). Thus, the forces of the social media, internet and cable networks in their transfer of modernity, secularism and globalisation compound the cosmic order; making it more challenging and in need of extraordinary reasoning abilities and skills. In depiction of this reality, Ramasamy stresses that the amount of complex information available due to technological advancement requires a logical and critical generation that are efficiently competent in formulating essential ideas and processing information systematically. It therefore stands that for sustainable development and good living conditions to be scored; there is need for the citizenry to achieve consistent logical and critical connections between ideas. This portends that the greater number of the population of a state has to critically identify, construct and evaluate prospective proposals, detect inconsistencies and common mistakes in reasoning, solve problems systematically, identify the relevance and importance of ideas, reflect on them, and articulate justification of their beliefs and values in a persistently consistent manner. (Ganiron, 11).

In all these complexities facing the modern world, it is regrettable that Nigerian educational system has no pride of place for logic and critical thinking. Thus, there is evidently a neglect of this important philosophic discipline within the educational training of Nigerian students. The result has been absence of skills; principles and methods necessary for individual performance and competitiveness. The poor logic and critical thinking abilities is again the reason behind the futility of governance, citizenship and sustainable development in Nigeria since independence in 1960. Sustainable development and democracy with its rule of law, representative and deliberative culture, is practically unproductive without logical and critical thinking population. Thus, an ideal socio-political and economic ideology will surely fail in a state replete with illogical and uncritical minds.

Concurring to the above idea, Emenajo asserts that Nigerian higher education needs to inculcate open mindedness, order, optimism, skills, knowledge, meritocracy and logic in the recipients (1). Kassim then supportively argues that logic and critical thinking is a powerful instrument of change and sustainable development in any society where it is introduced and taught in schools (202). It therefore stands that the substantial fundamental nature of man is constant but his experiences and environment are complexly changing. Such changes warrant a corresponding intellectual change driven by logical and critical reasoning (Okafor, 121).

Meaning of Logic and Critical Thinking

Logic is the art of attaining the truth. It is replete with principles and methods that when dynamically, persistently and consistently employed depicts critical thinking. This means that critical thinking is an offshoot of logic that materializes when a thinker displays the rudiments of correct reasoning gotten from logic. This is why Sextus Empiricus asserts that "...if truth is to be sought in every division of Philosophy, we must before all else, possess trustworthy principles and methods of discernment of truth". As such, Logic is a science concerned with the principles of correct inference, valid and sound reasoning. It is the art of discovering falsehood even when they parade as truth.

Because many people are controlled by what Francis Bacon calls "idols" (Russell, 499) or what Socrates calls "unfounded opinions" of daily existence which led to his observation that "...unexamined life is not worth living", there comes the need for logic and critical thinking (Stumpf & Abel, 2). Logic and critical thinking is therefore a course filled with consistent and

persistent trend of correct reasoning, and as well concerned with the science of scrutinization, analysis and proof. In other words, it is the philosophical trend of straight reasoning which is also filled with the determination of whether the claim to truth deserves assent. As such, logic is the study of the methods, formulae and principles needed to distinguish correct from incorrect reasoning and critical thinking is a disposition or attitude to think in independent, rational, reflective and clear manner. It therefore means that logic inculcates skills that aid critical reasoning. This makes a critical thinker persistently inquisitive, open minded, flexible, fair minded and logical to all views in order to arrive at sound judgment.

Cradle of Logic and Critical Thinking

Logic and critical thinking is one of the major branches of Philosophy. And Philosophy generally began from wonder. Plato echoes this in *The Republic* positing that “there is no other beginning of philosophy than “wonder” (Bodunrin, 16). This is wonder about the nature of the universe and man, as well as the place of man in the cosmic realm. This wonder led to curiosity and inquiry through which Philosophers posit rationale behind realities (Eneh, 11). In other words, it was human cosmological and ontological astonishment or puzzle that gives rise to fundamental questions and logical reflections on these questions in search of answers (Mbaegbu, 2). Supportive of this view, Nze argues that even Greek Philosophy commenced with human effort to understand the visible and tangible world in which men live and work. (16). It can therefore be taken that humans at an early epoch awoke from the world of mythical and illogical expressions to that of logic and critical thinking (Mbaegbu, 2).

It was at this stage therefore that Parmenides was quick to observe the self-contradictory ways in which men ordinarily think. Hence, he proffered consistent logical and critical manner of thinking, which happens by approaching things only from the aspect of their being (Nze, 16). This doctrine of being as postulated by Parmenides modified subsequent trend of natural philosophy. Above all, the ontological doctrine of Parmenides paved way for the study of the ideal processes of human thought as a subject different from the general cosmic considerations. This strictly occasioned the development of logic and critical thinking as a separate branch in Philosophy. Hence, subsequent Thinkers like Zeno, Protagoras, Socrates, Plato and Aristotle were influenced by this then developing logical and critical trend.

Like Parmenides, Zeno (489 B.C) discovered logical principles and produced logical and critical theories. These coloured his critical and sound logical arguments in his discourses of the racecourse, Achilles and the Tortoise, the arrow, and the relativity of motion (Stumpf, 19-20).

However, logic and critical thinking became more pronounced in the days of the philosophical Sophists; Protagoras, Gorgias and Trasymachus. This was the epoch Athenian democracy was at its peak under Pericles. The art of persuasion and rhetoric guided by logic and critical thinking became a political necessity for anyone who hoped to rise to the position of leadership (Aristotle, 3). Socrates however deepened the trend of logic and critical thinking. Thus, Socratic tradition became a critical art where probing questions are employed to attain the rational clarification, justification, veracity and logical consistency to claims of knowledge or truth (Wikipedia). Thus, Socrates in his dialectics made use of induction and deduction, and articulated logical theories evident in his intellectual midwifery and universal definition, which are today parts and parcel of logic and critical thinking.

Moreover, Plato was outstanding in discussing affirmations and denials which are also key aspects of logic and critical thinking. Sequel to these, it stands that Greek Philosophers were the first recorded to have applied logic and critical thinking in their inquiries. This is as they formally applied scientific logic which is necessary in diverse knowledge acquisition during their cosmological and ontological wonder, reflections and search for answers to the ultimate cause and existent realities; their constituent elements and existence. Remarkable of these philosophic feats is that rational explanation of realities were displayed with the aid of clear, critical, ordered, dynamic, dialectic and logical reasoning (Agbanusi, 83).

Meanwhile, the lasting contribution in the development of logic and critical thinking was made by Aristotle through his articulation of formal logic (Stumpf, 83). History records that he gathered together the various formulae, methods, laws and principles which has been reflected and taught in the context of reasoning. He further prescribed other necessary laws of thought and principles unifying them into a branch of Philosophy known as logic and critical thinking.

In accordance with Inyama, logical doctrine was further developed in the medieval epoch (225). The medieval logic was characterized by systematic use of syntax and semantics of natural language (Latin) in use at the time. Indeed, logic at this period was regarded as an “art of language” closely associated with grammar and rhetoric, useful in construing the texts of the Bible and of the church fathers, and in reconciling apparent contradictions found in those texts. The medieval logicians developed a general theory of reference that was applied to the formulation of what is now known as quantification theory, a general theory of implication governing logic of propositions and some treatment of problems in the philosophy of logic and language (Inyama, 225).

Outstanding in this medieval logical development was Peter Demian (1007-1072) whose logical constructions questioned the validity of the principle of contradiction in the context of realities within the power of God. Next was Roscelin (1050-1120) who received ecclesiastical condemnation as heretic for contributing to logic of identity and applying it to the doctrine of the Trinity. Inyama holds that Peter Abelard (1079-1142) in his work “Dialectica” systematically contributed the constituents of logical propositions, categorical propositions, syllogism, topical arguments, notion of logical consequence and logical definition (227). With the establishment of Universities of Paris and Oxford in 13th century, the study of logic became a separate course of study within the faculty of arts, and latter faculty of theology in a move to maintain the church orthodoxy.

The efforts of the medieval logicians to develop logic from its ancient status were punctuated by modern Thinkers. Leibniz proposed a logical language coming in symbols and a logical calculus or method of calculation which would together solve socio-philosophical problems. He also stipulated the keen relation between grammar and logic. These were improved upon by an Irish Logician George Boole (1815-1864) who developed the algebra of classes. Following this, an English Logician De Morgan (1806-1871) did work on the logic of relations. The works of these Logicians aimed at reforming logic and critical thinking along mathematical lines. These discoveries were later systematized and restructured in 1910 by Alfred North Whitehead and Bertrand Russell. Their logical achievements formed the content of their epochal “Principia Mathematica”, which is the foundation and framework of nearly all subsequent works in logic and critical thinking. In the “Principia Mathematica”, Russell and Whitehead traced the foundation of various aspects of mathematics to the fundamental concepts of logic. As such, they described mathematics as an extension of logic. Their vision

of mathematics as an extension of logic gives rise to mathematical logic which is today called symbolic or formal logic.

Essence of logic and Critical Thinking

Logic and critical thinking is characterised by principles and methods that guide human reasoning and lead to correct argument or decision. But within the context of logic, critical thinking is also a way of life or lifestyle replete with various dynamic, reflective, critical and analytic psychic abstractions. Within this exercise is constant and consistent application of various logical principles in a result orienting manner. Logic and critical thinking therefore possesses a prescriptive, analytic and service nature. This is in the sense that it prescribes principles, methods, formulae, trends and laws of correct reasoning and is characterized by rational trend of analysis and resolution of logical structures of claims and phenomena.

Indeed, logic and critical thinking is characterized by service. This is why Aristotle describes it as an *organon*; that is, an instrument of thought of other disciplines as well as the science of all sciences (Inyama, 223). Thus, logic and critical thinking is required by other disciplines to formulate and prove their contents. The correctness and reasonableness of such contents also depend on whether they are in accord with the laws of logic. This is why Durant holds that logic and critical thinking is the method of every science, of every discipline and every art (18). The modern Philosopher Rene Descartes describes it as the “mother of the sciences,” which in the words of the linguistic Philosopher Ludwig Wittgenstein aims at the “logical clarification of thought” (Agbanusi, 82). This gives clue that in the nature of logic and critical thinking lays the basis and nexus of human learning and institutions. This is more so because logic and critical thinking substantially possesses those critically penetrating and illuminating qualities needed by other fields of life.

Since logic and critical thinking is applicable to every discipline, it subsists in all of them. Hence logic and critical thinking is prided as an indispensable discipline in the sustainable development of the human person, human institutions, and human existence at large. Supportive of this view, Otakpor describes logic and critical thinking as “Queen of all disciplines” positing that “no Scientist, Historian, Lawyer, Engineer, etc. can afford to present his/her work in a disorderly manner and expect to be taken seriously because to be logical means to be orderly”(5). One cannot therefore consistently construct rational arguments, proposals, bills, policies, determine correct and fallacious reasoning, and embark on steady and systematic implementation without a deep knowledge of logic and critical thinking.

Thus, within the substance of logic and critical thinking are the instruments prerequisite to formulating and analyzing arguments. It then means that logic and critical thinking is the basis of every expression. This is as it determines whether the claim to truth which characterizes an argument, a formulation, proposal or policy deserves assent. Based on these, the essence of logic and critical thinking portends “...the training of the mind to see things critically and to seek the meaning and intelligibility of things.” (Omogbe, 197). In other words, it is in the nature of logic to “...develop the ability of the students to reason correctly and argue rightly...producing graduates with analytical and critical minds who can argue convincingly” (ESUT, 27). The substance of logic and critical thinking therefore comprises of essential techniques which are domiciled in its nature. Application of these techniques in human daily existence is the practice of logic and critical thinking. These important techniques are validity, soundness, justification and proof, which aid the logical form and consistency of every claim and gives rise to the truth and dialogical value of an argument.

Logic and Critical Thinking in Nigerian Education System

Education is one of the fast dying sectors in Nigeria. Abiogu and Enemuoh observe that this is because Nigerian leadership treats education sector as “no man’s land, where every old woman plants mushroom anyhow” (36). Though, education is the most vital tool and pivotal drive for optimum development of a country, it is sad that the attention Nigerian government pays to quality education is minimal. This is evident in the paltry budgetary allocation to the educational sector in Nigeria which is regressively low for such crucial sector of the society. The impact of this is glaring in the geometric growth of non-quality but certified graduates whose impact to the development of the society is pragmatically minimal.

In line with this reality, Dike avers that “out of every 10% of annual budget set for education in Nigeria, only 2% actually gets to the classroom” (1). Consequently, Nigerian education sector is suffering quantum set-backs which is currently plunging it to a state of comatose (Abiogu, 26). Worst hit within the education sector is logic and critical thinking which suffers conscious neglect. Many people allude that this is so because the ruling class abhor a critical society, where the actions of government would be questioned by the citizenry. Some others have also opined that such neglect is out of ignorance of the role of logic and critical thinking in human and societal sustainable development. Whatever is the reason, it is now in the few functional Philosophy departments and General studies divisions of some Nigerian Universities that logic and critical thinking is merely felt. In most of these places, elementary logic which is incapable of impacting lasting philosophical insight in the learners is taught, and at times by unqualified staffs. Consequently, most Nigerian Graduates are grossly faced with difficulties of how to reason correctly. More so, they remain ignorant of the required competitiveness and philosophical approach to dynamic existential conditions after graduation. Particularly, many of these Graduates are incapable of critical and logical psychic abstraction that generates essential ideas which leads to meaningful self-employment amidst the high unemployment rate in the country.

Moreover, it is not out of place to attribute the rise in violence in our society and within academic institutions as a reflection of poverty of critical thinking among the educated youths in Nigeria. People usually resort to violence when they are unable to argue their points or lack the capacity to canvass their thoughts convincingly. The use of force usually is a product of the failure of reason. So one can reasonably attribute the rising rate of violence and ethnic and religious intolerance to the absence of reasoning and critical culture.

Logic and critical thinking indeed ought to give education in Nigeria that desired systematic touch. This is as it is the main ingredient of human capital base and resource development. Conversely, this important discipline receives a minor and optional position in Nigerian educational system. This undesirable position even negates the National Policy on Education (NPE) which views logic and critical thinking as philosophy of Knowledge that guarantees all round improvement in University education (38).

Contrarily again, the Benchmark Minimum Academic Standards for Undergraduate Programme in Nigerian Universities (BMAS) recently jam-packed logic and critical thinking with philosophy and human existence as a semester course only within the General studies division (NUC, 3). A critical look at the content of this merger shows absence of essential logic and critical thinking contents. In addition, the benchmark failed to make it compulsory for all students. It only made it optional, allowing departments to decide whether their students will offer it or not. With the elective and optional position, the Benchmark (BMAS) accorded this

essential discipline, so many Nigerian students graduate without the knowledge of logic and critical thinking. As such, the future of Nigerian state remains unformed. For the State does not possess an independent character. The character of the citizenry composes the character and nature of the state.

Consequently, there has been a steady rise in unseasoned, irrational and uncritical population; citizens who are incapable of initiating valuable ideas and sustaining the human society. As such, the old generation of Nigeria seem to possess better critical mind and psychic capacity to sustain human and national development than the new generation who are products of current Nigerian education. Since the new generation of Nigerians eventually become active members of the society, the logical development in the education sector portends a negative impact on Nigerian sustainable development. The current situation in Nigeria therefore shows that a country whose education sector neglects logic and critical thinking produces an unsound, illogical and uncritical population, who will be incapable of advancing the socio-political, economic and technological sectors of the country.

The Educational Predicament of Nigeria

Education as key instrument of optimum development is far from producing the anticipated goals of worthwhile, meaningful and lasting changes in Nigerian society. This is despite the educational laws, policies, reforms, consensus, reports, and recommendations (Fafunwa, 226). The contemporary Nigerian Universities also compound the problem by concentrating more on teaching students “what to think” and not “how to think”. The basis of Nigerian questions is therefore deficiency in knowledge of logic and critical thinking. This is why underdevelopment persists in spite of the long democratic years celebrated by the media. In fact, most of the “so” educated Nigerians lack critical reasoning which is what underscores a progressive society.

Chukwuemeka Ike in his work, “Chicken Chasers” which is a critique of Nigerian educational system narrated a story of an indigenous academic who resort to Witch Doctors to attain an academic promotion instead of reclining to educational qualification, skills and research. In similar critique, Ezeugwu narrated an incident where a school Principal could not defend himself against the petition levelled against him for illegal collection of levies but resorted to *Shango* (the god of Thunder) (39). The said school Principal even brought the *Shango* Priest to the school premises to pronounce curses and death on his accusers.

The current Nigerian spate of political party defection, politics of no ideology and indiscipline with its tribalistic, nepotic, unpatriotic and corrupt character, as well as its supportive band of citizenry also result from deficiency of logic and critical thinking. The current religious proliferation which encourages redundancy and belief rather than reason and hardwork also results from deficiency of logic and critical thinking. As of 1998, Obiora in his empirical research, “The Divine Deceit”, avers that Nigeria boast with more than eight hundred and thirty one Christian denominations (33). All these and more, point to the fact that most Nigerians are deficient in the culture of logical and critical reasoning and argumentation. For quality education hangs on being consistently logical and critical which suppose to be a life style and a habit. Due to this lack, most Nigerian population is incapable of exercising their psychic abilities in a value orienting way. Since they lacked increased ability and enlarged capacity to scrutinize issues, formulate arguments and to analyze them critically, they resort to myths and dogma, and even follow authorities without inquiring whether the pronouncements of these

authorities can be justified by available evidence. Consequently, Nigerian society lacks objectively and rational actions that propel sustainable development.

Indeed, the Nigerian state does not possess an independent character. The character of the citizenry that composes a nation predicates and reflects the character of such nation. This is why the irrationality conspicuous in Nigeria today is correspondent to the irrationality of her citizens. Obviously, the educational experience in post independence Nigeria is a shadow of the quality critical education recorded in pre-independence epoch. Thus, the dignity of man seems to be lost as public reasoning has declined. In view of the central position of logic and critical skills in human and national development, Asiegbu asserts that education must encompass not only information, concepts, and facts but

also attitudes and values...Our young people will have innumerable value-laden decisions and choices and face the many dilemmas of life...It is important that they acquire the necessary knowledge and skills (10).

Thus, the lot of Nigeria can improve if positive change occurs in the mode of thought of the leaders and subjects (Okolo, 132). Such positive change is propelled by acquisition of logic and critical thinking skills. The utilitarian Philosopher J. S. Mill also gave credence to this reality, stating that such positive change in human mode of thought is achieved through quality education replete with logic and critical thinking skills (Okwu, 47).

Relevance of Logic and Critical Thinking in Nigerian Society

Evidently, knowledge of logic and critical thinking completes the human person. This is as it stimulates the psychic faculties, and equips man with coherent and systematic abilities and skills needed for formulating important ideas and implementing them. Within this function, logic and critical thinking impacts rules, principles, formulae and methods which are indispensable in discovering the truth value and in minimizing error. In a broad sense, the discipline enhances human awareness of relative weights of “varied discursive factors in a particular context” (Baurmann & Lahno, 373). Based on these roles, Ngamen Kouassi avers that;

it is not contradictory to say that logic is to life what oxygen is to life. We all need logic in one way or the other, in one form or another. We all need logic to communicate and interact in the society. Even to be illogical presupposes a logical action or decision...any good sociologist, psychologist, historian, lawyer, ... requires the services of logic. It is only logic that can bring light to the general laws and cannons to which reason must conform (41).

The relevance of logic and critical thinking in Nigerian milieu is today more pronounced. This is based on the need for the citizenry to be aware of their environment and experiences, and as well control situations by actively and reasonably engaging in reflective thinking; which involves assessing what they know, what they need to know, and developing insights that will bridge the existing gap (Okafor, 123). In reference to these roles however, Karl Popper conceives logic and critical thinking as embodiment of principles and ingredients necessary for solving problems in various sectors of life and for sustenance of development (164).

Largely therefore, logic and critical thinking is the basis of true education, which sets people on an ordered part of maximal competence and performance. On this part, a logic and critical population embarks on sound existence which is susceptibly open to hardwork and positive change. Conversely, underdevelopment becomes a trend when a nation wallows in ignorance of logical and synthetic reasoning. In this situation, the material aspect of man takes precedence, casting a nation into the pit of materialism and consumerism. This is the state of Nigeria in present time. Hence, Karl Popper again notes that sustainable development of any nation must link with the education of the citizens and their leaders in art of logic, critical thinking and self criticism (Stelzer, 234). He once more contends that lack of critical and logical reasoning bridles the feeling of responsibility; that humanitarian urge to help, and casts the civil state to a condition of neurosis or hysteria as well as pandemonium, anarchy, and comatose (Popper, 164).

On another note, logic and critical thinking counters non axiological age long mode of rote memorization and regurgitation approach inherent in Nigerian University education. It again reverses the educational approach that focuses learners' attention on what to think and not on how to think. Logic and critical thinking thus trains the human mind in the art of critical investigation, examination, and *a priori* abstraction that result to precise and relevant social ideas which guarantee sustainable development. Within this ambience, it strengthens the human resolve to stand in the right direction with knowledge that reason never fails. This is so because a critical thinker possesses the ability to formulate arguments with vigour and analyse them convincingly to maximum results. Hence, Karl Savich observes that logic and critical thinking instils in the human person the qualities of role playing, simulations, re-enactments, analysis, criticisms, evolving probing questions, situation examination, examination of multiple perspectives, synthesizing and reconstruction of existent realities, group discursiveness, interpretations, maximum interaction, assessment, profundity and discursive approach (2).

In all these, a critical population easily distinguishes valid and sound ideas, vital policies or actions from faulty or invalid ones. And logic and critical thinking then disposes the human persons, and steadies the will towards an ordered process. It even inculcates the principles, disciplines and virtues that enhance human moral order and then builds the human person and the nation. This is the rationale behind Robert Ennis (1987) description of logic and critical thinking as the catalyst behind human right behaviour, and the condition or disposition behind the tendency to think and do something reflectively.

Evidently, logic and critical thinking is a fundamental quality in leadership and followership competence. This is because leaders and followers are constantly faced with information from various sources where they have less expertise (Ganiron, 22). To excel therefore, logic and critical thinking is paramount in processing information, articulating sound judgments and embarking on favourable but dynamic ordered implementation of policies. This results to competence which is central in sustainable development. Thus, conceptualization, vision

creation, planning, implementation of concepts and problem solving successfully depend on knowledge of logic and critical thinking ability (22).

Again, logic and critical thinking makes one capable of taking independent valuable initiatives and decisions. It as well helps in the development of correct personal convictions, principles, attitudes, values and stability of life and character amidst several competing ideas and principles. Therefore, the art of reflective thinking, truth-seeking, open-mindedness, inquisitiveness, systematic and analytic reasoning, intellectual honesty, objectivity of knowledge and action, profundity and cognitive maturity are formed and developed on the platform of logic and critical thinking. Absence of logical abilities and skills therefore fosters absurdities, weakens a political state and results to underdevelopment.

CONCLUSION

Sustainable development and logic and critical thinking are compatible bed-mates. This is in the sense that logic and critical thinking prepares a population for competitiveness and performance that drives democracy, sustainable development, and good living condition. The poor attention given to logic and critical thinking education in Nigeria is therefore the basis of current Nigerian undemocratic democracy, unsustainable development and harsh living condition.

Although, man is by nature imbued with form; innate psychic faculties (Agbanusi, 83), which makes him capable of reasoning (Arua, 6), logic and critical thinking stimulates these psychic faculties making them consistently and coherently functional. Based on this, Ekeh observes that to be logical and critical, strict mental effort and display of acquired logical knowledge and trend are constantly required (48). It then means that logic and critical thinking acts as a catalyst that propels human correct reasoning, and determines human correct and proactive course of action. In this sense, a people are equipped with how to reason and systematic management of thought, expression and action which are instrumental to sustainable human and national development.

The absence of sustainable development in Nigeria today has a grave link with poor logic and critical thinking. The illogical display is even more evident in the apparent disparity between her autochthonous nature and existential trajectory. There also abounds illogical order, pattern and incoherence in the social, cultural, economic, political, scientific and technological sectors. Nigerian predicament therefore thrives on poor knowledge and application of logic and critical thinking. This has impacted negatively on human capacity building and productivity. All these point to the fact that a community of thinkers where the majority will apply sound reasoning can only exist in Nigeria when the educational system is deepened by logic and critical thinking. Thus, a credible reconstruction of the current decadent condition is only possible with logic and critical thinking as a base.

To actualize qualitative education therefore, the agencies which serves as the watchdog of Nigerian Higher education must as a matter of necessity embrace a paradigm shift from mere accreditation czars to quality control and curriculum architects. This will redirect attention to the importance of logic and critical thinking in human formation. It will as well refocus the attention of the future generation from clamour for certificate to critical thinking, which predicates into positivistic and pragmatic actions. For nation building and high performance

occurs when critical thinking, which is the fruit of good and qualitative education is lived out towards improving human way of life and the society (Hojo, 8).

The role of logic and critical thinking in human and societal development is indeed what Plato meant when he taught about kings becoming philosophers (Okafor, 88). Advancing this position, Plato stresses that logic and critical thinking enhances dialectics and human intellectual capacity to understand the distinction between the visible and intelligible world, realm of opinion and knowledge, as well as appearance and reality (88). With this development therefore, Nigeria will steer away from that education which enhances redundancy of the mind, and moves towards that education that breeds the critical mind needed to drive development and self sustenance. This will be so for logic and critical thinking is the highest principle of foresight and intelligent action available to man. It is the much needed cognitive strategy towards thinking clearly, reflectively, independently, rationally, proactively and prospectively.

Since logic and critical thinking portends validity and soundness of thought, judgments and decisions, it means that to exist without consistent critical thinking is to exist without rationality. To exist without rationality is then to incur unsustainable development. This is so because logic and critical thinking is synonymous with rationality, which paves way for idea initiation, creativity, truth discovery, development and proper application of knowledge or problem solving. It therefore stands that the neglect and omission of logical reasoning in Nigerian education system is the foundation of irrationalities pervading the current Nigerian society. For it is on the potent platform of logic and critical thinking that better concepts are formulated, right decisions are made and the will to implement such judgments are strengthened. The remedy to the current national decadence is therefore the accommodation of logic and critical thinking in all the departments of Nigerian University education.

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