

**CREATIVITY AND INVENTIONS AS VERITABLE INSTRUMENTS
FOR FUNCTIONAL EDUCATION AND SELF RELIANCE IN
NIGERIA: A PHILOSOPHICAL PARADIGM.**

Dodo Aminu Yamu
Department of Educational Foundations,
College of Education,
Akwanga,
Nasarawa State.

and

Joshua Isa
Department of Educational Foundations,
University of Jos,
Jos

Abstract

This paper discussed creativity and inventions as veritable instruments for functional education and self reliance in Nigeria; a philosophical paradigm. Concepts such as creativity, invention, functional education and self reliance were clarified. Creativity and inventions were expounded in relation to functional education and self reliance. This was in addition to the discussion on the principles of functional education. It was concluded that the colonial inherited education we received was theoretical and book based with little or no attention paid to the necessity for pragmatic education that is geared towards creativity, inventions and self reliance through skills acquisition. The paper recommended that; activity and practical rather than theoretical education should be provided to the learners, less emphasis be placed on paper qualification as a yardstick for employment among others.

The over dependence on white-collar job which culminates into unemployment as experienced in Nigeria today can be traced to the type of theoretical education given to learners

which has its roots from the colonial era. The colonial government emphasized on the kind of education that was meant to produce clerical staff and interpreters with little or nothing to show in terms of

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science and technology based courses. Most of the schools during the colonial era were grammar schools which were meant to serve the interest of the British Colonial Masters. This was the experience in most African countries including Nigeria.

Based on the above, the Phelps Stokes Commission of 1922 vehemently criticized the Colonial Governments educational Policy in Africa and made concrete recommendations on how to improve Africa Education, (Fafunwa 1974). Creativity and inventions were virtually non-existent in the British colonial educational curriculum. This is in contrast to our traditional indigenous education which emphasized functional education that encouraged creativity and invention through emphasis on development of intellectual skills and acquisition of vocational training and development of healthy attitude toward honest labour (Fafunwa, 1974).

It was in realization of the shortcomings of the Colonial inherited non-functional education that the National Policy on Education (NPE) was first published in 1977 so as to give Nigerians a form of education that could guarantee creativity, invention, functionality, and self-reliance. Accordingly, the Federal Government of Nigeria, through the NPE aptly states that "Nigeria's philosophy of education is therefore, based on the belief that: education should maximize the creative potentials and skills of the individual for self-fulfilment and general development of the society" (FRN, 2009)

To achieve self-reliance as a country, we must be creative and willing to make exploits through inventions and innovations. To actualize this, our educational system must be functional and pragmatic in approach such that we can achieve our national goal of self-reliant nation devoid of poverty, indebtedness, and unproductively.

Clarification of Concepts

Creativity- This has to do with the ability to make or otherwise bring into existence something whether a new solution to a problem, a new method or device, or a new artistic object or form (Encyclopaedia Britannica, 2014 online). This creative ability comes from the ability of an individual's thinking process, which philosophers refer to rational thinking which is rooted in the philosophy of idealism as championed by Plato. To be creative and inventive therefore, is to be idealistic. Good idea, good creativity, good invention which are achieved through functional education.

Invention

Invention may be seen as the creation of a product or introduction of a process for the first time (Grasty, 2015). It is different from innovation which occurs if someone improves or makes a significant contribution to an existing product, process, or service. If a product or a thing is invented, for example, its efficiency and effectiveness are enhanced through the process of innovation through experimentation as

prescribed by the pragmatic proponents of philosophical endeavour.

Functional Education

This refers to education that comes from the child's needs and that which uses the child's interest as a mechanism for activating him and towards his desirable activities. Its purpose is to develop the life of the mind that acts from the wholeness of organic life, with relation to practical life in the present and in the future. The proponents or advocates of functional education include philosophers like Rousseau, Pestalozzi, Froebel, Montessori, and Dewey. In their educational ideas, they give premium to child-centred education where a child's education is given a prime of place in teaching and learning processes.

Self-reliance

The clarification of the concept will help us to understand the concept of self reliance. Reliance has to do with dependence or being dependent. And to be dependent is to be other-directed, but to be self reliant is to be self dependent. Self –reliance is the ability of an individual or nation to do things and take decisions without getting other people to help. An individual or nation that is self reliant is free from the control of another individual or country. A self reliant person or nation is creative, original, self directing, autonomous and independent. Emerson(2015) maintains that self –reliance is the ability to depend on yourself or oneself to get

things done and to meet one's needs. The concept "self-reliance" is synonymous to independence, self-dependence, self support, self subsistence etc. Self-reliance entails that an individual is original in his ideas, practice, way etc. and not being conventional. It means to believe in one's own thought. Philosophers like Plato did not speak what others spoke but what they thought. A self reliant person insists on himself, refuses to imitate and sees imitation as suicidal, but self is promoted over aim above everything.

Creativity and Inventions for Functional Education

The pragmatic philosophy of Peirce, James and Dewey is one of such philosophies that stress the functionality of education. Functionalism believes in the utility or usefulness of education to the individual and collective ends. This implies that knowledge is a means to an end and not an end in itself. It is therefore, pertinent to assert here that functional education is one that emphasizes the imparting of knowledge and skills to an individual which is aimed at making the individual creative and inventive. Functional education should not just aim at making the individual to read and pass examination so as to obtain a certificate, rather it should serve as a means to an end-creativity and invention toward self-reliance.

The Principles of Functional Education

The principles of functional education according to Zeilberger (1999) are discussed thus:-

One has to judge the child from the standpoint of his own world-view, and to describe him in terms of concepts drawn from his experience and to teach him according to his criteria. In other words, one has to relate with him like a person that ought to be respected and nourished. Impliedly, a child is first seen as an individual whose views are expected to be respected in the course of teaching and learning.

Functional education is based on the natural needs of the child to enquire and to know, to observe and to work and play. Functional education seeks to arouse in the child the spirit of love for the good and of work as well as love for knowledge which should not come by force, but rather in a free atmosphere and in suitable learning conditions, the school therefore, is under obligation to create a happy and conducive learning environment for the smooth learning of the child.

The curriculum should be child-centred and not based on principle exterior to the child. The traditional teacher centred mode of education should be discouraged. Adequate attention must be given to the child by parents and teachers to encourage him when he seems to lose confidence in himself based on some ugly prevailing circumstances that may mar his academic progress. Such ugly

circumstances may include family background, peer influence, and social media.

The motivation of a child should not be externally based (like fear of punishment or hope for a reward). Rather, the motivation should be internally based out of genuine interest to participate in teaching and learning activities. The internal disciplines (self disciplines) will substitute the external discipline which may include force as against the child's own volition.

The teacher is expected to stimulate moral and spiritual needs and cooperate with his pupils/students instead of just delivering lectures to them. In cooperating with his students, the teacher will help them in acquiring knowledge through enquiry and self-study which will lead to creativity and invention, culminating into self reliance.

Creativity and invention are products of critical thinking and experimentations. Research has shown that the great explorers and achievers in various fields of endeavour were creative and inventive. The great minds like Socrates, Aristotle, Plato, Einstein, Dewey, Rousseau, Bill Gates, and Wole Soyinka were creative and inventive. These are philosophers who dedicated their lives relentlessly to the service of humanity through services of discoveries in clear practical dimensions.

The success stories of the above mentioned great men of substance owe much to pragmatism, the philosophical movement that

emphasizes practicality. The concept of pragmatism according to Orhungur (2013) is derived from Greek word (Pragma) which means work or action from which words “ Practice” or “Practical” came. Its origin can be traced to the American Philosophers in persons of Peirce, James and Dewey often referred to as the pragmatic trinity. This school of philosophy, as earlier stated, gives premium to achievement through practical experience and experiments. Truth therefore, is what works. In this perspective, true knowledge is what works or functions in practical terms. In other words, functionalism is their watch word. Functionalism in philosophical parlance is conceived as a philosophy that gives practical and utilitarian concerns over aesthetic concerns as the case may be.

For Nigeria to achieve its vision 20:20:20 target, her education should be seen to be functional towards salvaging the unemployment menace that is ravaging the country at the moment. The teaming unemployed youths need to be engaged to avoid youth restiveness through functional education that encourages creativity and inventions in order to make them employable or self-employed which will propel Nigeria towards self-reliance as a nation.

Over-emphasis on paper qualification for white-collar jobs is another cankerworm that is eating deep into the fabric of the Nigerian nation. This is due largely to absence of a formidable educational system that emphasizes pragmatic curriculum

innovation that is tailored towards liberating Nigerians from the bondages of mental and physical poverty. Mental poverty here implies poverty of knowledge and skills that are rooted in creativity, invention, and functionalism. Physical poverty here implies financial and material lack. Therefore, a nation whose education is not creative, inventive, and functional is highly vulnerable to poverty and indebtedness which are clear parameters or indicators of underdevelopment.

The necessity for functional education has been upheld by the Nigerian government as a basis for its philosophy of education just as it is reflected in the nation’s policy on education. Consequently, “education should be qualitative, comprehensive, functional, and relevant to the needs of the society and emerging concerns.” (FRN, 2009). It is on this relevance of functional education to the development of Nigeria that it (functional education) has become one of its operational goals as officially stated in the National Policy on Education (NPE) thus, the operational goal aims at “promoting functional education for skill acquisition, job creation and poverty reduction” (FRN, 2009). No wonder Nigeria has in operation a policy put in place by Obasanjo’s government tagged poverty alleviation programme which was put in place to curb poverty and unemployment through skills acquisition.

Creativity and Inventions for Self-Reliance

Creativity and invention are two bed mates that are inseparable, and both affect one another. Creativity leads to invention, that is, the product of creativity is invention. Any individual or nation that desires to be self reliant must be creative and inventive. If this is the case, then, our educational programme cannot afford to be lukewarm towards the issue of creativity in learners. Odesanmi (2000) cited in Osamudiamen (2009) stressed that no country should down play its educational system especially where it affects creativity and self reliance. The education which an individual acquires should make him productive and self reliant. The education should make him a functional member of the society.

A self reliant individual or nation is one which has the capacity to think, initiate and create something out of nothing. In emphasizing self reliance, functionalism comes to mind. Functional education frowns at laziness and indolence. Dodo (2014) stressed that the natives were not lazy and indolent. They had the capacity to create something out of nothing. This was revealed during the civil war where history has it that the Igbo's, for instance, could fabricate weapons, and bombs from locally made materials to aid them fight their enemies. Palm wine from palm trees was converted into fuel for car use. Although the civil war era was not a good one for Nigerians, but it was an era of technological breakthrough for the

country, unfortunately, this was not sustained after the civil war. If the technological breakthrough was sustained, the country will not be depending on other countries for imported weapons and other things. For anything to be considered as creative and inventive, it must be one that will spring surprises.

The attainment of self reliance by an individual or nation is dependent on the creative and inventive ability of the citizens. Creative and inventive education is expected to produce informed citizens of quality who are equipped with appropriate knowledge, talents, and technical skills groomed with practical dexterity to use their heads, hands, and hearts to produce and operate new processes for employment generation and self-reliance (Ovie, 2011). Creativity and invention are integral to successful living which equips an individual with skill in order to be an effective citizen.

It is worthy of note that individuals who are self reliant are those who are creative, self dependent in judgment, original and different from other individual. Blair, Jones and Simpson (1975) cited in Fati (2012) believe that any one can be creative and can develop creative product or idea only if he can involve himself in some creative thinking. This is why people like Einstein and Shakespeare are known for their outstanding contributions in sciences and Arts. They were self reliant & original in their ideas. In the same vein, the creative thinking of a Rowland

Amadi resulted in his building an aeroplane.

It is obvious that if an individual is not self reliant, he will certainly be other directed, and to be other – directed is to fail to be original and creative in thought, idea and practice. One of the challenging issues in Nigeria is that of unemployment and poverty. Iwuamadi and Ofoegbu (2011) revealed that statistic on national labour force released by National Bureau of Statistics (2009) show that about 9,969,649 Nigerians were depending on government for white –collar jobs in 2009. The analysis of the figure further shows that the highest number of individuals depending on the government for employment falls within 22-44 years of age bracket. This shows that the young people who are vibrant and active are the ones depending on government for employment. This is followed by those between the ages of 15-25 and the elderly of age 45 years and above. What could be responsible for this over dependence of individual on the government for white-collar jobs? Is it that they have no creative ability to produce something that will help them become self reliant? This statistics show that Nigeria as a country is still far from attaining the National goals of being a self reliant country and a country cannot be self reliant if its citizens are not self reliant.

Taking America as an example of a country that promotes pragmatic education, it has been observed that an ideal individual is one who is self

reliant, resourceful, energetic pioneer, one who is able to solve his own problems so as to be able to survive in this challenging society. It is in view of this that the NPE(2004) placed a strong emphasis on building of a united, strong and self reliant nation, as well as encouraging acquisition of competencies necessary for self reliance. Tai Solarin cited in Enoch (1996) observed that, in Nigeria, the spirit of self reliance and resourcefulness has given way to indolence, parasitism, dependence on anything foreign. He therefore, pleads that all Nigerians should shun the spirit of pre-colonial Nigeria by becoming more engaged in useful work.

Fati (2012) stressed that China and Japan were regarded as third world countries, but their creative abilities to invent things moved them from the 3rd world position to development countries. They are today seen as self reliant countries having the capacity to depend largely on themselves. And if Nigeria is to become a self reliant country, it must take a leaf from these countries.

The Nigerian government, in recognizing the need for the individual to be self reliant, introduced entrepreneurial education in her educational institutions. A kind of education that will enable learners to develop creative abilities to be self reliant, this is to make an individual independent, one who can identify and solve his own problems without necessarily depending on anybody to solve it for him.

Conclusion

History of education in Nigeria reveals that the curriculum conference of 1969 was fashioned out to replace the kind of education which was given to us by the colonial government just to produce graduates who rely absolutely on government for white collar jobs. The education was non functional and book based, no form of skill was taught to the learners. The learners could only regurgitate facts from books.

The paper reveals that education should be geared towards making an individual a functional member of his society, one who can contribute to the development of himself and the society in which he lives. Therefore, the Nigeria education must be functional to make an individual self reliant. Functional education transcends reading and numeracy just to pass examination and be certificated, but aims at making an individual creative and inventive so as to be self reliant. Education should be able to produce an individual who is self reliant, self employed and independent. To be able to achieve self reliance as individuals or as a nation, Nigerians must be creative and skillful having the ability to invent things of their own and avoid over depending and relying on other nations for their products and ideas. As a country, we must refuse to conform, import, and imitate other countries. This can only be realized through functional education.

Recommendations

Based on the issues raised and discussed in the paper, the following recommendations are made;

1. More activity and practical rather than theoretical oriented education should be provided to learners at all levels of education to enable them acquire some basic skills which will help them to become creative and produce things and ideas to solve their own problems.
2. Nigerians should place less emphasizes on certificate acquisition as the only means by which an individual can be gainfully employed.
3. Genuine attention should be given to science and technology and vocational based courses right from the kindergarten to the University level to inculcate in the learners the spirit and virtue of creativity and inventions.

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