Curriculum and Indigenous Education: A Developmental Tool for Human Capacity and Technological Advancement

H.N. Kwuluje[1] and **I. M. Tariah[2]**

Corresponding author: kwulujehnrietta@gmail.com[1]
[1,2]Faculty of Education, Ignatius Ajuru University of Education, Rivers State, Nigeria.

Abstract

The Nigerian learning curriculum for twenty-first century human development should grease the wheels of education at all levels and make the center of the educational system free and adaptable towards the realization of Nigeria's aspirations for the actualization of vision 2030; which includes scientific innovation. The curriculum is the culmination of human efforts to raise society's consciousness via education. Since curriculum takes place within a school structure, it is crucial that indigenous information be included in the school curricula to ensure that the native aboriginal technical skills and knowledge are upgraded and improved upon, for which the educational authorities should be held accountable. Curriculum can also be seen as the aims of what happens to students, that can result in social transformation. In this regard, modern civilizations are aware that indigenous knowledge and modernization are regarded as the core competencies of the modern curriculums. However, due to the structural fragility, it might not be acceptable to adopt advanced or more developed practices in rural regions comparable to what is applicable in the cities. The rural areas always have their own native resources, especially immaterial resources like traditional items and local knowledge anchored in the more distant past. It has been found that the knowledge system of native environments will also expand and be enriched by utilizing the external knowledge while articulating the native information and knowledge as native facts were it is also very difficult to recreate since it is created from indigenous philosophy and intellect before energetically transforming into the native condition.

Keywords: indigenous education, native skills, native technology, curriculum, educational gap, research composition, maximum profitability, social change, expansionism globalization and transformation

1.0 Introduction

As society and social ideals change quickly, the educational sector has undergone a several innovations. Education, whether formal or informal, is effective in reaching the diversity of the general public, as civilization is dynamic and ever-changing. Any culture's educational practices must be changed to accommodate the demands of a society that is always changing. Youth unemployment and an increase in social vices among young people are results of education's incapacity to satisfy the growing demands and encourage economic self-reliance and sufficiency.

In addition to the aforementioned, Mba and Uchendu (2007) claimed that education, whether official, informal, or indigenous, is as ancient as human life in every civilization. They emphasized once more the societal importance of education in every person's life. They maintained that in order for a person to be a helpful member of society, a role model, and a man of high character, that person must possess a certain level of education. The authors argue that in order to achieve maximum profitability, positive interaction, and integration, every rational person and of course every institution or organization strives to impart to the next generation the acceptable norms, attitudes, behaviors, and values that make life meaningful and manageable. Despite the aforementioned, there has recently been a public uproar on the issue of value disorientation. Orderly conduct, moral observance, and labor-intensive effort have made way for the importance of money, luxury, and ease. It has been observed that majority of people's value choices are unclear. This account for why modern youths are developing into adulthood in a sometimes unsettling world. In this regard, for any nation to collectively develop meaningfully, its citizens must cultivate good values. This position is related to the findings of Igho, Okpenga, and Ako (2010). It should be noted that in recent years, there has been widespread public outcry over the deteriorating value standards; implying that selfish and undesirable values have taken the place of wholesome ones that promote healthy human and societal development.

In view of the foregoing, Ukeje (2008) had a profound contribution when he stated in Anyebe (2011), thus: "Unfortunately, the Nigerian decay is particularly grave, debilitating, degenerating, deteriorating and dehumanizing in regard to education, our institutions of learning where we ought to breed youths of high value have become dens

of robbers, campus prostitutes, cultists, fraudsters, examinations malpractice culprits, internet fraud stars and a host of other unwholesome characters that are alien to our culture" This paper observes that this is the actual fact of the situation.

Pursuant to the foregoing, indigenous learning places a strong distinction on teaching methodologies, and subject matter within formal and informal learning frameworks. Growing acceptance of and use of indigenous educational systems and methods has the potential to erode indigenous knowledge through expansionism, globalization, and change. According to Grenier (1998), who made a similar observation in Ekere, Dargu and Ebiere (2015), indigenous societies have a chance to "reclaim and enhance their customs, tradition, and dialects, as well as advance the learning achievement of the native and indigenous students," which will ensure their survival as a culture.

It's interesting to note how the global movement towards accepting and understanding the native system of learning as a genuine and viable form of education has given rise to the possibility of taking different learning opportunities into account. Different educational systems exist today; some are more prevalent and well-liked than others. In this regard, it is significant to mention that local people like discussing various learning and comprehension techniques. For instance, the creation of the "Centre for Niger Delta Studies" at Delta State University, Abraka, where the Urhobo language is taught and raised to a standard of global use.

Therefore, the indigenous way of reasoning influences their learning, studying, instructing, and knowledge acquisition. This must be seen by other numerous post-modern students as a significant way of ensuring that scholars and instructors, whether indigenous or not, are able to benefit from education in a traditional complex way that allows them to use, support, and improve the consciousness of native customs, outside of the typical Western curriculum of reading or program of study.

A nation's capacity to manage its knowledge and factual resources is crucial for the development that is sustainable and supportive on the availability of an effective financial sector, according to the World Bank in 1997. The native people's major contribution to the learning community is their effort towards their survival; to cultivate food, provide shelter and achieve control over individual lives. The understanding of the local areas is considered not only as the high quality competitive power for the developed areas but also as the public wealth of the native people. The precise ability and knowledge required for society's continuous survival are the only sources of revenue for the rural poor. However, due to the rapidly changing environment and means of survival, in addition to political awareness and ethnic modification on a global scale, some native understanding methods of education that are nonexistent are in danger of extinct.

In light of the aforementioned, Busari (2017) claims that the success of indigenous education fades out because it is no longer appropriate for modern responsibilities or because the community to whom it is attributed has become used to it. The growth of ideas and temporary abilities in the field of learning has remained difficult, despite the disappearance of some occupations owing to the disruption of externally westernized skills and technical know-how. The threat of indigenous knowledge vanishing is growing as time goes on, and it is obvious to those who might modify it and make a livelihood off of it. However, the advancement of the indigenous educational system does not fully use local understanding and information. According to conservative techniques, advancements in current technology, education, and skill require constant growth and development, as does movement from one location to another.

2.0 Clarification of the Concept
Before moving on to the discussion of this issue, it is important to identify and clarify the key concepts. Education, indigenous knowledge, and technological advancement are the three main ideas to elucidate on.

2.1 Concept of Education
There is no single, accepted definition of education; instead, there are several meanings that derive from various schools of thought. However, education may be seen as a multifaceted procedure and network of activities by which society acquaints the newborn with socially accepted standards. Noah (1997) and Bolarin (2007) averred that education is the discipline of imparting the values of ingrained knowledge on society. In other words, it is a social

process that does not end with formal education or learning in a classroom. This indicates that education entails a process of value reorientation that a person must develop over the course of his or her lifetime in order to function effectively as an adult in society. In this regard, Okolo's (2009) view on education in Okolo (2011), implies that education is a tool for social transformation and a necessary way of fostering moral, political, religious, and social growth for survival and lifelong learning. For those who are dedicated human development by proper education, whether they are young learners or adults, education is fundamental to the survival of human societies.

According to Elekwa and Okanezi (2013), education is viewed differently when it clashes with over other factors. Most philosophers and sociologists have attempted to condense its meaning as follows: education is simply the variety of life experiences that people have and that foster their personal development. According to Fafunwa, (1974), in Elekwa (2007), education is "the process through which a young or adult learner develops the talents, attitudes and other types of conduct, which are beneficial qualities to the community in general,". According to Elekwa (2007) and Swift (1969), education encompasses all of society's activities, including teaching and learning. In the foregoing regard, education is more than socialization. Thus, a person's education equips him or her to make positive changes in society that will benefit all members of the community and make the future better than the present and the past.

Consequently, Ezewu (1983) opined that without education, there is no society. Thus, in its widest meaning, it also refers to cultural and indigenous educational transmission. Education is a social activity and the goals and approaches it uses will vary depending on the culture in which it is practiced. Additionally, it is the different methods in which society makes sure that its members learn and acquire relevant information, including knowledge of facts, abilities, and values. Additionally, from a child's conception till death, education is a lifelong endeavor, Elekwa (2007).

2.2 Conceptual Understanding of the Indigenous Education Curriculum
This paper observes that a curriculum may be thought of as a means of achieving particular educational aims and objectives. In this vein, curriculum creation process might be thought of as an agenda of anticipated educational results. This means that the goals are defined and measurable in terms of behavior. Thus, curriculum goals approach is defined by focusing on learning objectives. In this sense, the emphasis is on outcomes or products and is also administrative or teacher-oriented. If the latter applies, then very few instructors have any feeling of ownership for the information they are required to transmit because the curriculum is sometimes created by politicians without consulting teachers.

2.3 Curriculum as Subject Matter or Course of Study
A curriculum is a procedure for choosing materials of study or courses (Beauchamp, 1977; Wood & Davis, 1978). In this sense, a curriculum may also be considered as the subjects and objectives of formal education. The definition of a curriculum given above as a collection of purposes, aims, or objectives included in goals is similar to how a curriculum is used; in actuality, there are different emphases. Hence, instead of emphasizing on learning objectives, the first definition concentrates on the description and explanation of the instructional course material. The "courses" differ in their size and content. The language used by Wood and Davis (1978) in their book, which was intended to construct and evaluate higher education courses at the University of California, Berkeley, serves as an illustration of this description. Considering a curriculum as the "totality of courses that form a course of study given by an institution or pursued by a student" as was recommended by Wood & Davis in 1978.

2.4 Planning for Learning Contents and Curricula
Tom (1984) asserts that curriculum may be thought of as a plan or as a type of proposal that has been carefully applied in educational activities. Because the methodologies are incorporated, this definition of Wood and Davis (1978) has a larger reach than the previous two curricular paradigms. It mixes the content with instructional approaches. In this regard, Tom (1984) averred that curriculum may be described as "an notion for educating and imparting instructions". Similar to this, Pratt (1994) asserted that a curriculum is a strategy for maintaining the teaching and learning processes. This approach to curriculum development does not pragmatically link it with actual procedures being used. According to Pratt (1994), curriculum is not the actual act of education; rather, it is the plan

for the activities that will be used to carry out the lesson to enable the success of education. This viewpoint may be compared to the curriculum's building plans. A curriculum is not teaching or learning in itself but a plan of learning; just as a blueprint is not a structure of itself.

2.5 Curricula as Documents of Direction
Brady (1995) defined a curriculum as a written document that also serves as an outline of a course or program. The official written programs of study published by ministries or departments of education written on a sheet of paper have therefore come to be known as curriculum. Curriculum "has therefore evolved to mean the official written programs of study produced by ministries or administrative units of education, local experts or education boards, and commercial businesses or groupings of educational specialists working on specifically financed initiatives."

According to Barrow & Milburn (1990), visual or graphic written materials related to curricula were created in response to a specific requirement throughout the creation and implementation phases, and they must be in written form and made to contain a description of the goals, content, methodology, and evaluation. The document's presentation aims to provide instructors a framework to use while developing curriculum. In this sense, the words "curriculum" and "syllabus" are interchangeable.

2.6 The Relevance of Indigenous Education Curriculum
The fact that indigenous education simplifies the integration of trustworthy abilities and understandings required in the classroom; establishes the fact that it is one of the reasons why its curriculum is relevant. The native educational curriculum exhorts instructors to bring contentious topics to the classroom without hesitation. Teachers-in-training processes should include impartation of indigenous knowledge that is necessary for the advancement of contemporary society and environmental management into their instructional practices and policies that the local population has historically employed are still applicable today. It promotes indigenous people's participation. Users of indigenous instructional materials frequently take an active role in their surroundings. Indigenous cultures have adapted and maintained their way of life in a certain region for many generations, this fact also influences their learning patterns. The current indigenous people are in a position to clench the natural linkages, resources, demands, and risks of the region because of the distinctiveness of their culture. Indigenous education's curriculum is important because it helps people in post-colonial and western nations reconsider the typical hierarchy of knowledge systems. This paper observes that western education has historically and factually devalued and reduced the impact of indigenous knowledge systems in Africa. Although there have been adjustments to the curriculum for indigenous schools, that must now recognize the existence of several types of knowledge and skills rather than just one standard or benchmark system.

This paper finds that indigenous education method and content may be employed to promote the results of learning under westernized education. This is possible under certain jurisdictions' goals of fostering multiculturalism in society and raising the academic success of native students and learners. It is therefore common to regard the incorporation of indigenous teaching and learning techniques as well as indigenous curriculum content into modern learning objectives. This is an essential obligation incumbent on the government as well as the educational authorities, experts, and consultants.

2.7 Meaning of Indigenous Education
Indigenous education specifically places emphasis on imparting indigenous knowledge via both official and informal educational institutions. It is there observed that academic community has taken notice of the growing importance of indigenous knowledge. However, the study finds that some institutions have not yet fully embraced the evolution and perception of the indigenous education paradigm. It should be noted that indigenous knowledge (IK) is the native understanding of issues of knowledge and the consciousness of learning. In this regard, Warren (1991) and Flavier, Chambers, Pacey, and Thrupp, (1995), proposed a unique concept, on the basis of a body of information that is exclusive to one culture or community. The western/universal knowledge system developed by universities, research institutes, and business enterprises is very distinct from indigenous knowledge. Thus, native cultures incidental to Africa decision-making in agriculture, animal husbandry, and other fields is fundamentally based on indigenous knowledge; and native societies engage in a variety of activities, such as local agriculture, health care, food preparation, native education, and resource management.

According to Warren (1991), it is important to understand the meaning of the view which holds that "Indigenous Knowledge is a focus on the aspects of society which facilitates communications and decision-making". This view of indigenous education implies that local information systems are driven by internal inspiration, innovation, and experimentation as well as interactions with external structures. It should be noted that indigenous knowledge is dynamic and self-motivated (Flavier *et al,* 1995).

3.0 Methods, Applications and Importance of Indigenous Knowledge

Indigenous knowledge methods and systems, according to Ellen and Harris (2013), are the fundamental part of each given civilization. The fundamental element consists of the people's information, skills, beliefs, ideas, opinions, and experiences that will improve their standard of living. With a thorough awareness of their environments and cultures, native and indigenous people have produced significant and remarkable contributions to human knowledge; for instance, in the fields of medicine and veterinary science. Indigenous knowledge has evolved and been continually altered, changing the environment over time. It has been passed down from one generation to the next and is correlated with the cultural values of the people. Indigenous knowledge is sometimes referred to as low-income earners' social capital and riches. It is their most important weapon in the struggle for survival, i.e. to make food, to build shelter, and to maintain control over their lives. Native knowledge is an integral part of the life of indigenous people, who rely on the abilities and information they learned from their communities in order to survive.

The process of developing indigenous knowledge is particularly pertinent to the fields of agriculture, animal husbandry, and native veterinary medicine. Thus, indigenous people manage and use natural resources, provide primary health care, protective medical care, and psychosocial care, preserve, give and promote community growth and poverty alleviation using local skills incidental to their cultures. Sometimes, when these abilities are transferred to other cultures they become a means of human advancements and comfort in those cultures. According to the findings of Jumbo, Agboye and Philip (2018), when African slaves were taken to faraway lands, they took with them their native practices which they deployed in their places of abode as slaves. They cited an example of the air conditioning system that was initiated by a slave. They found that although it was an invention of a slave boy, the credit (as in most cases) went to his slave master. The implication of this finding is that indigenous or native education or knowledge acquired therefrom is crucial to the society's ongoing growth. This position is in tune with the views of Sach (2002).

For the local group that bears the information, it is crucial to generate native values which are highly esteemed among the native communities, therefore development agents (NGOs, government supporters, local government leaders, and commercial organizations projects) need to be aware of this, as they articulate their programs. It is important to state that indigenous knowledge is a crucial component of universal and global knowledge. Value, in this context is extremely important in and of itself, necessitating the preservation, transmission, or foreign adoption of indigenous knowledge. When developing or implementing programs and initiatives for indigenous education, the indigenous knowledge should engage with the development processes in one of three ways. The development of indigenous knowledge may be used in one of these three ways:
i. it can be relied upon heavily or fully;
ii. it can take precedence over other information; or
iii. it can be assimilated.

As found by this study, developers and implementers of indigenous knowledge must choose which direction to intervene from. This implies that the core focus should be the determination of how indigenous knowledge can address certain current issues and achieve the suggested goals, and may serve as the foundation for drawing conclusions. It might be more encouraging to combine native and foreign information, allowing the possibilities of choice, rate, and degree of adoption to any of the prevalent conditions.

In this regard, modern technology does not necessarily imply the superiority of foreign knowledge; as it may also have been derived from local or indigenous knowledge, as have been opined in Jumbo, *et al* (2018) and it may also incorporate indigenous practices that have been developed and are still used in other contexts with a comparable set of conditions, as partly argued in Sach (2002). The appropriate technique for application of either types could

be adopted specifically and successfully. To embrace and promote such transfer of knowledge derived from indigenous education, one needs a solid understanding of native knowledge, for in such exclusive ideas are found the essence humanity.

3.1 Benefits of Indigenous Education

According to Ekweme and Ogbondah (2005), incorporating indigenous education in school curricula will increase educational effectiveness. They said that it is frequently more successful to incorporate native teachers and students into the teaching process. It offers education that is based on the perspectives, abilities, practices, language, customs, and traditions of the indigenous people. This study is of the view that this practice makes the transition to maturity for young learners easier. As could be seen, majority of the time, this sort of education has an impact on non-indigenous pupils through teaching and bringing to light community customs, individual communities, and the cultural heritage of the people. Different cultural realities frequently encourage respect and are widely valued. Accordingly, indigenous knowledge incorporation in school curriculum, instructional materials, and text books has a significant impact on educational content and preparation of students in other educational systems, such as the Western system, and throughout the world.

In the views of Ejide (2017), there are values that support the inclusion of indigenous knowledge in the curriculum of public schools. Students from various backgrounds attend various public schools; they can gain from exposure to indigenous education as well as receive benefits from it. Indigenous knowledge may help improve student intelligence in diverse communities and lessen prejudice, bigotry, and discrimination in the classroom. The benefits of indigenous education are limitless when viewed along the existential conditions of knowledge intertwined with native cultures.

In the foregoing context, what may be taught in the classroom may have a variety of complex issues that may call for consideration by non-indigenous educators who value and elevate the significance of indigenous viewpoints in educational system mainstreaming. Teachers who are concerned about the misapplication of the indigenous way of thinking without acknowledging their challenges and way of thinking and restoring their credibility, find it difficult to apply proven native solutions to identified problems. Since the majority of teachers may not be natives or aborigines of their areas of domicile, indigenous knowledge perspectives that may provide solutions to the majority of current and upcoming social and environmental problems may not be actualized as quickly as desired by the proponents of indigenous knowledge. Indigenous educators and organizations create curricula and teaching strategies for indigenous education as well as motivate policy makers and educational stakeholders to take cognizance of this important fact in curricula planning and design (Njoku, 1989).

In the foregoing regard, working together in the development of learning contents with the traditional leaders and elders will help bring authentic indigenous talents into the classroom. The elders and opinion leaders in native communities can help to make it easier to integrate authentic indigenous knowledge into classroom learning contents. The history of the indigenous peoples should be well researched and controversial topics should not be avoided by instructors when introducing them in the classroom. This is because discussions arising from such topics or ideas could be a veritable tool for further development of learning contents.

3.2 Identifying the Knowledge Gap in Native Education

The majority of native people view indigenous education as a crucial development tool and a means of pursuing their own economic, social, and cultural advancement. It provides individuals with a sense of autonomy, motivation, and resolve. The local population views education as a path to work as well a key resource for human development. It is a means of lifting socially disadvantaged individuals out of poverty and ignorance. Thus, the majority of educational methods and curricula lack awareness and comprehension of indigenous peoples' learning styles. For the indigenous population, this can result in a learning gap. Within these context, insufficiencies and gaps identified within relevant issues of native education could be articulated to form the basis of knowledge advancements, by incorporation of such identified gaps as learning topics, which could be integrated into course content at various levels of learning.

3.3 Factors Related to Identified Learning Gaps
The study found that there are factors that influence learning and until identified, these factors constitute learning or educational gaps. They include, low school enrollment, transcendental academic performance, a low literacy rate, and a high dropout rate, etc., are all potential contributors to the education gap in the indigenous education system. Thus, "some schools encourage indigenous students to be socialized and to be a national asset to society via assimilation," opined by Ekweme and Ogbondah (2005). Thomas-Slater, Kabutha, and Ford (2006) expressed the opinion that, schooling has been explicitly and implicitly a site of rejection of indigenous knowledge and language, it has been used as a means of assimilating and integrating indigenous peoples into a 'national' society and identity at the cost of their indigenous identity and social practices'. In the foregoing vein, intercultural learning is a good illustration of how to create a bridge across the educational divide between modern conventional education and indigenous education.

3.4 Critical Issues in African Indigenous Education
According to Mushi (2009), "African indigenous education is defined as a method of instilling the knowledge and understanding of indigenous education in the native members of a community, which is passed on from one generation to the next; it includes the inherited and natural knowledge, skills, cultural, traditional norms, and values of the native people" (Source: www.eric.gov.recorddetail). This implies that indigenous education is a traditional means of native knowledge transfer that is based on inheritance and historically linked cultural practices and patterns.

The traditional, locally produced education that is passed down from an older generation to a younger generation, more sophisticated culture might also be referred to as African native education. Native learning objectives, aims, and frameworks are not irrelevant in indigenous educational articulations. Outside of the impact that indigenous education creates on its proponents, it has not been proved not to have achieved its aims. Therefore, the term "African native education" can typically refer to a system of instruction used in traditional African civilizations to transmit information, skills, and attitudes from one generation to another and from one tribe to another through oral teachings and practical experiences.

In the foregoing regard, indigenous education is centered on practical learning in which the younger generation learn from the older ones by observing them, putting what they have learnt into practice, participating, and performing. Under this system, the younger members of the community were taught skills including carving, masonry works, weaving, fabric making, canoe construction, cooking and home administration. Mushi (2009) further opined that the fundamental abilities, knowledge, and attitudes that allowed people to live and operate in their home societies were available to all native people from their tender age. Thus the local people's socioeconomic activities are an essential source of cultural information, skills, and values. The younger generation hence develop the fundamental abilities that are used in both short-term and long-term tasks in addition to what they have learnt.

In relation to the foregoing, Mushi (2009) advanced the idea that traditional African education occupies a limited space compared to conventional intellectual education. Thus, under conventional learning, concrete knowledge, rather than abstract learning, is given significant attention than indigenous knowledge and this account for why traditional African communities have distinct ideologies in respect to many aspects of their survival that are not taken cognizance of under conventional education. Because of the value put on traditional education, such as cultural beliefs and their relative limitations and dangers to modern knowledge power, some native reasoning and thinking prevents persons with core traditional values from coming to some alternate conclusions that enhance further learning.

3.5 Relevance of African Indigenous Education to Modern Education
According to Ejide (2017), "African indigenous education is the cornerstone for Education for Self-Reliance" (ESR) in contemporary learning. When ESR was founded in 1967, Nyerere recalled how traditional education was crucial to local community life, particularly in the area of learning by imitation, and how it was integrated into contemporary education. The involvement of students in their own education is strongly promoted by contemporary educators. Additionally, it gave its beneficiaries the tools they needed to serve their communities and contribute to a better

society, which is not unusual in modern education. In this regard, the students are given the tools they need to participate in the changing world of work.

Traditional education also changed in response to societal issues, such as how to combat infections, illnesses, diseases, wild animals, etc. Secondary schools and tertiary institutions have begun to offer courses in information and communication technology as an example. Students frequently respond to the current demand for information and communication technology. African indigenous education has also had a significant impact on curriculum creation, problem-solving, and the encouragement of lifelong learning.

In the foregoing regard, some African traditional education system has persisted in the development of educational practice and policy that is peculiar to them. Although it varies from tribe to tribe, African indigenous education has endeavored to provide for the education of all members of the community (Okwujiagu, 2010). It should further be noted that before the advent of modern education, African traditional education was perceived as insufficient to meet the demands of the contemporary world; this occasioned the need for new skills that would not only be competitive but has the capacity to chart a new dimension and direction once western education was introduced to the continent. African indigenous education's isolationism was dismantled as cultures were now exposed to the challenges of a constantly changing wider world of contemporary knowledge and technology.

4.0 Indigenous Knowledge Perception and use in Relation to Technology

The phrases traditional knowledge (TK), indigenous knowledge (IK), traditional environmental knowledge (TEK), and local knowledge (LK) are all used to refer to the long-standing, well-developed customs and practices of certain regional, indigenous, or local societies. These communities' wisdom, knowledge, and teachings are all included in traditional knowledge. It also incorporates local technology as well as the knowledge, abilities, and perspectives of individuals that are used to sustain or advance their standard of living. According to Buseri (2010), the operative word, 'local' should not be used to disparage the technology that is prevalent in some developing nations. Instead, it only implies that it is a technology whose usage, application, existence, and understanding are still limited to a certain region or locality, and which is likely still in its very early phases of evolution or development. As a result, this technology might not be well known and used in terms of its knowledge, usage, and application by general technology users.

In the foregoing regard, local technology is another name for native technology. This is due to its origin. According to Momah (1999), indigenous technology is that which has developed from a people's traditional and cultural environment. It is comparable to the term "appropriate technology," which denotes a specific degree of modern technology in relation to the state of environmental development. Consequently, every community may have its own unique technology that it has developed in accordance with its own distinctive requirements, tradition, and culture. Although Momah (1999) acknowledged that the efforts of the Nigerian Federal Ministry of Science and Technology are becoming significant in the recent exhibition of the first Nigerian car, the current upsurge in local products, African Fine Arts, African Prints, African Architecture, African wood/metal works, and so on, are a testament to the critical importance of indigenous education. Thus, Momah's concept of technology is in agreement with the conceptualization of the very ancient nature of technology and what it actually represents; although Momah (1999) acknowledged the efforts of the Nigerian traditional education system's robust nature, his views are respectfully akin to contemporary westernized education.

4.1 Challenges of Curriculum Integration for Indigenous Education

According to Buseri (2010), there are several issues with using indigenous education. It might not be simple to incorporate indigenous education into conventional western schooling since it is "an ongoing process of cultural negotiation" to incorporate indigenous educational systems into conventional schools. Because children learn through observation, indigenous education differs from the conventional Western model in terms of its formats and methodologies. Compared to the western educational paradigm, the traditional educational standard is less formal but more integrative.

In line with the foregoing, Busari (2010) opined that "learning takes happen throughout the day, both in the home and in adult's jobs, in contrast to regulated hours and a classroom environment". According to traditional schooling

ideologies, children are "fragile individuals when it comes to learning"; thus, children learn about cultural norms including speech recognitions and restrictions and the "reflection" of individual acts "on the entire home," as opposed to being punished or nurtured, as part of traditional schooling. Some traditional educational systems and practices place significant emphasis on entrepreneurship training, such as weaving, hunting, carpentry, and the use of plants as remedies, which are taught to children at their young age as apprentices in adult-operated workshops.

The above-mentioned modalities of education are becoming more difficult to use as current technology and modernization advances into more complicated horizons. The majority of these kinds of indigenous knowledge are disappearing as a result of youngsters who are leaving the village in greater numbers for job opportunities in the metropolis, this group of persons have less need for indigenous education and consequently less interest in them.

4.2 Creativity in Education for Technological Advancement
Despite being as old as one can imagine, technology has always been improving and evolving. This is the case due to the fact that man, on the other hand, fundamentally and permanently alters his surroundings in an effort to adapt to those changes as well as to increase his chances of survival in unfamiliar and hazardous situations. As could be seen, the logical character and sophistication of rural people's knowledge, and the belief that information may be combined with or absorbed into formal scientific knowledge systems are all sources of global knowledge; and very relevant to advancement of human societies. Thus, in order for the maximization of the benefits of indigenous knowledge, existing research and extension services will pay more attention to the priorities, needs, and capabilities of rural people if local knowledge and capacities are given legitimacy within the scientific concerns and initiatives for the development of rural communities. This will ultimately lead to more effective and long-lasting outcomes.

In the foregoing regard, the knowledge acquired via indigenous education may help in resolving current issues and reaching the targeted goals. This means that indigenous knowledge also naturally adapts to the local environment and is exceedingly difficult for outsiders to mimic because it was created from native ideas, local wisdom and culture. Therefore, a crucial subject of critical significance to the enabling theory of this study is examining the prevailing mechanisms for the sharing, dissemination, and change resulting from indigenous knowledge.

From the foregoing, it is important to note that western and post-colonial countries might reconsider the inherent order of the knowledge system by improving and supporting indigenous education and incorporating traditional knowledge and understanding into the system of learning. It should thus be noted that the colonial masters traditionally devalued local knowledge and indigenous educational practices because, at the time they introduced western education, western educators did not appreciate African indigenous education. There has been a movement in favor of appreciating the value of traditional and indigenous education. In this regard, the inclusion of indigenous education alongside western educational model necessitated the recognition of the presence of several types of knowledge rather than a single, standardized system.

Studies have shown that for native African communities, indigenous education, traditional knowledge and understanding have some "transformative force" that may be utilized to stand-in for "empowerment and justice", according to numerous researchers in the field of education. In order to advance indigenous rights to education globally, it is crucial that indigenous educational methods be acknowledged as valid forms of learning instruction. Thus, indigenous education enables native people to create huts, light fires, make clothes, and build boats, etc., in this vein, technology is as old as humans and has undergone several transformations as new inventions suggest the possibilities of undeniable advancements at such a speed that is unpredictable.

This innovative technology drive is a significant agent of constant change that guarantee positive human progress. In this vein, it is advised that teachers should periodically reflect on their pedagogy to identify learning content areas that call for indigenous views. The value of indigenous education is attested to by the numerous technological advances made by young learners without formal educational background. It should be noted that in some parts of Nigeria, mostly the eastern parts, young people are trained to undertake skills in the manufacturing of metals (automobile spare parts). This information may be used to develop technology when combined with current scientific understanding.

5.0 Recommendations

As the study have pointed, indigenous people live in a variety of native inclined environments while maintaining their traditional and ancestral practices and beliefs. In this vein, indigenous education has increased public knowledge of personal and societal customs pertaining to native and traditional groups and individuals. Additionally, it has encouraged a deeper regard for and understanding of other cultures' realities. In this regard, the following recommendations are crucial:

  i)   It is recommended that indigenous languages be included in national curriculum and learning subjects should be written in native languages.
  ii) It is also recommended that appropriate United Nations organizations create resources that are considerate of the cultural and educational needs of indigenous people.
  iii) All educational levels should promote multilingual education and training.
  iv) It is recommended that native populations should be taught how to engage in both the national and international educational systems.
  v)   It is further recommended that youths who have dropped out of school should be given more attention, as well as support with their language and culture.
  vi) The value of conserving indigenous culture, languages, and spiritual relationships should be emphasized along with the recognition of customary lands and natural resources.
  vii) Government should be pressed to include linguistic protection for traditional languages in national constitutions and to support UNESCO in creating programs to revive indigenous culture.

5.1 Conclusion

The incorporation of indigenous education within the Nigerian educational system's curriculum may be beneficial for advancing technology, fostering literacy, and serving as a supplement to schools at all levels. As found in this study, in some of the world's poorest countries, indigenous education is the rule rather than the exception. Given the challenges in effectively promoting technology and basic reading skills, it is remarkable that the majority of development organizations continue to ignore the significance of this network of indigenous schools. It is time to support the local institutions that have endured for centuries despite being mostly disregarded by modern curriculum planners and educators. Despite being as old as one can imagine, technology has always been improving and evolving. Thus, the study finds that man, on the other hand, fundamentally and permanently alters his surroundings in an effort to adapt to those changes as well as to increase his chances of survival in unfamiliar and hazardous situations.

In addition to building houses, creating fire and clothing, man also makes ships, planes, and spacecrafts. All of them afterwards blend into the environment of the human race and become new agents of change. It is advised that teachers periodically reflect on their pedagogy to identify content areas that call for indigenous views. The value of indigenous education is attested to by the numerous technological advances are sometimes made by native inventors without formal educational background in the eastern part of Nigeria in the areas of metal and wood works. This information can be used in conjunction with current scientific understanding for the development and advancement of indigenous technology.

References

Brady, L. (1995). Curriculum Development. Sydney: Prentice Hall.

Beauchamp, G. (1977). Basic Components of a Curriculum Theory. In A. Bellack & H. Kliebard (eds.), Curriculum and Evaluation (p.22). Berkeley: McCutchan

Buseri, J.C. (2010). Local Technology and Education in the New Millennium, In L.O. Ocho (ed.) Reforms in Nigerian Education, Enugu: New Generation Books pp: 267-272

Ejide, B. (2010). Innovations in Secondary School Curriculum: An Imperative for an Efficient Vocational/Technical Education, In L.O. Ocho (ed.) Reforms in Nigerian Education, Enugu: New Generation: 97-124

Ekweme, G.E., & Ogbondah, L. (2005). Sociological Foundation of Education, Port Harcourt

Elekwa, J. E. (2007). Sociology of Education, Unpublished Lecture Notes.

Elekwa, J. E., & Okanezi, B. (2013). Sociology of Education: Simplified Analysis. Port Harcourt

Ellen, R., & Harris, H. (1996). Concepts of Indigenous Environmental Knowledge in Scientific and Development Studies literature -A critical assessment; draft paper East-West Environmental Linkages Network Workshop 3, Canterbury

Flavier, J.M. Chambers, R., A. Pacey, and L. A. Thrupp (1995). The regional program for the promotion of indigenous knowledge in Asia, In Warren, D.M., L.J. Slikkerveer and D.

Grenier, L. (1998). Working with Indigenous Knowledge - A Guide for Researchers, IDRC, Ottawa

Jumbo, E. E. Agboye, J.O.; Philip, O. D. (2018). Migration of Science, Technology and Engineering Development by Globalization of Higher Education Opportunities: Contemporary Evaluation of Africa Experience: International Journal of Engineering Science Invention (IJESI) ISSN (Online): 2319-6734, ISSN (Print): 2319-6726, www.ijesi.org Volume 7 Issue 8 Ver II, Aug 2018, p. 77-88

Momah, S. (1999). Technology is Power: Memoirs of a Soldier, Scholar, Strategist, Engineer in Government, Lagos: Mufademic Press

Mushi, P.A K. (2009). History of Education in Tanzania. Dar-es-Salaam: Dar-es-Salaam University Press

Njoku E.A., W.A, (1989). Participation and Indigenous Knowledge in Rural Development Knowledge: Creation, Diffusion, Utilization, 10(4): 304-316.

Nyerere J.K (1979) Education for Self Reliance, In Hinzen, H. and Hundsdorfer, V.H. (eds.) Education for Liberation and Development: The Tanzania Experience, Tanzania

Sachs, W. 1992. The Development Dictionary: A Guide to Knowledge as Power. London: Zeal Press.

Tom, A. R. (1984). Teaching as a Moral craft. New York: Longman.

Thomas-Slater, B., Kabutha, C. and Ford, R. (1991). Traditional Village Institutions in Environmental Management. From the Ground Up Case Study Series, Washington, DC:

The Center for International Development and Environment, World Resources Institute and Nairobi: The African Centre for Technology Studies.

Warren, D. M. (1991). "The Role of Indigenous Knowledge in Facilitating the Agricultural Extension Process". Paper presented at International Workshop on Agricultural Knowledge Systems and the Role of Extension. Bad Boll, Germany, May 21-24.

World Bank, (1997) Knowledge and Skills for the Information Age, The First Meeting of the Mediterranean Development Forum; Mediterranean Development Forum, URL:http://www.worldbank.org/html/fpd/technet/mdf/objectiv. htm Accessed 6th November, 2014

Pratt, D. (1980). Curriculum design and development. New York: Harcourt Brace Jovanovich, Inc.

Pratt, D. (1994). Curriculum planning: A handbook for professionals. Fort Worth: Harcourt Brace College Publishers

Wood, L., & Davis, B.G. (1978). Designing and evaluating higher education curricula. *AAHE-ERIC/Higher Education Research Report No. 8*. Washington, D.C.: The American Association for Higher Education