

# **An Appraisal of the Western Educational Systems and an Inward Look for an Indigenous Educational Approach for National Development**

*Sule, Hasiyah Anavami & Enesi, Prince Habib,<sup>1</sup> PhD*

## **Abstract**

*This paper makes the case that the introduction of contemporary, western-style education has diminished the value of indigenous forms of knowledge in Africa that adopting an indigenous educational approach is essential for a country's growth. Any society's destiny depends on how well its culture and worldview are passed on to subsequent generations. Africa's indigenous educational systems have been alienated and impacted by the western educational system. literacy, post-colonialism, and modernization paradigms served as the basis for arguing that during the race for Africa, the continent's indigenous knowledge was unfortunately invaded and distorted. Most of what is African has been lost as the continent has been assimilated into the western economic world and academia. Africa is currently struggling to stay up with its own innovations. Asking the West to provide its innovations to Africa out of pure altruism is much more challenging. But because all information, whether indigenous or western, has some utilitarian values, it is crucial to solve the socioeconomic difficulties of the continent's national development through a knowledge-driven economy. Industrialization of Africa is necessary. Japanese and Chinese models, which merged an indigenous educational system with Western scientific advancements, are advised by this study for national growth.*

*Keywords: western educational system, indigenous educational system, national development, Nigeria*

---

1 The authors are of the Dept. of History and International Studies, Federal University, Lokoja, Nigeria

## Introduction

Education equips people with the information and abilities they need to progress both personally and politically, economically, and socially. The quality and accessibility of education as well as the capacity of education to enhance living situations are all influenced by socioeconomic variables, such as family income level, parents' educational attainment, race, and gender (Ahmad, Shehu, & Mahmoud, 2019). It is believed that Western learning would cure all of Africa's educational issues. Scholars who are ignorant of the conflicts between Western education and the necessities of African society have this perspective (Ukwuoma, 2014). For instance, in schools in former British colonies, English is preferred as the medium of teaching (Ukwuoma, 2015).

Early in the history of man, there was education. It was around for a very long period when African groups of people began to form communities. Indigenous knowledge education is the name given to this type of instruction. We discover proof of knowledge, skills, and a way of life through indigenous tribes' oral traditions. The Christian church missionaries, who believed that Africans lacked any form of education, were responsible for introducing western education to the continent. According to Ranasinghe (2015), education is necessary for human existence. It is also a mechanism by which one generation passes on the information, skills, and experience that equip the following generation for the responsibilities and difficulties of life. Indigenous knowledge or indigenous education existed in Africa prior to the arrival of western education.

Indigenous knowledge (IK), according to Makinde et al. (2013), is also known as "traditional knowledge" (TK), "traditional environmental knowledge" (TEK), and "local knowledge" (LK). Local knowledge and indigenous education (IE) are terms used to describe knowledge systems that are based on the cultural practices of local, indigenous, or regional populations. Traditional communities possess knowledge about traditional practices in subsistence agriculture, animal husbandry and ethnic veterinary medicine, use and management of natural resources, primary health care (PHC), preventive medicine and psychosocial care, saving and

lending, community development, poverty alleviation midwifery, and The existence of different local societies depends on these sorts of knowledge, which are often accumulated by empirical observation and contact with the environment. (Edsand & Broich, 2019; Ukwuoma, 2015).

The claim made in this essay is that schools, colleges, and universities in Nigeria and other African countries ought to foster the development of citizens, youths, and adults who are obedient to, and responsible for upholding, the laws, rules, customs, and traditions of their societies. This can only be accomplished by using an indigenous educational approach and ethno-veterinary medicine. The existence of different local societies depends on these sorts of knowledge, which are often accumulated by empirical observation and contact with the environment. (Edsand & Broich, 2019; Ukwuoma, 2015).

The claim made in this essay is that schools, colleges, and universities in Nigeria and other African countries ought to foster the development of citizens, youths, and adults who are obedient to, and responsible for upholding, the laws, rules, customs, and traditions of their societies. This can only be accomplished by using an indigenous educational approach. While others who favour a western educational system do so because they believe that using English would boost academic performance and make learners more employable in a globalized environment, which has not been the case in the present global economy (Ukwuoma, 2015). According to Mahoso (2013), the majority of people believe that civic education would foster patriotism, submission to legitimate authority, and respect for other citizens' opinions on a range of social, economic, and political concerns. However, the recent uptick in xenophobic attacks against foreign nationals in the Republic of South Africa has demonstrated that it only instructs children and adults in Africa to understand the roles, functions, and responsibilities of members of parliament, government ministers, governmental institutions, civil servants, local authorities, and communities but not the rights and privileges of citizens of other nations residing in their country (Chivaura, 2014). Africans are now more likely to lead individualistic lifestyles than the communal once for which the

continent is famed because of the success of the western educational system.

Indigenous knowledge is information that has been verbally transmitted from one individual to another and from one generation to another. In contrast to the western educational system, the majority of Indigenous knowledge is represented through tales, legends, folklore, rituals, songs, and even laws (Zuckermann, 2015). Other types of conventional knowledge are expressed in various ways. Indigenous communities are frequently distant and secluded from one another, and because of the relative independence with which they developed, their identities are far more diverse than those of modern knowledge. Indigenous knowledge is scientific in the sense that it comes from years of practice and offers rational answers to issues that affect communities (Shehu, 2020).

A nation's capacity to create and mobilize knowledge capital is as important for sustainable growth in the growing global knowledge economy as the availability of physical and financial capital. According World Bank (2007) native knowledge is the fundamental element of each nation's knowledge system. It includes all of the knowledge, expertise, and understanding that individuals have and use to sustain or advance their way of life. Indigenous people have made significant contributions to global knowledge, such as in the fields of medicine and other related professions thanks to their in-depth awareness of their surroundings. IK is created, passed down from generation to generation, continually modified to settings that are gradually changing, and closely linked to cultural values. The majority of indigenous systems are in danger of going extinct due to modern challenges and technology, which have accelerated the worldwide pace of economic, political, and cultural change as well as the natural environment's rapid changes.

However, many traditions only cease to exist as a result of the introduction of foreign technologies or development paradigms that promise quick wins or fixes to issues but are unable to sustain them. IK's sad imminent non-advocacy is most apparent to individuals who have developed it, hence this study is necessary. In order to press for the

adoption of an indigenous education method for national development, this study analyzes western education. As a result of modernization and the continual globalization processes that the western educational system has imposed on us, indigenous education is being lost. Therefore, it is crucial to safeguard and advance the knowledge created and passed down by local communities via purposeful institutional and policy reform initiatives. Furthermore, using the language and conventions that people are familiar with and find most effective for expressing themselves allows for quick development.

### **Methodology**

This research work is aimed to study the limitations of western educational system and the alternative of indigenous educational approach for national development where the secondary source of data is used. The secondary source of data are materials containing an account of an event or phenomenon by someone who did not actually witness the scene phenomenon. Examples, of secondary source of data used in this research work, are books, journals, projects, and other related documents.

### **Theoretical Framework**

This study's theoretical approach incorporates post-colonial, modernisation, and critical literacy ideas. Education is not neutral; it has many facets and a political component, which educational policymakers should be aware of when they create school curricula. It is obvious that "it is impossible to even think about education without considering the question of power" (Freire, 1987). By drawing attention to the concept that schools are occasionally utilized as platforms for sustaining relics of colonial legacies in Africa, critical literacy and post-colonialism seek to spark change (Freire, 1987; Macedo, Dendrinis, & Gounari, 2003; Tracey & Morrow, 2006). Thus, critical literacy and post-colonialism investigate sources that enable discussions about current circumstances in order to inspire change (Ukwuoma, 2015). It is crucial for those who

determine educational policy to comprehend the cultural worldview that is supported by the information they have created.

In order to explain how the industrial societies of North America and Western Europe evolved, the modernization paradigm, which will serve as the lens for this paper's discussion, first appeared in the 1950s (Crossman, 2012). According to the hypothesis, societies advance through a series of largely predictable stages as they become more complex. The importation of technology, along with a variety of other political and social developments that are thought to follow, are what development depends on most. Due to cultural dispersion from the center to the periphery of the world (Ukwuoma, 2015), traditional behaviors and values in prehistoric cultures become outdated when modernity settles in.

Finally, the dominant method of exchanging commodities and services shifts to marketplaces that are cash-driven. (Ntalaga 2005) asserts that for many Africans, notions like progress, modernization, and globalization entail embracing western cultural norms, which demotes African culture to a supporting role. Thus, he views modernization as a process that will enable Africans to catch up to the levels of development attained by western countries (Ntalaga, 2005). In this sense, the idea that modernity, globalization, and progress are synonymous with westernization reflects a Eurocentric mindset that subjugates African culture and fuels the desire for a westernized culture in children and even adults from Africa. By elevating western educational systems (modernity) to a superior position, it denigrates traditional African knowledge systems. The focus of the next section is on how implementing a strong language strategy for education may promote the value addition of indigenous knowledge systems and support an afrocentric educational philosophy. The modernization paradigm, when applied to the topic of indigenous knowledge systems, causes some Africans to believe that indigenous Knowledge Systems are incompatible with education (Maila & Loubser, 2003). This point of view is supported by the 'absolutization' of indigenous knowledge systems held by indigenous peoples in Africa and the belief that western modes of knowledge are superior (Ntuli, 2009).

The presumption that Africa was a tabula rasa (i.e., a continent without civilization) prior to the colonial era and that western cultural systems of knowledge were regarded as the only means to be used in determining the value of Africa's ideas, beliefs, and general way of life are coupled with the aforementioned idea (Ntuli, 2009). Therefore, it is essential that Africa builds on all of its historical indigenous achievements and renounces everything that would be detrimental to her development, progress, and sustainability. An inclusive system and process of traditional knowledge should be consciously sought out and vigorously implemented in the education system of the nation rather than developing an ecologically coded African society that excludes the traditions of knowing of other peoples (Maila & Loubser, 2003). Such a strategy will not only be enlightening but will also make sure that past errors in exalting one knowledge system above another are never made again. A holistic knowledge framework for humanity is critical if Africa wishes to respond swiftly and appropriately to an educational crisis facing its people as a consequence of cultural imperialism (Vilakazi, 1999).

### **Indigenous Education Approach**

According to Jacob, Cheng, and Porter (2015), indigenous education pays attention to educational conceptions that are native to certain territories and locations as well as the manner in which people learn about and make sense of their indigenous heritages. The goal of Indigenous education is to holistically develop future leaders who will be able to speak and act on behalf of their people. There are as many different Indigenous educational models as there are different Indigenous cultures throughout the world. It is a continuation of Indigenous knowledge's in a modern setting, but it also requires creating reciprocal, moral relationships between Indigenous and other knowledge systems (Ermine, 2007). To "indigenize" education, one must return to the ontological and epistemological frameworks of the Indigenous peoples of a nation to influence its educational institutions or systems. Indigenous education is a body of knowledge that develops through the prolonged habitation of a particular location across time.

Such knowledge comprises established societal norms and values as well as conceptual frameworks that direct, coordinate, and control how individuals live and interpret their surroundings (Dei, Hall, & Goldin Rosenberg, 2000). These understandings are the result of a people's collective experiences and understandings.

Indigenous educational approaches are defined in detail by Emeagwali (2014, p. 1) as “the cumulative body of strategies, practices, techniques, tools, intellectual resources, explanations, beliefs and values accumulated over time in a particular locality, without the interference and impositions of external hegemonic forces” (p. To describe common knowledge and how it relates to contemporary science, terms like ethno-science and citizen science have also been employed within the context of indigenous knowledge (Leach & Fairhead, 2002). Indigenous knowledge has also been referred to as traditional wisdom and local, folk, or people's knowledge. Indigenous knowledge is transmitted orally from one generation to the next through ceremonies and word-of-mouth. The World Bank (1997) asserts that a group's capacity to expand its indigenous knowledge is just as significant as its financial resources since indigenous knowledge embodies a people's history, skills, and experiences and may lead to better livelihoods.

### **Education and National Development**

One of the key elements of progress is education in many senses. Without significant investments in human capital, no nation can have sustainable economic growth. People's understanding of the world and themselves are improved via education. It raises their standard of living and has a significant positive social impact on both people and society (Taiwo & Tunde, 2016). Education increases productivity and creativity, encourages entrepreneurship, and advances technology. Additionally, it is essential for ensuring social and economic advancement as well as for enhancing revenue distribution.

Development is a multifaceted and complicated process that involves activities in the social, economic, cultural, and other spheres of



existence. Men have worked to improve their environment-conquering skills throughout human history in an effort to raise their level of living. Development involves both qualitative and quantitative improvements in a person's ability, talents, creativity, and overall material well-being. The lack of qualified employees or sufficient financial resources is not the primary cause of Nigeria's development challenges; rather, dishonesty and the desire for personal gain on the side of the Programme's policy makers and implementers also have share of the blame. Inequality, unemployment, and poverty are the three main problems that development commonly addresses and which then translate into national development.

Investment in human capital development, political sanity and survival, health and healthy living, economic advancement, sociocultural development, environmental protection, and industrialization all result from investments in people and community-oriented education. The aforementioned definitions make it clear that education is the driving force behind all development and nation-building, and as a result, any type of government—military, civilian, or mixed—that fails to take into account the pace of educational advancement in its nation will inevitably lead to crisis and/or disaster (Ogueri, 2004). Additionally, some industrialized countries “re-adjusted” their educational policies to reflect local conditions and increased funding for education growth shortly following World War II in order to meet the current needs of development. This resulted in increased economic growth (Ogueri, 2004).

### **Challenges of Western Education to National Development**

Indigenous peoples from throughout the world have similar experiences with literacy programs, such as general underperformance in formal educational institutions and high dropout rates (Ketsitlile, 2011). For instance, African and Native American families in the U.S. confront challenges in the areas of education, society, and politics. Indigenous peoples were brutally silenced by colonists through formal schooling in many different parts of the world. Thus, poverty and misunderstanding have been attributed to literacy habits that differ from those of dominant

communities. (Shujaa, 1996) urges all African Americans and Africans to take ownership of their literacy by establishing a pedagogy that takes into account the distinctive culture and traditions of African people. According to research, these challenges combined with increased mobility led to inferior academic success, greater dropout rates, and other issues with education, such as cultural misunderstandings (Ketsitlile, 2011). While in popular Western culture, modern science—as promoted by western education is seen as the sole legitimate route to knowledge acquisition (Ketsitlile, 2011).

Young people in Africa are turning away from African music and adopting music from other cultures, completely oblivious to the fact that African music and dance are not just for amusement but also a spiritual and cultural legacy that should not be disregarded. Indigenous methods of knowing are critically endangered by knowledge of mainstream people in nations like Australia, Brazil, Peru, and India. The West ignored the suffering and torment that this “mission” causes to indigenous peoples in its blatant attempt to eradicate indigenous knowledge and establish a “new order” that would permanently silence the voice of the indigenous person. Some current notable areas in which western education is having disservice to national development in Nigeria and other indigenous societies are:

There is no denying that morals in Nigeria have declined significantly. Adultery, abortions, and wearing clothes that is overly provocative are now more commonplace than they ever were. the traditional African societies where not known with the aforementioned deviances. In certain households, it's possible to identify a split among the family members who favour and oppose western values. For instance, while the parents would like that their child grow up familiar with the best national traditions, a youngster may strive to become familiar with new trends. Such disputes could also have an impact on a couple's love. African customs and culture are receiving less focus. Prior to colonization, regional customs were taken extremely seriously. These civilizations are being lost over time as a result of the popularity of western culture and education. Our predecessors'

administrative practices were far more trustworthy than those in use now. Less anarchy prevailed, and rigorous order was upheld.

### **Relevance of Indigenous Education to National Development**

Any society's destiny depends on how well its culture and worldview are passed on to subsequent generations. Instilling knowledge of the group's language, history, customs, conduct, and spiritual beliefs into young people via education changes all facets of identity (Ketsitlile, 2011). Many European travelers to Africa had the impression that the continent was uninhabited. This impression was, to put it mildly, highly misguided and improper. Thus, Europe demonstrated a lack of understanding of African knowledge systems, which helps to explain why formal established European schools never gave any thought to the informal educational system that pervaded the entire continent and served as a means of passing knowledge from one community to another and from one generation to another (Richard, 2017). The main argument was that the Europeans had brought in something completely fresh to help her forward the imperialist goal. It became clear at that point that the western educational system serves to accelerate the contemporary West's development at the expense of the indigenous societies that are being colonized.

Disparaging African native educational systems indicates that there is no interaction or socialization amongst African groups and that there is no system in place to nurture students in accordance with African requirements and customs. The impression is depressing. As evidenced by the historical accomplishments of indigenous tribes in Nigeria that extend back to the colonial era, there were other groups that saw reading and writing as the primary foundation of education. Reading and writing are equated with Western culture in the eyes of these communities. The purposeful goal of the Western mentality was to obliterate anything and anything African, including the way that continent taught its children. African modes of life were undercut by the introduction of Western institutions, which undoubtedly cleared the path for their replacement.

African names were changed to European ones in order to carry out

the colonial objective, and English substituted native languages in the states of Anglo-speaking Africa as the medium of instruction. Africans were raised to imitate European Christians' moral standards. The need that every African be baptized and indoctrinated into western principles led some Africans, like Mbonu Ojike, to denounce his father's faith as "heathen" and obviously "inferior to the white man's" (Richard, 2017).

School in Africa typically serves as a microcosm of the greater culture. Children and adults tend to think that everything from the West is the greatest and that anything from Africa is inferior or fong kong, a Chinese term for the cheap, phony Chinese items that are commonly seen in Africa. It is not unusual for kids to recite lengthy portions from foreign literature like Shakespeare without realizing what they are saying. Children are trained to turn away from their communities when seeking solutions to life's questions. A curriculum that mainly relies on Western methods of knowing serves to further support this. When former Tanzanian President Julius Nyerere asserts that the conflict between indigenous and western methods of learning is a major factor in the issues in African schools, he is speaking for all indigenous peoples.

Beyond the aforementioned problems, there is a pressing need for indigenous African educational approaches to be included in school, college, and university curricula. However, it is crucial to remember that regardless of how important the latter objective may be, there are social, psychological, anthropological, intellectual, economic, and other reasons that primarily result from the way in which the continent's history has developed, as well as the intellectual dominance and dependence structures connected to colonial and postcolonial hierarchies and power elites (Christie, 2008). Sadly, the same Africa created the classical bronzes of Igbo Ukwu in the ninth century, those of Ife (from the eleventh to the twelfth centuries AD), and Benin (from the fourteenth century AD). Did these achievements not take place while Europe was still mired in the Middle Ages? It is still conceivable that Egypt's historical records were sent to Greece, the birthplace of Western academia, after Alexander the Great captured Alexandria.

## **Why Indigenous Education Approach Should be Considered above Western Education System**

Traditional education's influence was lessened by colonization, which also brought western culture, civilization, and Christianity. Reading, Arithmetic, and Writing were introduced at a basic level with the goal of eliminating illiteracy, ignorance, and superstition while also creating messengers and individuals with a limited education who are terrified by authoritative leaders. The repercussions of this educational disarray brought about by western education were buried behind tribalism, nepotism, ethnocentrism, statism, and religious fanaticism. Numerous Asian nations have well-known growth and development patterns that are admirable. Japan and the rapidly industrializing economies of Hong Kong, South Korea, Singapore, Taiwan, and others were first to achieve this feat, making East Asia the only area in the world to do so across a number of decades (Richard, 2017).

These cultures' homogeneity was only one of several elements that contributed to their development. These include the development of the agricultural sector, a system of mass education, the growth of indigenous industries, an export-oriented strategy, the Spartan discipline of their leadership, and the presence of an effective bureaucracy. If we want to better develop and sustain this peasant culture, we should take a cue from these close neighbours. Lesson from a close-knit community of peasants the experiences of the Japanese and Chinese. We must recognize that the people had a significant impact on the sort of growth that occurred in Japanese society. America destroyed Hiroshima and Nagasaki during World War II, leaving the Japanese civilization defenseless to the point that they were compelled to surrender. Japan closed its economy, never engaged in trade with the outside world, and turned inside for its supply and development, which is where the narrative of Japan's impact began. They refined and updated their traditional and indigenous ways of doing things and getting work done while managing their resources within their own setting. This suggests that Japanese society utilized an inward-looking approach to progress. They were able to modernize in accordance with

their technological capabilities, and they never imagined technological breakthroughs, innovations, or development for which they were not prepared or mature. This significantly aided in the advancement of civilization. It is true that growth that is focused on and driven by people takes time and effort.

China had comparable experiences and turned inside in search of change. After the Second World War, the focus moved from full production and accumulation to raising the standard of life of the populace and consumption as the society realized the importance of the population to a sustainable development. They preserved their native tongue, used indigenous knowledge to construct their primitive technology, valued their culture, and instilled the value of hard labor in their people on the same platform. China is one of the most developed and technologically sophisticated countries in the world today, producing more than 70% of the electronics used in Nigeria.

Nigeria should take a lesson from China and Japan's experiences, and we should realize that adopting Western values, as we did during the colonial era and are still doing today, hasn't benefited and probably won't benefit us. Our leaders should start people-centered development initiatives, we should focus on our own internal growth, and let's update our own native methods of doing things. The difficulties of underdevelopment can be stopped in their tracks by taking prompt action to address the following problems: poverty, inequality, unemployment, economic crises, and insecurity issues. Therefore, developing effective strategies for reducing poverty, particularly in rural regions, is a top priority for governments, international institutions, and policymakers worldwide. The paper ends with questions regarding the following as a possible course of action: if the equitable distribution of income, an increase in employment opportunities, improved social services, and an efficient allocation of resources to eliminate waste with proper planning and inquiries as blueprints for development, as has previously been advocated, will work, then the populace and the implementer should be properly checked.

## **Conclusion**

There is no question that indigenous peoples over the world confront several obstacles to their children's education, and in Africa, there is a never-ending battle for national development. It is crucial for indigenous children to have a decent education in order to compete effectively with mainstream students in the competitive world of today. However, obstacles like foreign languages, foreign teaching methods, poverty, and distance between home and school prevent them from succeeding in school. The current paper's numerous illustrative examples show that the main obstacle to these kids' educational success is forced instruction in a foreign language or languages.

The discussion's conclusion is that, in order to promote national development, the incorporation of indigenous educational approaches into all curricula must be done carefully and correctly in almost every setting for instruction. To make indigenous education a required component of all teaching and learning situations consistent with the sociological view that all knowledge, whether indigenous or western, is spawned within a particular segment of society based on power and class, the Western educational mindset that tends to view indigenous knowledge system as an integral part of the Arts and Culture Learning curriculum needs to be revisited. The hierarchically organized bodies of school knowledge are cited by (Aronowitz and Giroux 2005) as evidence for how crucial a role learning institution play in legitimizing and developing hegemonic cultural capital. The discussion came to the conclusion that while dominant western forms of knowledge continue to have a prominent place in school curricula, they are not always the answer to Africa's social, economic, and political ills. The study came to the additional conclusion that placing too much emphasis on the superiority of western hegemonic forms of knowledge leads to denigrate indigenous educational approaches, discouraging many Africans from pursuing them. Even if it is advised that curriculum designers incorporate indigenous knowledge, it can be required for colleges to provide such courses as electives. In fact, if students are not interested in studying African indigenous knowledge



systems, they should not be forced to do so. Only when the subject matter is interesting to the students can learning flourish.

## R E F E R E N C E S

- Ahmad, A., Shehu, S. and Mahmoud, Z. (2019). Factors affecting development of education in Nigeria. In: T. Umar, ed., *Multifarious Issues in Nigeria Today: Multidisciplinary Approaches*, 1st ed. Akure: Science and Education Development Inst., Nigeria, pp.70-80.
- Aronowitz, S., & Giroux, H.A. (2005). *Education under siege: The conservative, liberal and radical debate over schooling*. London: Routledge & Kegan
- Arua, A. & Lederer, M. (2003). What are students in Botswana high schools reading? In A, Arua (Ed.). *Reading for all in Africa*. (pp. 26- 31). Newark, DE: International Reading Association.
- Chivaura, V. G. (2014). Progress on meeting SADC education targets. *Zimbabwean*, 4, 19-25.
- Christie, P. (2008). *Changing schools in South Africa: Opening the doors of learning*. Johannesburg: Heinemann.
- Christie, P., & Collins, C. (1990). Bantu education: Apartheid ideology or labour reproduction? *Comparative Education*, 18, 59-75. <http://dx.doi.org/10.1080/0305006820180107>
- Christie, P. (1992). Reforming the racial curriculum: Curriculum change in desegregated schools in South Africa. *British Journal of Sociology of Education*, 11, 37-48. <http://dx.doi.org/10.1080/0142569900110103>
- Crossman, A. (2012). *Sociological theories*. London: Methuen.
- Dei, George J. Sefa, Hall Budd L. and Goldin Rosenberg, Dorothy (eds.) (2000). *Indigenous knowledges in global contexts: Multiple readings of our world*. Toronto: University of Toronto Press.
- Edsand,. H & Broich,. T (2019). The Impact of Environmental Education on Environmental and Renewable Energy Technology Awareness: Empirical Evidence from Colombia. *International Journal of Science and Mathematics Education*, 18, 611–634.



- Emeagwali, G. (2014). Intersections between Africa's indigenous knowledge systems and history. In G, Emeagwali & G. SefaDei (Eds.), *African indigenous knowledge and the disciplines* (pp. 1-17). Rotterdam, Netherlands: Sense Publishers.
- Ermine, W. (2007). The ethical space of engagement. *Indigenous Law Journal*, 6(1)
- Fries, J. (1987) *The American Indian in higher education, 1975 – 76 to 1984 – 85*. Washington DC: Center for Education Statistics, Office of Educational Research and Improvement, U.S. Department of Education.
- Gboyega, A. (2003). Democracy and development: The imperative of local governance. An Inaugural Lecture, University of Ibadan, pp. 6-7.
- Jacob, W. J., Cheng, S. Y., & Porter, M. K. (2015). Global review of indigenous education: Issues of identity, culture, and language. In W. J. Jacob, S. Y. Cheng, & M. K. Porter (Eds.), *Indigenous education: Language, culture and identity* (pp. 1–35). New York: Springer Science+Business Media
- Joseph, O.A (2014). National Development strategies: Challenges and options. *International Journal of Humanities and Social Science Invention*, 3 (4), 51-58.
- Ketsitlile, L.E. (2011). An overview of indigenous peoples in education systems worldwide: Challenges, barriers and successes. *LWATI: A Journal of Contemporary Research*, 8(3), 213-229.
- Leach, M. & Fairhead, J. (2002). Manners of contestation: “citizen science” and “indigenous knowledge” in West Africa and the Caribbean. *International Social Science Journal*, 173, 299-311
- Macedo, D., Dendrinis, B., & Gounari, P. (2003). *The hegemony of English*. Boulder CO: Paradigm.
- Makinde, O. O. & Shorunke, O. A., (2013). Exploiting the values of indigenous knowledge in attaining sustainable development in Nigeria: *The place of the Library. Library Philosophy and Practice* (e-journal). Paper 908
- Meriton, V. (2009). Speech of Minister Vincent Meriton at the opening of the Indigenous Knowledge Systems (IKS) workshop on 22nd June 2009. Retrieved August 29, 2015, from <http://www.mcdysc.sc/Documents/SPEECH IKS WORKSHOP colour.pdf>
- Maila, M., & Loubser, C. (2003). Emancipatory indigenous knowledge systems: Implications for environmental education in South Africa. *South African Journal of Education*, 23, 276-280.

- Moahi, K. (2010, February 18-19). Promoting African indigenous knowledge in the knowledge economy: Exploring the role of higher education and libraries. In symposium Knowing is not enough: Engaging in the knowledge economy. Conducted at the Stellenbosch University Library / IFLA Presidential Meeting, Stellenbosch South Africa. Retrieved from <http://scholar.sun.ac.za/handle/10019.1/395>.
- Naomi, O. (1995). Towards an integrated view of human rights. *Hunger Teach Net*, 6(3), 6-7.
- Ogueri, A. C. (2004). The need for environmental education in secondary education level in Nigeria: Problems and Challenges. International Master's Degree Thesis on Environmental Policy submitted to the Department of Environment, Technology and Social Studies Roskilde University, Denmark. {<https://api.semanticscholar.org/CorpusID:114447850>}
- Ohagwu, C.A. (2010). *Rural development in Nigeria: Issues, concepts and practice*. Enugu, John Jacobs Classic Publishers Ltd
- Mavhunga, P. (2009). Africanizing the curriculum: A case of Zimbabwe. *Zimbabwe Journal of Educational Research*, 2, 31-37.
- Mutekwe, E. (2015). Towards an Africa philosophy of education for indigenous knowledge systems in Africa. *Creative Education*, 2015, 6, 1294-1305
- Ntalaga, N. (2005). Interrogating the notion of development from a modernization paradigm. *Journal of Social Sciences*, 12, 311-323.
- Ntuli, P. (2009). The missing link between culture and education: Are we still chasing gods that are not our own? In M. W. Makgoba (Ed.), *African renaissance* (pp. 67-72). Cape Town: Mafube-Tafelberg.
- Ntuli, P. (2002). Indigenous knowledge systems & the African renaissance. *Indicator South Africa* 15(2):15-18.
- Odora-Hoppers, C. (2002). Indigenous knowledge and the integration of knowledge systems: towards a conceptual and methodological framework. In C. Odora Hoppers (Ed.), *Indigenous knowledge and the integration of knowledge systems: Towards a philosophy of articulation* (pp.139-143). Claremont, South Africa: New Africa Books.
- Richard, A.E. (2017). African indigenous knowledge: The challenges of industrialization. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 5(5), 76-84.

- Shehu, A. (2020). Western education versus indigenous knowledge of the Tarok in Plateau State, Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 11(4), 59-68,
- Shujaa, (1996). *Beyond desegregation: The politics of quality in African American schooling*. Thousand Oaks, CA: Corwin Press.
- Taiwo, R.O & Tunde, A. (2016). Impact of education on national development. *International Journal of Advanced Academic Research | Social Sciences and Education*, 2 (1), 1-8.
- Tracy, D. H., & Morrow, L. M. (2006). *Lenses on reading: An introduction to theories and models*. New York: The Guilford Press.
- Ukwuoma. (2014). College lecturer's perspectives on the role of Nigerian creole in teacher education. Doctoral dissertation. Retrieved from ProQuest Dissertations. (UMI No. 3580948). <https://eric.ed.gov/?id=ED557024>
- Ukwuoma, U. (2015). Educational development of Africa: Changing perspectives on the role of indigenous knowledge. Original scientific paper Botswana International University of Science and Technology UDK: 371.217.46 Palapye – Botswana DOI: 10.17810/2015.28
- UNEP. (2008). Indigenous knowledge in disaster management in Africa. Nairobi, Kenya: United Nations Environment Programme. [https://www.scirp.org/\(S\(czeh2tfqw2orz553k1w0r45\)\)/reference/referencespapers.aspx?referenceid=2091374](https://www.scirp.org/(S(czeh2tfqw2orz553k1w0r45))/reference/referencespapers.aspx?referenceid=2091374)
- Vilakazi, H. (1999). The problem of African universities. In M. W. Makgoba (Ed.), *African Renaissance* (pp. 127-132). Cape Town: Mafube-Tafelberg.
- Webster, A. (2008). *The sociology of development*. New York: Routledge
- Worldbank. (2015). What is indigenous knowledge? Retrieved August 29, 2015, from <http://www.worldbank.org/afr/ik/basic.htm>.
- Zaruwa, M. Z., & Kwaghe, Z. E. (2014). Traditional tannery and dyeing (Yirie) methods: A science par excellence in Northeastern Nigeria. In G, Emeagwali & G. SefaDei (Eds.), *African indigenous knowledge and the disciplines*. Rotterdam, Netherlands: Sense Publishers.
- Zaruwa, M. Z., Ibok, N. U., & Ibok, I. U. (2014). Traditional brewing technique in northern Nigeria. An indigenous approach to the exploitation of enzymes (Tsiro). In G, Emeagwali & G. SefaDei (Eds.), *African indigenous knowledge and the disciplines*. Rotterdam, Netherlands: Sense Publishers

Zuckermann, Ghil'ad; et al. (2015), ENGAGING - A Guide to Interacting Respectfully and Reciprocally with Aboriginal and Torres Strait Islander People, and their Arts Practices and Intellectual Property, Australian Government: Indigenous Culture Support, p. 7.