

IS HERITAGE-BASED EDUCATION SIMILAR TO INDIGENOUS KNOWLEDGE SYSTEMS IN ZIMBABWE?

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Abstract

Post-colonial Zimbabwe has been hopping from one curriculum to the next in search of long-lasting solutions to the national socio-economic challenges. Zimbabwe has been trying to decolonise the education system to create economic growth and survive the sanctions imposed on the country. The study is premised on the argument that heritage-based education has similarities with indigenous knowledge systems (IKS) in Zimbabwe, with a few points of departure that separate the two approaches. The study uses the place-based education conceptual framework as guidance. The study employs a qualitative methodology with a case study research design while engaging secondary data from journals and newspaper articles.

Key words: *Livelihoods diversification, systems theory, resilience, informal economies*

INTRODUCTION

Societies the world over depend on their indigenous knowledge to solve their day-to-day economic problems, address various environmental challenges, and adapt to change (Mawere, 2015). Indigenous knowledge systems (IKS) are the knowledge system

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produced by indigenous peoples through observation and practice, in a dynamic process that meets the needs of a particular community. During the post-colonial era in Africa, there has been a growing interest in restoring lost or dying IKS (Mapira and Mazambara, 2013). The term “indigenous” has been vilified and criticised, particularly since the beginning of formal decolonisation projects across the globe such that it has now assumed a diversity of meanings (Hountondji, 1997). Turnball (2000) views it as pejorative and sneering when a group of people are referred to as indigenous or their ideas, beliefs, and practices as indigenous knowledge.

In Zimbabwe, IKS have been included in the curriculum to complement the national curriculum in search of solutions to the existing national problems. Poor economic performance and a lack of a focused national education policy in Zimbabwe saw the country hopping from one policy to the next (Kecher, 2022). These curriculum changes saw the development of Education 5.0, a heritage-based education curriculum that has been proposed as the solution to the problems bedevilling the country. Education 5.0 has been proposed as the solution to the education policy foraging to create graduates with innovative job creation skills and industrial worth knowledge to industrialise the country and create a middle-income economy by 2030, while cognisant of the culture and heritage of the country (Murwira, 2020).

There's a growing movement in Zimbabwe to include IKS in the curriculum, and this has several potential benefits. One of the reasons for the inclusion of IKS is its relevance and direct applicability to the Zimbabwean context, especially in agriculture, resource management, and traditional skills. This can make learning more relatable and engaging for students. Cultural Identity is seen through including IKS honours and preservation of the Zimbabwean cultural heritage. Students gain a deeper understanding of their roots and traditions. IKS

offers solutions for environmental challenges and integrating it into the curriculum equips students with knowledge of sustainable practices (Mavengano, 2022). Empowering students can be achieved by introducing skills development programmes as early as the pre-school stage. Valuing IKS empowers communities and recognises the expertise held by elders and knowledge-keepers. If this knowledge is not shared now, it will be lost forever and when shared, it will be an investment into the future. With new technologies, many sustainable innovations can be related to indigenous ideas by the younger generations.

Mawere (2015) posits that modern understanding of 'indigenous' and, by proxy, indigenous knowledge, is applied to a given person or group of people self-identifying as indigenous and being accepted by community as a member, demonstrating historical continuity with pre-colonial and pre-settler societies evincing a strong link to territories and surrounding natural resources having distinct social, religious, economic and political systems, having a different language, culture, and beliefs, comprising a non-dominant part of society and resolving to maintain and produce ancestral environments and systems as distinctive people and social communities. Da Silva *et al.* (2023) observe that indigenous people are ethnic groups with unique traditions, political, cultural, and social organisation, and ways of life that are distinct from the dominant societies with which they often share their territory.

Indigenous people are generally considered the descendants of peoples who had previously inhabited a certain geographic area when the new conquerors from different cultures or ethnic origins arrived there (*ibid.*). Despite the diversity and complexity of indigenous knowledge, it is often neglected in knowledge production environments, being generally described with words such as 'primitive', 'backward', 'rural' 'savage' and 'unscientific' (Ezeanye-

Esiobu, 2020). The unique knowledge and interpretations of reality produced by indigenous communities through a complex process of cultural construction, end up being made invisible, marginalised, and regarded as an inferior social experience, against a hegemonic epistemological model that produces and legitimises a true monoculture of knowledge (Santos, 2015). Culture and heritage are usually viewed in the same inferior manner where even the indigenous people end up looking down upon their indigenous ways of life.

Indigenous knowledge systems in Zimbabwe have a rich history of fostering various skills. IKS contributes to skills development through Craft Skills. Khupe (2014) alludes that, traditional methods of basket weaving, pottery making, woodwork, and metalworking are passed down through generations by observation, apprenticeship, and storytelling. IKS emphasizes using locally available materials and techniques improved over centuries. Agricultural IKS offer a wealth of knowledge about weather patterns, soil conditions, and appropriate planting times. Farmers utilise this knowledge to cultivate crops and raise livestock suited to the local environment.

Khupe (*ibid.*), argues that resource management has always been the most encouraged in the different communities that have developed practices for the sustainable use of natural resources. This includes techniques for land management, preventing soil erosion, and conserving water. IKS are problem-solving and decision-making processes. They foster critical thinking and collaborative decision-making within communities. Elders and experienced individuals share knowledge and stories to address challenges and find solutions.

Despite their strengths, IKS face challenges in the modern world. Colonialism and emphasis on formal education sometimes overshadow the value of indigenous knowledge. Mavengano (2022)

observes that there is a growing recognition of the importance of IKS for sustainable development. Initiatives are underway to integrate IKS into formal education and development programmes. This can help in ensuring that these valuable skills are preserved and continue to benefit future generations.

Some challenges are met in trying to include IKS into the curriculum. The need for policy support is one important factor to consider. The Zimbabwean curriculum acknowledges the importance of IKS, but translating policy into practice requires further development of resources and teacher training. There is need for teacher training and resource development. Teachers need training on IKS to effectively integrate it into their lessons. This might involve collaborating with community knowledge holders, establishing the ecologies where schools are located, and making use of resources available to the different communities. Developing appropriate teaching methodologies is crucial. This could involve storytelling, practical demonstrations, and integrating IKS with existing subjects.

On potential outcomes, IKS can create a more holistic educational experience that blends traditional knowledge with scientific understanding. Mavengano (*ibid.*) observes that students can develop critical thinking and problem-solving skills by learning from indigenous approaches. Community engagement can encourage considerable involvement of stakeholders in school development programmes. Schools can become bridges between formal education and community knowledge, fostering cultural exchange and appreciation. Overall, including IKS in the curriculum promises a more relevant, culturally rich, and sustainable education system in Zimbabwe. There are challenges to address, but the potential benefits are significant.

Chitumba (2013) posits that schools and the education system can be used as tools for guarding against the invasion of foreign cultural practices. IKS are seen as a medium and form of cultural affirmation of *Ubuntu* and to safeguard the African culture. The inclusion of indigenous knowledge systems in the curriculum has been a step in the right direction for Zimbabwe towards the Africanisation of the continent's knowledge production system and this has been aided by the creation of a heritage-based education system that favours production through locally available resources and knowledge systems. The study seeks to understand the similarities and differences between IKS and heritage-based approaches to education in Zimbabwe. This article is premised on the argument that while both approaches, heritage and IKS, have the potential to benefit education and development, it is crucial to recognise the distinct nature of IKS and to respect the rights and knowledge ownership of indigenous communities when incorporating their knowledge into the educational system. Thus, this article aims to explore similarities and deviations between the two approaches.

CONCEPTUAL FRAMEWORK

The study engages the place-based education (PBE) and pedagogy concept as the conceptual framework to guide the study. Knapp (2014) defines PBE as a community-based effort to reconnect the process of education, enculturation, and human development to the well-being of community life, introducing learners to skills and dispositions needed to regenerate and sustain communities. IKS are related to communities, their norms and values, and their coping mechanisms in different environments in which they live.

Smith and Sobels (2014) argue that PBE is the process of using the local community and environment as a starting point, to teach concepts in Language Arts, Mathematics, Social Studies, Science, and other subjects across the curriculum. Gray (2000) observes that since the

1980s, there has been a growing interest in how to design and implement culturally responsive pedagogy. There have been several educational curriculum policies that have been tried to bring culture and heritage studies into classroom lessons.

The PBE pedagogy has developed around the need to bring schools and communities closer together. In more recent times PBE has become part of the broader movement that has arisen in response to globalisation and the serious environmental issues confronting humanity. Giroux (2016) articulates the notion of pedagogy as a deeply civic, political moral practice, that is, pedagogy as a practice of freedom, and M Inerney *et al.* (2011) agree that pedagogy of place shifts the emphasis from teaching learners about local culture to teaching through the culture as students about the immediate places they inhabit and their connection to the larger world within which they will make a life for themselves (Barnhardt, 2014). Of the same view is Knapp (2014), who refers to pedagogy as extending the classroom beyond the four walls of the room and the two covers of a book. The practices of the PBE movement can be connected to experiential learning, constructivism, outdoor education, environmental and ecological education, bioregional education, democratic education, multicultural education, community-based education, and critical education (Gruenwald, 2003). This shows how closely related heritage is to IKS and the need to engage the community in all the school-based programmes is vital.

Place-based education provides an alternative to curriculum that is particularly alienating for many learners as it challenges the authenticity and delivery of mandated curriculum and authorises locally produced knowledge, otherwise referred to as indigenous knowledge (McInerney, 2011). A critical perspective in PBE encourages young people to connect local issues to global environmental, financial, and social concerns, such as climate change, water scarcity, poverty,

and trade (Ronoh, 2018). This concept becomes appropriate as the study deals with the heritage-based curriculum and IKS in the Zimbabwean education system to understand their similarities as education crafted in a specific place using the Zimbabwean culture to craft solutions for the problems confronting the country such as poverty, climate change, water scarcity, and energy problems.

Place-based education is gaining traction in Zimbabwe, aligning with the nation's rich cultural heritage and diverse landscapes. This approach centres learning around the local community, environment, and culture. Leveraging local Resources is one key focus of PBE. Zimbabwe's abundant natural resources, historical sites, and cultural practices offer a wealth of educational opportunities. For example, studying the Great Zimbabwe Ruins can provide insights into history, archaeology, and tourism.

Incorporating IKS is the way to harness and invest in the country's knowledge and heritage. Zimbabwe has a rich tapestry of IKS, including traditional medicine, agriculture, and environmental wisdom. Integrating these into the curriculum as Nociti (2024) asserts, can enhance students' understanding of their heritage and promote sustainability. Addressing local challenges can be achieved through PBE which can equip students with the skills to tackle local issues such as climate change, poverty, and healthcare. For instance, studying water scarcity in a particular region can foster problem-solving and critical thinking. Building community partnerships by collaborating with local organisations, businesses, and experts can enrich the learning experience and create a sense of ownership within different communities. PBE can be useful in Zimbabwe. Environmental Education, including exploring national parks, studying local ecosystems, and participating in conservation protection can foster environmental stewardship. Agricultural Education can be achieved through learning about traditional farming practices, and modern

agricultural techniques, ensuring food security and preparing students for sustainable livelihoods. Cultural Heritage Education, including preserving and promoting Zimbabwe's diverse cultural heritage through language, music, dance, and crafts, can strengthen cultural identity. Community Development Projects help to engage students in community-based initiatives, such as clean water projects, healthcare campaigns, and infrastructure development, to cultivate civic responsibility ethos. PBE holds immense promise but also faces challenges such as limited resources, infrastructure, and teacher training. However, there are opportunities for collaboration between government, non-governmental organisations (NGO)s, and the private sector to support its implementation.

LITERATURE REVIEW

This section of the study reviews the literature on the nature of IKS, as there is not much literature on the heritage-based approach to education, except from its inception to date. Sillitoe (1998) observes that IKS are often referred to in different ways including, but not limited to, local knowledge, traditional knowledge, indigenous technical knowledge, peasants' knowledge, traditional environmental knowledge, and folk knowledge. Battiste (2002) views IKS as local knowledge, unique to every culture or society, embedded in community practices, institutions, relationships, and rituals, and is commonly held by communities rather than individuals. Khupe (2014) articulates that IKS are worldviews with their ontology and epistemology. Hewson (2015) describes the African way of knowing as a sophisticated (but different) way of seeing and interpreting the world and explaining the vicissitudes of human lives.

Through educational curriculum, learning institutions exert considerable influence in shaping society (Escrigas, 2016). Education is both a prerequisite to and a tool for, enhancing the opportunities of learning to exercise their social, cultural, economic, and political rights

(Ronoh, 2018). Culturally responsive education is directed toward culturally knowledgeable students who are well grounded in the cultural heritage, and traditions of their community, and can understand and demonstrate how their local situation and knowledge relate to other knowledge systems and cultural beliefs (Barnhardt, 2014). Blignaut *et al.* (2017) assert that an important purpose of education is to bring about autonomous individuals who can think for themselves and can make ethical judgments and decisions. Such successful education programmes require a relevant curriculum that can be taught and learned in a local language and builds upon the knowledge and experience of teachers and learners (UNESCO, 2002).

The dominant teacher-centred pedagogy of the present formal education system negates the constructivist theory that believes that children actively construct their knowledge, rather than simply absorbing and memorising ideas spoken to them by teachers (Lunenburg, 1998). Thus, for the African child to learn with meaningful practice applications within his or her communities, there is need to extend teaching in Africa beyond the current practice of transmission and indoctrination to facilitating subject matter learning through integration of the learner's IKS to transform the subject matter knowledge into a comprehensible form that the learners can grab and apply (Abah *et al.*, 2015; Assie-Lumumba, 2016). Education is the transmission of values and accumulated knowledge of society and is a societal instrument for the expansion of human culture. Nyerere (1971) points out that ideas imparted by education should include skills that are liberating, as nothing else can properly be called education that teaches knowledge that induces a slave mentality or a sense of impotence.

The post-colonial era has heralded critique of the curriculum to cultural superiority, ideological introduction, power, and control over others and this has resulted in fundamental re-thinking of the

curriculum that has led to a move beyond the representation of Western, Eurocentric knowledge, by creating spaces for the re-emergence of indigenous knowledge in the school curricula. Weaver (2023) observes that the incorporation of IKS in the school curriculum becomes important for African countries as it decolonises the knowledge production platforms through the re-imagining of knowledge production, in a way that is place-based and context-specific for African cultures and beliefs. Thus, this study investigates IKS and the newly crafted heritage-based education curriculum to draw similarities and differences to inform an education system that searches for solutions within African communities while demystifying the superiority and hegemony claimed by Eurocentric approaches that claim a one-size-fits-all education that claims to pigeon-hole everything into science.

RESEARCH METHODOLOGY

The study uses a qualitative methodology leaning towards the case study research design. Crowe *et al.* (2011) observe that a case study research design is used to generate an in-depth multi-faceted understanding of a certain social issue as it gives new insights and shows the relationship between phenomena. A case study design is appropriate for this study as it captures the relationship between IKS and heritage-based education. To craft the discourse for this article, the research engages secondary data to create a study that is informed by a literature review. Snyder *et al.* (2019) observe that a literature review-based study can direct a researcher on the gaps within the study area and how others have addressed the pitfalls within a certain research area. The study uses thematic data analysis to analyse the themes that emerge during the study.

FINDINGS

Heritage-based education and indigenous knowledge systems in Zimbabwe, share some similarities, but there are also key differences.

The study reveals that both approaches focus on cultural knowledge and traditions. They aim to preserve and transmit cultural knowledge and traditions from past generations to future ones. Muzira and Bondai (2020) note that the thrust of education systems like Education 5.0 is on the local heritage and IKS to produce local goods through locally available resources and knowledge. Tanyanyiwa (2019) posits that the geography curriculum on climate change involves IKS as they espouse lived experiences, understanding, values, and lessons that have been passed from generation to generation and they can work in the future.

Murwira (2020) states that Education 5.0 is a heritage-based education curriculum that aims to reposition IKS into the education system to equip students with African values, culture, experiences, and solutions to the problems bedevilling Zimbabwe. Shizha (2013) observes that IKS thus constitutes a critical and unavoidable component of a more realistic and comprehensive system of education, and classroom experiences should reflect the social and cultural context and focus on the need to meet the current societal needs. *The Herald* (28 February 2024) quotes Minister Amon Murwira as having said,

“The nation is informed that the Heritage-Based Education 2024-2030 Curriculum Framework is expected to transform the education system to produce citizens with relevant skills, applied knowledge, values, and dispositions that are key to national development beginning with communities they serve. The Primary and Secondary Education system is designed to mould productive learners who will cherish and practice the Zimbabwean philosophical orientation of Hunhu/Ubuntu.”

The Herald (*ibid.*) indicates that Heritage-Based Education entails learning one's endowments as a country, but still retaining the universal principle of education. Rusiro (2019) alludes that in pursuit of the decolonisation project, the Government of Zimbabwe has integrated IKS into the Geography curriculum to base the understanding of current climatic conditions and changes, along with the cultural understandings and values of the land as the Eurocentric

weather forecasting is becoming less reliable due to unpredictable weather changes. *The Patriot* (02 November 2018) observes that Minister Murwira advised agricultural experts and farmers to use IKS along with scientific knowledge to improve yields as the education system should provide a platform of heritage-based education that will help in the development and transformation of agriculture through national culture and shared values—the value of local knowledge and experiences in understanding and addressing challenges.

The Herald (09 August 2021) alludes that the thrust of heritage-based education is meant to allow students and medical professionals to research traditional medicines (herbs) and how best they can be processed, packaged, and consumed through scientific knowledge and IKS. Thus, both approaches aim to preserve the values and traditional practices of the land, while moving them toward 21st-century trends and practices. Community involvement can involve community elders, artisans, and practitioners as knowledge bearers and teachers. Mavengano (2022) observes that heritage-based education is anchored on community service as one of its pillars. Khupe (2014) observes that IKS encompasses a community's way of life which is the community's values and beliefs.

There are points of departure between the two approaches in that heritage-based education has a broader scope, encompassing various aspects of cultural heritage, including history, language, crafts, music, and social values. It can include different groups within a nation and might not necessarily be unique to specific populations. Muzira and Muzira (2020) observe that Education 5.0 heritage-based education was introduced as an attempt to match Zimbabwean culture and the country's developmental needs. Heritage-based education is often formalised in educational institutions like schools and museums, with documented and structured learning materials. Maringehosi (2020)

posits that heritage-based education was introduced in response to the country's educational demands and the country's cultural context.

The Herald (16 February 2024) observes that heritage-based education was introduced to create a knowledge industry grounded in African values and culture that will usher in a new era and a new dawn in Zimbabwe and the continent. *The Chronicle* (23 February, 2024) indicates that President Mnangagwa said:

"Culture, heritage, and education are important threads that weave together the fabric of Zimbabwe's identity towards industrialisation, modernisation, economic growth, peace, equality, and poverty eradication."

Heritage-based education can be selective or adapted to suit broader national narratives or educational goals. Muzira and Bondai (2022) observe that heritage-based education has thrust on creating an education system that is based on local knowledge systems to produce goods through locally available resources to solve the country's manufacturing problem through innovation and industrialisation.

Keane *et al.* (2023), in their study on IKS in South Africa, allude that IKS focus specifically on the knowledge systems and practices developed and passed down by indigenous communities, who have a long-standing historical connection to a particular territory. IKS are primarily oral traditions passed down generations through storytelling, apprenticeship, and community practices. IKS are often closely linked to sustainable resource management, traditional medicine, agriculture, and social organisation within specific indigenous communities. Mapira and Mazambara (2013) observed that IKS are part of Zimbabwe's heritage that dates to the pre-colonial era when they were developed to address various survival challenges as they are home-grown and have survived the test of time. Masocha and Kariaga (2001) discuss the value of IKS in the field of herbal medicine in the Mutirikwi Communal area of Zimbabwe, where they identified records, passed from generation to generation in the community, of

medicinal plants that have been used for centuries to treat human abdominal diseases in the area. IKS are context-specific, and resonate with a specific area's values and beliefs.

DISCUSSION

The findings reveal that indigenous knowledge systems and heritage-based education in Zimbabwe share similarities. Both approaches focus on cultural knowledge and traditions as culture remains the thread that instils national development and shared goals for Zimbabwe. The study shows that the thrust of heritage-based education is to produce local goods, through locally available resources. IKS are area-specific or community-based. The study indicates the inclusion of IKS in the Geography curriculum to inform the knowledge from lived experiences into the current and future studies on the issues around climate change. Consistent with the study is Barnhardt (2014), who alludes that pedagogy of place shifts the emphasis from teaching learners about local culture to teaching through the culture about the immediate places they inhabit and their connection to the larger world within which they will make a life for themselves.

The study reveals that both IKS and heritage-based education are concerned with community service striving to bring development in the community through innovation and industrialisation using locally produced resources and knowledge. In support of the study is Matorevhu (2023), who observes that education systems in Zimbabwe are linked to community service as they all target solving the problems facing the community. The community service aspect of education in Zimbabwe is anchored on the *Ubuntu* philosophy that emphasizes the unity of purpose, and in Zimbabwe, the goal is to unite against poverty and create a middle-class economy by 2030, while leaving no one behind. The study reveals that both IKS and heritage-based education can be used in agricultural development as they are both anchored on

national culture and shared values. In support of this, Sobels (2014) observes that PBE can be a starting point for communities to teach languages, arts, sciences, and Mathematics, while pushing for the development of the nation, and community. Both IKS and heritage-based education aim to preserve local knowledge while innovating local knowledge to meet the demands of 21st-century practices.

The study shows that IKS and heritage-based education reach a point of departure as the latter has a broader scope, encompassing various aspects that are not part of IKS such as the national agendas as IKS is PBE, passed from one generation to another. The heritage-based education was introduced to match Zimbabwean culture and the country's development needs, innovation, entrepreneurship, modernisation, and industrialisation, while the Zimbabwean culture, based on *Ubuntu* or *Hunhu* remains the common thread holding all the aspects together. In support of the study, Murwira (2020) observes that heritage-based education was a response to a national problem, that is the lack of development in the Zimbabwean community through innovation, industrialisation, and modernisation. The study reveals that heritage-based education was crafted to create a national identity towards development of national goals to suit broader national narratives, while eradicating vices such as poverty, unemployment, hunger and starvation. In a similar study, Matorevhu (2023) alludes that heritage-based education was crafted to address the national problem of graduates lacking competency, with the framework ensuring that graduates have job-relevant knowledge, skills, and attributes as exit competencies. Deliberately ignoring practical skills in schools will lead to the production of dependant school leavers. If practical skills are introduced to learners during early learning up to at least Form Four without bringing the issue of electives on practical subjects, the nation is assured to have entrepreneurs as the output of the education system. Life and technical skills give students confidence to get into the world as skilled indigenous entrepreneurs, job creators,

not job seekers, and good decision makers for the growth of the economy.

There is a point of deviation between IKS and heritage-based education as the former focuses specifically on the knowledge systems and practices passed down from generation to generation by indigenous communities, who have a long-standing historical connection to a particular territory while the latter can be infused towards national goals and be nationalised. In a similar study, Emeagwali (2014) articulates that indigenous knowledge are cumulative strategies, techniques, practices, intellectual resources, tools, cultural beliefs, and values of a group of people accumulated over time in a particular locality with less interference and impositions from external forces. IKS are linked to sustainable resource management, traditional medicine, agriculture conservation, and social organisation within specific Indigenous communities. *The Chronicle* (05 March 2021) alludes that IKS can play a critical role in natural resources management in Zimbabwe, especially in communal areas, as it encompasses local technologies, innovations, know-how, skills, practices, and beliefs uniting local people to conserve natural resources and their cultural values. Concurrent with this are Reniko *et al* (2018) who allude that the Korekore have a form of IKS that need to be tapped into the natural resources conservation as they use totemism to avoid the killing of certain animals. In a live interview, Dr Nziramasanga said, “Learning is a process and assessment of skills is a continuous process, unlike summative evaluation which ends in an examination at the end of a given period.”. He suggested that introducing innovation hubs as early as at primary school level, can develop learners into industry-oriented students who can analyse, operate, organise, monitor, evaluate, and even stop to question the direction of the flow of things. While it was a wise idea to have innovation hubs at universities, it is prudent to start skills development at an earlier age to ensure that the correct positive

attitude towards skills development is inculcated in the young ones so that universities do not churn out PhDs who cannot even change a flat tyre.

CONCLUSION AND RECOMMENDATIONS

Heritage-based education is a broad term encompassing cultural knowledge and traditions within a nation. IKS is a specific subset focused on unique knowledge systems and practices of indigenous communities. While both approaches have the potential to benefit education and development, it is crucial to recognise the distinct nature of IKS and respect the rights and knowledge ownership of indigenous communities when incorporating their knowledge into educational systems. This study reveals that heritage-based education is an approach that deals with national problems, while IKS can be context-specific to a certain community. It can be concluded that there are certain similarities and points of departure between the two approaches to education, but certain points can be driven home from both approaches. It can also be concluded that the education system and national development can tap into IKS and take a page from the natural resources conservation of IKS and the discipline that is espoused in the IKS, as this can create an ethos towards development. It can be argued that IKS offers vocational training, equipping people with various understandings which can be moulded into vocational skills to develop the national skills set to make up for the skills shortage in the country.

Future studies should investigate the provision of IKS in primary schools to understand the contents of the education received by students and analyse how it helps national development. There is need to promote IKS medical practices and innovate them into 21st-century medical practices. There is need to create a natural resources conservation framework around IKS approaches. There is also need to respect the communities on the ownership of IKS.

REFERENCES

- Abah, A. E. and Arene, F. O. I. (2015). Status of Intestinal Parasitic Infections among Primary School Children in Rivers State, Nigeria. *Journal of Parasitology Research*, 2015, Article ID 937096.
- Assié-Lumumba, N.D.T. (2016). Evolving African attitudes to European Education: Resistance, Pervert Effects of the Single System Paradox, and the Ubuntu Framework for Renewal. *International Review of Education*, 62, 11-27.
- Barnhardt, B. and Ginns, P. (2014). An Alienation-Based Framework for Student Experience in Higher Education: New Interpretations of Past Observations in Student Learning Theory. *Higher Education*, 68, 789-805.
- Battiste, M., Bell, L. and Findlay, L.M. (2002). Decolonizing Education in Canadian Universities: An Interdisciplinary, International, Indigenous Research Project. *Canadian Journal of Native Education*, 26(2).
- Chitumba, W. (2013). University Education for Personhood through Ubuntu Philosophy. *International Journal of Asian Social Science*, 3(5), 1268-1276.
- Emeagwali, G. (2014). Intersections between Africa's Indigenous Knowledge Systems and History. *African Indigenous Knowledge and the Disciplines*, 1-17..
- Escrigas, C. (2016). A Higher Calling for Higher Education. *Great Transition Initiative*, 2016(3), 1-12.
- Ezeanye-Esiobu, C., Oguamanam, C. and Ndungutse, V. (2020). Marginalisation of Indigenous Knowledge in African Education: The Case of Rwandan Traditional Medicinal Treatments for Livestock. *Open AIR Working Paper 24*. Open African Innovation Research (Open AIR).
- Giroux, H.A. (2016). Democratic Education Under Siege in A Neoliberal Society. In C. H. Johnson & T. E. M. E. Morris (Eds.), *Teaching for Democracy in an Age of Economic Disparity* (pp. 12-24). New York: Routledge.

- Gray, M.J. *et al.* (2000). Assessing Service-Learning: Results from a Svervy of "Learn and Serve America, Higher Education". *Change: The Magazine of Higher Learning*, 32(2), 30-39.
- Gruenwald, N. and Klymchuk, S. (2003). Using Counter-Examples in Teaching Calculus. *International Journal of Mathematical Education in Science and Technology*, 34(5), 689–697.
- Herald, The. (2021, August 9). Cabinet Approves Reopening of Schools/COVID-19 Restrictions Eased. *The Herald*, p. 1.
- Herald, The. (2024, February 28). Government Finalises Education Policy/New Curriculum Implemented. *The Herald*, p. 3.
- Hewson, C., Vogel, C. and Laurent, D. (2015). *Internet Research Methods*. PLACE PUBLISHED: Sage.
- Jordaan, D.B., Laubscher, D.J. and Blignaut, A.S. (2017). Design of A Prototype Mobile Application to Make Mathematics Education More Realistic. *International Association for Development of the Information Society (IADIS) International Conference on Mobile Learning*, 2017, 115-122.
- Keane, M. *et al.* (2023). Indigenous Knowledge Systems in South Africa and Australia: Transforming Doctoral Education. *Curriculum Perspectives*, 43. <https://doi.org/10.1007/s41297-023-00183-1>
- Khupe, C. (2014). *Indigenous Knowledge and School Science: Possibilities for Integration*. Doctoral Dissertation, University of the Witwatersrand, Faculty of Science, School of Science Education.
- Knapp, A. (2014). Language Choice and the Construction of Knowledge in Higher Education. *European Journal of Applied Linguistics*, 2(2), 165-203.
- Lunenburg, F.C., 1998. Constructivism and Technology: Instructional Designs for Successful Education Reform. *Journal of Instructional Psychology*, 25(2), 75.
- Mapira, J. and Mazambara, P. (2013). Indigenous Knowledge Systems and their Implications for Sustainable Development in Zimbabwe. *Journal of Sustainable Development in Africa*, 15(5), 90-106.

- Mavengano, E. (2022). Rethinking the Boundaries of Self-Other and the Logics of De/Coloniality in Harare North and One Foreigner's Ordeal; A Decolonial Perspective. *Acta Academica*, 54(2), 95-114.
- Mawere, M. (2015). Indigenous Knowledge and Public Education in Sub-Saharan Africa. *Africa Spectrum*, 50(2), 57-71.
- McInerney, P., Smyth, J. and Down, B. (2011). 'Coming to a Place Near You? The Politics and Possibilities of a Critical Pedagogy of Place-Based Education. *Asia-Pacific Journal of Teacher Education*, 39(1), 3-16.
- Murwira, M. (2020). Education 5.0 and the future of skills development in Zimbabwe: Challenges and opportunities. *Zimbabwe Journal of Educational Research*, 32(3), 260-275.
- Muzira, D.R. and Bondai, B.M. (2020). Perception of Educators towards the Adoption of Education 5.0: A Case of A State University in Zimbabwe. *East African Journal of Education and Social Sciences*, 1(2), 43-53.
- Muzira, D.R., Muzira, R. and Min, D. (2020). The Concept of Servant Leadership in Business Management. *East African Journal of Education and Social Sciences*, 1(1), 24-32.
- Nociti, K. (2024). Beyond Reflective Practice: Blogging-with Place as A Diffractive Practice for (Re)Imagining Place-Based Education. *Contemporary Issues in Early Childhood*, 25(1). <https://doi.org/10.1177/14639491221129190>
- Patriot, The. (2018, November 2). Education 5.0: The New Blueprint for Industrialization and Skills Development. *The Patriot*, p. 1.
- Perevozniuk, V. (2024). The Effectiveness of Place-Based Education in the Aspect of Forming an Active Civil Position. *Bulletin of Postgraduate Education (Series)*, 27(56). [https://doi.org/10.58442/2218-7650-2024-27\(56\)-117-130](https://doi.org/10.58442/2218-7650-2024-27(56)-117-130)
- Podduturi, R. et al. (2023). Characterisation and Finding the Origin of Off-Flavor Compounds in Nile Tilapia Cultured in Net Cages in Hydroelectric Reservoirs, São Paulo State, Brazil. *Food Research International*, 173, 113375.

- Reniko, G., Mogomotsi, P.K. and Mogomotsi, G.E. (2018). Integration of Indigenous Knowledge Systems in Natural Resources Management in Hurungwe District, Zimbabwe. *International Journal of African Renaissance Studies-Multi-, Inter-and Transdisciplinarity*, 13(1), 96-112.
- Ronoh, J.C. (2018). *Indigenous Knowledge in the School Curriculum: Teacher Educator Perceptions of Place and Position*. Doctoral Dissertation, Nelson Mandela University.
- Smith, G. A. and Sobel, D. (2014). *Place-and Community-Based Education in Schools*. New York: Routledge..
- Snyder, H. (2019). Literature Review as a Research Methodology: An Overview and Guidelines. *Journal of Business Research*, 104, 333-339.
- Tanyanyiwa, V.I. (2019). Indigenous Knowledge Systems and the Teaching of Climate Change in Zimbabwean Secondary Schools. *SAGE Open*, 9(4), 2158244019885149.
- Weaver, K. (2023). Bridging Indigenous and Western Knowledge-Systems in Knowledge Co-Production with Amazonian Indigenous Communities: A Systematic Realist Review. *Development Studies Research*, 10(1). <https://doi.org/10.1080/21665095.2023.2203842>.
- Wuta, R.K. (2022). Extendibility of the Education 5.0 Concept to Zimbabwe's Secondary School System as Encapsulated in Curriculum Framework 2015-2022. *Ind J Human Soc Sci*, 3(5), 26-33.