

Digitalising Indigenous African Knowledge Systems for Curriculum Decolonisation and Transformation in Zimbabwean Tertiary Education

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Abstract

Indigenous African knowledge systems (IAKSs) have been marginalised and suppressed since the advent of colonialism in Africa. The digitalisation process may act of IAKSs can act as a catalyst in decolonising and transforming the curriculum in Zimbabwean tertiary education. Education is integral in the transformation of any society and promoting use of African epistemic systems can lead to utilisation of local heritage in tertiary education. The main issue of contention is that African Indigenous epistemologies are not documented but basically oral, and displaced by Western knowledge systems. This paper explores the digitalisation of Indigenous African Knowledge Systems (IAKS) as a means of decolonising and transforming Zimbabwean tertiary curriculum. The call is to challenge the dominant Western epistemologies and promote Afrocentric knowledge systems. The paper is informed by the decolonial theory. It also examines the potential of IAKS to challenge dominant Western epistemologies, thereby, foster a decolonising and transformative trajectory in the Zimbabwean education system. The paper highlights the significance of IAKS in promoting decolonisation and transforming education, whilst revealing challenges and opportunities of IAKS incorporation into tertiary education. Thus, academics are recommended more than ever to digitalise IAKSs in decolonising and transforming education in tertiary institutions.

Indigenization Statement

This paper pays particular focus on the Zimbabwean Indigenous communities. The researcher is a member of this particular community referred to in the research. The researcher recognises and respects the sovereignty, knowledge systems, and cultural protocols of these communities. As an Indigenous researcher, residing on the traditional lands of the Zimbabwe, I remain committed to decolonising methodologies that centre Indigenous voices. This paper provides an opportunity to explore issues regarding the Indigenous people of Zimbabwe.

Introduction

IAKSs have been the part and parcel of African societies since the time of their existence.

The Knowledge system permeates all facets of life and supports the sustenance of life in the

communities. The contentious issues about the IAKSs have been the methods of dissemination and preservation of the knowledge systems. The mode of transmission of the knowledge has been predominantly oral, and the elders of the community were regarded as the fountains or sources of knowledge. The oral nature of the dissemination of the knowledge system posed the danger of losing some of the valuable knowledge as it was not documented. This led the knowledge system to be dismissed by the colonial masters as not worthwhile.

It can be noted that education in Zimbabwe is heavily influenced by the colonial history of the country. Colonial remnants still dominate the curriculum, as evidenced by the use of English as the official language of communication and instruction at the expense of Indigenous languages. The Heritage-based curriculum advocates the utilisation of local culture, knowledge, and traditions in teaching and learning, hence the need to use digital technology to preserve the knowledge system. With the dominance of Western episteme in the Zimbabwean curriculum, it would be ideal to use IAKSs to decolonise and transform the curriculum. In this technological driven era, it is pertinent and prudent to digitalise IAKSs in order to preserve it for posterity.

Background Information

The oral nature of IAKSs has posed a number of challenges in terms of defending the authenticity of the knowledge against criticism from scholars from the Western world. Most African education systems were inherited from colonial authorities and are biased towards Eurocentric epistemologies and languages. The curriculum often gives priority to foreign episteme while treating IAKSs as inferior or immaterial (Ndlovu-Gatsheni, 2013). The education system gives higher value to outside knowledge, and sidelines local African knowledge, even though both are valuable.

Colonisation

Colonialism has led to the subjugation of IAKSs to the other world knowledge systems. According to Coronil (cited in Chabaya and Chabaya, 2023) independence in Africa did not dismantle some of the colonial elements that remained a legacy of the colonial period. Epistemologically, knowledge continues to be embedded in Western ideologies and advances settler interests. In tertiary education in Zimbabwe, most of the literature available to students is exotic. Indigenous Peoples' methods of preserving, managing, and distributing knowledge are argued to have added to their knowledge being threatened with extinction because of its lagging behind in time and not conforming to the present-day ways of disseminating knowledge (Mdhluli et al., 2021). Colonial education systems privileged Western knowledge traditions while systematically devaluing African epistemologies. The suggestion is to integrate both Western knowledge and IAKSs into the curriculum.

Decolonisation

Decolonising education involves rethinking and restructuring African education systems to reflect African worldviews, values, and epistemologies. Decolonisation is the process of recognising and addressing limitations placed on education by colonisation, where people dismantle, dislocate and discard marginalising practices and then find policies for making education equitable (Chimbunde & Moreeng, 2025). Consequently, there is a need for IAKSs to be digitalised and preserved for posterity. This may lead to the decolonisation of the knowledge system as it can be systematic and not subject to distortion.

Global epistemology has been dominated by Eurocentrism and Western knowledge production paradigms and platforms (Afolabi, 2020). In Africa, the process of knowledge production has been muddled, supplanted, and ultimately made subservient to the orthodox

Western education forms and structures established by colonial authorities (Afolabi, 2020). In essence, the knowledge production in Africa should keep abreast with the modern technologies dominating the contemporary world.

The Concept of Digitalisation

Digitalisation is a topical issue in the contemporary world and is associated with developments in the field of technology. Since technology improves and advances constantly, higher education institutions cannot afford to exclude themselves from the advancements of emerging technology (Jakoet-Salie & Ramalobe, 2023). Thus, it is imperative for African scholars to utilise modern digital technology to preserve IAKSs. The process of digitalising IAKSs and making them co-exist with other world knowledge systems would facilitate the decolonisation of the knowledge. Decolonisation can be described as an authentic way of reforming, permitting for a transition from colonialism/coloniality to liberation and freedom (Ndlovu-Gatsheni, 2020). From another dimension, decolonisation can be viewed as rejecting Eurocentric epistemology worldviews that commit epistemicides, or the erasure of multiple knowledge traditions; and demanding the re-centring of the African thought systems in the education landscape (Chimbunde & Moreeng, 2025). The call being made is to view IAKSs as worthwhile knowledge systems and make them available for use universally.

IAKSs are the abundant knowledge found among different communities in Africa. The knowledge systems have supported the existence of different societies in Africa through-out the history of mankind. However, of concern is the fact that, in most cases, IAKSs are not written or preserved in digital form. The challenge facing IAKSs is that pertinent knowledge may be lost as some of the custodians of the knowledge systems may face their demise without passing the information to other members of society. Hossain & Ballardini (2021) observed that, for

centuries, Indigenous peoples around the world have developed their own knowledge systems, which relate, but are not limited to, environmental management and nature conservation, and have accordingly adapted over time to various prevailing knowledge systems. However, not much of this Indigenous knowledge is disseminated to students in institutions as it is oral and not written down. Recording of audios for later transcription would be ideal to avoid loss of valuable knowledge in fields such as medicine, botany and agriculture.

Digitalisation of IAKSs

It is vital to preserve the knowledge digitally and as it is less costly to the local population. Digitalisation involves the use of computers, mobile devices, the internet, software applications, and other technology-based devices. Digitalisation has transformed the learning and teaching spaces from traditional ways of classroom or lecture learning and teaching to virtual electronic platforms (Jakoet-Salie & Ramalobe, 2023). Thus, digitalisation has a role in the education transformation process, as knowledge can be stored and retrieved using modern technology. Digitalising Indigenous African Knowledge Systems offers immense potential for curriculum decolonisation and transformation in Zimbabwean tertiary education. It can democratise access, preserve endangered traditions, and integrate African epistemologies into higher learning. However, this process must be prudently managed to avoid reproducing colonial methods of appropriation and exploitation which did not benefit local African communities

The IAKSs have supported the existence of different societies in Africa from time immemorial. However, of concern is the fact that, in most cases, IAKSs are not preserved in digital form for posterity. Thus, Indigenous knowledge which has generally been transmitted and passed from generation to generation by word of mouth is in danger of being lost due to the absence of well-coordinated and systematic strategies and methods employed to formally

manage and preserve the knowledge systems. It can be argued that Indigenous People's assets and/or ways of transmitting knowledge have become outdated and fall short of intergenerational preservation of knowledge and the solution is premised in the process of digital transformation.

IAKSs are a trans-generational knowledge that has been deployed for centuries by the Indigenous People of Africa (Dei, 2024). They are knowledge systems that are enshrined in the boundaries of the People's culture and exercised with dexterity, wisdom, conservation and preservation, and sustainability and environmental harmony as its hallmark (Ayeni & Aborisade, 2022). IAKSs should not be viewed from a simplistic point of view, but rather as knowledge which can contribute to societal development and empowerment.

The concept of digitalising IAKSs is not prevalent in the Zimbabwean literature. It can be argued that there is no Zimbabwean-developed theoretical model that explains how Indigenous knowledge can be ethically and effectively digitalised for the curriculum. Most theories and models are borrowed from the Global North. Zimbabwean education policies reference heritage and culture, but do not provide operational guidance on digitalising IAKS in higher education. In this regard, there is need to reflect on how digitalising Indigenous African knowledge can have an impact on curriculum decolonisation and transformation in Zimbabwean tertiary education.

Problem Setting

In Africa, most IAKSs are conveyed in folktales and songs, passed on verbally by the elders to the younger generation (Ndlovu, 2023). The IAKSs lack proper documentation, and hence the call for knowledge to be preserved through the process of digitalisation. This may enable the knowledge system to be verified and authenticated. Ukwuoma (2015) notes that certain aspects of Indigenous knowledge are oral and are transmitted from generation to generation through word of mouth and rituals. This has led to the marginalisation of the

knowledge system by the coloniser, as it was not documented and subject to different interpretations. The leading threat to IAKSs pertains to methods of preservation which depends on, or is sustained by, elder members of the community (Mdhluli et.al., 2021) While technological advancement institutes a vibrant element of sustainable development, there is a conspicuous and insistent lack of technological progression with IAKSs in Africa, and thus a greater dependency on Western scientific technologies. In essence, the paper addresses issues relating to the extent to which digitalisation of IAKSs can contribute to curriculum decolonisation and transformation in Zimbabwean tertiary education.

Purpose of the Paper

The purpose of the paper is to determine the benefits of digitalising IAKSs in the tertiary education curriculum and to interrogate the challenges associated with digitalising IAKSs. It also aims at drawing attention to the strategies which can be utilised to promote the digitalisation of IAKSs in tertiary education curriculum.

Theoretical Framework

This conceptual paper on digitalising IAKSs for curriculum decolonisation and transformation in Zimbabwean tertiary education was informed by decolonisation theory. Decolonisation challenges the hegemony of Western rationale (Chimbunde & Moreeng, 2025). Decolonisation theory is a school of thought that seeks out to reverse the cultural, psychological, and economic effects of colonisation. In this case, there is need to reduce dependence on Western epistemology and allow it co-exist with IAKSs. Decolonisation scholars apply decolonial frameworks to struggles against the colonality of power and colonality of knowledge within settler-colonial states, even after successful independence movements (Sondarjee &

Andrews, 2023). Decolonisation refers to the process of undoing colonisation, where a colonised nation gains political, social, and cultural independence from the coloniser (Udah, 2024). It involves dismantling the imposed systems, structures, and ideologies of colonial powers and restoring the autonomy, identity, and heritage of Indigenous or previously oppressed groups. In terms of IAKS, decolonisation is not just a historical event, but an ongoing practice aimed at addressing the lingering effects of colonisation in areas such as education, governance, and cultural representation. Decolonial theory was selected as it provides a powerful lens for understanding and guiding the digitalisation of IAKSs in Zimbabwean tertiary education.

Nature of IAKSs in the Digital Era

Indigenous knowledge is the living embodiment of cultural, social, and historical significance for Indigenous communities worldwide. The Indigenous knowledge systems which have endured for a very long time can be demarcated as local knowledge that is unique to a specified culture or society. IAKSs are knowledge systems that have failed to perish despite the racial and colonial criticism that they have suffered at the hands of imperialism and arrogance (Chiwanza et al., 2013). The IAKSs encompasses both the tangible and non-tangible heritage of the community. Indigenous knowledge is largely shrouded in secrecy, and the hope of it being disseminated to everybody and exploited for the public good is almost impossible (Mdhluli et al, 2011).

In essence, there is a need for digital conservation of tangible and intangible IAKSs embedded in rural communities, such as agricultural Indigenous knowledge, local medicine, conservation and folklore. The cultural worth of these practices lies in their preservation and transmission of ancestral knowledge, traditions, and oral histories; Indigenous knowledge also has a reflective social value as it nurtures community cohesion and identity (Ajani et al., 2024).

Some knowledge is context-specific, sacred, or restricted. Not all traditions should be digitised or made universally accessible. Respecting cultural protocols, for example, limiting access to certain rituals or oral histories acknowledges the spiritual and social dimensions of knowledge (Hountondji, 1997). This is in line with the Heritage-Based Curriculum (HBC) which currently informs the Zimbabwean education system. IAKSs are to a great extent oral in nature and conveyed from one generation to another verbally by members of specific communities in an interactive and dynamic manner (Mkabela, 2005). This culminates in the call to digitally preserve the knowledge system to promote its authenticity. The heritage includes both the man-made and natural environment, which support communities in their existential circumstances.

Societies across the world depend on their Indigenous epistemology to solve their day-to-day socioeconomic problems, address numerous environmental problems, and adapt to change (Mawere, 2015). Various scholars perceive Indigenous knowledge from diverse viewpoints, such as traditional knowledge, local knowledge, cultural knowledge, farmer knowledge, elderly wisdom, traditional wisdom, native knowledge, and traditional science (Owolabi et al., 2022). Hence, diverse people view IAKSs from different perspectives depending on their understanding and usage of the knowledge systems. There may be challenges in trying to replicate the knowledge after a period of time, hence the need to use digital technologies to preserve the knowledge. Currently, in this contemporary society, the internet, digital satellite television, and social media technologies have changed the way people communicate and access information and knowledge at anytime from anywhere they want. Digitalisation has brought about a new trajectory in terms of the way information is stored and retrieved. It is postulated that the proper documentation of the IAKSs would assist in the decolonisation of the system and eventually contribute to the transformation of tertiary education.

IAKSs and the Digitalisation Process

Digitilisation in the context of IAKSs refers to the of converting, documenting and managing traditional knowledge such as oral histories, cultural practices, ecological wisdom and Indigenous technologies into digital formats. Social media applications provide great opportunities to librarians for creating, managing, preserving, and sharing Indigenous knowledge (Jain & Jibril, 2016). Digital media technology permits meticulous documentation, comprehensive archiving, and seamless digitilisation of Indigenous languages, extending their accessibility to a broader and more diverse audience (Hinton et al., 2018). In the digital age, the preservation of Indigenous knowledge is increasingly recognised as a vital endeavour to safeguard cultural heritage and promote sustainable development. However, digitalisation should occur under the authority and direction of indigenous knowledge holders and communities. This ensures that custodians of knowledge remain central to decisions about what is shared, how it is represented, and under what conditions it is accessed (Mawere, 2015). Without this, digitalisation risks becoming another form of epistemic extraction.

The concept of digitilisation is associated with interest in the management of cultural heritage in the technological environment (Akinwale, 2013). Digitalisation involves the use of computers, mobile devices, the internet, software applications, and other technology-based devices. The instantaneous digitilisation of information allows native communities to archive and dispense their oral traditions more broadly than ever before, guaranteeing that their stories, knowledge, and values are accessible to future generations (Saad et al., 2024). The call is for local communities to take opportunity of digital technologies in preserving their local knowledge.

Global phenomena such as the introduction of the internet, information exchange, digitalisation, virtualisation, and social media have made the digital transformation strategy inevitable for tertiary institutions to stimulate student experience, particularly the delivery of education, meaning, the increasingly digital transformation process has become a reliable platform to design, develop and retain competitive advantages (Hashim et al., 2022). A digital Indigenous African knowledge library with appropriate subject matter would be ideal for study and in giving insight into or presenting potential information for preserving IAKSs and conserving them for posterity (Plockey, 2014). Students are able to acquire knowledge which emanates from their local communities and consequently making knowledge relevant to societal needs.

Digitalisation and the Preservation of IAKS for Posterity

The preservation of Indigenous knowledge in African is changing due to technological developments prevailing on the continent. Digital transformation in Africa has gained significant momentum in recent years, driven by increasing access to mobile phones, the internet, private sector investment, government initiatives and digital technologies (Nweke, 2024). Preserving Indigenous knowledge is a vibrant facet of preserving the cultures and characteristics of Indigenous communities (Ajani et al., 2024). Indigenous knowledge is often intertwined with rituals, language, and spiritual beliefs that define a community's cultural identity. As Indigenous languages and traditions are threatened by globalisation and modernisation, the preservation of Indigenous knowledge becomes an important tool in protecting these cultures. It assists as a means of cultural resistance against the homogenising forces that can erode exclusive identities (Ajani et al., 2024). Digital media technology also allows collaborative knowledge documentation initiatives, with online platforms serving as facilitators for collective endeavours

in knowledge documentation, enabling the amalgamation of linguistic expertise, cultural wisdom, and community contributions. Information and communication technologies (ICT) can play major roles in improving the availability of IAKSs by enhancing their blending with the modern scientific and technical knowledge (Plockey, 2014). Wong and Naqvi (cited in Saad et al., 2024) posit that digital tools, together with social media, digital libraries, and multimedia platforms, provide prospects for these ancient narratives to be presented in new, engaging formats such as interactive websites, videos, animations, and podcasts. Such information should be available to students and other researcher at the click of the button.

IAKSs and the Process of Decolonisation

During colonialism, the gathering, creation, and dissemination of Indigenous knowledge by anthropologists and missionaries, served as information for purposes of colonisation, and more generally, the promotion of colonising agendas (Murove, 2018). With the advent of independence in Africa, Indigenous knowledge is thus considered the basis for self-sufficiency and self-determination, providing effective alternatives to Western technologies (Plockey, 2014). Gwandure and Mayekiso (cited in Menon et al., 2025) highlighted that, decolonisation as part of curriculum transformation entails changing prescribed books, theories and learning content that is based on Western ideas, concentrating more on Indigenous African knowledge or issues affecting African countries to be predominant in the curriculum. The decolonisation of the Zimbabwean tertiary curriculum is imperative to address the colonial and Western prejudices that have been disseminated in the education system. Premised on the understanding that Indigenous populations were exposed to several injustices, including cognitive, cultural, social, and economic injustices, decolonisation is indispensable (Chimbunde & Moreeng, 2025). Mbembe, (cited in Menon et al., 2025) posited that key themes in curriculum transformation are

linked to the decolonisation of knowledge, which involves challenging Eurocentric perspectives and incorporating diverse epistemologies and ways of knowing. This includes revising curricular content to reflect Indigenous knowledge systems, histories, and cultures in addition to cultures and other knowledge forms and sources (Menon et al., 2025). Decolonising the curriculum requires educational institutions to reorient themselves towards Indigenous sovereignty and Indigenous futurity (Dei & Cacciavillani, 2024). By foregrounding community authority, intellectual property, and cultural sensitivity, digitalisation becomes a tool of epistemic justice rather than appropriation. It challenges colonial hierarchies of knowledge and affirms African epistemologies as legitimate, protected, and central to higher education transformation. The drive is for societies to determine their future as far as epistemology is concerned and to be able to deliver solutions to their challenges.

African World View of Knowledge Production and Digitalisation

Digitalisation is contemporary subject in the modern world, however there are diverse challenges which are associated with this phenomenon. While the initiatives are recognised, their results in line with digital preservation of IAKSs have been at a snail's pace in Africa as most African countries are still battling with IAKSs preservation projects. African traditional knowledge is at the core of Indigenous identity, culture, languages, heritage and livelihoods, and its transmission from one generation to the next must be protected and preserved (United Nations, 2019). This forms a fundamental difference between Western and African epistemologies, as Western epistemologies are written down or documented, and people tend to view written documents as authentic and verifiable. This brings to the fore the need to record African Indigenous epistemologies for verifiability and for the benefit of future generations (Murwira, 2025). While digitalisation boosts accessibility, it also raises concerns about

authenticity, ownership, and cultural sensitivity (Saad et al., 2024). Digitalising the Indigenous knowledge would permit researchers to find ways of triangulating the information and verifying the sources.

The Digitalisation of IAKSs and Globalisation

It is apparent that the marginalisation of IAKSs has impacted negatively towards the development of Africa. There is need for IAKSs to be given priority and revitalisation in the tertiary education curriculum. Many African intellectuals, communities, and organisations globally have endorsed the need for the revitalisation of IAKSs and its preservation for posterity (Biyela et al., 2016). Due to globalisation, there is an abundance of information that emanates mostly from Western countries, which promotes a narrative that is contrary to African epistemologies. Western globalisation of ideas and knowledge is prevalent more in the humanities and social sciences, particularly in the social construction of the individual and the social realities of Africans (Afolabi, 2020). This creates a system where Indigenous knowledge is lost and remains inaccessible to other People and the coming generations. This affects developmental projects and leads to the inability to offer sustainable solutions to Indigenous and local problems.

Indigenous knowledge serves as the foundation for sustainable development, and the inability to manage it impedes the development of most communities. While technological advancement constitutes a vital component of sustainable development, there is a conspicuous and persistent lack of IAKSs technological advancement and thus a greater dependency on ‘western scientific’ technologies (Plockey, 2014). Decolonising education in Africa is not merely a symbolic act, it is a necessary transformation to create inclusive, relevant, and empowering systems for African students. It requires political will, community participation, and intellectual

courage to challenge dominant paradigms and reclaim Africa's educational destiny.

Decolonisation is, however, not a finite process but an ongoing one, characterised by a dynamic interplay of epistemologies. Similarly, it introduces the concept of an ecology of knowledges, which emphasises the coexistence and interrelation of Western and Southern knowledge systems (Chimbunde & Moreeng, 2025). In reality, the idea is not to denigrate any knowledge system but to ensure the adoption of IAKSs among world knowledge systems.

Digitalisation and Curriculum Transformation

Curriculum transformation refers to the systematic process of revising, rethinking, and redesigning the curriculum to make it more relevant, inclusive, responsive, and future-oriented. Curriculum transformation is about reshaping education to make it contextual, transformative, and empowering learners to address real-world challenges with confidence and cultural pride. Jacobs (cited in Menon et al., 2025) contends that curriculum transformation aims to address societal changes, emerging needs, and advancements in knowledge and pedagogy to better prepare students for the challenges and opportunities of the future. The curriculum transformation process involves aligning content with current societal needs, values, and technological advancements. It also incorporates diverse knowledge systems, especially Indigenous and local perspectives, promoting cultural representation and equity. Curriculum transformation influenced by digitalisation emphasises competencies such as data skills, basic coding and collaboration using digital tools. Decolonisation is also part and parcel of the transformation process in the curriculum. Transformation of the curriculum also entails removing colonial biases and Eurocentrism from curriculum content, particularly in post-colonial contexts like Zimbabwe.

Curriculum transformation is aimed at promoting innovation and skills development in tertiary education. It focuses on critical thinking, problem-solving, creativity, entrepreneurship, and digital literacy. True transformation requires profound cultural and ideological shifts, equity, social justice, equality, political will, and an enabling environment (Menon et al., 2025). Such a transformation should take into account the local knowledge systems. Curriculum transformation in Africa has focused on addressing the production of knowledge. This involves incorporating multicultural perspectives, addressing issues of gender, sexuality, and disability, and fostering critical consciousness about social inequalities, quality graduates, graduate unemployment, and graduates' questionable societal contributions (Menon et al., 2025). Curriculum transformation is evident in visions like Zimbabwe's Education 5.0, which encompasses teaching, research, community service, innovation, and industrialisation. Through digitalisation the curriculum can promote aspects such as blended learning, artificial intelligence and other technology supported pedagogics to promote the utilisation of IAKSs.

Challenges in Digitalising IAKSs

Like any other human endeavour, digitalising IAKSs will result in facing challenges. It can be noted that most Indigenous knowledge lacks documentation and standardisation. Although systematic documentation captures and conserves orally transmitted knowledge for current and future generations, it exposes Indigenous communities to the danger of losing their intellectual property rights through piracy and commercial manipulation (Chiwanza et al., 2013). In the process of digitalising, Indigenous knowledge, which is oral, dynamic, context bound, and held by community elders and practitioners, can be recorded and interpreted differently by different people. Thus, the challenge is that there may be need to document IAKSs and translate them into official languages before digitalising.

There is bound to be language presentation issues due the dominant use of English in Zimbabwe. Digitalised knowledge systems tend to privilege global languages at the expenses of local or native languages. It is further observed that there is no standardised way to record oral traditions, rituals, cosmologies, or community practises. Another challenge is that loss of context can change meaning when African Indigenous knowledge is translated and digitalised.

Digitalising IAKSs can face technological challenges and infrastructural gaps. The absence of electricity in certain places, low internet penetration and high technology costs work against the digitalisation process. Digital transformation in Africa has also been influenced primarily by Western technologies and models, which often fail to consider the continent's exclusive socio-cultural and environmental circumstances (Nweke, 2024). The use of digital technology may fail to incorporate African culture or respect certain cultural practices such as respect of sacred shrines when recording information. Some members of the community who can assist in the digitalisation process may have low digital skills. Community members may lack exposure to ICT training and lack necessary skills. The other problem relates to the issue of intellectual property. There are no clear laws and legal framework to guide the digitalisation work.

Strategies for Digitalising IAKSs

A number of strategies can be employed in the digitalisation of IAKSs. The community-centred knowledge can be used to digitally document the local knowledge. The process involves the use of audio, video and photography to record and preserve oral traditions. This is possible through working with community elders, traditional healers and cultural practitioners to record IAKSs. In essence it is vital to apply participatory methods so that communities remain the custodians of the knowledge. Indigenous knowledge is not “free” or “public domain.” It is often

collectively owned and tied to cultural identity. Protecting intellectual property rights means developing frameworks that recognise communal ownership and prevent exploitation by external actors (Chisango et al., 2020). This strengthens the decolonial argument by resisting commodification of culture.

In the process of recording the Indigenous knowledge, it is pertinent to respect ethical considerations. Cultural sensitivity in integrating IAKSs with digital technologies is vital for obtaining acceptance and confidence from local communities (Nweke, 2024). The researcher in the process of recording should create or come up with ethical guidelines that respect the cultural aspects of certain societies and should solicit for the consent of the participants. It is imperative for those researching and recording the knowledge to adhere to laws of the country regarding data and information

Another strategy regarding digitally preserving IAKSs is to utilise emerging technologies especially in rural areas. The use of videos, audio recordings, virtual reality, and augmented reality facilitates vivid, immersive conservation of oral traditions, ceremonies, and craftsmanship (Chirima, 2025). In rural areas researchers can use mobile technologies. There should also be prudent use of artificial intelligence in the recording of the knowledge system. It is important use Indigenous languages in digital platforms. In the context of Zimbabwe, there is need to digitalise content in Shona, Ndebele and other local languages. In essence, it important to promote language revitalisation alongside knowledge preservation. The tension lies in balancing broader access for educational transformation with protection of community rights. A decolonial approach insists that access must never override ownership. Instead, digitalisation should be framed as a collaborative process, where communities decide what knowledge can be shared and

how it contributes to curriculum reform (Ndlovu-Gatsheni, 2013). Zimbabwe has sixteen local languages which need to be embraced in the preservation of knowledge.

Conclusion

Digitalising Indigenous African Knowledge Systems must be more than a technical exercise; it is a moral and political act. Communities are not simply sources of data but custodians of living traditions. Their authority must guide what is digitised, how it is shared, and who benefits. This approach ensures that digitalisation strengthens decolonisation rather than undermining it, protecting cultural integrity while opening pathways for curriculum transformation.

Integrating digital IAKSs into the curriculum fosters a sense of identity, cultural pride, and ownership among learners, supporting epistemic justice and decolonisation. An analysis of the issue reflects that the marginalisation of IAKSs can be traced back to colonisation. The colonialists denigrated IAKSs in favour of Western-generated knowledge. The major challenge facing IAKSs is that they are mostly not documented and are transmitted by word orally. There is need for inclusion of IAKSs in digital formats to facilitate a shift from Eurocentric content towards Afrocentric, context-relevant education aligned with Zimbabwe's heritage-based curriculum and Education 5.0 goals. Barriers such as lack of infrastructure, digital literacy gaps, resistance to change, and limited documentation of IAKSs were noted as key challenges to effective implementation. However, the process of digitalisation should be done within the context and in accordance with the culture of the local Indigenous people. The spiritual and sacred practices of the local communities should be respected.

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