



Integrating indigenous games into preservice teachers' decolonised curriculum practice to help understand Economics principles

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Abstract

Incorporating indigenous knowledge into curriculum practice is essential for fostering a decolonised approach to education, particularly in the context of Economics Education. This study explores how the Morabaraba game, a traditional African board game, can be utilised as a pedagogical tool to teach pre-service teachers complex economic principles. This study aims to demonstrate the potential of indigenous games to promote critical thinking and problem-solving skills within Economics Education, challenging conventional Eurocentric teaching methods. The Africana Framework, which supports decolonised curriculum practices by centring African knowledge systems, underpins this research. This theoretical perspective highlights the importance of integrating local cultural elements into education to enhance learning experiences and foster inclusivity. A case study using qualitative methods was employed with ten purposefully sampled economics and management sciences pre-service teachers. The participants engaged in Morabaraba gameplay during their Economics calculation tasks. Data were collected through observations combined with group discussions to understand how pre-service teachers experienced their learning process. Using the Morabaraba board game during the learning allowed pre-service teachers an opportunity to master the necessary economic principles and calculations while fostering interaction with the material and promoting teamwork practices. Through this method, abstract economic principles became more understandable to pre-service teachers while they discovered ways in which their traditional indigenous knowledge linked to current educational practices. Learning environments are enhanced when indigenous games are integrated into the curriculum. The sustained use of indigenous knowledge systems is recommended to supplement decolonised curriculum practices in higher education institutions.

Keywords: Africana Framework, curriculum practice, decolonisation, Morabaraba board game, pre-service teachers

Introduction

Traditional learning and teaching in South Africa still relies heavily on Eurocentric methods. However, there is an increasing need to localise learning and teaching strategies that can reflect diverse perspectives and cultures in the education environment. Opoku and James (2021) argue that decolonisation and indigenisation of curriculum practice are some of the strategies relevant to diversify the learning environment. This includes the infusion of African curriculum practice as a culture, especially within higher education, where traditional curriculum often relies on Eurocentric perspectives that overlook

indigenous knowledge systems (Ramonyai et al., 2022). Consequently, Ngokobi (2022) opines that Eurocentric learning and teaching methods limit the ability of pre-service teachers to learn in ways that reflect their cultural heritage and lived experiences. Mbembe (2016) argues that decolonised education should foreground African knowledge to redress historical imbalances and promote a curriculum that resonates with local contexts. In Economics Education, this perspective invites innovative pedagogical approaches that move beyond Western frameworks to include African cultural elements, which Ngũgĩ wa Thiong'o (1986, as cited in Bhola, 1987), identifies as crucial for genuine educational

transformation. The objective of this study is to explore a culturally relevant way to teach complex economic calculations by introducing indigenous games such as Morabaraba into Economics Education.

Morabaraba is a traditional African board game that has been played in Southern Africa for years (Nkongolo, 2023). Nkopodi and Mosimege (2009) contend that Morabaraba helps develop critical thinking and problem-solving skills and requires strategic thinking, resource management, and risk-taking. In the context of economics education, Morabaraba may serve as an indigenous pedagogical tool that simplifies complex economic principles, as it offers a practical way to learn economic principles such as competition, resource allocation, and decision-making. By integrating Morabaraba into the support for performing economic calculations, it makes economic theories and principles more relatable and supports a diverse curriculum.

One of the challenges in economics education lies in integrating indigenous knowledge into the learning, because the teaching of economics relies heavily on structured theory frameworks of European origins, which contrast with African schools of thought (Mampane, Omidire, & Aluko, 2018). Matsekoleng, Mapotse and Gumbo (2024) also explain that indigenous games create deep and authentic learning opportunities for students, which link complex concepts to their cultural heritage while developing their intellectual skills and enhancing their interest in the learning material. Furthermore, Matsekoleng et al. (2024) examined how the traditional African game Morabaraba helps pre-service teachers understand economics concepts related to supply and demand, aiming to improve the delivery of culturally relevant economics education. The use of decolonised curriculum practice enables pre-service teachers to establish stronger relationships with Economics as a subject while closing the gap between theoretical learning and practical understanding.

Academics have researched incorporating indigenous knowledge into the curriculum for African educational institutions. Mbembe (2016) analysed Eurocentric educational

principles' control in African universities. The study found that learning using Eurocentric pedagogies alienated students from their indigenous traditions. The study stressed that Eurocentric approaches to learning should incorporate African perspectives that will embrace Africanism. Mbembe (2016) illustrates that indigenous knowledge should be merged into educational content as it fosters better accessibility for students, especially in classes centred around Western pedagogies such as Economics. Additionally, Brondizio et al. (2021) investigated indigenous knowledge as a key to providing better access for abstract concepts such as economic principles. The study demonstrates that students who include culturally appropriate content in their assignments outperform their counterparts regarding critical thinking abilities and problem-solving skills. Furthermore, Meeran et al. (2024) suggest that traditional games provide links indigenous knowledge systems which enable students to better understand theoretical concepts through their personal experiences.

On the other hand, Jansen (2023) argues that indigenous knowledge should be integrated in higher education with a level of caution. The study further assumes that culturally relevant content may lead to engagement, but if not properly implemented, has the high risk of diluting the rigour of the academic writing. The study argued that utilisation of indigenous knowledge may not constitute the depth required to cope with complex subject areas, including subjects that require great analytical skills, such as Economics. Jansen's (2023) study creates a critical turning point within this discourse in that it suggests a way to be culturally relevant and yet academically rigorous.

Despite the extensive literature regarding decolonising education and inclusion of indigenous knowledge systems, there has yet to be a consensus on how such methods are applied to economics education during pre-service teacher education. While these studies point to the potential of playing and teaching indigenous games and applying culturally relevant pedagogy, they have not fully explored how playing Morabaraba would provide a means of teaching and learning complex economic principles such as supply and demand, opportunity cost, and profit

maximisation. This gap highlights a need for further investigation on the practical use of indigenous games in economics education. Thus, this study seeks to investigate the effectiveness of Morabaraba as a suitable pedagogical tool to enhance pre-service teachers' understanding of economic principles in a decolonised and culturally relevant learning environment. The study argues for the integration of indigenous African knowledge systems into economics education pedagogy so that pre-service teachers can achieve both analytical and cultural competence.

Definition of terms

This article uses the terms 'decolonised curriculum practice' and 'indigenous knowledge systems' in an African context. The following descriptions will explain how these terms are used. Decolonised curriculum practice, according to Mphuthi (2024), refers to the active process of reimagining, reorganising, and recontextualising what is taught, how it is taught, and what counts as knowledge in formal education, ensuring that African worldviews, knowledge systems, and cultures remain central. Ideally, Mbembe (2016) postulates that decolonised curriculum practice involves resisting the dominance of Western paradigms that have historically shaped curriculum development and complementing them with culturally relevant, locally based knowledge. Decolonised curriculum practices can promote inclusiveness, critical thinking, and transformative learning opportunities through the integration of African-oriented pedagogical strategies. Kaya and Seleti (2013) describe indigenous knowledge systems as living, localised systems of knowledge generated, maintained, and shared through cultural practices, oral traditions, rituals, and the experiences of communities within Africa.

The decolonised Economics curriculum presented in this article extends its reach to pre-service teachers by incorporating some of the cultural practices they engage in daily, such as the Morabaraba board game. The Morabaraba board game is a traditional Southern African strategy board game, particularly popular among Sesotho-speaking communities (Nkongolo, 2023; Nkopodi & Mosimege, 2009). It involves two players who

alternately place and move twelve tokens ("cows") on a grid to form rows of three (called "mills") to remove the opponent's tokens. The game emphasises tactical skill and foresight, reflecting cultural values of strategy and competition. Furthermore, the game represents the language and communal knowledge systems used by students at the University of Technology where this study takes place. Playing the game not only makes learning more accessible and relevant but also helps establish learners' identities and fosters a sense of ownership and meaning in their educational experiences.

Research Problem

Currently, economics education in African higher education institutions is largely influenced by Eurocentric perspectives and methods, which often disregard the cultural contexts and knowledge systems of African students (Mbembe, 2016). This approach creates a disconnect between students and the material they study, as traditional Western economic theories and teaching methods fail to resonate with the lived experiences and cultural heritage of African learners. Pre-service teachers, who will have to translate their knowledge and expertise into meaningful classroom experiences for their learners, may find it challenging to relate Economics content to the realities faced by their future learners. This lack of cultural relevance not only limits the effectiveness of economics education but also risks perpetuating a curriculum that does not serve the diverse needs of African learners.

Ideally, economics education should be accessible, culturally relevant, and aligned with the knowledge systems and lived experiences of African students. Integrating indigenous knowledge, such as traditional games like Morabaraba, into the Economics curriculum could bridge the gap between abstract concepts and practical applications, fostering a decolonised, inclusive learning environment. Nkopodi and Mosimege (2009) opine that the Morabaraba board game functions as a culturally grounded, experiential tool that may be relevant to teaching abstract economic concepts. Without this shift, pre-service teachers may continue to experience

disengagement with Economics content, leading to a lack of enthusiasm and critical thinking in their future classrooms.

The study aims to two research questions: (1) How can the Morabaraba board game help pre-service teachers to understand Economics principles? (2) How can indigenous board games, such as Morabaraba, be used as a pedagogic tool to create meaningful, contextually relevant learning experiences for African learners?

Theoretical framework

This study is underpinned by the Africana paradigm, a framework that calls for the recognition and centrality of African experiences, histories, worldviews, and knowledge systems in education (Asante, 1987). The Africana paradigm rejects the dominance of Eurocentric pedagogies, which have historically marginalised indigenous ways of knowing, and instead advocates for an epistemic re-centring that validates African cultural practices, languages, and lived realities within the curriculum (Khoza & Fomunyam, 2020). This framework was selected because it aligns with the study's aim to transform economics education by incorporating indigenous knowledge systems, in this case by using the Morabaraba board game, to create meaningful, contextually relevant learning experiences.

Central to this paradigm is indigenous knowledge, defined as locally derived knowledge systems rooted in African cultures, social practices, and spiritual traditions (Kgope, 2023). The concept of indigenous knowledge is the opposite of the education system that is Eurocentric and that emphasises Western knowledge and the Western contexts of knowing to the exclusion of the African perspectives and context (Bhola, 1987). Unlike the Eurocentric pedagogical models that are unconnected with the Africanised life of learners, the Africana approaches attempt to connect the learning to practices that are near to the learners of African communities, i.e., traditional games and communal learning activities.

Furthermore, the study draws on the principles of culturally relevant pedagogy (Ladson-Billings, 1995), which promotes the use

of teaching strategies and content that are responsive to learners' cultural backgrounds and foster cultural competence. Cultural competence is the ability to navigate and integrate multiple cultural frames of reference (Ladson-Billings, 1995). In the context of this study, cultural competence is developed when pre-service teachers engage with the Morabaraba board game, reflecting on both the economic calculations within the game and the cultural significance of the activity itself.

A critical omission in many decolonisation efforts, including economics education, is the role of language, which is inextricably linked to culture and identity. While this study did not specifically investigate language practices during gameplay, the Africana paradigm recognises that teaching through indigenous languages deepens understanding and affirms learners' cultural identities (Ngugi wa Thiong'o, 1986, as cited by Bhola, 1987). Future iterations of this study could incorporate linguistic diversity, considering that language is a carrier of indigenous knowledge and a medium through which culturally meaningful learning is transmitted.

The Africana paradigm in this study informs the use of the Morabaraba board game - not simply as a cultural artefact - but as a pedagogical tool that connects economic concepts to African ways of thinking, valuing local knowledge, and fostering critical engagement with the curriculum. This theoretical stance positions decolonisation as a holistic process involving the integration of cultural practices, knowledge systems, and languages into curriculum design and classroom practice.

Methodology

The study employs a constructivist paradigm that is aligned with the narrative on culturally relevant and experiential learning approaches (Zagelmeyer, 2023). Constructivism is consistent with the focus on participants' subjective experiences and interpretation, and hence it is appropriate to explore how indigenous knowledge through games such as Morabaraba can enhance pre-service teachers' understanding of Economics calculations. The study purports to explore the meaning-making processes of

participants as opposed to the measurement of outcomes, which is the essence of constructivist research.

This study adopted a qualitative descriptive case study design (Priya, 2020), appropriate for exploring participants' lived experiences, perceptions, and reflections on using the Morabaraba board game as a pedagogical tool in economics education. The case study approach allowed for an in-depth analysis of a bounded context: a group of third-year pre-service teachers enrolled in an economics education module within the teacher education specialisation in Economic and Management Sciences (EMS). The participants were purposefully selected within a single institutional setting and timeframe, providing a rich context to examine how indigenous knowledge practices can inform curriculum transformation. This design was aligned with the study's aim of unpacking how the Morabaraba board game can foster understanding of economic principles in a decolonised curriculum context.

Data collection and sampling

To answer the research questions, the study focused on participants' reflections and observations during gameplay, particularly how they applied concepts such as opportunity cost, supply and demand, competition, and decision-making under scarcity - concepts that are naturally embedded in the strategic moves and countermoves required in the Morabaraba board game. Ten third-year pre-service EMS teachers who elected to take Economics Education as a module were purposefully sampled to capture a variety of perspectives across cultural and linguistic backgrounds. Data were collected through observation and facilitated group discussions, which allowed participants to articulate and reflect on how gameplay simulated real-world economic situations. During gameplay, participants made strategic decisions about placing and removing tokens, paralleling market competition and resource allocation, and calculated hypothetical gains and losses linked to forming mills, which mirrored profit maximisation scenarios in Economics. Over four weeks, participants engaged in three structured sessions,

each lasting approximately two hours, allowing for extended engagement with the game and sufficient time for reflection and collaborative meaning-making.

This approach, consistent with the constructivist paradigm (Hull & Saxon, 2009), emphasised the co-construction of knowledge, with group discussions serving as platforms where participants unpacked their learning, connected indigenous practices to economic theories, and reflected on how the use of the Morabaraba board game helped demystify abstract principles. Through these methods, the study captured how indigenous games can serve as meaningful pedagogic tools in transforming economics education to be more accessible, culturally relevant, and engaging.

Data analysis

According to Braun and Clarke (2022), a data analysis method classifies qualitative data analysis through identifying patterns known as themes. The analytical method requires researchers to experience data once, create first-stage codes, work on and evaluate themes, and enhance them for significant interpretation. Thematic analysis allowed the researcher to decode pre-service teacher interactions with the Morabaraba board game for economic concept comprehension through the identification of recurring values and ideas, and learning behaviours (Braun & Clarke, 2022). The chosen methodology proved advantageous during this research since it allowed the researcher to document participant experiences throughout an exploration of decolonised classroom practices. The researcher used thematic analysis to extract important themes from their combined observations and discussion phases and thereby gained comprehensive insights into how the Morabaraba board game enhanced understanding of economics education principles.

Ethical considerations

Ethics in research refers to the systematic application of moral principles, values, and standards to ensure that scholarly investigations are conducted with integrity, fairness, and respect for all participants, communities, and ecosystems

involved (Kumavat, 2024). Ethical clearance to conduct the study was obtained from the Central University of Technology, with ethical clearance number CUT/ HREC 2024/000331. The ethical principles that the study was based on include those of informed consent, confidentiality, and voluntary participation. Therefore, member checking was used to ensure the accuracy and credibility of the findings. Participants were invited to review the preliminary findings to confirm if they represent their experiences. Nguyen et al. (2021) narrate that the study's credibility is improved through an iterative approach to analysis and through member checking, which ensures that the study's findings echo the participants' experiences and interpretation. Pseudonyms were allocated to participants to hide and protect their identities, for example, names such as Thandi, Siphon, Lerato, Zanele, and Tumi, were used to narrate participants' responses and experiences.

Findings

The research findings of this study demonstrate that the Morabaraba board game acted as an effective teaching method for pre-service teachers to learn about abstract economics concepts and economics calculations. Below are the main themes that were identified during coding. The themes are explained in relation to the research questions, literature, and their implications for the theoretical framework.

Enhancing the understanding of Economics concepts

The participants noted that through the Morabaraba gameplay, the economic concepts embedded in the play mechanism became tangible and were relatable to their lived experiences. Observational data from this study confirmed that participants were able to explain difficult economic concepts and calculations after engaging in the Morabaraba board game while learning. It was identified that the participants' reasoning skills demonstrated improvements after engaging in the game play. This seems to affirm the claim by Opoku and James (2021) that culturally based learning experiences can lead to more profound learning and engagement. In addition, it conforms to Nkopodi and Mosimege's (2009) idea that

indigenous pedagogies make more abstract concepts accessible by using familiar cultural contexts in which to situate learning.

One of the principal findings of this study is that engagement with the Morabaraba board game improved pre-service teachers' understanding of complex economic concepts. As such, it directly answers the first research question of whether the Morabaraba board game will enhance knowledge of economic principles. This knowledge was demonstrated through the use of the game's strategy and the interactivity of playing it in a practical and engaging way. Participants demonstrated knowledge of the principles of supply and demand, opportunity cost, and profit maximisation. This was demonstrated in the active learning strategies participants had to enact by playing the game. Below are some of the narrations that were captured during the group discussions by the participants:

Participant 1 (Thandi): *“Playing Morabaraba helped me to understand opportunity cost in a way that textbooks never could. It prompted me to think strategically about each trade-off in the opportunity cost.”*

Participant 2 (Siphon): *“The game simplified supply and demand, and I could see how my decisions affected the ‘market’ within the playing field.”*

Participant 3 (Lerato): *“Morabaraba made profit maximisation tangible even more. I had to plan my moves carefully to ‘earn’ the most points, which mirrored real-world business decisions.”*

Morabaraba, as an indigenous board game, was able to give an immediate, concrete and culturally meaningful example to help grasp the concept of opportunity cost to Thandi, transforming what could be an otherwise abstract idea into something understandable and easily relatable. Her experience reveals the potential inadequacies of European-centric pedagogy, which often fails to link theoretical constructs with learners' realities. Thus, demonstrating the need for education tools that bridge the theory-practice gap adequately. These findings align with findings from scholars such as Shizha (2022) and Opoku

and James (2021) who maintain that indigenous games can simplify the learning process of complex concepts and calculations. This corroborates their assertions that culturally salient learning activities can directly benefit the learning outcomes. Additionally, as Jumba and Mwiti (2022) and Kgope (2023) concur, incorporating indigenous knowledge systems into learning pedagogy may help to locate such complex subjects within the cultural framework of the learners.

Collaboration and critical engagements

Another major finding is that the Morabaraba board game encouraged participants to collaborate and engage in critical engagement, thus answering the second research question of what participants experience, and their reflections on the use of indigenous games as a learning and teaching tool. The interactive design sparked participation of the participants, therefore advancing an environment for them to work together, share strategies, and learn economic concepts and calculations. In addition, this corresponds with the transformative paradigm's commitment to participatory and inclusive learning spaces. Participants described their experiences as follows:

Participant 6 (Zanele): *"I loved how we had to discuss strategies and learn from each other. It felt like we were building knowledge together."*

Participant 5 (Tumi): *"The game forced us to think critically about every move. It wasn't just about playing, it was about understanding the economics behind it."*

Participant 10 (Bongani): *"Working with others helped me see different perspectives. It made the learning process more dynamic and engaging."*

Zanele's statement indicates that the Morabaraba board game functioned as a learning environment for collective knowledge building and sharing. This is why her reflection also argues for collaborative pedagogies to promote inclusivity and to maintain engagement. In addition, her experience demonstrates the case for learners to be empowered through participatory

methods. These findings support the researcher's argument to question dominant Eurocentric teacher-centred approaches and advocate for decolonised approaches. This finding also finds support in the literature. Le Grange (2021) emphasises the importance of collaborative learning in decolonised education, whilst Matsekoleng et al. (2024) emphasise that indigenous games may facilitate peer-enabled critical thinking. Likewise, Ndlovu-Gatsheni (2023) asserts that decolonial pedagogy operates through the co-production of knowledge to allow for active meaning-making. The findings in this study seem to support the findings of Ndlovu-Gatsheni (2023) in the notion of knowledge co-production, as well as the findings of Matsekoleng et al. (2024), who argue that indigenous games can promote interactive and learner-centred classrooms.

Relevance of indigenous knowledge in economics education

The study also identified other ways indigenous games can contribute to decolonised curriculum practice in economics education (Asante, 1987; Mbembe, 2016), further answering the second research question. During the gameplay, participants used traditional African epistemologies to learn abstract ideas, such that the practical value of indigenous knowledge was reflected in the assertions during the group discussions. Participants highlighted:

Participant 4 (Nomvula): *"Morabaraba showed me that our traditional games have so much to teach us. It's not just about culture; it's about practical knowledge."*

Participant 8 (Thabo): *"I never thought a traditional game could help me understand modern economics. It was eye-opening."*

Participant 9 (Palesa): *"I was proud using Morabaraba because it was part of our heritage." The thing that it had shown me was that there is value in our knowledge systems as much as any of the Western knowledge systems."*

The Morabaraba board game helped bridge the gap between traditional African knowledge and the complexities of Eurocentric economics concepts and calculations. This is

evident in Nomvula's reflection, which suggests that indigenous games can be pedagogical in nature and that indigenous games can be used to promote learning. Furthermore, Palesa's viewpoint emphasises the need to harmonise indigenous knowledge together with Eurocentric knowledge systems in modern curriculum practices for cultural relevance and inclusiveness (Ramonyai et al., 2022). This finding reiterates the need for decolonised education to adopt systematically diverse knowledge. This finding is also consistent with the Africana Framework's guidelines for contending Eurocentric dominance and advancing epistemic justice (Asante, 1987).

Discussion

This study's findings indicate that the Morabaraba board game was instrumental in engaging the pre-service teachers to think about and understand economics concepts and calculations. The game was reported to allow participants to tackle abstract concepts such as supply and demand and opportunity cost in a more tangible and relatable way. Results from observations indicated that the game helped participants bridge the gap between theory and practice in economics education, because participants could articulate these concepts more confidently after engaging in the game, using a culturally relevant framework of the Morabaraba board game. This could also support Opoku and James' (2021) claim that culturally based learning experiences can improve student understanding and engagement.

Playing the Morabaraba board game helped to develop critical thinking and problem-solving skills that are crucial to the study of Economics. The game made participants strategise, calculate potential moves, and evaluate outcomes in a similar way to economic decision-making processes. The concepts that were present in the game in the form of resource allocation and opportunity cost, triggered cognitive thinking by the participants, which they could later relate to formal Economics principles. This is in line with Mphuthi's (2023) work, in which culturally relevant games increase cognitive engagement by demystifying abstract concepts.

Additionally, the use of the Morabaraba board game fostered collaboration as supported by Meeran et al. (2024). There were many instances where the participants would discuss not only strategies, but also potential outcomes among themselves, leading to knowledge sharing and peer teaching. This interaction gave an impression of community, mutual learning, which can be lacking in traditional ways of teaching economic principles. These observed collaborative dynamics echo Mbembe's (2016) suggestion for educational methods to promote inclusivity and build relations among students. Participants were more comfortable and ready to discuss complex economic ideas through interacting with their peers in a familiar cultural context.

Additionally, the use of the Morabaraba board game seemed to lead to some participants to question their assumptions and their preconceived notions about Economics being an entirely Western discipline. These notions of questioning the myth of modernity and knowledge systems development being associated with Eurocentrism are validated by Dussel (1993), commenting on the Eurocentrism of economics. A few participants mentioned that they did not consider Economics to be culturally relevant before the study; they were surprised that the subject can also be made easier using African methods. However, the use of the Morabaraba board game in an educational setting supported them to view Economics as more applicable to the African context. This is a finding that aligns with the argument by Makumane and Khoza (2020) that successful curriculum implementation should also consider human societal needs. This finding is also consistent with Asante's (1987) Africana Framework, that calls for an education curriculum that draws on African knowledge systems to make the educational system more inclusive and relevant. The relevance of the educational system will also promote the motivation for engagement in teacher education as suggested by Ravhuhali, Kutame and Mutshaeni (2015).

The findings thus advance the theoretical argument that decolonised curriculum practices are not only culturally responsive but pedagogically effective, even in technical fields such as Economics. They suggest that the Africana

framework (Asante, 1987) can drive curriculum transformation by helping to bridge abstract economic concepts and calculations with learners' cultural backgrounds, fostering a holistic learning experience that affirms identity, promotes inclusiveness, and integrates indigenous and formal knowledge systems. In this way, the study highlights the transformative potential of African-centred approaches to teaching and learning in higher education.

Implications of the study

The findings of this study have important theoretical implications, particularly in affirming the central tenets of the Africana paradigm, which advocates for centring education on African knowledge systems, cultural practices, and lived experiences. The results provide empirical support for Asante's (1987) assertion that an African-centred pedagogy can transform the learning experience by rooting it in culturally familiar practices. By using the Morabaraba board game an indigenous game deeply embedded in African heritage, participants were able to grasp complex economic concepts such as opportunity cost, competition, and resource allocation in ways that traditional Eurocentric teaching methods often fail to achieve in a Southern African context. This finding challenges the hegemony of Western pedagogies in technical disciplines such as Economics, demonstrating the potential of indigenous knowledge systems to enrich learning in subjects traditionally perceived as culturally neutral but in practice shaped by Eurocentric assumptions (Ngubane & Makua, 2021).

Moreover, the study contributes to the discourse on culturally relevant pedagogy (Fomunyan & Khoza, 2020), by illustrating how indigenous games foster both critical thinking and collaborative learning within a constructivist learning environment. The participants' reflections and group discussions revealed how they blended traditional strategies from the Morabaraba board game with academic economic concepts, demonstrating a co-construction of knowledge that draws from both African and Western epistemologies. This aligns with the Africana paradigm's call for integrative, context-sensitive pedagogies, as well as with constructivist theories

that value active, experiential learning (Mapuya, 2021).

Conclusion and recommendations

The study aimed to investigate indigenous knowledge systems and how they can foster a decolonised curriculum practice that will enable pre-service teachers to unravel economic concepts and calculations. This study illustrates the potential for educational transformation by using the Morabaraba board game to incorporate indigenous knowledge in economics education with pre-service teachers. The research findings show that culturally relevant, decolonised curriculum practice can reduce pre-service teachers' perceptions of economic concepts as being complex which can be made more understandable in the African context. The study shows the potential of integrating the Morabaraba board game into the economics curriculum, as pre-service teachers can engage with abstract concepts such as supply and demand in a tangible and fun way, which encourages critical thinking, collaboration, and which provides a strong link to their cultural heritage. This presents support for the Africana Framework and its emphasis on centring African knowledge in education and offers a practical case of how this can be done in the realm of economics education.

This informs the suggestion that more culturally relevant pedagogies should be included in the foundational areas of teacher training programmes. Therefore, a recommendation emanating from this study is the need for resources and strategies for educating teachers on how to incorporate indigenous knowledge systems such as games to make Economics and other subjects more relevant to African students. Secondly, a further recommendation is for higher and schooling education institutions to organise regular workshops and professional development sessions for lecturers and teachers to be equipped with the knowledge and skills for implementing decolonised curriculum practices. Such initiatives would also facilitate teachers' awareness of and access to culturally relevant teaching methods.

Mhlongo (2021) opines that the implementation of indigenous knowledge systems across different disciplines still requires further

research to establish more ground for evidence supporting decolonised curriculum practices. Studies exploring the long-term effect of such practices on student outcomes in subjects (not only Economics) might increase the case for educational reforms that endorse African-centred knowledge. Ultimately, integration of indigenous games such as the Morabaraba board game in economics education constitutes a valuable step towards an inclusive and transformative educational model that recognises and validates the cultural contexts of African learners. This approach represents a potentially creative means to develop more critically engaged, culturally aware, and socially responsive future teachers who are willing and able to work to bring about change in their community.

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Disclosures of interests

The author wishes to state that Generative AI was applied to contextualise the methodology section, and to improve grammar and the quality of language in the manuscript in general

References

- Asante, M. K. (1987). *The Afrocentric Idea*. Philadelphia, PA: Temple University Press. <https://philpapers.org/rec/ASATAI>
- Bhola, H. S. (1987). Review of Decolonising the Mind: The Politics of Language in African Literature, by Ngugi wa Thiong'o. *African Studies Review*, 30(2), 102–103. <https://doi.org/10.2307/524049>
- Braun, V., & Clarke, V. (2022). Toward good practice in thematic analysis: Avoiding common problems and being a knowing researcher. *International Journal of Transgender Health*, 24(1), 1–6. <https://doi.org/10.1080/26895269.2022.2129597>
- Brondízio, E.S., Aumeeruddy-Thomas, Y., Bates, P., Carino, J., Fernández-Llamazares, Á., Ferrari, M.F., Galvin, K., Reyes-García, V., McElwee, P., Molnár, Z. & Samakov, A. (2021). Locally based, regionally manifested, and globally relevant: Indigenous and local knowledge, values, and practices for nature. *Annual Review of Environment and Resources*, 46(1), 481–509.
- Dussel, E. (1993). Eurocentrism and modernity (Introduction to the Frankfurt Lectures). *Boundary 2*, 20(3), 65–76. <https://doi.org/10.2307/303341>
- Fomunyan, K. G., & Khoza, S. B. (Eds.) (2020). *Curriculum theory, curriculum theorising, and the theoriser: The African theorising perspective*. Brill.
- Hoppers, C. A. O. (Ed.). (2002). *Indigenous knowledge and the integration of knowledge systems: Towards a philosophy of articulation*. South Africa: New Africa Books.
- Hull, D. M., & Saxon, T. F. (2009). Negotiation of meaning and co-construction of knowledge: An experimental analysis of asynchronous online instruction. *Computers & Education*, 52(3), 624–639. <https://doi.org/10.1016/j.compedu.2008.11.005>
- Jansen, J. (2023). The problem with decolonisation: entanglements in the politics of knowledge. *The Journal of Modern African Studies*, 61(1), 139–156.

<https://doi.org/10.1017/S0022278X2300162>

- Jumba, H. A., & Mwititi, F. M. (2022). Teachers' perception on integration of indigenous knowledge systems in competence based curriculum at selected primary schools in Buuri East Sub-County. *International Journal of Public Policy*, 10(1): 1-15. <http://repository.tharaka.ac.ke/xmlui/handle/1/3462>
- Kaya, H. O., & Seleti, Y. N. (2013). African indigenous knowledge systems and relevance of higher education in South Africa. *International Education Journal: Comparative Perspectives*, 12(1): 30-44.
- Kgope, T. V. (2023). The indigenous knowledge system of Credo Mutwa: a pedagogical challenge in higher education in South Africa. *Curriculum Perspectives*, 43(1), 95-103.
- Khoza, S. B., & Fomunyan, K. G. (2020). Introduction: theorising curriculum approaches and praxis. In K.G. Fomunyan & S.B. Khoza (Eds.) *Curriculum theory, curriculum theorising, and the theoriser: The African theorising perspective*. BRILL, 1-11. <https://doi.org/10.1163/9789004447943001>
- Kumavat, P. P. (2024). A study on ethics, integrity, and trust in research: An interdisciplinary perspective. *Research Review Journal of Indian Knowledge Systems*, 1(1), 23-33. <https://doi.org/10.31305/rjiks.2024.v1.n1.004>
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465-491. <https://doi.org/10.3102/00028312032003465>
- Le Grange, L. (2021). (Individual) responsibility in decolonising the university curriculum. *South African Journal of Higher Education*, 35(1), 4-20.
- Makumane, M. A., & Khoza, S. B. (2020). Educators' reasonings and their effects on successful attainment of curriculum goals. *South African Journal of Higher Education*, 34(2), 95-111. <https://dx.doi.org/10.20853/34-2-3428>
- Mampane, R.M., Omidire, M.F. & Aluko, F.R. (2018). Decolonising higher education in Africa: Arriving at a glocal solution. *South African Journal of Education*, 38(4): 1-9.
- Mapuya, M. (2021). First-year accounting student teachers' constructivist learning experiences, the lecturer's role and implications for curriculum implementation. *International Journal of Learning, Teaching and Educational Research*, 20(1), 103-119. <https://doi.org/10.26803/ijlter.20.1.6>
- Matsekoleng, T.K., Mapotse, T.A. & Mampane Gumbo, M.T. (2024). The role of indigenous games in education: a technology and environmental education perspective. *Diaspora, Indigenous, and Minority Education*, 18(1), 68-82.
- Mbembe, A. (2016). Decolonizing the university: New directions. *Arts and humanities in higher education*, 15(1), 29-45. <https://doi.org/10.1177/1474022215618>
- Meeran, S., Kodisang, S. M., Moila, M. M., Davids, M. N., & Makokotlela, M. V. (2024). Ethnomathematics in intermediate phase: Reflections on the Morabaraba game as indigenous mathematical knowledge. *African Journal of Research in Mathematics, Science and Technology Education*, 28(2), 171-184. <https://doi.org/10.1080/18117295.2024.2340095>
- Mhlongo, M. (2021). A framework for the integration of indigenous knowledge into libraries in South Africa. *IFLA*

- Journal*, 47(3), 375-385. <https://doi.org/10.1177/0340035221101>
- Mphuthi, M. W. (2023). Jigsaw as a curriculum strategy to enhance pre-service teachers' understanding of economics calculations. *African Journal of Teacher Education and Development*, 2(1), 7. <https://doi.org/10.4102/ajoted.v2i1.24>
- Mphuthi, M. (2024). Fostering inclusive curriculum practice for pre-service teachers in higher education. In X.D. Khohliso & E.M. Mgqwashu (Eds), *Perspectives on curriculum as praxis: Implications for higher education pedagogy*. Potchefstroom: Axiom Academic Publishers, pp.173-196.
- Ndlovu-Gatsheni, S. J. (2023). Beyond the coloniser's model of the world: Towards reworlding from the Global South. *Third World Quarterly*, 44(10), 2246-2262. <https://doi.org/10.1080/01436597.2023.2211520>
- Ngokobi, W. F. E. M. (2022). On decolonizing the curriculum: Thoughts of a black pre-service teacher. *The Currere Exchange Journal*, 6(2), 60-68.
- Ngubane, N., & Makua, M. (2021). Ubuntu pedagogy—transforming educational practices in South Africa through an African philosophy: from theory to practice. *Inkanyiso: Journal of Humanities and Social Sciences*, 13(1), 1-12. <https://doi.org/10.4102/ink.v13i1.9>
- Nguyen, H., Ahn, J., Belgrave, A., Lee, J., Cawelti, L., Kim, H. E., ... & Villavicencio, A. (2021). Establishing trustworthiness through algorithmic approaches to qualitative research. In *Advances in Quantitative Ethnography: Second International Conference, ICQE 2020, Malibu, CA, USA, February 1-3, 2021, Proceedings 2* (pp. 47-61). Springer International Publishing. https://doi.org/10.1007/978-3-030-67788-6_29
- Nkongolo, M. (2023, January). Game theory based artificial player for morabaraba game. In the 5th *International Conference on Smart Systems and Inventive Technology (ICSSIT)* (pp. 1210-1218). IEEE. <https://doi.org/10.1109/ICSSIT55814.2023.10060972>
- Nkopodi, N., & Mosimege, M. (2009). Incorporating the indigenous game of morabaraba in the learning of mathematics. *South African Journal of Education*, 29(3): 377-392.
- Opoku, M. J., & James, A. (2021). Pedagogical model for decolonising, indigenising and transforming science education curricula: A case of South Africa. *Journal of Baltic Science Education*, 20(1), 93-107. <https://doi.org/10.33225/jbse/21.20.93>
- Priya, A. (2020). Case study methodology of qualitative research: Key attributes and navigating the conundrums in its application. *Sociological Bulletin*, 70(1), 94-110. <https://doi.org/10.1177/0038022920970318>
- Ramonyai, I. P., Marumo, M. L., Skhephe, M., & Matashu, M. (2022). Challenges of transformation in higher education curriculum development in South Africa during time of decolonisation. *Jurnal Penelitian dan Pengkajian Ilmu Pendidikan: e-Saintika*, 6(3), 157-172. <https://doi.org/10.36312/esaintika.v6i3.703>
- Ravhuhali, F., Kutame, A. P., & Mutshaeni, H. N. (2015). Teachers' perceptions of the impact of continuing professional development on promoting quality teaching and learning. *International Journal of Educational Sciences*, 10(1), 1-7.
- Shizha, E. (2022). Indigenous epistemologies and decolonized sustainable livelihoods in Africa. In *The Palgrave Handbook on Critical Theories of Education* (pp. 465-

480). Cham: Springer International Publishing.

[Zagelmeyer, S.](#) (2023). Moving beyond delinking, decoloniality and the pluriverse: reflections on the “decolonizing

international business” debate. *Critical Perspectives on International Business*, 20(10): 71-93. <https://doi.org/10.1108/cpoib-04-2023-0028>