

Investigating Teacher Practices in Integrating Indigenous Songs for Play Based Learning in Early Childhood Education Centers: A Case Study of Ndola District, Zambia

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ABSTRACT

Early childhood education (ECE) provides a critical opportunity to shape holistic development through learning experiences that are meaningful, culturally grounded, and developmentally appropriate. Within this context, integrating indigenous songs into play-based learning offers a pedagogical approach that aligns children's natural modes of play with their cultural heritage, thereby strengthening cognitive, social, emotional, and cultural development in early learning settings. This study investigates teachers' practices and experiences in integrating indigenous songs into play-based learning in ECE centres in Ndola District, Zambia, with particular attention to how these songs are incorporated into teaching and their influence on children's learning outcomes. The study employed a multiple case study design, using a combination of non-participant observations, semi-structured interviews with educators and administrators, and focus group discussions with parents. A purposive sampling technique was used to select 15 participants, including five ECE teachers and children aged 4-5, five school administrators, and five parents from five schools. To ensure balanced representation, the study also employed stratified sampling based on population density. Two schools were selected from zones 7 and 8 (high density), two from zones 3 and 4 (medium density), and one from zone 1 (low density). The key findings reveal that teachers use indigenous songs in a variety of subjects, including literacy, numeracy, and social studies, as well as in promoting cultural values and social skills. These songs enhance children's cognitive, emotional, and social development by reinforcing language acquisition, memory, and cultural identity. However, several challenges hinder the effective integration of indigenous songs, such as a lack of resources, inadequate teacher training, and insufficient access to culturally relevant materials. The study proposes recommendations to improve the integration of indigenous songs, including developing resource books, and indigenous data base, providing professional development programmes for teachers, and strengthening community school partnerships to ensure the cultural authenticity and sustainability of the songs used in classrooms. Overall, the study underscores the importance of strategically supporting teachers and schools to embed indigenous songs meaningfully within the curriculum, thereby enhancing culturally responsive pedagogy while safeguarding indigenous musical heritage for future generations.

Keywords: Indigenous songs, Play-Based Learning (PBL), Early Childhood Education, Cultural Identity, Cultural Awareness

INTRODUCTION

Early childhood education (ECE) is a foundational phase that sets the trajectory for a child's development and lifelong learning (Berebitsky, 2018; Sommer, 2013). It is during this period that children develop critical cognitive, emotional, and social skills, which serve as a bedrock for their future education and personal growth (Tayler, 2015). Indigenous songs (IS) are traditional songs, embedded in cultural heritage, which serve as a vital medium for conveying stories, values, and wisdom, fostering identity and belonging (Good et al., 2021; Borunda & Murray, 2024). Beyond artistic expression, indigenous songs have historically been used for informal education, socialisation, and cultural preservation in African societies (Akuno, 2009; Miya, 2007). In early childhood, they provide a platform for creative expression, internalising social norms, and engaging with cultural heritage (Campbell, 2010). Their educational potential also includes fostering language, rhythm, storytelling, and supporting emotional and social development (Hare, 2015; Campbell et al., 2022). Despite all their potency, in African contexts are an underutilised resource for enhancing ECE (Garcia-Sierra et al., 2016; Miya, 2007).

Play-based learning (PBL) in (ECE) play as a crucial aspect of children's development, facilitating exploration and sense making in a low pressure, hands-on environment (Moore et al., 2014; Kalinde et al., 2024). PBL aligns with Vygotsky's zone of proximal development (ZPD), emphasising social interaction and guided discovery to support cognitive, emotional, and social growth (Vygotsky, 1978; Ali et al., 2018). This approach fosters creativity, problem-solving, and social-emotional skills while promoting holistic development (Kalinde et al., 2024; Mukela, 2022).

Integrating indigenous songs into play-based learning activities is important for several reasons. Firstly, it fosters cultural awareness and pride among children, helping them connect with their heritage and fostering a sense of belonging (Kalinde & Vermeulen, 2016; Kakoma, 2017; Matafwali & Mubanga, 2021). This is vital for developing cultural identity, as indigenous songs allow children to learn about their customs, traditions, and norms, which enhances their social and emotional well-being (Kakoma, 2017; Mukela, 2022).

Furthermore, indigenous songs play a key role in language development. They help children improve communication skills, vocabulary, and phonological awareness, while also enhancing language fluency (Kakoma, 2017; Kalinde & Vermeulen, 2016; Mukela, 2022). This contributes to cognitive development and provides a strong foundation for learning in early childhood. Additionally, incorporating songs into play-based activities promotes the development of motor skills, both fine and gross, as children often engage in actions and movements related to the songs (Kakoma, 2017). Overall, integrating indigenous songs into play-based learning activities is a key strategy for enhancing children's cognitive, social, emotional, and cultural development while ensuring that education remains relevant to their local realities.

Country context

In Zambia, there is growing recognition of the value of incorporating indigenous songs into play-based learning in ECE (Matafwali & Mofu, 2023). While research on this topic is limited (Kalinde, Sichula, Mambwe & Kaluba, 2024; Kalinde & Munsaka, 2017), existing studies highlight the benefits and challenges of integrating indigenous songs into ECE (Kalinde & Munsaka, 2017; Matafwali & Mofu, 2023; Mukela, 2022). The integration of indigenous songs in play-based learning is acknowledged for its significant role, which aligns with Zambia's evolving educational policies (Kaluba et al., 2021). Education policies such as the 1977 Educational Reforms, emphasised the role of play in learning and the promotion of culture, songs, and dances. The 1992 focus on learning policy continued this, while also introducing provisions for children with disabilities. The "Educating Our Future" policy (1996) further reinforced the value of music for communication, creativity, emotional expression, and social interaction. In 2011, ECE was formally integrated into Zambia's education system, mandating the government to promote and regulate ECE, ensuring accessibility, particularly in underserved areas (Bibian et al., 2024). A consistent goal across Zambia's educational policies since independence has been to foster learners who appreciate Zambia's culture (Zambia, 1977; 1992; 1996).

The above outlined education policies, curriculum frameworks and acts all support the incorporating of indigenous knowledge, songs and play games so that education can be meaningful to children. Sandlane, (1989) stated that, after British rule ended in 1964, Zambia's curriculum was formed to include African indigenous cultures. This was an effort to make the education more relevant to Zambian children. According to Mukela (2022), when children are denied meaningful education that is grounded in their local realities, their ability to be productive adults is compromised.

Studies conducted in Zambia by Kalinde (2023), Mukela (2022), Matafwali and Mubanga (2021), Kakoma (2017), and Kalinde and Vermeulen (2016) indicate that songs and games taught to children – particularly in their mother tongue – play a significant role in enhancing language and communication skills, fostering cultural identity and heritage, and supporting cognitive and social development. Through these musical and play-based practices, children are able to connect with their cultural heritage and develop a strong sense of belonging. As Makumba (2005) argues, an individual's thinking cannot be fully understood without first appreciating their cultural background. Empirical studies in Zambia further demonstrate that the integration of indigenous songs into play-based learning enhances key language outcomes, including vocabulary development, phonological awareness, and oral fluency (Kakoma, 2017; Kalinde, 2016; Mukela, 2022). Despite these benefits, challenges such as limited instructional resources and inadequate teacher training continue to hinder the effective integration of indigenous songs in early childhood education settings (Kalinde, 2016; Matafwali & Mubanga, 2021).

Indigenous songs, often categorised as musical play or singing games, combine singing, movement, and interaction, promoting both emotional and cognitive development in children (Holmes, 2017; Kalinde, 2017; Campbell & Scott-Kassner, 2010). These activities support memory and learning, contributing to the holistic development of young learners while fostering cultural pride. Despite their potential, the use of indigenous songs in play-based learning is limited in Zambia, often viewed only as entertainment (Kalinde, 2016; Mukela, 2022).

In the current state of Zambia's ECE centers, the sporadic use of indigenous songs in play-based learning is compounded by a lack of comprehensive research and literature addressing this pedagogical approach within the Zambian context (Kalinde, 2016; Matafwali & Mubanga, 2021). This deficiency is exacerbated by teachers' confrontations with numerous challenges, notably limited training and resources, hindering their ability to effectively incorporate indigenous songs into the curriculum (Kakoma, 2017). Moreover, this neglect has the potential to undermine the cultural sustainability and cohesion of Zambian communities (Kakoma, 2017; Kalinde, 2016; Mukela, 2022). Additionally, it could hinder the comprehensive development of young children, affecting their future educational achievements and socio emotional well-being (Mukela, 2022).

Despite their potential, the use of indigenous songs in play-based learning is limited in Zambia. These songs are often perceived as mere entertainment rather than as valuable pedagogical tools (Kalinde, 2016; Mukela, 2022). This limited integration is compounded by a lack of comprehensive research and literature addressing the role of indigenous songs in Zambian ECE (Chipili, 2020; Matafwali & Mubanga, 2021). Teachers face numerous challenges, including insufficient training and resources, which hinder their ability to effectively incorporate indigenous songs into the curriculum (Kakoma, 2017).

The sporadic use of indigenous songs in ECE also poses a risk to cultural sustainability, as traditional practices are sidelined in favor of more formalised approaches. This neglect can undermine the social cohesion of Zambian communities and hinder the holistic development of young learners, affecting their future educational outcomes and socio-emotional well-being (Mukela, 2022). Addressing these challenges is essential to ensure that indigenous songs are integrated effectively into PBL, promoting both cultural preservation and enhanced educational outcomes.

Hence, this research seeks to address the critical problem of the limited integration of indigenous songs into PBL within ECE centers in Ndola District, Zambia. As a result, the purpose of this study is to investigate the experiences of teachers concerning the integration of indigenous songs (SI) for PBL in ECE centers in Zambia

Indigenous songs, aligned with Vygotsky's social constructivism theory, emphasise the role of socio-cultural environments in learning. Tchombe (2011) highlights how language and songs sustain social connections, while Winsler (2003) stresses bridging children's prior knowledge with new classroom activities. Language, as central to Vygotsky's framework, mediates thought and learning. Indigenous songs, rich in local languages, support linguistic development, cultural identity, and vocabulary enhancement through play-based learning (Mukela, 2022). Within the Zone of Proximal Development (ZPD), teachers can use songs to scaffold learning and introduce new concepts in engaging ways (Wiggins & Espeland, 2012; Scrimsher & Tudge, 2010). Children's learning is driven by interests and knowledge shaped by family and community (Hedges, 2007). Play, as noted by Sutherland (2012), serves as a vital tool for exploration, problem-solving, and developmental growth. The aim of this study is to investigate how the integration of indigenous songs into play-based learning in ECE in Zambia can enhance educational outcomes, support cultural preservation, and inform the development of culturally relevant pedagogical strategies, while also exploring teachers' experiences and the challenges of aligning such practices with the national curriculum in resource-constrained settings

Research Questions

- How do teachers integrate indigenous songs into play-based learning in Zambian early childhood education centres?
- What types of indigenous songs are integrated into play-based learning in Zambian early childhood education centres?
- What challenges do teachers face in integrating indigenous songs into play-based learning in Zambian early childhood education centres?

METHODS

The study employed a multiple case study design within a qualitative framework, allowing for a focused exploration of the integration of indigenous songs into play-based learning activities in ECE centers. This approach facilitated a detailed understanding of the subject matter by examining a small, purposeful sample.

Sample size

A purposive sampling technique was used to select 15 participants, including five ECE teachers and children aged 4-5, five school administrators, and five parents from five schools. To ensure balanced representation, the study also employed stratified sampling based on population density. Two schools were selected from zones 7 and 8 (high density), two from zones 3 and 4 (medium density), and one from zone 1 (low density).

Data collection method and instruments

Data was gathered through non participant observations, semi-structured interviews with the ECE teachers and administrators, as well as focus group discussions (FGDs) with teachers. The focus was on understanding the integration of indigenous songs into PBL activities, the types of indigenous songs used, and the challenges encountered by teachers in ECE centers.

Data analysis

The qualitative data collected were analysed using thematic analysis. This involved coding the data according to emerging themes, with detailed descriptions provided using direct quotes (verbatim) to illustrate the findings.

Ethical considerations

The study adhered to ethical guidelines throughout its implementation. Ethical approval was granted by the University of Zambia's Research Ethics Committee under the Directorate of Research Innovation and

Development (DRIG). Prior to the commencement of the study, permission was sought from the Ministry of General Education at both provincial and district levels, as well as from individual schools. Informed consent was obtained from all participants, who were made aware that their participation was voluntary and that they had the right to withdraw from the study at any point should they feel uncomfortable.

FINDINGS

The findings were analysed using thematic analysis and organised into emerging themes and subthemes aligned with the study's research questions, focusing on teachers' practices and experiences in integrating indigenous songs into play-based learning activities in Zambian ECE centres, the types of indigenous songs utilised, and the challenges teachers encountered during the implementation process.

Teacher practices on the integration of indigenous songs into play-based learning activities for play based learning.

Findings from question one revealed that most teachers used indigenous songs as part of play-based learning activities, as reflected in three emerging themes: the use of songs for teaching topics within subject areas, for transitioning between subjects, and for supporting storytelling and role-play activities.

Teaching topics within subject areas

Indigenous songs were observed to be integrated across various learning areas, including language development, numeracy, social studies, and expressive arts. For example, counting songs were used to reinforce numeracy concepts, while storytelling songs supported language development and listening skills. In some instances, songs were adapted to match lesson topics, indicating teacher creativity and contextualisation of content. Most teachers reported that they used indigenous songs in relation to the specific topics they intended to teach across different subject areas, including Literacy, Numeracy, Social Studies, Science, and Expressive Arts. Accordingly, the

subthemes are organised by subject area: 5.1.1.1 Literacy and Language, 5.1.1.2 Numeracy, 5.1.1.3 Social Studies, 5.1.1.4 Science, and 5.1.1.5 Expressive Arts. The detailed presentation and discussion of each subtheme follow the sequence below.

Literacy and Language

Most teachers attested that they have been using indigenous songs to teach phonics, phonemic awareness, listening skills, pronunciation, vocabulary and reading. They explained that it was easy to teach new vocabulary as well as vowels in local language because children were able to understand easily than when they were supposed to be taught in English because it would mean introducing two new phenomenon which would be the language itself and the concept to be learnt at the same time. Teachers incorporate songs like “*ashintilile*” and “*pamushi pa fulwe*” to aid in letter formation and phonemic awareness. Parents also highlighted songs such as “*ashintilile kukamuti*”, which reinforce literacy skills.

This narration is also backed up by the verbatim below from, pre-school teacher.

Pre.Sch. Tr. 2. said “we incorporate them when teaching reading. For example, when we are teaching reading in Bemba, we teach them action like in vowels we teach them /a/ *ahintilile kukamuti*, /e/ *akonkomeenefye*, /I/ *ali nakasote* /o/ *ali noalufumo* /u/ *kwati muganda*, and when they are reading these sounds, they do actions and can easily read these vowels because of the gesture they do”. **Example of a song: *Ashintilile kukamuti***

Bemba lyrics		English literal translation	
Call	Response	Call	Response
a	<i>Ashintilile kukamuti</i>	a	Leaned against a tree
e	<i>Akonkomeenefye</i>	e	Leaned on itself
i	<i>Ali na kasote</i>	i	Had a hat
o	<i>Ali no lufumo</i>	o	Had a belly
u	<i>Ali mukanda</i>	u	Was a pit

Numeracy

Most teachers said that building foundational mathematical skills, including number recognition, counting, and problem-solving was not an easy concept to present just like that. They explained that for young ones to learn better, they needed more fun because their nature of learning was about play.

Pre.Sch. Tr. 5 stated the following, “for example on counting, you tell a bit of a story on animals so you give learners a village setup or scenario as you count using a song “*namwene imbwili imo ilebutuka imbwili paishila imo shaba na 2*” (meaning I saw one leopard running, another leopard joined then there were two leopards) the number will continue increasing until you get to the last number that you want the learners to learn about on that day”

Example of a song: *Namwene imbwili*

Bemba lyrics		English literal translation	
Call: <i>Namwene imbwili imo ilebutuka</i>		Call: I saw one leopard running	
Response: <i>Imbwili paishila imo shaba na shibili</i>		Response: it was joined by another and they were two	
Call: <i>Namwene mbwili shibili shilebutuka</i>		Call: I saw two leopards running	

Response: <i>Imbwili paishila imo shaba shitatu</i>	Response: it was joined by another and they were three
Call: <i>Namwene mbwili shitatu shilebutuka</i>	Call: I saw three leopards running
Response: <i>Imbwili paishila imo shaba shine</i>	Response: they were joined by another and they were four
Call: <i>Namwene mbwili shine shilebutuka</i>	Call: I saw four leopards running
Response: <i>Imbwili paishila imo shaba shisano</i>	Response: they were joined by another and they were five

Social studies (SS)

Teachers stated that sometimes they use indigenous songs to teach about domestic and wild animals. This could be done through an indigenous song entitled “*Inama sha mumpanga shaba ne misowa iyingi*”. (meaning wild animals have several and different sounds). The teacher could ask the children to demonstrate how certain animals sound and then ask where they can be found. Here, children may choose to sound out any wild animal of their choice while the rest would raise their hands up to state which animal the sound belong to. This type of learning is fun and enjoyable by children.

Example of a song: *Inama sha mumpanga*

Bemba lyrics	Literal English Translation
Call: <i>Inama shamumpanga</i>	Call: Wild animals
Response: <i>Shaba ne misowa iyingi</i>	Response: Have different types of sounds
Call: <i>Fyeeeeee! Fyeeeeee!</i>	Call: Trumpet! Trumpet!
Response: <i>Iyi ni nsofu</i>	Response: This an elephant

Below is quote that support the above narratives.

Pre.Sch. Tr. 4 said, “Then in social studies when you must teach them about domestic animals or wild animals, you can sing “*inama sha mumpanga, shaba nemisowa shingi*, (meaning wild animals have several different sounds). Then as a teacher you must name the animals one by one, then the learners they have to produce the sound made by that animal and state whether it lives, either among people or in the bush. Let say an elephant or let say a lion. Children will have to state that the lion lives in the bush or wild and so it is called a wild animal”.

Science

Most teachers under this subject said that they use indigenous songs to teach about different diseases, foods and about the human body. In support of the narrative above, here is a quote below

Pre.Sch. Tr. 5 said, “when you are teaching about parts of the body in science, you must sing a song “*mutwe mapeya makufi, tukondo*” (meaning head and shoulders knees and toes, knees and toes). You have to touch the parts of the body even the learners they have to do that. You must sing with them “*mutwe mapeya makufi tukondo, mutwe mapeya makufi tukondo*”, then (elyo wayamba ukulanda ama) parts (yonse aya muleyalanda na bana), until you finish, after singing, that’s when you are going to introduce the lesson, you ask them if (bacila umfwa ifyaciba mulwimbo,) lesson (yaingila, eflyo iya)”. Meaning you ask them if they understood the words in the song, thereafter, the lesson begins.”

Expressive Arts (EA)

Teachers incorporate various indigenous songs into Expressive Arts lessons, often conducting activities outdoors, where children are highly engaged. Songs like “*Kabushi Kalilalila*” and “*Nambushi Ee!*” *Icikonkoma Sacha*,

mulilo kulupili are particularly exciting as they involve vigorous movement, enhancing coordination, cognitive skills, and overall well-being. However, teachers noted the challenge of managing time during these activities. The interactive nature of these songs stimulates multiple senses and developmental domains, fostering holistic growth in young learners.

Am example of the song: ‘*Kabushi kalilalila song*

Bemba	English literal translation
Call: <i>Kambushi kalilalila</i>	A goat is crying
Response: <i>Meee</i>	Meee (mimic a crying goat)
Call: <i>Ndeshila umunandi</i>	Call: I will give it to my friend
Response: <i>Meee</i>	Response: Meee (mimic a crying goat)
Call: <i>Eo twangala nankwe</i>	Call: The one I play with
Response: <i>Meee</i>	Response: Meee (mimic a crying goat)
Call: <i>pefye kusukulu</i>	Call : Always at school
Response: <i>Meee</i>	Response: Meee (mimic a crying goat)
Call: <i>mee, me- Response: meee</i>	: Call: Mee, me (mimic a crying goat)
Call: <i>Kalilalila, Response: kasha umwana</i>	Call: It’s crying Response: looking for a baby it left behind

Pre. Sch. Tr. 5 said that, “*incorporating songs like “Kabushi Kalila-lila” in play-based learning supports holistic child development. She explained that the song engages the whole body, thereby promoting physical development. As children interact during the game, they also develop social skills and moral values, for example, learning to empathise and say sorry when a peer falls. The teacher added that such activities create opportunities for language development and critical thinking, as learners must communicate and make decisions during play”.*

Pre. Sch. Tr. 2 noted that the learners demonstrated high levels of enthusiasm, discipline, and seriousness while participating in the game. The activity was described as holistic, as it involved multiple developmental domains including physical, social, emotional, cognitive, and linguistic growth.”

Transitioning between subjects

The second theme revealed that teachers used indigenous songs primarily during circle time and as transition activities between subjects to maintain learners’ attentiveness and active participation in class. Under this major theme, two subthemes emerged: the use of indigenous songs during circle time and the use of songs to break classroom monotony.

Circle time

Teachers highlighted that in ECE, formal teaching is challenging due to the young age of the learners, who naturally have a strong inclination toward play. To enhance learning, they emphasised the importance of incorporating songs, play, and dance, as these activities are what children enjoy the most. They explained that circle time is an essential part of their daily routine and typically occurs at the beginning of the day. During this time, children gather and sit in a circle on the carpet, allowing everyone to see each other. The session involves singing songs, playing games, dancing, and storytelling. Afterward, teachers introduce the day's activities and explain the schedule. Responsibilities and tasks are assigned to each child and.

Admin. 3 stated that, “*during Circle time teachers greet their learners through song such as “mulishani mwebana? Tuli bwino ba teacher”.*

Example of a song: *Mulishani mwebana?*

Bemba lyrics		English Literal Translation	
Call.	Response	Call.	Response
<i>Mulishani mwebana?</i> - <i>tuli bwino ba teacher</i>		How are you children?—we are fine teacher	
<i>Abafyashi bali Shani?</i> – <i>Bali wino ba teacher</i>		How are parents? – They are fine teacher	

Breaking monotony

Under this sub-theme, “breaking monotony”, teachers shared strategies for sustaining learners’ interest in the classroom, acknowledging that young children have short attention spans and can easily become disengaged. To counter this, they frequently used indigenous songs between subjects to break monotony and maintain engagement. These songs also served as transition signals in the integrated ECE curriculum, helping children prepare for the next lesson by packing away previous materials. Observations revealed that learners sometimes moved to designated subject corners, where hands on activities using various artefacts were conducted. The songs used varied in focus, with some involving physical movement and others aimed at enhancing literacy, numeracy, and other foundational skills.

Children will form a circle and as they sing the song, (*Kalulu ku mawa*), they will jump and dance as if they are cutting their stomachs open.

An example of a song: *Kalulu ku mawa*

Bemba lyrics		English Literal Translation	
Call	Response	Call	Response
<i>Kalulu kumawa</i> - <i>andya matemba</i>		Hare in the morning – he has eaten our maize	
<i>Ee. timuceke pamimba ngati adya matemba</i>		Ee - Let’s cut it open if it has eaten our maize	

Storytelling and role-play

This was the third theme which comprised sub themes as passing on values and morals and heritage, history and freedom and holistic development. Storytelling involves narrating events, often with a moral or lesson, to stimulate imagination, language development, and listening skills. Role play allows children to act out scenarios, promoting creativity, social skills, and deeper understanding through experiential learning. Both methods are interactive and support holistic development in ECE. The four sub themes have been explained in detail below.

Administrator 2. Stated that, *storytelling was as ancient and old as creation itself. He further said that it was a way through which our forefathers demonstrated understanding of concepts of life such as morals, values, traditional and culture and continued passing them on from generation to generation. He stated that these were conducted during the night before going to bed and or in the afternoon when people were relaxing after performing all the necessary chores on a particular day.*

He narrated how his grandmother would tell them such stories and how she asked them questions such as, what did you like about the story and why? Who would the childlike to be and not and why? What the great lesson of the story was? What message they got from the song imbedded in the story and many more. He later stated that *“these indigenous songs imbedded into stories had great teachings about every part of life that’s why people who grew up with those values would not do things that we are seeing today such as arguing with elderly people, dressing in wired ways, nude pictures and many more”*.

In support of the above narration **Pre.Sch. Tr. 4** said *“we teach songs to do with traditional and culture which mainly teach values morals and cultural awareness. For example, I taught a song entitled “ninani walya makanga yabene” Meaning “who has eaten someone ‘s Guinea fowl?” which was teaching children integrity.”*

Example of a song: *Ninani walya makanga yabene*

Bemba lyrics	Literal translation in English
Call: Ninani walya makanga yabene?	Call: Who ate someone's Guinea fowl?
Response: Namatenga	Response: Deep waters
Call: cisense mukule mutwale Pali bemba	Call: Sardines take him/her to deep waters
Response: Namatenga	Response: Deep waters

The researcher observed that the lesson was so captivating as children listened to the story and joined in the story song (*ninani walya makanga yabene- namatenga*). He watched children's emotions shifting depending on the scene at a particular time. This lesson had a lot of teachings in it, he could see this during the question time and when they were asked to give feedback on the lesson according to how each one of them wanted to do it.

Passing on values and morals

Teachers and School administrators reported that indigenous songs play a significant role in transmitting values and moral teachings to learners. They explained that songs and related musical activities are used to communicate principles such as kindness, respect, honesty, and responsibility in ways that are engaging and easily remembered by young children. According to the teachers, the use of lyrics, rhythms, and melodies helps learners internalise these values and develop an early sense of right and wrong. Teachers further noted that because the songs are rooted in cultural traditions and community beliefs, they serve as an effective means of preserving and passing on moral teachings across generations.

Admin. 4. Said that “children will learn their culture through indigenous songs, will appreciate school for incorporating what they already know and that there will be improvement of oratory skills in children.”

P.1. said, “traditional songs help to teach respect”. Songs like “ciminine” (meaning a child should not stand while elderly people are sitting, he/ she must kneel down), my child likes to sing it. They also learn not to look down or judge others basing in their looks. She gave an example of a song “Kapapa kalubalala” (meaning only when you break open a groundnut shell, will you know what is inside of it), which when interpreted gives an interpretation that ‘each one has a purpose God created them for’.

Example of a song: *Kapapa ka lubalala*

Bemba lyrics	Literal translation in English
Call: <i>Kapapa ka lubalala</i>	Call: Groundnut shell
Response: <i>Mwikamona ukutuntumana mukati emuli amano</i>	Response: Don't just look at its outer shell inside that's there's sense
Call: <i>Mukati</i>	Call: Inside
Response: <i>Emuli amano</i>	Response: That's where there's sense

Heritage, history and freedom

Teachers explained that heritage, history, and freedom encompass the cultural traditions, significant past events, and ideals of independence that shape a community or nation's identity. They also went on to say heritage reflects the values, customs, and artefacts passed down through generations, history, the events and experiences that define a collective past, and freedom represents the struggles and achievements that establish autonomy and rights. Together, they foster cultural pride, historical understanding, and a commitment to preserving

independence. They also insisted that heritage, history and freedom can be preserved through different songs such that when these songs are sung, people will learn something.

Pre. Sch. Tr. 5 said, “for freedom, we teach songs like, “*Munshita ya cha- cha-cha-cha*”, “*Cawama casokona na lelo ba Kaunda*” and also the national anthem. These help children to become patriotic and they feel connected to their nation, the independence and freedom that was gained by their forefathers. You should have seen the demonstration of the fight for independence by these children!”

Example of a song: *Munshita ya cha-cha-cha*

Bemba lyrics	Literal translation in English
Call: <i>Munshita ya cha-cha-cha</i>	Call: During struggle for independence
Response: <i>Twale lala mu mpanga, Twale lala pansoka kwati tuli nama sha mu mpanga kwati tuli nama sha mu mpanga</i>	Response: We used to sleep in the bush, we used to sleep on serpents a if we were animals

Types of indigenous songs used in Play-Based Learning activities

Findings of the second question study revealed that teachers used traditional, cultural and thematic songs, called *Inyimbo sha cikaya* in Bemba, with the themes as outlined below: call and response songs, seasonal songs, ceremonial and cultural songs, rhymes and chanting songs, story songs, and play and game songs presented below.

Call and response songs

Some teachers stated that they used these songs because they encourage participation and were highly interactive in that, one child or the teacher may start the song then the rest will respond. They said these songs were used to teach new concepts, consolidate ideas, and even when concluding the lessons in both culturally and educational areas. They gave examples of the songs such as “*ciminine, kapapa kalubalala, uyu mwana mwebesheni*”.

P.3 said, “Songs like ‘*uyu mwana mwebesheni*’ help learners to improve their attentiveness as they await to respond to the caller and at the same time learn how to become patient to their leaders, elders, leaders at various level”.

Seasonal songs

Most teachers indicated that indigenous seasonal songs hold cultural significance across many African communities, as they reflect the natural cycles, seasonal changes, and traditional practices such as farming, hunting, and ceremonies. These songs, often passed down through generations, play a key role in connecting communities to their environment and cultural heritage. While schools may not cover all aspects of these traditions, teachers incorporate selected seasonal songs to raise children’s awareness of their surroundings.

They explained that children are taught about different seasons and their characteristics, helping them prepare accordingly for example, bringing umbrellas and wearing warm clothing during the rainy or cold seasons. Additionally, practical skills like gardening are introduced, encouraging learners to support their families at home. A commonly used seasonal song is “*We mfula isa-isa twangale na mainsa*” (meaning “Rain, rain come, we want to play with you”), which helps children engage with seasonal changes in a playful and meaningful way.

Example of a song: *We mfula isa-isa*

Bemba lyrics	Literal translation in English
Call: <i>We mfula isa-isa</i>	Call: Rain, rain come, come
Response: <i>Twangale na mainsa</i>	Response: We want to play with you

Ceremonial and cultural songs

Some teachers explained that ceremonial songs, traditionally performed during sacred rituals such as healing, rites of passage, harvest celebrations, and religious observances, are deeply rooted in community values. These songs often invoke blessings, guidance, or protection and are closely tied to the spiritual and moral fabric of the society. In the classroom, teachers adapt such songs using child-friendly language to teach values like respect. For instance, songs such as “*Ciminine, uyu mwana mwebesheni*” are used to instil respectful behaviour among learners.

Regarding cultural songs, a few teachers noted that these celebrate identity, tradition, and the environment, and are commonly sung during festivals and community gatherings. These songs serve to preserve cultural heritage, pass down stories and history, and reinforce important values such as respect for elders, community, and nature. Songs like “*Kapapa kalubalala, kwali cilumendo, kabula kandale, akazi amfumu*” are examples used to promote cultural pride and respect for societal roles and traditions.

P. 5 Said that I think they use these songs to teach cultural values such as respect and integrity.

Example of a song: *Mwimona mamba pa numa*

Bemba lyrics	Literal translation in English
Call: Wimona mamba pa numa	Call: Don't just look at the scales on my back
Response: Nine nafyala imbeka	Response: I am the one who has given birth to the beautiful girl

Rhymes and chanting songs

Teachers said that rhymes and chants were songs that included repetitive vocal patterns, often with a steady rhythm of words or sounds, often designed to be easy to remember and passed down through generations. These songs may be playful, teaching, or spiritual in nature. Usually in teaching these could be used in counting, vowels or even the alphabetical order. Both rhymes and chanting songs are accessible, communal, and often serve both functional and spiritual roles in indigenous cultures. They help preserve tradition, promote unity, and convey knowledge. To support the narrative above, below are the quotes:

Pre.Sch. Tr. 2. said we incorporate them when teaching reading. For example, when we are teaching reading in Bemba, we teach them action like in vowels we teach them /a/ ahintilile kukamuti, /e/ akonkomefye, /I/ ali nakasote /o/ ali noalufumo /u/ kwati muganda, and when they are reading these sounds, they do actions and can easily read these vowels because of the gesture they do.

P. 1 said that they use indigenous songs to teach reading. I hear my child singing (*kapaso k ne mfumu- a batila ka, kapaso k nemfumu e batila ke, kapaso k nemfumu I batila Ki.*)

Story songs

Teachers explained that story songs were musical narratives that tell stories, often based on myths, legends, historical events, or everyday life. These songs blend storytelling with music, using rhythm, melody, and lyrics to convey important cultural teachings, values, and lessons. They said these were an integral part of many Indigenous and cultural traditions and serve both as a form of entertainment and a means of passing down knowledge. Story songs often encourage movement, gestures, or imaginative play, allowing children to express themselves physically and emotionally while reinforcing the story's themes.

For example, the story that was taught by **Pre.Sch. Tr. 4** with a story song “*We calya mayo, bushe ukatulika?*” She emphasised that,

‘Story songs in ECE can be powerful tools for teaching language, numeracy, cultural awareness, values, and creativity. By incorporating storytelling into music, children not only enjoy an engaging form of learning but also gain a deeper understanding of the world around them, fostering a love for music and storytelling while developing essential cognitive, social, and emotional skills.’

Play and game songs

Play and game songs were said to be interactive, engaging songs that involved children in active participation, often through movement, actions, or games. They said these songs were designed to be fun and playful, helping children develop various skills while keeping them entertained. They typically incorporate repetitive lyrics, simple instructions, and sometimes a rhythm that invites physical activity or cooperative play. Play and game songs typically involve children in activities like clapping, dancing, and simple movements, all of which engage them physically and socially. These interactive elements not only make learning fun but also foster important developmental skills. Socially, children learn to cooperate, take turns, and follow instructions while participating in group activities. Morally, such songs often teach concepts of sharing, empathy, and teamwork. Additionally, the physical actions involved help develop both gross motor skills such as coordination, balance, and body awareness, and fine motor skills, such as finger dexterity, hand-eye coordination, and spatial awareness.

In this way, play and game songs provide a holistic approach to learning, supporting children's emotional, cognitive, and physical growth while encouraging social bonding and positive behaviour. Good examples for the play and game songs were “*kabushi kalila-lila*”, (bleating goat) and “*Nambushi ee*” (sheep, sheep, come).

Pre.Sch. Tr. 4 recounted that, “as children were singing those songs and dancing and the drum was there playing simply means that their gross motor skills are being developed, even in *Kabushi kalila-lila* they were holding the ball, that ball symbolises fine motor skills then the running around symbolises the gross motor skills development, they were following the rules so when we want to teach rules in class we still use *Kabushi kalila-lila* and most of the games and songs have rules”.

Challenges teachers faced in integrating indigenous songs into play-based learning in Zambian early childhood education centres

This section presented findings in line with the third research question of the study. The following themes and emerged: Teachers training in music, lack of resources and support, insufficient indigenous song materials, lack of administrative support, language barriers and understanding, challenges with local language proficiency, learners’ language barriers, cultural and conceptual challenges, lack of cultural understanding, and difficulty in adapting songs to curriculum.

Teachers training in music

Out of the five teachers talked to during the in-depth interviews, four of them stated that they were trained to use music as a teaching tool under Expressive Arts which encompassed Music, Art and P.E that was why they were able to integrate indigenous songs into play-based learning activities. However, one of them denied having been trained in using music as a teaching tool hence, dependence on others for her to deliver effectively. The above narration is supported by the quotes below:

Pre.Sch. Tr. 3. said, “No, I was not trained, but I copy from others whatever is in line with what you want to do”.

Lack of resources and support

Under this heading, teachers referred to the absence or insufficiency of essential tools, materials, or guidance necessary for them to effectively carry out their roles. In the context of integrating indigenous songs into playbased learning.

Pre. Sch. Tr. 3 said, *sometimes we want to use indigenous songs in our lessons, but we don’t have the instruments or materials to support that. Even getting simple things like drums or traditional costumes is difficult. Without these resources, it becomes hard to make the learning experience meaningful for the children.*

Insufficient indigenous song materials

Teachers reported a shortage of indigenous songs compared to English songs. They said they did not have access to the full lyrics, recordings, or resources to teach indigenous songs effectively. Only titles of songs are available, and teachers lack access to complete lyrics or audio resources for teaching.

Pre. Sch. Tr. 3 said, *“The only challenge is that in the books there are only title in brackets so you may know a song at the beginning then you may not know where they got it from or the teaching’ behind it, but if you complete may mean you have heard it from somewhere”.*

Lack of administrative support

While other teachers acknowledged having material, resource and financial support from their administrators, some teachers reported that some school administrators were not able to provide enough guidance materially and even financially just because they came with secondary school mentality and were not aware on the importance of ECE.

In answering the question on how she managed to put up all those beautiful talking walls, the teachers explained that she just used her own money.

Pre.Sch. Tr. 5 said, *“I used my own money because if I waited for the administration, the class would remain bare. They don’t understand ECE, because most heads have never taught at this level and think it’s less important than upper grades.”*

Language barriers and understanding

Teachers stated that language was a barrier in instances where teachers were sent to teach in areas with languages they do not speak and understand. They said that these barriers sometimes could lead to misunderstandings, misinterpretations, or even conflicts, as language shapes how we convey ideas, emotions, and cultural values. They said however, they always found it easy to communicate among themselves in English until they all got grounded with the language spoken in the area.

Pre.Sch.Tr. 4 said, *“Yes. One of the challenges is that these indigenous songs as we saying indigenous, they are local, meaning using local language to teach them and we have children who are from the background where parents picked up the language of English so when you teach the Bemba, to them it’s meaningless because they want their children to sing songs that are modern because we are in the modern world”.*

Pre.Sch.Tr. 1 noted that *“the policy requiring instruction in local languages disadvantages teachers who are not native speakers of the languages spoken in the areas where they are posted. As a result, such teachers experience difficulties teaching indigenous songs in languages with which they are unfamiliar, this is a challenge I personally experienced.”*

Admin. 2 said *“Yaa, to be frank with you, at times I have problems with the ECE teachers as they come. You know the problem that is there is that, these teachers are being trained within urban areas, they have never been to rural areas or village, because you know this is where these indigenous songs are sung, but when they come by them not being in the village, it is difficult for them even to sing a song before of the class because they are not somehow acclimatized to those what, to those songs so it is somehow a challenge to these teachers, yes.”*

Difficulty in adapting songs to curriculum

Teachers clearly stated that they faced challenges in composing or adapting songs to fit specific learning topics or themes within the curriculum. This was so because the resources provided had only titles of songs so if you have not heard that particular song somewhere, you will be in for it. Below were some of the sentiments from the teachers:

Pre. Sch. Tr. 3 said, *“The only challenge is that in the books there are only title in brackets so you may know a song at the beginning then you may not know where they got it from or the teaching’ behind it, but if you complete may mean you have heard it from somewhere”.*

Pre. Sch. Tr. 5 *“Yes, there are some challenges when you want to compose the song, it’s very difficult, you have to think so that you can compose that song”.*

DISCUSSION

Findings of the study on the practices and experiences of pre-school teachers on the integration of indigenous songs into play-based learning activities, type and or examples of indigenous songs used, and challenges faced

by teachers to integrate indigenous songs into play based-learning activities in ECE centers in Ndola District, Zambia.

Teacher practices and experiences on the integration of indigenous songs into play-based learning activities for play based learning.

Findings reviewed that most teachers used indigenous songs for play based learning activities according to topics they taught across subjects as shown below:

Teaching topics within subject areas

Most teachers stated that they used indigenous songs according to the topic that they wanted to teach across subjects, whether in Literacy, Numeracy, Social Studies, Science and or Expressive Arts. The above theme has sub themes such as Literacy and Language, Numeracy, Social studies, Science, and. Expressive arts. Presentation of each sub theme in detail will follow the order laid above.

Integration of indigenous songs into Literacy and languages

Lesson observations, focus group discussions, and in-depth interviews revealed that most teachers use indigenous songs to teach foundational literacy skills such as phonics, phonemic awareness, listening, pronunciation, vocabulary, and reading. Local language songs facilitate vocabulary acquisition and vowel recognition, as children learn better in their native language, reducing cognitive strain (Gay, 2018; Mbatha, 2020). Kakoma (2017) and Mukela (2022) highlight that indigenous songs enhance vocabulary retention and phonemic awareness by reinforcing familiar linguistic structures.

However, concerns exist regarding the over-reliance on indigenous songs and local languages, as this may delay

English proficiency development, which is crucial for higher education and professional success in Zambia (Banda, 2019). Additionally, inadequate teacher training may hinder the structured integration of indigenous songs, potentially reducing their effectiveness (Gatumu, 2021).

Despite these concerns, the study supports the use of indigenous songs as they aid comprehension by allowing children to learn in a familiar language. Kalinde and Vermeulen (2016) argue that ECE benefits from mothertongue instruction, enhancing learning, motor development, and cultural preservation. Similarly, Kakoma (2017) and Kalinde and Vermeulen (2016) emphasize that exposure to a familiar language strengthens literacy foundations, making it easier for children to relate printed words to real-life experiences.

Numeracy

Teachers acknowledge the challenge of introducing foundational mathematical skills, such as number recognition, counting, and problem-solving, to young learners. They emphasize that play is essential in early childhood learning, making it necessary to incorporate engaging methods. Many teachers find that using indigenous songs simplifies the introduction of mathematical concepts, making lessons more enjoyable and interactive.

Research supports the integration of culturally meaningful, play-based learning approaches to enhance numeracy skills in ECE. According to Harrison et al. (2020), incorporating indigenous songs within structured play fosters greater engagement and improved mathematical learning outcomes. This aligns with Brass et al. (2020), who highlight the role of culturally grounded, sensory-rich learning experiences in helping children connect abstract concepts to their lived experiences. Similarly, the Australian Education Research Organisation (AERO, 2024) emphasizes that embedding play-based learning with cultural and indigenous perspectives enables educators to balance structured instruction with children's natural learning styles.

Empirical studies further validate the role of play-based learning in numeracy development. Research in Zambia by Lungu and Matafwali (2020) and Mukela (2022) demonstrates that integrating indigenous songs in mathematics instruction helps children relate numerical concepts to real-life situations, enhancing engagement

and retention. Likewise, Madondo and Tsikira (2021) highlight the impact of traditional games and songs in Zimbabwean rural settings, showing their effectiveness in developing counting and logical reasoning skills.

The integration of indigenous songs in numeracy instruction aligns with Vygotsky's Social Constructivist theory, particularly in its emphasis on play and social learning. According to Vygotsky, learning is facilitated through social interaction and scaffolding, where educators guide learners within their Zone of Proximal Development (ZPD). Play, when enriched with culturally relevant tools such as indigenous songs, provides essential scaffolding, supporting children's understanding of abstract mathematical concepts like number recognition, counting, and problem-solving.

This study reinforces the connection between indigenous songs and Vygotsky's social constructivism theory, which advocates for culturally responsive, interactive, and socially acceptable learning activities for preschoolers. Observations during lessons reveal that key constructivist components unfold as learners engage in circle time, group activities in learning corners, and songs and dances that consolidate numeracy concepts. These practices demonstrate how culturally relevant play-based learning effectively supports early mathematical development.

Social Studies (SS)

Social studies education in early childhood benefits from culturally grounded teaching methods. This view aligns well with, Marsh et al. (2020), who emphasises the role of indigenous songs in teaching children about cultural values and social roles, creating connections to their communities and fostering respect for traditions. Similarly, Tunde and Adebayo, (2020), highlighted the effectiveness of traditional songs in teaching health-related topics in African schools. These songs provide accessible ways to teach hygiene, nutrition, and basic anatomy.

Vygotsky's social constructivism approach fits well in this study because it emphasises the value of active engagement with culturally meaningful content. By incorporating indigenous songs into science lessons, children construct understanding through familiar and interactive experiences.

This study, therefore, views the use of indigenous songs to teach respect, cultural traditions, and animal behaviour embodies a rich, interactive way to connect children with their societal roles and environment. This method supports Vygotsky's idea of learning through social interaction and culturally meaningful tools. It not only enhances children's understanding of cultural identity but also instils foundational social values.

Science

Lee and McCabe (2021) demonstrate that integrating music into science lessons enhances young learners' understanding of complex topics such as the human body, diseases, and nutrition. Their research highlights that songs improve memory retention while making lessons more enjoyable. Similarly, Tunde and Adebayo (2020) emphasize the effectiveness of traditional songs in teaching health-related topics in African schools, noting that indigenous songs provide accessible ways to convey concepts like hygiene, nutrition, and basic anatomy.

In Zambia, teachers frequently use indigenous songs to teach health, food, and anatomy, reinforcing the link between abstract scientific concepts and children's everyday experiences (Ngulube, 2022). This aligns with Vygotsky's social constructivist approach, which underscores the importance of active engagement with culturally meaningful content. Through music, children construct knowledge interactively, making science lessons more engaging and accessible.

This study concurs that indigenous songs are effective pedagogical tools for teaching complex scientific concepts by connecting them to real-life experiences. This approach fosters active participation, enhances memory retention, and aligns with the constructivist theory, which advocates for sensory-rich, relatable learning experiences.

Expressive arts (EA)

Teachers reported using indigenous songs in expressive arts (EA) lessons to enhance creativity and physical coordination. They noted that children were particularly excited about outdoor activities involving songs and

games. Observations confirmed that activities such as running, clapping, and dancing engaged learners, though teachers sometimes struggled with time management.

Catterall (2021) supports this view, emphasizing that movement-based activities combined with music stimulate creativity and coordination in early learners. Similarly, Molefi and Ndhlovu (2021) and Juntunen (2024) found that traditional songs in expressive arts promote creativity, social interaction, and cultural identity among African children, aligning with Vygotsky's Social Constructivist theory, which emphasizes learning within cultural contexts.

Further research by Kakoma (2017), Kalinde (2016), N. (2024), and Mukela (2022) highlights that these practices enhance children's participation and enthusiasm, though logistical challenges, such as time management, persist. The Constructivist theory reinforces the value of experiential learning in expressive arts, as children construct knowledge through culturally relevant, hands-on activities (Vygotsky, 1978).

This study affirms that integrating indigenous songs into expressive arts supports creativity, physical coordination, and social development. Outdoor activities, combined with traditional music, provide opportunities for exploration and interaction, reinforcing experiential learning as advocated by Vygotsky's Social Constructivist theory.

Types of indigenous songs used in play-based learning (PBL) activities

This section addresses the second objective of the study, exploring the types of indigenous songs used in playbased learning (PBL) activities within Zambian ECE centers, particularly in Ndola District. Indigenous songs, deeply embedded in Zambia's diverse cultural heritage, serve as crucial tools for teaching language, promoting moral education, instilling cultural pride, and supporting holistic child development. The discussion connects with Vygotsky's socio-constructivist theory, highlighting the role of cultural tools in learning and how they mediate cognitive and social development.

Call and response songs

The study found that teachers frequently used call-and-response songs in classrooms because they encouraged active participation and fostered an interactive environment. In this type of song, one individual (either a child or the teacher) initiates the song, and the others respond, creating a dynamic and engaging learning experience. According to Kaemmer (1993:103), African music often follows a cyclic call-and-response structure where parts of the song are repeated, and there is no defined ending. These songs are instrumental in introducing new concepts, consolidating previously taught material, and even concluding lessons. Call-and-response songs are highly effective in promoting active listening and collaboration, which are key skills for early childhood learners (Campbell et al., 2022). In addition, these songs align with oral traditions across cultures and play a significant role in fostering communal learning, as noted by Molefe and Tlou (2021). They also teach children to listen, respect, and cooperate with the leader, which instills a cooperative spirit (Nompula, 2011). The study suggests that integrating such songs in PBL is not only culturally relevant but pedagogically effective, fostering collaboration, critical thinking, and emotional connections. Teachers in Zambia should ensure inclusivity by integrating diverse indigenous songs that reflect the country's multilingual and multicultural context, supported by proper training and planning.

Seasonal songs

Seasonal songs are essential in African cultures, helping children connect with the rhythms of nature and understand the practical implications of seasonal changes. For instance, during the rainy season, children are taught to prepare by bringing umbrellas and warm clothing, as well as learning gardening skills that they can apply at home. Teachers use these songs to guide children in adapting to different seasons and engage them in activities that help them understand the changing environment. Stickney (2020), Mirada (2002), and Chung (2022) have noted that songs tied to the seasons teach children about natural cycles, such as weather patterns and time, while also increasing environmental awareness. Baba (2020) and Tunde & Adebayo (2020) emphasize the role of seasonal songs in agricultural education, marking planting and harvest times, and teaching children about farming practices and environmental stewardship. The study findings are consistent with the work of Kaluba et al. (2021), Mwale & Sampa (2019), and Simwinga (2017), who observed that seasonal songs are frequently used in Zambia to teach learners about traditional farming cycles and local knowledge. Vygotsky's

(1978) socio-cultural theory underscores that these songs serve as cultural tools that mediate learning, connecting children to local traditions and fostering a deeper understanding of their environment.

Ceremonial and cultural songs

Ceremonial and cultural songs are central to fostering community identity, spirituality, and continuity of indigenous knowledge. Teachers highlighted that these songs are often used in sacred rituals and ceremonies such as rites of passage, healing rituals, harvest celebrations, and religious observances. Tomaselli (2021) noted that ceremonial songs connect communities to their spiritual heritage, evoking blessings, guidance, or protection. Globally, such songs have been used in indigenous cultures, including Native American and Australian

Aboriginal communities, to preserve spiritual practices and storytelling traditions (Smith et al., 2019). In Zambia, ceremonial songs play an important role in events like "Matebeto" (marriage preparations) and "ichisungu" (coming-of-age ceremonies) (Lumbwe, 2009). Teachers modify these songs to meet the educational needs of children, adjusting language and presentation to ensure accessibility while maintaining their authenticity. From a social constructivist viewpoint, ceremonial songs align with Vygotsky's principle that learning is social and cultural. These songs provide a framework for communal learning, allowing children to construct meaning through cultural engagement and fostering pride in their heritage.

Rhymes and chants

Rhymes and chants are widely used in ECE to help children develop memorization, coordination, and language skills in a fun and rhythmic way. Teachers use these to engage learners in educational activities that also promote social and moral learning. Rhymes and chants often carry moral lessons, teach values, or narrate folklore, making them an entertaining yet instructive tool (Campbell, 2002; Chan, 2018; Kelly, 2015). In Zambia, rhymes and chants are commonly adapted for young learners, ensuring that the language and themes resonate with their developmental needs. This adaptation ensures that the rhymes remain relevant while preserving cultural traditions. According to Vygotsky's theory, rhymes and chants allow children to learn collaboratively within their cultural context, thus facilitating cognitive and social development. As children participate in these shared cultural practices, they learn from each other and build their understanding of language and social norms, strengthening their connection to their community and heritage.

Story songs

Story songs combine narrative and music, often reflecting myths, historical events, legends, or everyday life. These songs are essential for teaching cultural values, moral lessons, and social practices, as they intertwine rhythm, melody, and storytelling to make the content engaging and memorable. In Zambia, story songs play a crucial role in imparting cultural values, traditional practices, and life lessons to children. Teachers adapt these songs to meet learners' developmental needs while preserving their cultural significance and authenticity (Mukela, 2022). Story songs offer an interactive medium for children to engage in their cultural heritage and participate in the construction of meaning. Through these songs, children can explore historical narratives and moral themes, aligning with Vygotsky's view that learning occurs within a cultural and social framework. These songs bridge the gap between traditional knowledge and modern pedagogical approaches, allowing children to explore their identities and gain insight into the values and norms of their society.

Play and game songs

Play and game songs are often characterized by repetitive lyrics, rhythmic elements, and simple instructions that encourage physical activity and cooperative play. Teachers use these songs to engage children in movement-based learning, promoting physical coordination, social interaction, and teamwork. Tomaselli (2021) explained that such songs often involve actions like clapping, dancing, or coordinated movements, which not only entertain but also aid in the development of critical physical and social skills. These songs are valuable for teaching cooperation, turn-taking, and group dynamics, and often reinforce moral values such as sharing, empathy, and teamwork. Research by Smith et al. (2019) supports the idea that play and game songs play an important role in engaging children in the learning process, enhancing both social and motor skills. In Zambia, traditional play songs like "*Kabushi kalilalila*" and "*Nambushi ee*" are integral to childhood games, promoting social bonding and reinforcing cultural identity (Mtonga, 2012; Mukela, 2022). Teachers modify these songs for classroom settings, ensuring their relevance to educational goals while preserving their cultural significance. The study

concludes that play and game songs are an effective pedagogical tool that integrates traditional knowledge with modern educational practices, fostering holistic development by addressing physical, social, and moral learning. These songs contribute to making learning enjoyable while celebrating cultural heritage.

Challenges teachers faced in the integration of indigenous songs into play-based learning

Teacher training plays a crucial role in integrating music into education. Four out of five teachers interviewed received training under the Expressive Arts curriculum, which combines Music, Art, and Physical Education. This training enabled them to use music, particularly indigenous songs, as a tool for play-based learning, enhancing engagement and cultural relevance. Similar training programs globally, like those in Finland and New Zealand, focus on holistic development, fostering creativity and cultural awareness (Smith et al., 2019). In Africa, teacher training often includes indigenous music, linking education to cultural heritage (Mkhombo, 2019). In Zambia, the Expressive Arts curriculum reflects the Ministry of Education's emphasis on cultural preservation and holistic learning (Mtonga, 2012; Mukela, 2022). However, disparities in training access or emphasis may hinder the effective application of these strategies. From a social constructivist perspective, Vygotsky's theory highlights the importance of culturally relevant tools in learning, with music bridging learners' cultural contexts and formal education. Strengthening training programs will empower educators to integrate indigenous music more effectively, fostering cultural identity and engagement.

Lack of resources and support

Teachers noted that inadequate resources and support hinder the integration of indigenous songs into play-based learning. The absence of essential tools like musical instruments, songbooks, and audio equipment limits their ability to deliver engaging lessons. Additionally, there is a lack of professional development opportunities, affecting teachers' ability to innovate. This aligns with Smith et al. (2019), who identified resource constraints in music education, particularly in low-income regions. In Zambia, teachers often improvise with local materials or simplify lessons due to the shortage of resources (Kalinde, 2016; Kakoma, 2017; Matafwali & Mofu, 2021; Mukela, 2022). From a social constructivist perspective, the lack of resources undermines collaborative learning, as Vygotsky's theory emphasizes the need for appropriate tools in the learning process. To address this, investment in infrastructure and culturally relevant materials, along with continuous teacher training, is necessary to bridge this gap and ensure the preservation of Zambia's musical heritage.

Insufficient indigenous song materials

Teachers expressed concerns about the scarcity of indigenous song materials, a significant challenge for incorporating these songs into teaching. The limited availability of resources, such as lyrics, recordings, and instructional guides, makes it difficult to deliver culturally relevant lessons. This is consistent with Battiste (2013), who observed that the lack of resources for indigenous knowledge is a global issue, with educators in places like Native American and Aboriginal Australian communities facing similar challenges. In Zambia, the shortage of documented indigenous songs and teaching aids forces teachers to rely on personal knowledge or peer collaboration, which may not always be comprehensive (Kalinde, 2016; Kakoma, 2017; Matafwali & Mofu, 2021; Mukela, 2022). Addressing this issue is crucial for cultural preservation and educational success, through initiatives like digitizing traditional songs, collaborating with local communities, and developing focused teacher training programs.

Lack of administrative support

The study also found that insufficient administrative support hampers the effective integration of indigenous knowledge into education. This aligns with Battiste (2013), who noted that many education systems worldwide fail to support teachers in integrating indigenous practices. In Zambia, underfunding in ECE and inadequate teacher training in culturally relevant pedagogies are key issues (Bashir & Mayat, 2018; Donaldson, 2019). Teachers often resort to personally funding materials and creating resources like "talking walls" to support learning. This lack of administrative support further complicates the implementation of effective teaching practices, demonstrating the need for stronger administrative backing and better resource allocation in Zambia's education system.

Language barriers and understanding

Language barriers present a significant challenge in education, particularly in multicultural contexts. These barriers often lead to misunderstandings and hinder effective communication, as language shapes the way ideas and cultural values are conveyed (Tenzer & Pudelko, 2015; DeCapua & Wintergerst, 2016). The marginalization of indigenous languages, as discussed by Skutnabb-Kangas (2000) and Garg (2024), exacerbates these issues. In Sub-Saharan Africa, colonial languages often dominate education, which undermines the teaching of indigenous knowledge and cultural heritage (Heugh, 2002). The study found that language barriers affect teachers' ability to teach indigenous songs, particularly when they are not fluent in local languages (Muzeya, 2023). Parents' preference for English further intensifies this challenge, reflecting the societal pressure to conform to global educational norms (Marvin, 2019). Addressing these issues requires systemic reforms that prioritize cultural inclusivity, promote indigenous languages, and support teachers in multicultural classrooms, ensuring that both local and global languages are integrated into education in Zambia.

Difficulty in adapting songs to curriculum

Teachers face challenges in adapting indigenous songs to curriculum themes, a difficulty seen globally due to limited exposure to prescribed songs and insufficient guidance (Green, 2017). In sub-Saharan Africa, traditional music is often undervalued in formal education, making it difficult for teachers to access or adapt relevant resources (Nketia, 1999). In Zambia, the lack of practical guidance, such as lyrics and melodies, further hinders the effective use of music in teaching (Mwamba, 2021). This study observed similar issues, with teachers highlighting that having only song titles, without accompanying resources, limited their ability to integrate music effectively. This underscores the need for comprehensive musical resources aligned with curriculum objectives.

Vygotsky's Social Constructivism theory supports these findings, emphasizing the importance of culturally relevant tools like indigenous songs in learning. The absence of such materials disrupts cultural scaffolding, which is vital for cognitive and social development. The Zone of Proximal Development (ZPD) highlights the teacher's role in guiding learners from familiar cultural contexts to new knowledge, making indigenous songs a crucial pedagogical tool. Play and game songs further facilitate knowledge co-construction through social interaction, fostering cognitive and emotional growth.

Addressing gaps in teacher training is crucial for the effective use of music in education. Strengthening Expressive Arts programs can equip teachers with the confidence to integrate indigenous music, promoting cultural identity, engagement, and holistic development in learners.

Concluding Thoughts

Overall, the findings demonstrate that teachers in Zambian ECE centres purposefully integrate indigenous songs across subject areas as culturally responsive tools for play-based learning. Whether used to support literacy and language development, numeracy, social studies, science, or expressive arts, indigenous songs enable children to learn through familiar cultural forms that promote active participation, enjoyment, and meaningful understanding. Anchored in Vygotsky's Social Constructivist theory, these practices illustrate how learning is enhanced through social interaction, play, and the use of culturally grounded tools within children's everyday experiences. This underscores the pedagogical value of indigenous songs as essential resources for culturally relevant and effective play-based learning in early childhood education.

The findings also reveal that indigenous songs—ranging from call-and-response and seasonal songs to ceremonial, rhymes, story, and play songs – are integral to play-based learning in Zambian ECE settings. These song types function not only as engaging instructional tools but also as powerful cultural resources that mediate children's cognitive, social, emotional, and moral development. By adapting these songs to suit young learners while preserving their cultural essence, teachers bridge traditional knowledge and formal education. Strengthening teacher capacity and ensuring inclusive representation of Zambia's diverse musical traditions will further enhance the pedagogical value of indigenous songs, promoting culturally responsive, holistic, and contextually relevant early childhood education.

In conclusion, the integration of indigenous songs into play-based learning is constrained by systemic challenges including limited resources, insufficient indigenous song materials, weak administrative support, language

barriers, and difficulties in aligning songs with curriculum demands. From a social constructivist perspective, these constraints undermine the use of indigenous songs as culturally meaningful tools for scaffolding learning and supporting children's holistic development. Addressing these challenges requires coordinated efforts by policymakers, curriculum developers, and education administrators to strengthen teacher training, invest in culturally relevant resources, and promote indigenous languages within ECE. Such interventions are essential not only for improving pedagogical practice but also for preserving Zambia's musical heritage and fostering culturally grounded, inclusive learning experiences for young children.

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Disclaimer

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