



INTEGRATING LOCAL KNOWLEDGE SYSTEMS INTO PUBLIC SECONDARY SCHOOL CURRICULUM: STUDENTS' AWARENESS, ENGAGEMENT AND CULTURAL IDENTITY IN ANAMBRA STATE, NIGERIA

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ABSTRACT

This study examined students' awareness, engagement and perceptions of the integration of Local Knowledge Systems (LKS) into public secondary school curriculum in Anambra State, Nigeria. The study was anchored on a descriptive survey research design. The sample comprised 243 senior secondary school students drawn from three purposively selected education zones and twelve schools that offered culturally grounded learning opportunities and incorporated indigenous knowledge into subjects such as Social Studies, Cultural and Creative Arts and Civic Education. Data were collected using a structured questionnaire developed from a comprehensive review of related literature and validated by experts in Curriculum Education and Measurement and Evaluation. The instrument demonstrated high internal consistency, with a Cronbach's alpha coefficient of 0.86. The questionnaire measured students' awareness and understanding of LKS, their engagement in culturally grounded classroom and community-based activities, their sense of cultural identity and pride and their perceptions of the relevance of LKS integration to learning and motivation. Descriptive statistics, including mean and standard deviation, were used to answer the research questions. The findings revealed that students demonstrated moderate to high awareness and understanding of Local Knowledge Systems, actively participated in culturally grounded learning experiences and reported enhanced cultural identity and pride. Furthermore, students perceived that the integration of LKS into the curriculum improved the relevance of learning and motivated their active participation in classroom activities. The study accentuates the importance of systematically integrating Local Knowledge Systems into the curriculum to promote culturally responsive pedagogy, enhance students' engagement and strengthen their appreciation of indigenous heritage. It was concluded that the integration of Local Knowledge Systems into the curriculum contributes meaningfully to improving students' engagement, cultural identity and perceived relevance of learning in public schools. The study recommended that school administrators and policymakers should promote the systematic integration of Local Knowledge Systems into teaching and learning by providing teachers with adequate training and instructional resources.

Keywords: Local Knowledge Systems, Curriculum Integration, Cultural Identity, Students' Awareness engagement,

Education remains one of the most powerful instruments for individual empowerment, cultural renewal and sustainable national development. Through structured curricula, instructional



innovation and value transmission, education enables learners to acquire the knowledge, skills and dispositions required to engage meaningfully in their communities and participate in global development (Makokotlela, 2025). However, in many postcolonial contexts, including Nigeria, the content and structure of formal education continue to reflect colonial epistemologies that privilege Western knowledge systems while marginalizing indigenous languages, cultural heritage and local knowledge (UNESCO, 2020; Oukouomi Noutchie, 2025). This imbalance has contributed to a growing disconnect between learners and their sociocultural environments, weakening cultural identity and reducing the perceived relevance of schooling (Matindike, 2024; Odora Hoppers, 2021).

The need to reorient education towards contextual relevance has intensified scholarly and policy discussions on culturally responsive pedagogy and inclusive knowledge systems. Decolonizing education involves recognizing diverse epistemologies and restructuring curriculum content to reflect learners' lived experiences and cultural realities (Anor, 2022; Obumse et al., 2022). Within African contexts, this process represents both intellectual and cultural transformation, positioning education as a tool for identity formation, community development, and social responsibility (Matindike, 2024; Oukouomi Noutchie, 2025). Empirical evidence has shown that when teaching approaches align with learners' backgrounds, students demonstrate improved participation, understanding, and academic outcomes. For instance, innovative classroom practices that connect instruction to learners' experiences have been found to significantly predict students' academic performance in public secondary schools (Ikegbusi, 2025).

A practical approach to achieving culturally relevant education is the integration of Local Knowledge Systems (LKS) into the curriculum. Local Knowledge Systems refer to the collective wisdom, practices and belief systems developed through sustained interaction with the environment and community. These include indigenous ecological knowledge, traditional governance structures, oral traditions, arts, and moral systems that guide social life (Jaxa, 2024; Anor, 2022). Integrating LKS into teaching and learning processes improves the contextual relevance of education and promotes meaningful engagement among learners. When students encounter familiar cultural content within formal instruction, learning becomes more participatory and reflective of real-life experiences, thereby strengthening both cognitive and affective engagement.

In the Nigerian context, educational policies such as the National Policy on Education (Federal Ministry of Education [FME], 2024) and frameworks by the Universal Basic Education Commission (UBEC, 2025) advocate for the inclusion of indigenous content in school curricula. Despite these policy provisions, implementation has remained inconsistent, with many schools continuing to rely heavily on externally derived knowledge systems that overlook local realities (Ikegbusi et al., 2025a). This disconnect contributes to reduced students' engagement and limits the development of a strong cultural identity. Research has also shown that school-related practices that are disconnected from students' lived experiences may weaken their sense of belonging and participation in learning processes. For example, the relationship between students' self-esteem



and academic engagement highlights the importance of identity-related factors in fostering meaningful learning (Ikegbusi & Ogamba, 2026).

Empirical studies across African countries have demonstrated the benefits of integrating local knowledge into formal education. In Ghana, Anor (2022) reported that incorporating indigenous knowledge into chemistry instruction promotes students' cognitive engagement and emotional connection to learning. Similarly, Matindike (2024) found that integrating indigenous perspectives in science and entrepreneurship education in South Africa improved students' motivation and perceived relevance of school content. These findings suggest that contextualized learning not only enhances academic engagement but also promotes cultural awareness and social responsibility among learners. Furthermore, school-based practices that prioritize learners' well-being and contextual realities, such as effective supervision systems, have been linked to improved students' outcomes and overall school functioning (Ikegbusi & Onwuchulum, 2025).

In Anambra State, education remains central to social and economic development, yet the integration of Local Knowledge Systems into the curriculum is still limited. Many students appear to demonstrate low awareness of indigenous practices such as traditional ecological knowledge, local conflict resolution mechanisms and cultural arts that historically contributed to community development (Ebele, 2024). Teachers also seem to face challenges in implementing culturally responsive pedagogy due to inadequate training, limited instructional materials and insufficient institutional support (Ikegbusi et al., 2025b). The increasing complexity of modern educational systems further necessitates innovative approaches, including the use of emerging technologies to enhance instructional supervision and curriculum delivery (Ikegbusi, et al., 2026). However, without deliberate efforts to integrate local knowledge, the gap between formal education and community life persists, affecting students' engagement and cultural identity formation.

Grounded in constructivist learning theory (Vygotsky, 1978) and experiential learning theory (Kolb, 1984), this study assumes that learning is most effective when it is connected to learners' prior knowledge and cultural experiences. These theoretical perspectives emphasize active participation, social interaction and experiential engagement as essential components of meaningful learning. Integrating Local Knowledge Systems into the curriculum aligns with these principles by providing opportunities for students to engage in culturally relevant and context-based learning activities.

Against this backdrop, this study examined the integration of Local Knowledge Systems into public secondary school curriculum, focusing on students' awareness, engagement and cultural identity in Anambra State, Nigeria. Specifically, the study examined the extent to which students are aware of LKS, how they engage with culturally grounded learning experiences and how such integration influences their sense of cultural identity. By providing empirical evidence within this context, the study contributes to ongoing discussions on curriculum reform and culturally responsive education.



Purpose of the Study

The main purpose of this study was to examine students' awareness, engagement, cultural identity, and perceptions of the integration of Local Knowledge Systems (LKS) into public secondary school curriculum in Anambra State, Nigeria. Specifically, the study sought to:

1. determine the extent to which students are aware of and understand Local Knowledge Systems (LKS) integrated into school subjects in public secondary schools in Anambra State, Nigeria;
2. ascertain the extent to which students are engaged in culturally grounded learning activities that incorporate Local Knowledge Systems (LKS) in public secondary schools in Anambra State, Nigeria;
3. examine the extent to which students demonstrate a sense of cultural identity in relation to the integration of Local Knowledge Systems (LKS) in public secondary schools in Anambra State, Nigeria;
4. determine the extent to which students perceive that the integration of Local Knowledge Systems (LKS) into the curriculum enhances learning relevance and motivation in public secondary schools in Anambra State, Nigeria.

Research Questions

The following research questions guided the study:

1. To what extent are students aware of and understand Local Knowledge Systems (LKS) integrated into school subjects in public secondary schools in Anambra State, Nigeria?
2. To what extent are students engaged in culturally grounded learning activities that incorporate Local Knowledge Systems (LKS) in public secondary schools in Anambra State, Nigeria?
3. To what extent do students demonstrate a sense of cultural identity in relation to the integration of Local Knowledge Systems (LKS) in public secondary schools in Anambra State, Nigeria?
4. To what extent do students perceive that the integration of Local Knowledge Systems (LKS) into the curriculum enhances learning relevance and motivation in public secondary schools in Anambra State, Nigeria?

Research Design

This study adopted a descriptive survey research design to examine students' awareness, engagement and perceptions of the integration of Local Knowledge Systems (LKS) into the curriculum in public secondary schools in Anambra State, Nigeria. The descriptive survey design was considered appropriate because it enables the collection of quantitative data on participants' perceptions, experiences and attitudes in their natural school settings without manipulating any variables (Ikegbusi, 2022). It provides an accurate description of existing conditions relating to students' awareness of LKS, their engagement in culturally grounded learning activities and their sense of cultural identity within the school environment.



Population of the Study

The target population for this study comprised all Senior Secondary Two (SS2) students in the 274 public secondary schools across the six education zones of Anambra State, Nigeria. SS2 students were considered appropriate for the study because they are at a developmental stage where identity formation, critical reflection and cultural awareness are more pronounced (Obi et al., 2022). At this level, students are actively exposed to subjects such as Civic Education, Social Studies, History, Cultural and Creative Arts, Agricultural Science, and English Language, where elements of Local Knowledge Systems (LKS) and indigenous cultural perspectives are often reflected in classroom instruction.

Sampling Procedure and Sample Size

A purposive sampling technique was employed to ensure the inclusion of schools and students with relevant exposure to culturally grounded learning experiences while maintaining feasibility of the study. From the six education zones in Anambra State, three zones—Otuocha, Aguata and Onitsha, were purposively selected to represent rural, semi-urban and urban settings, respectively. Within each selected education zone, four public secondary schools were purposively chosen based on their engagement in community-based learning activities, cultural heritage initiatives or curriculum enrichment programmes that reflect Local Knowledge Systems integration. From each of the twelve selected schools, 21 SS2 students were purposively selected, ensuring adequate representation across gender and subject streams. This resulted in a total sample size of 252 respondents (3 zones × 4 schools × 21 students = 252). The sampling procedure was guided by accessibility, willingness to participate and the need to capture diverse students' experiences regarding awareness, engagement and cultural identity in relation to LKS integration.

Instrumentation

The main instrument for data collection in this study was a structured questionnaire titled Students' Awareness, Engagement and Cultural Identity through Local Knowledge Systems Integration Questionnaire (SAECILKSQ). The instrument was developed by the researchers after an extensive review of relevant literature on Local Knowledge Systems (LKS), decolonizing education, culturally responsive pedagogy and indigenous knowledge integration in school curricula. Items were adapted and contextualized from established instruments measuring students' engagement (Freda et al., 2023), cultural identity development (Obi et al., 2022; Gharaei et al., 2024) and perceptions of culturally grounded learning (Gay, 2018; Ladson-Billings, 2021). The SAECILKSQ was designed to measure four key constructs consistent with the objectives of the study:

1. Students' awareness and understanding of Local Knowledge Systems (LKS) integrated into school subjects, as reflected in their knowledge of traditional environmental management practices, indigenous art forms and oral traditions.
2. Students' engagement in culturally grounded learning activities that incorporate Local Knowledge Systems (LKS), including participation in storytelling, local crafts, traditional festivals, and heritage-based classroom and community projects.



3. Students' sense of cultural identity and belonging in relation to the integration of Local Knowledge Systems (LKS), reflected in their pride in indigenous heritage, cultural self-expression, and appreciation of local knowledge systems.
4. Students' perceptions of the contribution of Local Knowledge Systems (LKS) to learning relevance and motivation, particularly how its integration enhances the meaningfulness of learning experiences and increases students' motivation in school.

Each item in the questionnaire was rated on a four-point Likert-type scale. In line with the four research questions of the study, all constructs measured—namely students' awareness and understanding of Local Knowledge Systems (LKS), their engagement in culturally grounded learning activities, their sense of cultural identity and pride, and their perceptions of the relevance of LKS to learning and motivation, were assessed using an extent-based response format of Very High Extent (4), High Extent (3), Low Extent (2), and Very Low Extent (1).

The adoption of a four-point scale without a neutral midpoint was intended to encourage respondents to make clear and definite judgments on each item, thereby enhancing response discrimination and improving the clarity and interpretability of the data (Kankaraš & Capecchi, 2024). Furthermore, the use of a uniform extent-based scale across all variables ensured consistency in measurement and facilitated meaningful comparison of mean scores across the four research questions. Given that the items were designed to capture behavioural tendencies, experiential engagement, identity-related dispositions and perceptual evaluations, higher mean scores were interpreted as indicating higher levels of the constructs under investigation.

Validity of the Instrument

To improve contextual relevance, examples drawn from Anambra State's cultural practices, such as local proverbs, indigenous agricultural methods, moral instruction through folktales and traditional apprenticeship systems, were incorporated into the wording of questionnaire items. These adaptations ensured that the instrument reflected the lived experiences of students and the cultural context of the study area. The research instrument was subjected to both face and content validation to ensure its appropriateness, clarity and alignment with the objectives of the study, which focused on students' awareness, engagement cultural identity and perception in relation to the integration of Local Knowledge Systems (LKS) into the curriculum. Two experts, one in Curriculum Studies and the other in Educational Measurement and Evaluation from Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus, Anambra State, Nigeria, independently reviewed the instrument. They assessed the adequacy of the items in measuring the intended constructs and their relevance to culturally responsive education. Their feedback led to the refinement of ambiguous items, removal of redundant statements and improvement of item clarity and cultural appropriateness to ensure that the instrument accurately captured students' experiences with Local Knowledge Systems integration in public secondary schools in Anambra State.



Reliability of the Instrument

To determine the reliability of the instrument, a pilot study was conducted using 30 students drawn from two public secondary schools in Enugu State. These schools were not part of the main study but shared similar educational and cultural characteristics with the study area. The responses obtained from the pilot study were analyzed using Cronbach's alpha to determine the internal consistency of the instrument. The overall reliability coefficient obtained was 0.86, indicating a high level of internal consistency and stability of the instrument. This value exceeds the 0.70 threshold recommended by Creswell and Creswell (2018), confirming that the instrument was reliable and suitable for data collection.

Data Collection Procedure

Prior to data collection, formal approval was obtained from the Anambra State Ministry of Education as well as the principals of the selected public secondary schools. In addition, informed consent was sought from the participating students and their guardians to ensure ethical compliance, voluntary participation and confidentiality. Three trained research assistants with backgrounds in Educational Research and Curriculum Studies were engaged to assist in the administration of the questionnaire. Prior to fieldwork, the assistants received a one-day orientation on the purpose of the study, ethical considerations (including confidentiality and anonymity), time management and standardized procedures for administering the instrument.

Data collection was carried out during normal school hours to avoid disruption of academic activities. The questionnaires were administered and completed within the classroom environment under the supervision of the research team. Clear instructions were provided and clarifications were given where necessary without influencing respondents' answers.

Out of the 252 copies of the Students' Awareness, Engagement and Cultural Identity through Local Knowledge Systems Integration Questionnaire (SAECILKSQ) distributed, 243 were correctly completed and retrieved, representing a response rate of 96.4%. The high response rate was attributed to effective coordination with school authorities, proper supervision during administration and the willingness of students to participate in the study.

Method of Data Analysis

The data collected were coded and analyzed using the Statistical Package for the Social Sciences (SPSS), Version 26. Descriptive statistics, including mean (M) and standard deviation (SD), were employed to answer the research questions guiding the study. These statistical tools were used to provide a quantitative summary of students' levels of awareness of Local Knowledge Systems (LKS), their engagement in culturally grounded learning activities and their cultural identity in relation to the integration of LKS into the curriculum in public secondary schools in Anambra State, Nigeria.

A decision benchmark of 2.50 was adopted as the criterion mean for interpreting responses on the 4-point Likert scale. Therefore, mean scores of 2.50 and above were regarded as high or positive, indicating high levels of awareness, strong engagement in culturally grounded learning activities and strong cultural identity among students. Conversely, mean scores below 2.50 were interpreted as low or negative, indicating limited awareness, weak engagement, or low cultural identity in relation to Local Knowledge Systems integration.



This analytical approach was considered appropriate given the descriptive survey design of the study, as it enabled the researchers to systematically summarize and interpret patterns in students' responses regarding the integration of Local Knowledge Systems into the curriculum. The use of descriptive statistics provided an objective and easily interpretable representation of students' experiences and perceptions, in line with Pallant (2020), who emphasized that descriptive analysis is suitable for summarizing educational data and identifying trends in respondents' perceptions and attitudes.

Results

This section presents the analyzed data based on the research questions guiding the study.

Research Question 1: To what extent are students aware of and understand Local Knowledge Systems (LKS) integrated into school subjects in public secondary schools in Anambra State, Nigeria?

Table 1: Students' Awareness and Understanding of Local Knowledge Systems (LKS) Integrated into School Subjects (N = 243)

S/N	Items	M	SD	Decision
1	I am aware that some of my school subjects include content related to local culture.	2.92	1.07	High
2	I understand examples of Local Knowledge Systems taught in school.	2.78	1.10	High
3	My teachers connect classroom topics to local community experiences.	2.45	0.93	Low
4	I can explain how indigenous knowledge helps to solve problems in my community.	2.30	0.88	Low
5	I have learned about traditional practices in my school lessons.	2.80	1.05	High
	Grand Mean	2.65		High

The results in Table 1 indicate that students demonstrated a high extent of awareness and understanding of Local Knowledge Systems (LKS) integrated into school subjects, as reflected by a grand mean of 2.65. Students showed high awareness of the inclusion of local culture in school subjects ($M = 2.92$, $SD = 1.07$) and a good understanding of LKS examples taught in school ($M = 2.78$, $SD = 1.10$). They also reported exposure to traditional practices through classroom learning ($M = 2.80$, $SD = 1.05$). However, lower mean scores were observed in areas related to instructional connection and application. Students indicated limited teacher linkage of classroom content to community experiences ($M = 2.45$, $SD = 0.93$) and a lower ability to explain the practical relevance of indigenous knowledge ($M = 2.30$, $SD = 0.88$). Overall, while students exhibit a high extent of awareness and basic understanding of LKS, the integration of these knowledge systems into practical and experience-based learning remains limited.



Research Question 2: To what extent are students engaged in culturally grounded learning activities that incorporate Local Knowledge Systems (LKS) in public secondary schools in Anambra State, Nigeria?

Table 2: Students’ Engagement in Culturally Grounded Learning Activities that Incorporate Local Knowledge Systems (LKS) (N = 243)

S/N	Items	M	SD	Decision
1	I actively participate in classroom discussions that include indigenous practices.	2.75	1.06	High
2	I take part in school activities that showcase cultural heritage.	2.68	1.08	High
3	My teachers encourage me to relate lessons to local experiences.	2.42	0.97	Low
4	I enjoy learning through cultural activities such as storytelling.	2.80	1.04	High
5	I am given opportunities to share knowledge from my family background during lessons.	2.50	0.92	High
Grand Mean		2.63		High

The results in Table 2 indicate that students demonstrated a high extent of engagement in culturally grounded learning activities that incorporate Local Knowledge Systems, with a grand mean of 2.63. Students reported active participation in classroom discussions involving indigenous practices (M = 2.75, SD = 1.06) and involvement in school activities that showcase cultural heritage (M = 2.68, SD = 1.08). They also expressed enjoyment of culturally oriented instructional approaches such as storytelling (M = 2.80, SD = 1.04). However, lower engagement was observed in teacher-supported and participatory dimensions. Students indicated limited encouragement to relate lessons to local experiences (M = 2.42, SD = 0.97), although opportunities to share knowledge from their family background were rated at a high extent (M = 2.50, SD = 0.92). Overall, while engagement is generally high, it appears to be driven more by structured classroom activities than by sustained experiential or learner-contributed practices.

S/N	Items	M	SD	Decision
1	Learning about indigenous practices makes me feel proud of my cultural heritage.	2.86	1.07	High
2	I feel a sense of belonging when lessons reflect my local culture.	2.78	1.01	High
3	I am confident in expressing my cultural identity during classroom activities.	2.60	0.94	High
4	Participation in cultural school activities increases my appreciation of my culture.	2.74	1.09	High
5	Learning through Local Knowledge Systems helps me understand my identity.	2.91	1.08	High
Grand Mean		2.78		High



The results in Table 3 showed that students demonstrated a high extent of cultural identity in relation to the integration of Local Knowledge Systems, as indicated by a grand mean of 2.78. Students reported a strong sense of cultural pride derived from learning indigenous practices (M = 2.86, SD = 1.07) and a sense of belonging when lessons reflect their local culture (M = 2.78, SD = 1.01). They also indicated confidence in expressing their cultural identity during classroom activities (M = 2.60, SD = 0.94). In addition, participation in cultural school activities was found to enhance appreciation of culture (M = 2.74, SD = 1.09), while learning through LKS contributed most strongly to students' understanding of their identity (M = 2.91, SD = 1.08). Generally, the findings suggest that LKS integration plays a significant role in strengthening students' cultural identity, particularly in fostering self-understanding and cultural pride.

Research Question 4: To what extent do students perceive that the integration of Local Knowledge Systems (LKS) into the curriculum enhances learning relevance and motivation in public secondary schools in Anambra State, Nigeria?

Table 4: Students' Perceptions of the Role of Local Knowledge Systems (LKS) in Enhancing Learning Relevance and Motivation (N = 243)

S/N	Items	M	SD	Decision
1	Learning through Local Knowledge Systems makes school lessons meaningful.	2.89	1.05	High
2	I feel motivated to learn when lessons are based on my local environment.	2.82	1.09	High
3	Learning through Local Knowledge Systems helps me value my culture as knowledge.	2.91	1.02	High
4	Integrating Local Knowledge Systems makes learning more relevant to my community.	2.76	1.10	High
5	The use of Local Knowledge Systems promotes respect for indigenous knowledge.	2.84	1.07	High
Grand Mean		2.84		High

The findings in Table 4 indicate that students demonstrated a high extent of positive perception regarding the role of Local Knowledge Systems (LKS) in enhancing learning relevance and motivation, with a grand mean score of 2.84. Students reported that LKS makes school lessons meaningful (M = 2.89, SD = 1.05) and increases their motivation when learning is connected to their local environment (M = 2.82, SD = 1.09). In addition, respondents affirmed that LKS helps them recognize their culture as a legitimate source of knowledge (M = 2.91, SD = 1.02), which emerged as the highest-rated item. They also indicated that LKS improves the relevance of learning to their community context (M = 2.76, SD = 1.10) and promotes respect for indigenous knowledge systems (M = 2.84, SD = 1.07). Overall, the results suggest that students perceive LKS integration as a significant factor in enhancing both the meaningfulness and motivational quality of learning, thereby reinforcing the educational value of culturally responsive curriculum practices.



Discussion of Findings

This study examined students' awareness, engagement, and cultural identity in relation to the integration of Local Knowledge Systems (LKS) into the curriculum in public secondary schools in Anambra State, Nigeria. The discussion of findings is presented under four themes based on the research questions.

Students' Awareness and Understanding of Local Knowledge Systems (LKS)

Findings from the study revealed that students demonstrated a relatively high level of awareness and understanding of Local Knowledge Systems (LKS) integrated into their school curriculum, particularly in subjects such as Social Studies, Civic Education, and Cultural and Creative Arts. Students indicated familiarity with indigenous practices, including traditional environmental management, oral traditions, and indigenous art forms. However, despite this relatively high level of awareness, the findings also showed that students' understanding remained largely conceptual and surface-level, with limited evidence of deeper epistemic engagement or the ability to apply indigenous knowledge to problem-solving or real-life situations. This suggests that while LKS content is present in the curriculum, it is not consistently integrated in ways that promote critical thinking or experiential learning.

This finding aligns with the work of Ezeanya-Esiobu (2019), who argued that indigenous knowledge systems in African education are often included in fragmented forms, rather than being fully embedded within teaching and learning processes. Similarly, Adeyeye (2019) observed that curriculum structures in many postcolonial contexts tend to prioritize Western epistemologies, thereby limiting the depth of engagement with local knowledge systems. Mlotshwa and Tsakeni (2024) also reported that although learners demonstrate awareness of indigenous practices, meaningful understanding is constrained by inadequate teacher preparedness and limited contextualization of content.

The findings can be further interpreted through Kolb's Experiential Learning Theory (Kolb, 1984), which emphasizes learning as a cyclical process involving experience, reflection, conceptualization, and experimentation. In this context, students appear to have access to experiential exposure to LKS, but limited opportunities exist for reflection and application. As a result, their understanding remains incomplete. This highlights the need for instructional practices that move beyond exposure to active engagement, where learners can apply indigenous knowledge in solving authentic, real-world problems within their communities.

Students' Engagement in Culturally Grounded Learning Activities

The findings revealed that students in public secondary schools in Anambra State demonstrated a generally high level of engagement in culturally grounded classroom and community-based learning activities that incorporate Local Knowledge Systems (LKS). Students reported active participation in culturally relevant learning experiences such as storytelling, indigenous art activities, environmental conservation projects, and school-based cultural festivals. These activities enhanced learners' interest, creativity, and social interaction, indicating that culturally embedded instruction promotes active student participation and enriches classroom learning experiences.

However, the findings also indicated variations in the level of engagement across schools. These differences were attributed to factors such as teachers' instructional initiative, leadership



support within schools, and the extent of community involvement in school-based learning activities. This suggests that although Local Knowledge Systems are reflected within the curriculum, their effective implementation is uneven and largely dependent on contextual and institutional factors.

These findings align with Sefoka and Chuene (2024), who reported that integrating indigenous knowledge into classroom practices enhances learner motivation and participation by connecting instruction to students' lived experiences. Similarly, Kugara and Mdhluli (2023) emphasized that culturally responsive pedagogies strengthen learner-centered instruction and bridge the gap between formal schooling and community knowledge systems.

From a theoretical perspective, Vygotsky's Sociocultural Theory (1978) provides a strong explanatory framework for these findings. The theory emphasizes that learning is socially mediated through interaction with cultural tools, language, and shared experiences. In this context, students' engagement in storytelling, traditional crafts, and cultural heritage activities represents meaningful social learning experiences that enhance both cognitive development and emotional involvement. Therefore, integrating Local Knowledge Systems into classroom and community-based activities promotes deeper engagement by situating learning within familiar cultural and social contexts, thereby strengthening both participation and identity formation.

Students' Cultural Identity and Appreciation of Indigenous Heritage

The findings revealed that the integration of Local Knowledge Systems (LKS) into the curriculum had a strong positive influence on students' sense of cultural identity and appreciation of indigenous heritage. Students expressed a strong sense of pride in their cultural roots and recognized indigenous knowledge systems as valuable and relevant sources of learning within contemporary education. The results also indicated that LKS-based learning experiences enabled students to appreciate core cultural values such as respect for elders, communal cooperation, moral responsibility, and environmental stewardship. This demonstrates the role of culturally grounded education in strengthening identity formation and promoting cultural continuity among learners in postcolonial educational settings.

These findings are consistent with Sithole (2020) and Ezeanya-Esiobu (2019), who argued that the integration of indigenous knowledge into formal education systems contributes significantly to restoring cultural dignity and reinforcing learners' sense of identity. Similarly, Chilisa (2020) emphasized that decolonizing education involves the recognition of indigenous epistemologies as legitimate knowledge systems that shape learners' worldview, identity, and cultural consciousness.

From a theoretical standpoint, Kolb's Experiential Learning Theory (1984) further explains this phenomenon. The theory posits that meaningful learning occurs through a cyclical process of experience, reflection, conceptualization, and internalization. In this study, students' engagement with cultural practices and their reflection on these experiences enabled them to transform cultural exposure into meaningful personal knowledge. This process strengthened their self-awareness, cultural pride, and sense of belonging. Consequently, the integration of Local Knowledge Systems not only enhances academic engagement but also fosters deep cultural identity formation and reinforces students' connection to their indigenous heritage.



Students' Perceptions of the Role of LKS in Enhancing Learning Relevance and Motivation

The findings revealed that students in public secondary schools in Anambra State had generally positive perceptions of the integration of Local Knowledge Systems (LKS) into the curriculum, particularly in relation to learning relevance and motivation. Students reported that when teachers used local examples such as indigenous agricultural practices, folklore, and cultural arts, lessons became more meaningful, relatable, and easier to understand. This indicates that LKS integration helps to connect classroom learning with students' everyday experiences. The findings further showed that this contextualized approach increased students' motivation and interest in learning, as it reduced the gap between school knowledge and home or community knowledge. Students felt more engaged when learning content reflected their cultural environment, suggesting that culturally grounded instruction supports active participation and sustained interest in school activities.

These findings are consistent with Kugara and Mdhluli (2023) and Sefoka and Chuene (2024), who reported that culturally responsive and contextualized teaching improves learner engagement and understanding by linking instruction to students' lived realities. Similarly, Mawere and Mukusha (2022) emphasized that integrating indigenous knowledge into education promotes epistemic justice and makes learning more relevant in postcolonial contexts.

From a theoretical perspective, Vygotsky's Sociocultural Theory (1978) explains these findings by emphasizing that learning is shaped through social interaction and cultural tools. When students engage with familiar cultural content such as storytelling, local crafts, and community-based examples, they are able to construct meaning more effectively. This strengthens both their motivation and their connection to learning. Therefore, the integration of Local Knowledge Systems enhances learning relevance and motivation by making education more culturally meaningful and learner-centered (Chilisa, 2020).

Summary of the Discussion

The findings of this study show that integrating Local Knowledge Systems (LKS) into the curriculum enhances students' awareness, engagement, cultural identity, and perceived relevance of learning in public secondary schools in Anambra State. Students benefited from culturally grounded instruction, which made learning more meaningful, motivating, and connected to their lived experiences.

However, the study also indicates that LKS integration is still not fully deep or experiential, as classroom application and student participation in indigenous knowledge sharing remain limited in some areas. This highlights the need for stronger pedagogical integration, teacher training, and curriculum improvement. Largely, the study confirmed that LKS integration is an effective approach for promoting culturally responsive learning and advancing the decolonization of education, but it requires more intentional and structured implementation to achieve its full transformative potential

Conclusion

This study examined the integration of Local Knowledge Systems (LKS) into the curriculum and its relationship with students' awareness, engagement, and cultural identity in public secondary schools in Anambra State, Nigeria. The findings revealed that students generally



demonstrated moderate to high awareness of LKS concepts embedded in school subjects and actively participated in culturally grounded learning activities.

The study further established that LKS integration enhances students' engagement, motivation, and active participation in learning, while also strengthening their sense of cultural identity, pride, and appreciation of indigenous heritage. Students perceived LKS-based instruction as more meaningful and relevant because it connects classroom learning to their lived cultural experiences. However, the extent of LKS integration varied across schools and subjects, indicating that implementation is still inconsistent and often superficial.

The study therefore concluded that integrating Local Knowledge Systems into the curriculum is an effective strategy for promoting culturally responsive education, improving learner engagement, and strengthening cultural identity, while also contributing to the broader goal of decolonizing education in Nigeria.

Educational Implications

The findings have important implications for curriculum practice and educational development in public secondary schools. The observed levels of students' awareness, engagement, cultural identity, and positive perceptions of Local Knowledge Systems (LKS) suggest the need for deliberate integration of indigenous knowledge into curriculum planning and instructional delivery to enhance learning relevance and conceptual understanding. The results further indicate that culturally grounded pedagogies, such as storytelling, local crafts, and community-based activities, are effective in promoting student engagement and should be strengthened through more experiential and participatory teaching approaches. In addition, the positive relationship between LKS and students' cultural identity highlights the importance of incorporating indigenous heritage into school experiences to foster cultural pride, belonging, and identity formation. Effective implementation, however, requires sustained support through teacher capacity building, adequate instructional resources, and active community participation to ensure consistency and impact. Generally, the study emphasizes the value of integrating LKS in promoting culturally responsive, inclusive, and decolonized education that bridges the gap between classroom learning and community knowledge systems.

Limitations

The study was limited to selected public secondary schools in Anambra State, which may restrict the generalization of findings to other contexts. In addition, data were based on self-reported questionnaires, which may be influenced by response bias. The study also did not incorporate classroom observations or teacher interviews, which could have provided deeper perception into actual classroom practices. Future research should adopt mixed-method approaches and broader sampling across multiple regions to enhance validity and generalizability.

Recommendations

1. Public secondary school administrators should systematically integrate Local Knowledge Systems (LKS) across relevant subjects to strengthen students' awareness and understanding of indigenous knowledge, cultural practices and local environmental systems.



2. Teachers should adopt participatory and experiential teaching strategies, such as storytelling, indigenous arts, heritage projects, and community-based learning, to improve students' engagement, creativity, and active participation.
3. School administrators should create structured platforms, such as cultural days, heritage clubs and classroom presentations, that enable students to express and share their indigenous identity, thereby strengthening cultural pride and belonging.
4. Curriculum developers and education policymakers should provide targeted teacher training, instructional materials and policy support to ensure effective and consistent integration of LKS, thereby improving learning relevance, motivation and advancing curriculum decolonization.

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Ethical Considerations

Ethical approval for this study was obtained from the Research Ethics Committee of the Faculty of Education, Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus, Anambra State, Nigeria. Informed consent was secured from all students' participants and their guardians. The study strictly adhered to ethical principles for research involving human subjects, including confidentiality, voluntary participation, the right to withdraw at any stage and protection of participants' identity and responses.

Conflict of Interest

The authors declare that there are no conflicts of interest associated with this study.

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