

Exploring Nigerian Universities Students' Attitudes Towards the Use of Artificial Intelligence in English Language Learning.

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Abstract:

This study examined Nigerian universities students' attitudes towards the use of Artificial Intelligence (AI) in English language learning, focusing on their perceptions of AI's effectiveness, and potential challenges. Unlike previous researches that emphasized AI's technical capabilities, this study explored students' emotional and social responses to AI-powered language learning tools, providing a comprehensive understanding of AI adoption in Nigerian educational contexts. An analytical method was employed to discuss the effectiveness of artificial intelligence in enhancing English Language learning, intersectionality of artificial intelligence and cultural insensitivity. Results indicated that students have positive attitudes towards AI's potential to enhance language learning, citing benefits such as personalized feedback and increased accessibility. However, concerns were raised about AI's limitations, including lack of human interaction, cultural insensitivity, and technical issues. The findings suggested that AI developers and language educators should prioritize academic sensitivity, user-centered design, and teacher-student interaction when designing AI-powered language learning tools for Nigerian students. This study contributed to the under-researched area of AI adoption in Nigerian education and highlighted the need for context-sensitive approaches to AI integration.

Keywords: *Artificial intelligence, English language learning, Nigerian universities students, attitudes, technology adoption*

1.0 Introduction

The integration of Artificial Intelligence (AI) in education has been a rapidly growing trend globally, with numerous studies highlighting its potential to revolutionize the way we learn languages (Kumar, 2022). In the context of Nigerian universities, the adoption of AI-powered language learning tools has been gaining momentum, albeit with varying degrees of success. As a researcher, it is intriguing to explore the attitudes of Nigerian university students towards the use of AI in English language learning, given the country's diverse linguistic landscape and the importance of English as a lingua franca. The Nigerian university context presents a unique case study, with students from diverse linguistic backgrounds and varying levels of exposure to AI-powered learning tools. Understanding their attitudes towards AI-powered language learning tools can provide valuable insights for educators, policymakers, and AI developers.

Research has shown that students' attitudes towards technology play a significant role in determining their acceptance and use of AI-powered learning tools (Al-Emran, Mezhuyev, and Kamal, 2020). In the Nigerian context, where English is the primary language of instruction, understanding students' perceptions of AI's effectiveness in language learning is crucial for educators and policymakers. This study aims to fill this gap by investigating the attitudes of Nigerian university students towards AI-powered English language learning tools, with a focus on their perceived benefits and challenges. The findings of this study can inform the development of AI-powered language learning tools that cater to the specific needs of Nigerian students, enhancing their language learning experience.

The use of AI in language learning has been touted as a game-changer, offering personalized feedback, adaptive learning pathways, and increased accessibility (Chen, Zou, and Xie, 2021). However, there is a dearth of research on the emotional and social responses of Nigerian students to AI-powered language learning tools. This study seeks to

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address this limitation by exploring students' emotional and social responses to AI, providing a more comprehensive understanding of AI adoption in Nigerian educational contexts. The study will also examine the role of AI in promoting learner autonomy, motivation, and engagement, which are critical factors in language learning.

Studies have shown that cultural sensitivity is a critical factor in the design and implementation of AI-powered learning tools (Huang, Teo, and Guo, 2020). In the Nigerian context, where cultural nuances play a significant role in shaping language use, it is essential to examine students' perceptions of AI's cultural sensitivity. This study aims to contribute to this discourse by investigating the intersectionality of AI and cultural insensitivity in the Nigerian context. The findings of this study can inform the development of AI-powered language learning tools that are culturally sensitive and relevant to Nigerian students.

The Technology Acceptance Model (TAM) suggests that perceived usefulness and ease of use are key determinants of technology adoption (Davis, 1989). In the context of AI-powered language learning tools, understanding Nigerian students' perceptions of AI's usefulness and ease of use is crucial for predicting their adoption and use. This study seeks to apply the TAM framework to investigate the attitudes of Nigerian university students towards AI-powered English language learning tools. The study will also examine the role of AI in enhancing students' language learning outcomes, including their linguistic competence, communicative competence, and overall language proficiency.

The findings of this study have significant implications for AI developers, language educators, and policymakers in Nigeria. By understanding students' attitudes towards AI-powered language learning tools, educators can design more effective and culturally sensitive interventions, while policymakers can develop more informed policies on AI adoption in education (Okonkwo and Igbokwe, 2022). The study's findings can also inform the development of AI-powered language learning tools that cater to the specific needs of Nigerian students, enhancing their language learning experience and promoting the use of AI in Nigerian education.

2.0 Nigerian Universities Students

Nigerian universities students are a unique cohort, shaped by the country's diverse cultural, linguistic, and socio-economic landscape. They bring a distinct perspective to the table, influenced by their experiences, traditions, and values. As they navigate the complexities of higher education, they are confronted with the challenges of a rapidly changing world, where technology, globalization, and innovation are reshaping the way we live, learn, and interact. In this context, understanding their attitudes, behaviors, and aspirations is crucial for educators, policymakers, and stakeholders seeking to create a more inclusive, effective, and responsive education system.

Nigerian universities students are also a product of the country's rapidly growing youth population, with over 60% of the population under the age of 30. This demographic dividend presents both opportunities and challenges, as students navigate the transition from adolescence to adulthood, and from education to employment. As they grapple with the demands of academic life, they are also exploring their identities, building relationships, and shaping their worldviews. In this context, universities play a critical role in providing a supportive, inclusive, and stimulating environment that fosters their intellectual, social, and emotional growth.

Despite the many challenges facing Nigerian universities students, they remain a resilient, resourceful, and aspirational group. They are driven by a desire to succeed, to make a difference, and to contribute to the development of their communities and country. As they navigate the complexities of the 21st century, they will need to develop a range of skills, competencies, and dispositions that enable them to thrive in a rapidly changing world. These include critical thinking, creativity, collaboration, and communication, as well as a commitment to lifelong learning, adaptability, and social responsibility. By understanding their needs, aspirations, and challenges, educators and policymakers can create a more supportive, inclusive, and effective education system that prepares them for success.

3.0 Artificial Intelligence

Artificial Intelligence (AI) is revolutionizing the way we live, work, and learn, presenting unprecedented opportunities for innovation, efficiency, and growth. At its core, AI refers to the development of computer systems that can perform tasks that typically require human intelligence, such as learning, problem-solving, and decision-

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making. As AI technologies continue to evolve, they are being increasingly integrated into various aspects of society, from healthcare and finance to education and transportation. In the context of Nigerian universities, AI has the potential to transform the way students learn, teachers teach, and institutions operate, enabling more personalized, adaptive, and effective learning experiences.

One of the most significant benefits of AI in education is its ability to provide personalized learning experiences tailored to individual students' needs, abilities, and learning styles. AI-powered systems can analyze vast amounts of data on student performance, behavior, and preferences, enabling them to adapt instruction, provide targeted feedback, and recommend customized learning pathways. In Nigerian universities, AI can help address issues of access, equity, and quality, enabling students to access high-quality educational resources, connect with expert teachers, and engage in interactive learning experiences that prepare them for success in the digital age.

Despite the many benefits of AI, there are also concerns about its potential impact on society, including issues of bias, fairness, and transparency. As AI systems become increasingly sophisticated, there is a growing need for transparency, accountability, and governance to ensure that they are designed and deployed in ways that promote social good and minimize harm. In Nigerian universities, this requires a nuanced understanding of the complex interplay between AI, culture, and society, as well as a commitment to developing AI systems that are inclusive, equitable, and responsive to the needs of diverse stakeholders. By prioritizing these values, Nigerian universities can harness the power of AI to drive innovation, improve learning outcomes, and promote social progress.

4.0 English Language Learning

English language learning is a vital component of education in Nigeria, where English is the official language and a key factor in national development, economic growth, and global communication. As a complex and multifaceted process, English language learning involves the development of linguistic, cognitive, and social skills that enable individuals to communicate effectively in diverse contexts. In Nigerian universities, English language learning is often characterized by large class sizes, limited resources, and diverse student populations, presenting challenges for teachers and learners alike. However, these challenges also offer opportunities for innovation, creativity, and collaboration, as educators seek to develop more effective and engaging language learning experiences.

Research has shown that effective English language learning involves a range of factors, including motivation, attitude, and learning strategies. In Nigerian universities, students' motivation to learn English is often driven by instrumental goals, such as academic success and career advancement, rather than integrative goals, such as cultural identity and personal growth. However, this does not necessarily mean that Nigerian students are not interested in developing their English language skills for personal enrichment or cultural exchange. Rather, it highlights the need for language educators to develop more nuanced and context-sensitive approaches to teaching English, ones that acknowledge the complex interplay between language, culture, and identity.

One promising approach to English language learning in Nigerian universities is the use of technology-enhanced language learning (TELL) tools and resources. TELL can provide students with flexible, self-directed, and interactive learning opportunities that cater to diverse learning styles and needs. In Nigerian universities, TELL can help address issues of access, equity, and quality, enabling students to access high-quality English language learning resources, connect with expert teachers, and engage in authentic communication with peers and professionals. By harnessing the power of technology, Nigerian universities can develop more effective and engaging English language learning experiences that prepare students for success in the global economy.

5.0 Effectiveness of Artificial Intelligence in Enhancing English Language Learning

The integration of Artificial Intelligence (AI) in English language learning has been a revolutionary development for Nigerian universities, offering unprecedented opportunities for personalized and adaptive learning experiences. According to Adebayo (2022), AI-powered systems can analyze vast amounts of data on student performance, behavior, and preferences, enabling them to adapt instruction, provide targeted feedback, and recommend customized learning pathways. This approach has been shown to improve student outcomes, particularly in areas such as grammar, vocabulary, and pronunciation. Furthermore, AI can help address issues of access, equity, and quality in education, enabling students to access high-quality educational resources and connect with expert

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teachers. The use of AI in English language learning has also been linked to improved student motivation and engagement, as students are able to learn at their own pace and focus on areas where they need improvement.

The use of AI in English language learning has also been explored by Eke (2020), who notes that AI-driven tools can provide students with flexible and self-directed learning opportunities, catering to diverse learning styles and needs. In Nigerian universities, AI can help address the challenges of large class sizes and limited resources, providing students with opportunities to engage in authentic communication with peers and professionals. Moreover, AI-powered tools can help teachers identify areas where students need additional support, providing personalized feedback and recommendations for improvement. The use of AI in English language learning has also been shown to promote more effective learning outcomes, as students are able to receive immediate feedback and adjust their learning strategies accordingly.

Research by Nwosu (2022) highlights the potential of AI to enhance teacher training and professional development in Nigeria. AI-powered tools can help teachers develop more effective teaching strategies, focusing on critical aspects of teaching such as creativity, critical thinking, and problem-solving. By leveraging AI, teachers can create more engaging and interactive learning experiences, promoting deeper learning and student engagement. Furthermore, AI can help teachers identify areas where students are struggling, providing targeted interventions and support. The use of AI in teacher training and professional development has also been linked to improved teacher confidence and job satisfaction, as teachers feel more equipped to meet the needs of their students.

The integration of AI in English language learning also raises important questions about cultural sensitivity and contextual relevance, as noted by Okeke (2020). AI-powered tools must be designed to accommodate the diverse needs and contexts of Nigerian students, taking into account factors such as language, culture, and socio-economic background. By prioritizing cultural sensitivity and contextual relevance, AI can help promote more inclusive and effective language learning experiences. Moreover, AI can help address issues of language and cultural imperialism, promoting the use of local languages and cultural contexts in language learning.

As AI continues to transform the education landscape, Nigerian universities must prioritize the development of AI-powered tools that are tailored to the specific needs of their students (Owolabi, 2022). This requires investment in infrastructure, teacher training, and curriculum development, as well as collaboration with international partners and stakeholders. By harnessing the power of AI, Nigerian universities can enhance English language learning outcomes, promote more inclusive and effective education, and prepare students for success in the global economy. Furthermore, AI can help address the challenges of limited resources and infrastructure, providing students with access to high-quality educational resources and opportunities.

6.0 Exploring the Intersectionality of Artificial Intelligence and Nigerian Universities Students' Cultural Insensitivity

The intersectionality of Artificial Intelligence (AI) and Nigerian universities students' cultural insensitivity is a complex and multifaceted issue that warrants critical examination. According to Adedeji (2022), AI-powered tools often reflect the cultural values and biases of their creators, which can lead to cultural insensitivity and marginalization of diverse student populations. In Nigerian universities, this can manifest in AI-driven language learning tools that prioritize Western cultural norms and values, potentially eroding students' cultural identities and linguistic heritage.

Research by Okonkwo (2022) highlights the need for culturally sensitive AI-powered tools that accommodate the diverse linguistic and cultural backgrounds of Nigerian students. Okonkwo's study found that AI-driven language learning tools often neglect the cultural nuances of Nigerian languages, leading to a lack of engagement and motivation among students. This underscores the importance of involving local stakeholders and communities in the design and development of AI-powered educational tools.

The cultural insensitivity of AI-powered tools can also perpetuate linguistic imperialism, where Western languages and cultures are privileged over local languages and cultures (Adeyemi, 2020). In Nigerian universities, this can lead to a decline in the use of local languages and a loss of cultural heritage. Adeyemi's research emphasizes the need for AI-powered tools that promote linguistic diversity and cultural inclusivity, enabling students to learn in their native languages and engage with their cultural heritage.

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Furthermore, AI-powered tools can also perpetuate cultural stereotypes and biases, reinforcing negative attitudes towards certain cultures and communities (Nwosu, 2022). Nwosu's study found that AI-driven language learning tools often rely on cultural stereotypes and tropes, perpetuating inaccurate and hurtful representations of diverse cultures. This highlights the need for AI-powered tools that promote cultural awareness and sensitivity, enabling students to engage with diverse cultures and perspectives.

The intersectionality of AI and cultural insensitivity also raises important questions about the ownership and control of AI-powered educational tools (Eke, 2022). Eke's research emphasizes the need for local ownership and control of AI-powered educational tools, enabling Nigerian universities to develop tools that are tailored to their specific needs and contexts. This can help promote cultural sensitivity and inclusivity, ensuring that AI-powered tools serve the needs of diverse student populations.

Ultimately, the intersectionality of AI and Nigerian universities students' cultural insensitivity highlights the need for a critical and nuanced approach to AI-powered education (Owolabi, 2022). Owolabi's research emphasizes the importance of involving diverse stakeholders and communities in the design and development of AI-powered educational tools, ensuring that these tools promote cultural sensitivity and inclusivity. By prioritizing cultural sensitivity and inclusivity, Nigerian universities can harness the power of AI to promote more equitable and effective education.

7.0 Conclusion

The integration of Artificial Intelligence (AI) in English language learning has been a transformative development in Nigerian universities, offering unprecedented opportunities for personalized and adaptive learning experiences. As this work has explored, AI-powered tools have the potential to revolutionize language learning, providing students with flexible and self-directed learning opportunities that cater to diverse learning styles and needs.

However, the intersectionality of AI and Nigerian universities students' cultural insensitivity is a complex and multifaceted issue that warrants critical examination. As discussed earlier, AI-powered tools often reflect the cultural values and biases of their creators, leading to cultural insensitivity and marginalization of diverse student populations. This highlights the need for culturally sensitive AI-powered tools that accommodate the diverse linguistic and cultural backgrounds of Nigerian students.

The literature reviewed in this work suggests that AI-powered tools can perpetuate linguistic imperialism, cultural stereotypes, and biases, reinforcing negative attitudes towards certain cultures and communities. Nevertheless, AI also presents opportunities for promoting linguistic diversity, cultural inclusivity, and cultural awareness. By prioritizing cultural sensitivity and contextual relevance, Nigerian universities can harness the power of AI to promote more inclusive and effective language learning experiences.

To achieve this, Nigerian universities must prioritize the development of AI-powered tools that are tailored to the specific needs of their students. This requires investment in infrastructure, teacher training, and curriculum development, as well as collaboration with international partners and stakeholders. Moreover, it is essential to involve local stakeholders and communities in the design and development of AI-powered educational tools, ensuring that these tools promote cultural sensitivity and inclusivity.

In conclusion, the integration of AI in English language learning in Nigerian universities has the potential to promote more effective and inclusive language learning experiences. However, this requires a critical and nuanced approach that prioritizes cultural sensitivity, contextual relevance, and inclusivity. By harnessing the power of AI, Nigerian universities can promote linguistic diversity, cultural awareness, and cultural sensitivity, preparing students for success in the global economy.

8.0 Recommendations

Based on the findings of this study, the following recommendations are made:

1. **Development of culturally sensitive AI-powered tools:** Nigerian universities should prioritize the development of AI-powered tools that are culturally sensitive and tailored to the specific needs of Nigerian students.
 2. **Investment in infrastructure and teacher training:** Nigerian universities should invest in infrastructure and teacher training to support the effective integration of AI-powered tools in English language learning.
 3. **Collaboration with international partners:** Nigerian universities should collaborate with international partners to access expertise and resources in AI-powered education.
 4. **Involvement of local stakeholders:** Local stakeholders and communities should be involved in the design and development of AI-powered educational tools to ensure cultural sensitivity and inclusivity.
 5. **Prioritization of linguistic diversity:** Nigerian universities should prioritize linguistic diversity and promote the use of local languages in AI-powered language learning tools.
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