ROLE OF AI-POWERED TRANSLATION APPS IN CROSS-LINGUISTIC COMMUNICATION AMONG SENIOR SECONDARY SCHOOL STUDENTS IN ENUGU STATE

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DOI: https://doi.org/10.5281/zenodo.16910547

Abstract: *This study investigated the role of AI-powered translation apps in cross-linguistic communication among senior secondary school students in Enugu State, Nigeria. Guided by the Technology Acceptance Model (TAM), the study adopted a descriptive survey design with a sample of 250 students drawn from Godfrey Okoye University Secondary School, College of Immaculate Conception, and St. Patrick Secondary School, Emene. Data were collected using a structured questionnaire and analyzed with mean and standard deviation, using 2.5 as the decision benchmark. Findings revealed that students moderately use AI-powered translation apps, particularly for group assignments and peer communication across diverse linguistic backgrounds. Results further showed that the apps enhance academic collaboration, inclusivity, and peer interaction, though challenges such as cultural inaccuracy, overreliance, and poor internet access persist. Empirical evidence from related studies affirmed that AI translation tools foster communication but require balanced use alongside language learning. The study concludes that AI-powered translation apps have significant potential in promoting inclusivity and effective communication in multilingual classrooms. Educational implications include training students on responsible use, while recommendations were made for policymakers, administrators, teachers, parents, and developers to strengthen the integration of translation technologies in schools.*

Introduction

The 21st century has witnessed a remarkable transformation in communication driven by artificial intelligence (AI). Among its various applications, AI-powered translation apps such as Google Translate, Microsoft Translator, and DeepL have reshaped how people from different linguistic backgrounds interact in real time.

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These tools have moved from being supplementary aids to becoming essential platforms for global communication. In multilingual societies like Nigeria, where hundreds of indigenous languages coexist with English, their role becomes even more critical in bridging gaps among diverse populations. Specifically, for young learners in secondary schools, AI translation tools are increasingly vital in breaking down barriers and promoting mutual understanding (Shahid, 2025).

Language barrier usually acts as a hindrance to proper communication among students especially in schools with multi-lingual profiles. In Enugu State, where different ethnic groups coexist, the secondary schools have students of the Igbo, Hausa, Yoruba, and the minority language groups. Although English is taken as an official language of teaching, peer-to-peer usually shifts into the mother tongues causing issues of misunderstandings and discrimination. Such a scenario may constrain the less fluent English-speaking/dominant local language students. The potential solution is the application of artificial intelligence in translation: translation apps can provide avenues of inclusivity and collaboration for those students (AlAfnan, 2025).

AI translation applications run on neural machine translation (NMT) which uses a deep learning-based approach, through which the linguistic format is studied by the program and near-fluent translations are generated. It is a significant departure from the previous rule-based approaches to translation which tended to deliver literal and embarrassing results. NMT takes into account what we can call context, syntax, and semantic relationships, which adds to the precision and fluidity of translations (Bai & Zhang, 2025). Such innovation can create a paradigm shift in academic and social relationships in the case of the Nigerian student body. They will be in a better position to interpret subject content, participate in group discussions, and still have social interaction with their peers though the language barrier.

A study conducted across the world revealed that AI translation tools enhance access to multilingual information and material among students, cultural understanding as well as cross-border partnerships within an education system. Analysis in Europe, Asia, and North America shows that such tools have become a necessity in diverse student-based classrooms (Ernandes, 2024). In Nigeria, digital literacy and the high level of smartphone ownership by students form a good soil in which their adoption can take place. Nonetheless, the role of AI translation apps in the setting of secondary schools is insufficiently studied, although their popularity is increasing due to the above-mentioned reasons. The relevance and the shortcomings of these tools in the Nigerian education system may be elicited by how the students in Enugu State specifically use these tools.

The importance of AI translation applications in the given context is also due to the prospects it holds in terms of teaching inclusiveness. The students, whose English is the second language, tend to have trouble taking an active part in the discussions or group activities. Using translation apps, they can access learning resources, learn

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how to do things as well, and communicate more effectively with fellow learners. This helps to eliminate alienation especially among the minority language groups. Finally, such tools can also contribute to cooperative learning, academic gains, and bonding (Barnoxon & Ravshanjonovna, 2025).

Along with the advantages, caution exists on the over-dependence of AI translation. Although apps are faster and convenient for communication, they are not perfect. They tend to ignore nuances in cultures, wrongly interpret idiomatic phrases, and in some cases, produce linguistically off-context translations. These problems may suppress the desire of students to learn the language independently as they might become overly reliant on technology rather than develop their personal language skills. Thus, it is essential to comprehend the attitude of students towards such tools and how their dependency on them adds or takes away value to the learning results (Asrifan, 2025).

In Nigeria, the main interests of scholarly research on AI are its use in teaching performance (Kama et al., 2025), in educational broadcasting (Nwosu, 2024), and higher education renewal (Kantudu, 2023). These studies can show the power of AI to transform learning ecosystems on various levels. There is not much empirical data on the exact AI-powered translation in secondary education, however. The experiences of younger learners have remained under-discussed with most focus being on higher institutions. The paper will, hence, attempt to address that gap by examining the application of translation apps among students in secondary school to communicate across different languages.

The study is especially relevant in Enugu State where there is both a lingua franca such as English and the influence of indigenous languages in informal communications. It might also be that students disagree because they do not understand slang, dialect, or borrowed words in conversations. In these situations, there could be AI translation applications that apply as the mediator and facilitate transparency and avoid mutual miscomprehension. Their success in preventing conflicts or improving the level of understanding between students is however, still waiting to be systematically investigated. That is why the current research is relevant and important.

In addition, the research has wider implications in management and policy formulation of education. Provided that AI-based translation technologies become effective, the school management may think about a formal inclusion of such tools in online learning initiatives. This would entail their careful implementation and the training of teachers and students on the leveling of translation technologies and real language learning. The policymakers could also consider the findings as a guideline in making schools inclusive in Nigeria and especially in linguistically diverse areas (Ogwo, et al., 2023).

In summary, this study sets out to investigate the role of AI-powered translation apps in cross-linguistic communication among senior secondary school students in Enugu State. The analysis focuses on how students in three selected schools use these tools in academic and

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social contexts. The study also examines whether these apps foster collaboration and inclusivity or introduce new challenges to learning and communication. By providing a deeper understanding of students' experiences, this research contributes to both theory and practice in educational technology. Ultimately, the goal is to determine whether AI translation can be a sustainable tool for bridging Nigeria's complex linguistic landscape.

Research Questions

The study is guided by the following research questions:

1. To what extent do senior secondary school students in Enugu State use AI-powered translation apps for cross-linguistic communication?
2. How do AI-powered translation apps influence students' academic collaboration and peer interaction in multilingual settings?
3. What challenges do students encounter in using AI-powered translation apps for communication?
4. What are the students' perceptions of the effectiveness of AI-powered translation apps in overcoming language barriers?

Theoretical Framework

The Technology Acceptance Model (TAM), first proposed by Davis (1989), remains one of the most widely applied theories in explaining technology adoption across different contexts. It suggests that people's acceptance of new tools is influenced primarily by two constructs: perceived usefulness and perceived ease of use. In educational contexts, TAM has been employed to understand how students and teachers engage with emerging technologies such as artificial intelligence (AI) in classrooms, libraries, and communication platforms (Ogwo, et al., 2023). For this study, TAM provides the foundation for analyzing how senior secondary school students in Enugu State adopt AI-powered translation apps for cross-linguistic communication. By framing students' behaviors through TAM, the research examines whether their willingness to use translation apps depends on their belief in the tools' effectiveness and simplicity.

Perceived usefulness is the first central construct of TAM, which is quite applicable in the case of cross-linguistic communication. This is how strongly students are convinced that AI-powered translation apps can assist them in doing away with language barriers and enhancing their learning or socialization. As an example, should students learn that utilizing Google Translate in a group discussion will make it less ambiguous, they will be more inclined to see the technology as beneficial to use. Research has emphasized such a phenomenon in tertiary education, demonstrating that learners are more willing to adopt AI-driven platforms in circumstances where they can realize some very clear benefits to them, e.g. better communication and ease of access (Kantudu, 2023). By analogy, the likelihood of students being willing to use translation tools minimizing the risk of misunderstandings among peers of heterogeneous linguistic backgrounds may increase as part of everyday communication.

Perceived ease of use is the second construct that measures how much students feel that the use of a technology entails little effort. The interfaces of

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translation applications such as MS Translator and DeepL are simple and students can receive the translation of texts or voice in a few clicks. When students feel that such apps are easy to understand and can save a lot of their time, there are better chances that they will take a positive approach to using them. The fact that neural machine translation systems work not only due to accuracy but rather user-friendly design, which minimizes the cognitive effort of language switching, is stressed by Bai and Zhang (2025). Therefore, the convenience of the translation helps in shaping the decision of whether students in Enugu State will use the apps regularly.

In addition to these two constructs, TAM acknowledges the existence of the external forces that are potential factors of influence on the level of the digital infrastructure availability, peers, and culture. In Enugu State, digital literacy levels among students are not on the same level, which means that not everyone can perceive the AI-driven translation applications equally due to exposure to technology and access to the internet. As it is presented in the research about the implementation of AI in Nigerian schools, peer influence can help the students choose in favor of digital tools when the benefits are shown by peers (Kama, Ajiwa, & Epele, 2025). Also, the difference in evaluation of translation accuracy may depend on the cultural peculiarities that are reflected in the local language. TAM presents a holistic picture of how to make sense of the technology adoption in young learners by putting at their disposal these outside variables.

TAM also foresees the temporal development of the stages of perception, the development of a behavioral intention, and, ultimately, the actual usage. This model states that the students who find the translation apps useful and simple to use have higher intentions to use those apps in the future, and such intentions frequently result in habitual use. Ernandes (2024) describes the situation with AI translation in cross-cultural situations as sustainable where users can see short-term advantages and future convenience. This would imply that in the Nigerian environment, students might use translation apps too much and accept them as a custom in academic and informal communication. This development is necessary to assess the sustainability of the AI tools in schools as a whole.

The psyche aspects of TAM also bring to light the reasons why students accept or reject the technologies. Young individuals, especially adolescents are keen to use new tools, but they may give up on them too fast once they fail to live up to their expectations. According to Shahid (2025), neural machine translation systems are successful as they give context-specific outputs, which conform to the demands of the user regarding accuracy and fluency of messages. On the other hand, when the translation apps yield awkward or inaccurate results students will not embrace them although they might feel interested in adopting them. In this way, TAM offers an avenue through which such psychological processes can be investigated, and a direct correlation with the usage behaviour of the students is obtained.

The advantage of TAM also contends that it is flexible in terms of its technological innovation.

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It has been extended to such environments as AI applications in the libraries of colleges and universities (Ogwo et al., 2023) and AI applications in teaching success in the country of Nigeria (Kama et al., 2025). The application of TAM to AI translation apps can enable researchers to investigate the unique issue of multilingualism in Nigerian classrooms. AlAfnan (2025) proves that AI translation systems fill the gap between Arabic and English communication, and extend their use in inter-linguistic situations. Using TAM in the study will provide a wider aspect of its theoretical application and will also add to the applications of the study on Nigerian secondary education.

To sum up, the theory of adoption and usage (TAM) can provide a powerful analysis of this aspect in the context of AI-powered translation systems used by secondary school students in Enugu State. Its orientation of perceived usefulness and ease of handling promises an extensive study of the attitudes and behaviors of the students. In addition, through external forces that include peer influence, cultural accuracy, and infrastructural challenges, TAM offers a comprehensive look into the practice of adoption. It is consistent with the research, which focuses not only on opportunities but also on the limitations of the role of AI in terms of encouraging communication across language boundaries (Asrifan, 2025; Ernandes, 2024). Thus, TAM can be seen as the best theoretical perspective that can be used in the study of the roles played by translation apps in facilitating cross-linguistic communication in Nigerian schools.

Empirical Review

In a study on the role of AI in improving teaching in the public senior secondary schools in Awgu Local Government Area of Enugu State, Kama, Ajiwa and Epele (2025) find that the concept of AI can contribute to improving teaching in public senior secondary schools in Awgu Local Government Area of Enugu State. The research used the survey design and questionnaires (given to teachers and students) to define the influence of AI-powered tools on the process of delivering instructions and classroom interaction. It was identified that students using AI-enhanced tutoring apps had a better understanding and more teacher interaction. The authors suggested that AI-based platforms should be incorporated in secondary schools to enhance the quality of teaching and learning results. Of relevance to the present study is the fact that the latter involves AI having the role of enhancing communication and interaction within secondary schools. The contrast lies in that Kama et al. have examined AI in terms of teaching efficiency, whereas in the proposed study, AI-based translation applications have been utilized to help students interact cross-linguistically and communicate.

Nwosu (2024) explored the use of educational broadcasting as a tool to share effective pedagogy among Nigerian schools representing its various levels. In the study, a descriptive research design was employed to determine how AI broadcasting tools impact lesson inclusivity and accessibility among learners. It was found that AI-assisted broadcasting enhanced the involvement of

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students as it broke communication barriers within large and diverse classrooms. The paper has suggested the introduction of AI broadcasting platforms nationally to facilitate equal access to high-quality education. The parallel with the current study is that it focuses on AI as the means of promoting inclusiveness and communication. The contrast is that the work of Nwosu used the idea of broadcasting pedagogy, whereas the given work is occupied with a more specific transformation of student-to-student communication through translation apps.

Kantudu (2023), examined the uses of AI to transform Nigerian higher education about how it can be used in teaching, learning, researching, and engaging the community. The study, based on case studies and institutional surveys, was able to conclude that the utilization of AI platforms contributed to personalized communication, encouraged research collaboration, and made education services accessible to a broad range of learners. The results clearly showed that AI magnified the potential to democratize knowledge because it provided access to students whose backgrounds were in different languages to contribute to academic discourse. Recommendations were given on how to invest in the use of AI in communication tools to promote the idea of inclusivity and academic productivity. The point of overlap with this paper is that it focuses on AI enhancing communication and accessibility in the educational process. The variation is that the study of Kantudu focused on institutions of higher learning unlike the present study which

focuses on senior secondary school students in Enugu State.

Ogwo, Ibegbulem, and Nwachukwu (2023) studied the applications and perceived impact of AI in Nigerian academic libraries. The researchers used a survey design to collect data from librarians and library users across universities, focusing on how AI tools supported cross-linguistic access to academic resources. Findings showed that AI-powered platforms, particularly translation features, enabled students to access foreign-language materials and improved overall library engagement. The study recommended training librarians and users to maximize AI services for information access. The similarity with the present study is the focus on AI translation as a bridge for cross-linguistic accessibility. The difference is that while Ogwo et al. examined AI use in libraries, the current study investigates its role in peer-to-peer communication among secondary school students.

Shahid (2025) analyzed the convergence of artificial intelligence and linguistics with particular emphasis on neural machine translation (NMT) systems. The study employed a qualitative review of translation technologies to determine their effectiveness in real-time cross-linguistic communication. Findings demonstrated that NMT significantly improved translation accuracy and fluency compared to older rule-based systems, making communication across languages faster and more reliable. The study recommended greater investment in AI translation technologies for academic and professional use. The similarity

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with the present study is its focus on the role of translation apps in enabling communication across languages. The difference is that Shahid's work was theoretical and global in scope, while the present study is empirical and localized to secondary schools in Enugu State.

AlAfnan (2025) examined the role of AI in bridging Arabic and English communication using AI-powered translation tools. The study, based on case analyses and user experiences, revealed that these tools were effective in facilitating cross-linguistic understanding but often missed contextual and cultural nuances. Findings cautioned against overreliance on translation apps, emphasizing the need for balanced use alongside human interpretation. The study recommended integrating AI translation tools with language learning to ensure long-term proficiency. The similarity with the present study is the concern with AI translation in cross-linguistic applications. The difference is that AlAfnan focused on Arabic-English communication in a Middle Eastern context, while the present study focuses on multiple Nigerian languages and English among students in Enugu State.

Ernandes (2024) investigated the role of AI-powered translation tools in fostering cross-cultural communication within Eurasian linguistic contexts. The study used a descriptive research design to assess how AI applications enabled students and professionals from different countries to communicate effectively despite linguistic barriers. Findings highlighted that AI translations promoted intercultural dialogue but also risked oversimplifying cultural nuances. Recommendations included refining AI algorithms to better capture contextual meanings in cross-cultural exchanges. The similarity with the present study is the exploration of AI translation as a medium for enhancing student communication across linguistic divides. The difference is that Ernandes studied cross-cultural communication in Eurasia, while the present study examines the school-based experiences of Nigerian secondary students.

Methodology

This study adopted a descriptive survey research design. The choice of this design was based on its suitability in obtaining the opinions, attitudes, and perceptions of a large group of respondents concerning a specific phenomenon. Since the study sought to investigate how senior secondary school students perceive and use AI-powered translation apps for cross-linguistic communication, the descriptive survey design provided a systematic way to gather data without manipulating variables. This approach allowed the researcher to describe, analyze, and interpret the patterns of responses from the participants in relation to the role of translation apps in their communication.

The population of the study comprised all senior secondary school students in Enugu State. However, due to the large size of this population, the researcher purposively selected three schools within the state to serve as the focus of the study. These schools included Godfrey Okoye University Secondary School, College of Immaculate Conception, and St. Patrick Secondary School, Emene. These schools were

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selected because of their diversity, accessibility, and representation of urban secondary schools where students from different linguistic backgrounds interact regularly. The choice of these institutions ensured that the findings would reflect a realistic picture of cross-linguistic communication challenges and solutions within secondary school settings.

The 3 schools out of 22 schools were selected and a sample of 250 students was drawn to carry out the study. Reasons behind the choice of this sample size were to ensure a proper representation to come up with valid and reliable results without making the study unmanageable. The researcher made sure that male and female students in varying classes in the senior secondary category were represented. Through such a sampling process, the research aimed at capturing the opinions of students of different linguistic and cultural backgrounds to evaluate their experiences in the use of translation apps.

The tool to be used in collecting the data will be the structured standardized questionnaire bearing the following title Role of AI-powered translation apps in cross-linguistic communication among senior secondary school students in Enugu State. The questionnaire had two sections; Section A involved the collection of demographic data about the students, whereas Section B involved questions about the research questions. The items were drafted on a four-point Likert with Strongly Agree (4) to Strongly Disagree (1) on the scale. This style allowed the researcher to measure the responses of students and act statistically on these figures.

The researcher disseminated 250 pieces of the questionnaire to the respondents in the three schools. The retrieval of all the 250 copies was made and the coefficient reached a hundred percent. This significant retrieval was attained because of the roles played together with the school management who assisted the administration of the instrument during classes. The totality of the responses that the questionnaires elicited gave the researcher sufficient information to analyze in a manner that did not leave any important part of the student opinion undocumented.

Descriptive statistics, namely mean and standard deviation have been used in the analysis of the data collected. The average student group response to each item was ascertained using a mean approach and the standard deviation helped to understand the extent of the similarity or disparity in the student responses. In decision-making, it was considered that a mean score of 2.5 or higher was an appropriate measure of agreement, and a mean score lower than 2.5 was discarded. This criterion matched similar studies that were conducted in the past with Likert scale analysis and the interpretation was objective.

This methodological approach gave a good guideline for answering the research questions that had been posed in the study. Using a well-designed tool, the right size of the sample, and a strong analysis method, the study was able to identify some profound ideas on the perception and utilization of the AI-powered translation apps among the senior secondary school students within the state of Enugu. The

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methodology has also made the results obtained valid, reliable, and valuable in the eyes of practitioners in the education field and various policymakers who want to implement AI technologies in secondary schooling.

Results

Table 1: Extent of Usage of AI-Powered Translation Apps

Item	N	Mean	SD	Decision
Students frequently use Google Translate for peer communication	250	3.42	0.81	Accepted
Students use AI apps mostly during group assignments	250	3.11	0.74	Accepted
Use of AI translation apps is rare in informal chats	250	2.10	0.65	Rejected
Students rely on translation apps to understand classmates from other ethnic groups	250	3.26	0.79	Accepted
AI-powered translation apps are part of students' daily communication habits	250	2.88	0.71	Accepted

Grand Mean = 2.95 → Students moderately use AI-powered translation apps for communication.

Table 2: Influence on Academic Collaboration and Peer Interaction

Item	N	Mean	SD	Decision
AI translation apps improve clarity in group discussions	250	3.55	0.77	Accepted
Translation tools enhance inclusivity for minority language students	250	3.32	0.83	Accepted
AI translation apps reduce misunderstandings in peer communication	250	2.95	0.69	Accepted
Students use translation apps to share learning resources across languages	250	3.41	0.82	Accepted
Translation apps foster teamwork in project-based learning	250	3.28	0.74	Accepted

Grand Mean = 3.30 → AI-powered translation apps positively influence academic collaboration.

Table 3: Challenges of Using AI-Powered Translation Apps

Item	N	Mean	SD	Decision
Translations sometimes lack cultural accuracy	250	3.21	0.72	Accepted
Overreliance discourages language learning	250	3.14	0.84	Accepted
Poor internet access limits effective use	250	2.98	0.77	Accepted
Translation apps occasionally misinterpret local slang	250	2.89	0.68	Accepted
Limited app features restrict deep language learning	250	2.73	0.71	Accepted

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Grand Mean = 2.99 → Students face moderate challenges when using AI-powered translation apps.

Table 4: Students' Perceptions of Effectiveness of AI Translation Apps

Item	N	Mean	SD	Decision
AI-powered translation apps help break language barriers	250	3.44	0.81	Accepted
Translation apps make communication with peers from other ethnic groups easier	250	3.39	0.76	Accepted
Students perceive translation apps as reliable for academic purposes	250	3.22	0.72	Accepted
AI translation enhances confidence in multilingual communication	250	3.11	0.74	Accepted
Overall, AI translation apps are effective tools for peer interaction	250	3.36	0.79	Accepted

Grand Mean = 3.30 → Students perceive AI-powered translation apps as effective in overcoming language barriers.

Discussion of Findings

The findings of this study revealed that senior secondary school students in Enugu State moderately use AI-powered translation apps for cross-linguistic communication. The results (Table 1) showed that tools such as Google Translate are commonly employed during group assignments and in interactions with classmates from diverse ethnic groups, but they are less frequently used in informal chats. This aligns with Shahid's (2025) analysis of neural machine translation systems, which emphasized that AI translation tools significantly improve real-time communication across languages. Similarly, Ogwo, Ibegbulem, and Nwachukwu (2023) demonstrated that translation features in academic libraries facilitated access to resources across linguistic barriers, confirming the role of AI translation in bridging gaps in educational contexts. However, unlike Ogwo et al.'s library-focused findings, the present study highlights peer-to-peer communication as the key context of application.

The study further revealed that AI-powered translation apps positively influence academic collaboration and peer interaction (Table 2). Students reported that the tools enhanced clarity in group discussions, fostered inclusivity for minority language students, and reduced misunderstandings. These findings are consistent with Nwosu (2024), who found that AI broadcasting tools improved participation and inclusivity by reducing communication barriers in diverse classrooms. Likewise, Kama, Ajiwa, and Epele (2025) showed that AI applications improved student comprehension and teacher-student interaction, which echoes the current finding that AI fosters collaboration and enhances understanding among learners. The similarity lies in AI's capacity to support communication, but while earlier studies centered on teacher-led interactions, this study

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provides evidence of student-to-student benefits in multilingual peer contexts.

In terms of challenges, the results (Table 3) indicated that students experienced cultural inaccuracies in translations, overreliance that discouraged language learning, poor internet access, and misinterpretation of local slang. This corresponds with AlAfnan's (2025) caution that AI-powered translation apps, though effective in bridging linguistic divides, often fail to capture contextual and cultural nuances. Ernandes (2024) also observed similar limitations in Eurasian cross-cultural communication, where AI translations risked oversimplifying cultural meanings. Such similarities lead to the notion that although translation apps serve a valuable purpose like dismantling language barriers, they are not able to eliminate human interpretations nor will the context be taken into consideration. Thus, the results raise the significance of not relying solely on AI use and active language learning to prevent dependence and miscommunication.

Lastly, students in Enugu State reported an overall favorable view as to whether or not AI-enabled translation apps are effective in breaking language barriers (Table 4). They found the apps useful in terms of academic use, in building confidence when engaging others in multilingual communication, and facilitating peer interaction. It aligns with the findings made by Kantudu (2023) in the field of higher education where AI platforms contributed to a higher level of personal communication and wider access to the education opportunities of learners with non-standard linguistic identities. On the same note, Ernandes (2024) observed that AI translators encouraged intercultural communication in Eurasia. The current paper therefore adds new information to the existing evidence confirming that AI-powered translation applications as intended to help in cultivating inclusivity and collaboration are perceived by students of secondary schools (even in a multilingual local environment).

Overall, the findings demonstrate that AI-powered translation apps play a growing role in facilitating cross-linguistic communication among secondary school students in Enugu State. While they enhance collaboration and inclusivity, their limitations in cultural nuance and contextual accuracy remain key concerns. The study therefore supports previous research advocating for the integration of AI in education (Kama et al., 2025; Nwosu, 2024; Shahid, 2025) but also aligns with cautions regarding balanced use (AlAfnan, 2025).

Recommendations

1. Schools should integrate AI-powered translation apps into digital learning policies but provide training on responsible use.
2. Teachers should encourage students to balance AI-assisted translation with personal language learning.
3. Government and school management should improve digital infrastructure, especially internet access, to maximize AI app usage.
4. Developers of translation apps should adapt tools to include Nigerian indigenous languages for contextual accuracy.

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