

Innovative Language Learning: AI and Mobile Technologies in Post-Pandemic Landscape

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ABSTRACT: This phenomenological study captures how literature and language learning have evolved in the post-pandemic landscape among Bachelor of Arts in English Language (BAEL) students and educators at St. Michael's College, Iligan City. By drawing on the lived experiences of ten participants, it explores how platforms like Duolingo, Grammarly, and ChatGPT are reshaping both classroom instruction and independent study. These tools were found to personalize learning, increase student motivation, and provide timely feedback, creating more engaging and responsive learning environments. Yet, the study also highlights persistent challenges, such as unequal access to digital tools and the ongoing need for digital literacy. Grounded in Sociocultural Theory, Constructivist Learning Theory, and the TPACK framework, the research emphasizes that when thoughtfully integrated, technology can nurture meaningful collaboration and deeper learning. A key outcome of the study is a proposed program tailored to the specific literature and language needs of BAEL students, translating insights into actionable pedagogical strategies. Overall, the study offers a reflective narrative on how human experience, educational innovation, and emerging technologies converge to shape the future of digital language learning in higher education.

KEYWORDS: AI, Innovative Language Learning, Mobile Apps, Post-Pandemic Landscape, Qualitative Phenomenological Study

I. INTRODUCTION



Source: OpenAI. (2024)

Technology has become a cornerstone of modern education, reshaping how knowledge is imparted and acquired. In language education, traditionally dependent on face-to-face interactions and cultural immersion, digital tools such as mobile applications and artificial intelligence (AI) have emerged as game changers. These technologies provide learners with personalized, interactive, and adaptive platforms, effectively addressing diverse learning preferences while breaking geographical and temporal barriers (Freiermuth & Zarrinabadi, 2020). Their ability to democratize access to linguistic resources has made them invaluable, especially in contexts where English is not the primary language (Farr & Murray, 2020).

The COVID-19 pandemic accelerated this digital transformation, compelling educators and students to transition to virtual platforms almost overnight. Language classrooms, once characterized by in-person dialogue and collaborative learning, shifted to remote settings, relying heavily on tools such as Duolingo, Babbel, Grammarly, and ChatGPT (Warschauer & Xu, 2024). While these technologies sustained engagement and proficiency during the crisis, they also exposed systemic challenges such as digital inequity, gaps in technological literacy, and questions about the long-term sustainability of tech-based learning approaches (UNESCO, 2022).

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In regions where English is a second or foreign language, these challenges are magnified. Here, mobile apps and AI are not merely supplements but critical resources for bridging linguistic and cultural divides. They offer learners from underrepresented or resource-limited contexts an opportunity to acquire global communication skills, addressing inequalities that have long persisted in language education (Commission on Higher Education, 2022).

This study delves into these dynamics, focusing on how mobile apps and AI tools have redefined English language learning for college students and teachers in a post-pandemic context. By examining the lived experiences of these stakeholders, the research provides nuanced insights into the transformative impact of these technologies while recognizing the practical challenges of their integration.

The findings of this study contribute to the growing discourse on the intersection of technology, literature, and language education in a post-pandemic landscape. By exploring the lived experiences of college students and teachers, the research uncovers the benefits, limitations, and broader implications of using mobile apps and AI for language acquisition. These tools are shown to enhance linguistic proficiency while simultaneously fostering essential skills such as critical thinking, creativity, and intercultural communication (Mistretta, 2024).

In places where English is not the primary language, this research is particularly relevant. It highlights the role of mobile apps and AI technologies in addressing longstanding barriers to literature and language learning, emphasizing their potential to democratize education and promote equitable access (Liando & Tatipang, 2024). By bridging these gaps and facilitating global communication, these concepts underscore the transformative power of technology in education.

For school administrators, this study offers valuable insights into designing curricula that integrate technology strategically, with a focus on inclusivity and accessibility. Educators can derive practical strategies to adapt their teaching practices to maximize the potential of these tools, while students' perspectives inform a learner-centered approach to technological innovation (Aldosari, 2020). Additionally, the findings serve as a foundation for further research into the evolving role of AI and mobile applications in modern pedagogy.

In an increasingly interconnected world, the significance of this study extends beyond the classrooms. It sheds light on how technology can bridge literature, language, and cultural divides, fostering global citizenship and collaboration across borders (Commission on Higher Education, 2022).

This study investigates the transformative role of mobile apps and AI in English literature and language learning among college students and teachers in the post-pandemic landscape. Specifically, it aims to:

1. Examine how college students and teachers perceive the role of mobile apps in their literature, language learning, and teaching experiences in the post-pandemic landscape.
2. Explore the lived experiences of students and educators using AI tools for literature and language learning and teaching.
3. Identify the benefits and challenges of integrating mobile apps and AI into literature and language education based on stakeholders' perspectives.

It further examines the transformative role of mobile apps and AI in English learning among college students and teachers in the post-pandemic landscape. Employing a qualitative phenomenological approach, it explores the lived experiences of these stakeholders to uncover the benefits, challenges, and broader implications of integrating these technologies into literature and language education. By addressing these complexities, the research aims to provide actionable insights into leveraging mobile and AI tools to enhance literature and linguistic proficiency, promote equitable access, and foster cross-cultural understanding in higher education settings.

II. THEORETICAL AND EMPIRICAL BACKGROUND

The integration of mobile apps and AI in literature and language education is grounded in several theoretical perspectives that highlight the dynamic relationship between learners, teachers, and technology. Sociocultural Theory, as proposed by Vygotsky (1978), emphasizes the role of social interaction in cognitive development, positing that language acquisition is a socially mediated process. In this context, mobile apps and AI technologies facilitate authentic language use by creating virtual spaces for learners to engage in social interactions. These technologies offer learners opportunities to practice language in real-world scenarios, thereby enhancing their communicative competence. The interactive nature of these tools supports meaningful engagement, allowing learners to bridge the gap between classroom learning and real-life application (Bui & Namaziandost, 2024).

Piaget's (1952) Constructivist Learning Theory also plays a key role in understanding how mobile apps and AI tools support language acquisition. Piaget suggests that learners actively construct knowledge through their interactions with the environment. Mobile apps and AI-driven technologies align with this theory by providing interactive, learner-centered activities that encourage self-directed learning. These tools allow learners to explore language at their own pace, enabling personalized learning experiences that cater to individual needs. Such approaches are essential for fostering deeper engagement and facilitating effective language acquisition (Bui & Namaziandost, 2024).

The Technology Acceptance Model (TAM) developed by Davis (1989) provides another critical framework for understanding how learners and educators accept and adopt new technologies. According to this model, the perceived ease of use

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and usefulness of a technology significantly influence its adoption. In language learning, when students perceive mobile apps and AI tools as beneficial and user-friendly, they are more likely to engage with them regularly. TAM is valuable for identifying the factors that influence the successful integration of mobile and AI tools in language learning and for recognizing barriers such as technological discomfort or resistance to change (Davis, 1989).

The Technological Pedagogical Content Knowledge (TPACK) framework, introduced by Mishra and Koehler (2006), integrates technology into teaching by combining knowledge of subject matter, pedagogy, and technology. This model is particularly relevant to language teaching, as it helps educators navigate the complexities of effectively incorporating mobile apps and AI tools into their practices. By balancing content, pedagogy, and technology, the TPACK framework ensures that educational tools are not only technically efficient but pedagogically sound, thereby enhancing language learning outcomes. This study draws on these theoretical perspectives to understand how mobile apps and AI tools shape the literature and language learning process and inform teaching practices (Tseng et al., 2022).

Previous Studies: Recent research underscores the potential of mobile apps and AI tools to enhance literature appreciation and language learning. For instance, Duolingo and Babbel have become popular platforms due to their engaging and interactive features. Duolingo, known for its gamified approach, motivates learners by rewarding them with points and levels as they progress through lessons. Studies suggest that this gamification enhances vocabulary retention and grammar skills (Zou & Thomas, 2019). Babbel, in contrast, focuses on real-world conversational scenarios, enabling learners to practice speaking and listening in contexts they are likely to encounter outside the classroom. These tools promote active engagement, making literature and language learning both enjoyable and practical.

AI-driven tools have also proven effective in improving language proficiency, particularly in writing and pronunciation. Grammarly offers real-time feedback on spelling, grammar, and writing style, helping learners refine their written language. Similarly, Elsa Speak leverages AI to assess pronunciation and provide corrective feedback, supporting learners in improving their spoken language skills independently. ChatGPT, an AI tool capable of simulating conversations, offers students an interactive platform to practice language skills, making learning more dynamic and realistic. These tools, powered by sophisticated algorithms, offer personalized experiences, allowing learners to progress at their own pace while receiving instant feedback on their performance (Bui & Namaziandost, 2024).

The COVID-19 pandemic has significantly accelerated the adoption of mobile apps and AI tools in education, as many institutions shifted to remote and hybrid learning models. Research indicates that the use of these technologies surged during the pandemic, with students and educators relying on them as alternatives to face-to-face interactions (Tseng et al., 2022). Although these tools have helped fill the gap created by the disruption, challenges such as digital literacy and unequal access to technology remain. These issues highlight the need for further investigation into how to address technological barriers in language learning.

Mobile Apps and AI Tools in Language Learning: Mobile apps and AI tools offer a range of features that cater to diverse learner needs, enhancing various aspects of language acquisition. Duolingo, for example, uses gamification to engage students, reinforcing vocabulary and grammar through regular practice. Similarly, Babbel emphasizes real-world conversations, providing learners with the skills they need to interact meaningfully in the target language. Rosetta Stone uses immersion techniques, presenting content in the target language to encourage contextual learning, while Memrise incorporates video clips of native speakers, offering a more immersive experience.

AI tools like Grammarly and Turnitin have become indispensable in improving writing accuracy and maintaining academic integrity. Grammarly offers instant feedback on written content, helping learners refine their grammar, spelling, and sentence structure. Turnitin, widely used in academic settings, helps students avoid plagiarism and maintain originality in their work. Elsa Speak is another example of an AI tool that focuses on pronunciation, providing learners with corrective feedback that helps them perfect their spoken language. ChatGPT, which simulates real-world conversations, provides an interactive space for learners to practice speaking and listening, bridging the gap between textbook learning and real-world application.

These technologies offer personalized learning experiences, catering to individual needs and providing immediate feedback, which significantly enhances student engagement. However, as the reliance on digital tools increases, questions about accessibility, especially for marginalized groups with limited access to technology, become more pressing (Zou & Thomas, 2019).

Conceptual Framework: This study conceptualizes mobile apps and AI tools as pivotal enablers of enhanced literature and language learning in the post-pandemic context. The central concepts driving this research include technology-mediated learning, learner and teacher agency, and the challenges and opportunities posed by integrating these technologies into language education. Technology-mediated learning refers to the use of digital tools to facilitate language acquisition, with an emphasis on the interaction between learners, educators, and technology. Learner and teacher agency stresses the roles that students and instructors play in adopting and utilizing these technologies to enhance the learning process. Finally, the challenges and opportunities framework considers both the barriers to adoption—such as digital literacy and access issues—and the potential benefits, such as personalized learning, increased engagement, and flexibility.

Despite the growing body of research on mobile apps and AI in language education, there remain significant gaps that this study seeks to address. Much of the existing research focuses on the quantitative effectiveness of these tools, often overlooking the

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qualitative aspects of their impact. Understanding the lived experiences of students and educators in utilizing these tools is essential for capturing the full scope of their impact on language learning. Furthermore, while the pandemic accelerated the adoption of these technologies, there is limited research on their long-term integration into post-pandemic educational environments. It is time to bring this concept inside the classroom. It is crucial to examine as well how learners and educators continue to navigate the use of these tools as part of the evolving landscape of education (Duignan, 2020).

Additionally, few studies explore how mobile apps and AI tools contribute to cultural competence, alongside literature and language proficiency. Given the increasingly global nature of language learning, fostering cultural awareness is an essential aspect of language acquisition (Tseng et al., 2022). Lastly, digital equity remains a significant concern. Research on how accessibility issues affect marginalized students, particularly those with limited access to technology, remains limited. This study aims to fill these gaps, offering new insights into the benefits and challenges of using mobile apps and AI tools in literature and language learning, with a focus on post-pandemic education inside the real venue--the classroom.

By addressing these gaps, this research contributes to a deeper understanding of how mobile apps and AI can enhance literature and language acquisition while offering valuable insights for educators and school administrators seeking to harness these technologies today and in the future.

III. METHODOLOGY

Research Design. This study adopted a qualitative phenomenological approach to investigate the lived experiences of Bachelor of Arts in English Language (BAEL) students and language instructors at St. Michael's College of Iligan, Inc. (SMCII) regarding the use of mobile applications and artificial intelligence (AI) tools in post-pandemic literature and language learning. Anchored in van Manen's (1990) interpretive phenomenology, the design enabled an in-depth exploration of how participants make meaning from their encounters with technologies like Duolingo, Grammarly, and ChatGPT in both classroom and self-directed contexts. This methodological stance is well-suited to eliciting subjective insights and revealing the complexities of technology-enhanced pedagogy (Whitehead & Wright, 2017; Alhazmi & Kaufmann, 2022).

Data Collection Methods. Multiple qualitative techniques were employed to capture the richness of participants' experiences. These included (1) semi-structured interviews to elicit individual reflections, (2) focus group discussions to surface shared perceptions and collaborative learning dynamics, (3) classroom and virtual observations for contextual depth, and (4) analysis of relevant case studies from existing literature for comparative grounding. All instruments were framed around the study's guiding theoretical perspectives: Sociocultural Theory, Constructivist Learning Theory, and the TPACK framework. Interview protocols were pilot-tested and refined to encourage authentic, narrative-driven responses.

Sampling. Purposeful sampling was used to select ten participants—seven students enrolled in BAEL courses and three instructors teaching literature or ESL subjects—during the first semester of Academic Year 2024–2025. Inclusion criteria focused on individuals with demonstrated engagement in AI and mobile learning platforms. SMCII was selected as the study site due to its leadership in integrating blended learning and English language instruction in Northern Mindanao. Participants were coded using anonymized identifiers (L-Part 1 to L-Part 10) to ensure confidentiality.

Data Analysis. Thematic analysis, as outlined by Braun and Clarke (2012), guided the analytic process. The steps included familiarization with transcripts, initial coding of significant expressions, clustering of codes into emergent themes, and interpretive alignment with the study's research questions and conceptual lenses. NVivo software facilitated transparent data management and enhanced traceability of interpretations across the corpus. Observational and focus group insights were triangulated to refine the analysis.

Ethical Considerations. The research adhered to ethical protocols approved by the SMCII Research Ethics Review Committee. Participants signed informed consent forms and were briefed on their rights, including voluntary participation and the freedom to withdraw without penalty. Personal data were anonymized and stored securely. Member checking was employed to affirm the accuracy of interpretations, and an audit trail was maintained to enhance.

IV. RESULTS AND DISCUSSION

This section presents the findings derived from the saturated interviews, focus group discussions, observational studies, and published case studies. These insights reflect the experiences and perceptions of both students and teachers in integrating mobile apps and AI tools into literature and language learning and teaching in the post-pandemic landscape. The findings are further analyzed through the lens of five theoretical frameworks: Piaget's Constructivist Learning Theory, the Technology Acceptance Model (TAM), Technological Pedagogical Content Knowledge (TPACK), Sociocultural Theory, and Esli's Integrative Language Acquisition and Learning Model (ILALM).

Insights from the Interviews: Interviews with three teachers (L-Part 1 to L-Part 3) and seven students (L-Part 4 to L-Part 10) revealed several recurring themes regarding the integration of mobile apps and AI tools. These saturated insights highlight both the advantages and challenges associated with technology's role in literature and language learning.

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A major finding was the enhanced engagement with language learning tools. This was noted by several participants, especially L-Part 4, a student, who shared, *"I find Duolingo really fun. It's like a game, and I feel like I'm making progress every day. I'm more motivated to practice now than I ever was in a traditional classroom."* This finding implies that integrating gamified and interactive mobile apps into language learning can significantly enhance student motivation and engagement, leading to more effective and enjoyable learning experiences. This increase in engagement aligns with Sociocultural Theory, which emphasizes the importance of social interaction in learning. By integrating mobile apps that foster collaborative activities (e.g., Duolingo's community feature), students engage in a socially-driven learning process that strengthens language skills through social feedback and interaction (Vygotsky, 1978).

The personalized learning experience provided by AI tools also stood out as a key benefit. L-Part 7, a student, commented, *"Grammarly helps me understand my mistakes instantly. It feels like I have a tutor always by my side."* This aligns with Piaget's Constructivist Learning Theory (1952), which posits that learners construct knowledge through interactions with their environment. By receiving immediate feedback, students are able to reflect on and refine their language skills in a dynamic, self-directed manner, promoting deeper understanding and cognitive development.

However, participants also noted significant barriers to learning, such as fluctuating and irregular internet access. L-Part 5, a student, remarked, *"Sometimes, the internet is too slow, and I can't use the apps properly."* This barrier highlights challenges identified by the Technology Acceptance Model (TAM) (Davis, 1989), which suggests that the perceived ease of use and accessibility of technology are crucial for its acceptance and integration into learning environments. When students experience technical difficulties, their engagement with these tools may diminish, ultimately hindering the potential benefits.

Another concern raised by participants was the cultural relevance of mobile apps and AI tools. L-Part 6, a student, noted, *"I love using HelloTalk to talk to native speakers, but sometimes the cultural references don't make sense in the Philippine context."* This finding implies that the lack of culturally relevant content can undermine the effectiveness of these tools in promoting meaningful language acquisition. This finding resonates with Eslit's Integrative Language Acquisition and Learning Model (ILALM), which stresses the importance of adapting language learning tools to the cultural and social contexts of the learners (Eslit, 2024).

Focus Group Discussions: In the focus group discussions, both students and teachers agreed on the positive perception of mobile apps and AI tools like Duolingo and Babbel. The theme of increased engagement was especially prominent. As one teacher (L-Part 2) shared, *"Students are more engaged. They use Duolingo outside of class, practicing their speaking skills on their own."* This aligns with Sociocultural Theory, where learners engage in activities that promote social learning and collaborative development of language skills (Vygotsky, 1978).

The perceived ease of use of AI tools, a central concept of TAM, was also reflected in the discussions. Both students and teachers mentioned that mobile apps like Duolingo and Babbel were intuitive and easy to navigate, which facilitated their use outside of the classroom. As L-Part 3 (a teacher) mentioned, *"I find that students are more likely to use these apps consistently because they are user-friendly."* This echoes TAM's focus on the importance of technology's ease of use in promoting its adoption in educational settings (Davis, 1989).

A significant insight was that AI tools could complement traditional teaching methods rather than replace them. This finding ties into TPACK (Technological Pedagogical Content Knowledge), which highlights the importance of teachers' ability to integrate technology effectively with content knowledge and pedagogy. As L-Part 4, a student, stated, *"AI is great for practicing grammar, but I still need human interaction to improve my speaking and listening skills."* This finding implies that AI tools are best used to reinforce classroom lessons, not as a substitute for traditional interaction-based learning. Teachers also noted that AI tools are best used to reinforce classroom lessons, not as a substitute for traditional interaction-based learning. This reinforces TPACK's principle that effective integration of technology requires balancing technology, pedagogy, and content knowledge (Mishra & Koehler, 2006).

Observational Study Results: In the observation, students were seen actively using mobile apps during breaks or after class to reinforce their language skills. This independent use of AI tools supports Piaget's Constructivist Learning Theory, where learning is seen as an active process where learners build on their prior knowledge and experiences. The ability to practice outside of the classroom empowers students to construct and reconstruct their understanding of language at their own pace (Piaget, 1952).

The use of real-time feedback by AI tools, like Grammarly, was frequently observed. As one teacher (L-Part 2) noted, *"AI tools allow me to give instant feedback to students, which helps them improve quickly."* This finding implies that immediate feedback from AI tools can significantly enhance students' learning progress. This feature of immediate feedback supports Sociocultural Theory, which posits that feedback from more knowledgeable others (in this case, AI tools) plays a crucial role in the development of higher cognitive functions (Vygotsky, 1978).

Published Case Study Insights: Global case studies further support these findings. For instance, Oxford University's use of AI-driven language learning tools like Lingvist demonstrates how Sociocultural Theory is applied in digital learning environments. The tools facilitate collaborative learning through social interaction and provide opportunities for learners to engage

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in language practice, reinforcing Sociocultural Theory's focus on learning as a social and cultural activity (Schwieter & Benati, 2019).

MIT's integration of AI tools like Elsa Speak also aligns with TPACK, emphasizing how technology can complement language learning pedagogy. The combination of content, pedagogy, and technology creates a dynamic learning environment that enhances both linguistic skills and teaching effectiveness (Abrenilla et al., 2023). These case studies validate the findings of this study, showing that AI tools can support language learning, provided they are used to complement traditional teaching methods.

Overall, the findings from interviews, focus group discussions, observational studies, and case studies suggest that mobile apps and AI tools are significantly enhancing language learning in post-pandemic education. Students and teachers alike report benefits such as increased engagement, personalized learning experiences, and the ability to collaborate beyond the classroom. These benefits are particularly evident through the lens of Sociocultural Theory and Piaget's Constructivist Learning Theory, which emphasize the importance of social interaction and active learning. However, barriers such as access to technology and the cultural relevance of apps must be addressed, aligning with the Technology Acceptance Model and Integrative Language Acquisition and Learning Model. This finding implies that addressing these barriers is crucial for maximizing the effectiveness of mobile apps and AI tools in language learning. The integration of these tools into the classroom, when balanced with traditional pedagogies, can enhance the language learning experience, as demonstrated by the TPACK framework.

Thematic Analysis Results: Thematic analysis was used to identify and categorize recurring themes from the interviews, focus group discussions, observational studies, and published case studies. Ten key themes emerged from the data, each of which offers valuable insights into how mobile apps and AI tools influence language learning and teaching in the post-pandemic landscape. These themes are discussed below, with connections to relevant literature and theories.

1. *Increased Motivation and Engagement.* The integration of mobile apps and AI tools into language learning significantly increased student motivation and engagement. These tools, such as Duolingo and Babbel, offer gamified experiences that make learning enjoyable and rewarding. This theme is supported by Sociocultural Theory, which emphasizes that motivation is influenced by social contexts and interactions. Interactive apps that allow students to engage with the language in real-life situations increase their sense of connection and community, fostering greater motivation. Similarly, Constructivist Learning Theory emphasizes that active engagement in meaningful tasks enhances learners' intrinsic motivation and leads to deeper learning.

2. *Personalized Learning Experiences.* Mobile apps and AI tools like Grammarly and Elsa Speak provide personalized learning experiences that cater to individual student needs. These tools adjust their difficulty levels based on a student's progress, making learning more adaptive and responsive. This aligns with Sociocultural Theory, which underscores the importance of tailored support in the learning process. According to Eslit's (2024) Integrative Language Acquisition and Learning Model, and Salhab (2024) personalized learning experiences are crucial for language development, as they ensure that learners are constantly challenged at an appropriate level while considering their cultural and linguistic context.

3. *Immediate Feedback and Error Correction.* The availability of immediate feedback through AI tools is one of the most praised features by students. Tools like Turnitin and Elsa Speak offer real-time corrections, allowing students to address mistakes as they occur. This aligns with Constructivist Learning Theory, which stresses the importance of feedback in the learning process. By receiving feedback during the learning process, students can make adjustments and refine their skills. Sociocultural Theory also supports this idea, as immediate feedback acts as a form of scaffolding, helping learners move through their Zone of Proximal Development (ZPD) with support from technology.

4. *Bridging the Gap Between Formal and Informal Learning.* The use of mobile apps also bridges the gap between formal education and informal learning, enabling students to practice language skills outside the classroom at their own pace. This theme connects to Constructivist Learning Theory, which emphasizes the importance of learning through real-life experiences. By practicing language informally through apps like HelloTalk and Tandem, students engage in authentic communication, which enriches their learning experience and helps them internalize the language more effectively. Eslit's (2024) model also highlights the significance of blending formal and informal learning environments to promote language acquisition.

5. *Increased Autonomy and Self-Directed Learning.* AI tools and mobile apps foster greater autonomy and self-directed learning, allowing students to take control of their own learning paths. This autonomy is in line with Technology Acceptance Model (TAM), which suggests that users are more likely to adopt technology if they perceive it as useful and easy to use. Students' positive perceptions of these tools encourage them to integrate them into their learning routines. Sociocultural Theory also reinforces this, as autonomy in learning empowers students to take ownership of their education, while Constructivist Learning Theory underscores that learners who are more involved in their learning process tend to construct their own understanding of concepts.

6. *Challenges with Technology Access and Connectivity.* While mobile apps and AI tools have brought significant benefits, challenges such as limited access to technology and internet connectivity have hindered some students' ability to fully benefit from these tools. This theme is addressed by TAM, which posits that the perceived ease of use and access to technology are critical factors influencing technology adoption. If students face barriers to accessing the technology, their motivation and engagement with the learning process may diminish. Antony & Ramnath (2023) paper also stresses that equitable access to technology is essential for the effective integration of AI tools in language education.

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7. *Improved Pronunciation and Speaking Skills.* AI tools like Elsa Speak and Rosetta Stone have helped students improve their pronunciation and speaking skills. These tools provide real-time pronunciation feedback, which is essential for language acquisition. This theme is consistent with Sociocultural Theory, as it emphasizes the role of social interaction and feedback in learning. Through AI-driven interaction, students receive corrective feedback that helps them refine their speaking abilities. Constructivist Learning Theory further supports this, as students actively engage in tasks (such as speaking) that require them to apply what they have learned.

8. *Global Communication and Cultural Exchange.* Mobile apps like Tandem have provided students with the opportunity to engage in global communication with native speakers, facilitating both linguistic and cultural exchange. This reflects the principles of Sociocultural Theory, which highlights the importance of authentic social interaction in learning a language. Engaging with native speakers enables students to gain a deeper understanding of the cultural nuances of the language, enhancing both their linguistic and cultural competence. Esli't's (2024) model also emphasizes that language learning is inherently a social process, and cultural exchange is a key component of language acquisition.

9. *Teacher Adaptation to Technology.* Instructors' ability to adapt to new technologies has been a significant theme in the integration of mobile apps and AI tools. While many teachers recognize the benefits of these tools, some face challenges in effectively incorporating them into their teaching methods. This theme is connected to TPACK, which focuses on the intersection of technology, pedagogy, and content knowledge. Teachers need to effectively integrate technology into their teaching while maintaining a balance with pedagogical methods and content (Espinosa, et al. (2023). TAM also addresses this theme by highlighting that teachers' perceptions of the usefulness and ease of use of technology are crucial for successful integration.

10. *Perceived Effectiveness and Outcomes in Language Proficiency.* Lastly, the perceived effectiveness of AI tools in improving language proficiency was a central theme. Many students reported noticeable improvements in their language skills, particularly in vocabulary and grammar, through the use of apps like Duolingo and Memrise. This ties to TAM, which suggests that when students find a technology tool useful, they are more likely to continue using it. Constructivist Learning Theory also supports this, as learners who actively use AI tools are constructing their understanding of language through repeated practice and reflection. Esli't's (2024) model further supports the notion that effective language learning tools must be continuously engaging and contextually relevant to ensure that learners achieve meaningful outcomes.

Overall, these themes suggest that mobile apps and AI tools are instrumental in enhancing literature and language acquisition by providing personalized, engaging, and accessible learning experiences. These tools facilitate increased motivation, self-directed learning, and real-time feedback, all of which are supported by Sociocultural Theory, Constructivist Learning Theory, TAM, TPACK, and Magday et al. (2023) study. However, challenges related to technology access and teacher adaptation must be addressed to fully realize the potential of these tools in language education.

VI. DISCUSSION

The integration of mobile apps and AI tools into language education has become an essential focus in the post-pandemic era, driven by the widespread shift to digital learning environments. This study explored the role of these technologies in enhancing language learning for college students and teachers, shedding light on how they influence motivation, engagement, and proficiency. The findings revealed that both students and teachers found mobile apps like Duolingo, Grammarly, and ChatGPT effective for personalized learning and real-time feedback. However, challenges such as limited access to technology and the need for digital literacy training were identified, highlighting the need for equitable access to these resources. By employing a qualitative phenomenological approach, the study captured the lived experiences of students and teachers, revealing how these tools support collaborative knowledge-building and meaningful interactions. These insights taken from the significantly saturated data offer valuable perspectives on the evolving landscape of language education, particularly in higher education, where the application of mobile apps and AI tools can enhance learning experiences. This discussion interprets these findings, their implications for the field of language education, and the potential for a proposed language program designed to leverage these insights for future educational practices.

Overall Interpretation of the Findings: This study reveals a significant transformation in literature and language learning, with mobile apps and AI tools proving to be effective in fostering increased motivation and engagement among students. These results echo the work of Ryan and Deci (2000), who argue that technology-driven, personalized learning experiences can enhance intrinsic motivation. Similarly, Kearsley and Shneiderman (1999) noted that interactive and gamified learning environments are crucial in sustaining students' interest. The findings also support the use of AI-powered tools like Grammarly and Elsa Speak, which have shown promise in improving language proficiency by providing real-time, actionable feedback, as observed in formative assessment studies (Black & Wiliam, 1998). AI tools, in particular, enable more personalized learning paths, catering to individual student needs, which aligns with Vygotsky's Zone of Proximal Development (1978), where technology provides scaffolding to support learners in overcoming challenges.

However, despite the benefits of AI and mobile apps, the study also highlighted the persistent challenges posed by unequal access to technology. These barriers are consistent with the Digital Divide Theory (van Dijk, 2005), which underscores the socio-

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economic disparities that hinder full technology integration. While the pandemic accelerated the adoption of these technologies, it also exposed the ongoing digital inequality that affects learning outcomes, particularly in under-resourced communities (Orr, et al, 2023). Thus, while technology is transforming language education, its benefits cannot be fully realized without addressing these access challenges.

In comparison to existing literature, this study affirms that technology adoption in literature and language learning is not a new phenomenon, but its significance has been amplified by the pandemic. The findings demonstrate that mobile apps and AI tools are now central to the literature and language learning process, making the benefits of such technologies more pronounced in the post-pandemic landscape (Tian, 2023). Nonetheless, issues such as the digital divide remain persistent and continue to hinder the full integration of these tools in education (Bali et al., 2022).

Implications for Language Education: The findings of this study have several practical implications for language educators and policymakers. Educators should be proactive in integrating mobile apps and AI tools to enrich language acquisition. As the study suggests, popular apps like Duolingo and Babbel offer interactive and adaptive learning experiences, which can be incorporated into both classroom and independent study settings to promote continuous learning. Teachers must undergo professional development to effectively integrate these tools into their pedagogical approaches. This shift towards technology-enhanced learning requires an emphasis on training for both teachers and students, ensuring that they can harness the full potential of mobile apps and AI for language development (Adıgüzel et al., 2023).

From a policy perspective, ensuring equitable access to digital tools is critical. The study highlights that unequal access to technology remains a significant barrier to the widespread use of mobile apps and AI tools in education. Policymakers must prioritize investments in infrastructure, digital literacy programs, and the provision of resources to address the digital divide, particularly in underserved areas. Without such efforts, the gap between students who have access to technology and those who do not will continue to widen, limiting the transformative potential of AI in education (Suryana et al., 2020; Chiu et al., 2023). Overall, as data positively showed the relevance of the Apps and AI use in the classroom, the researcher proposed this program to further sustain and boost their literature and language proficiency needs.

Proposed Language Program Leveraging Mobile Apps and AI for Language and Literature Learning

Building on the findings, this study proposes a comprehensive language program that incorporates mobile apps and AI tools to enhance English language and literature proficiency and promote cultural competence in higher education or college context. The proposed program is designed to provide a flexible and personalized learning environment that supports both students and teachers in the post-pandemic landscape.

Title: “SmartSpeak and LinguaLitBoost Program”

Rationale

In the post-pandemic educational landscape, the integration of technology in literature and language learning has become increasingly important. Mobile apps and AI offer innovative solutions to enhance literature and language proficiency by providing personalized, interactive, and engaging learning experiences. These tools can cater to individual learning needs, offer real-time feedback, and create a flexible learning environment that extends beyond the traditional classroom.

Objectives

1. **Enhance Literature and English language skills** (speaking, listening, reading, writing, viewing, and comprehension) among college students.
2. **Utilize mobile apps and AI** to provide personalized and interactive learning experiences.
3. **Foster a collaborative and engaging learning environment** that motivates students to actively participate in their language learning journey.

Program mechanism:

Component	Specific Activities	Persons Involved	Monitoring Guidelines	Success Indicators
Assessment and Placement	Initial AI-powered language assessment using tools like Grammarly and Lingvist, Placement in modules	Teachers, AI Tool Developers	Regular review of assessment results, Adjustments based on feedback	Accurate placement of students in appropriate proficiency levels
Curriculum Design	Develop modular curriculum, create interactive content using Duolingo, Babbel, Rosetta Stone, Memrise, HelloTalk	Curriculum Designers, Teachers	Periodic curriculum review, Feedback from students and teachers	Engaging and comprehensive curriculum
Mobile App Integration	Daily practice using language learning apps, AI-powered features for personalized learning with Duolingo,	Students, App Developers	Monitor app usage and progress analytics, Regular updates to app	High engagement and progress in app usage

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Component	Specific Activities	Persons Involved	Monitoring Guidelines	Success Indicators
	Babbel, Rosetta Stone, Memrise, HelloTalk			
Classroom Activities	Blended learning sessions, Group discussions, Project-based learning using ChatGPT for brainstorming and Elsa Speak for pronunciation practice	Teachers, Students	Observation and participation tracking, Feedback from students	Active participation and improved language skills
Monitoring and Feedback	Track progress using app analytics, Provide regular feedback using Grammarly and Turnitin	Teachers, Students, App Developers	Regular progress reports, One-on-one feedback sessions	Continuous improvement in language proficiency
Supplementary Resources	Provide access to online resources and AI tutors for additional practice using Lingvist and Elsa Speak	Teachers, Students	Monitor resource usage, Feedback from students	Increased usage of supplementary resources
Evaluation and Improvement	Conduct periodic assessments, Gather feedback for program improvement using Turnitin	Teachers, Students, Administrators	Regular assessment schedules, Feedback analysis	Measurable improvement in language proficiency
Implementation Plan	Train teachers, Set up technology infrastructure, Launch program, Provide ongoing support	Teachers, IT Support, Administrators	Monitor training effectiveness, Ensure technology readiness	Smooth program launch and ongoing support

Online Activities for Teachers and Students:

Activity	Link
Debates and Discussions: Encourage students to express their viewpoints on various topics to foster critical thinking and active listening. Use Kialo.	https://www.kialo-edu.com/
Role-Play: Provide practical language usage experience by acting out real-life scenarios such as job interviews and customer interactions. Use Drama Resource.	https://dramaresource.com/
Storytelling and Presentations: Improve public speaking skills by encouraging students to tell stories or deliver presentations. Use TED-Ed.	https://ed.ted.com/
Language Games: Use games like Scrabble, Bananagrams, and Boggle to build vocabulary and improve spelling and grammar. Use Scrabble .	https://www.playscrabble.com/play/online
Collaborative Writing: Engage students in group writing projects to enhance their writing skills and teamwork. Use Google Docs .	(You need to create your Google account first)
Advanced Vocabulary Exercises: Challenge students with exercises tailored to advanced learners (C1-C2 level) to improve their vocabulary. Use Quizlet.	https://quizlet.com/

VII. CONCLUSION

This study investigated the role of mobile apps and AI tools in enhancing language acquisition among college students and teachers in the post-pandemic landscape. The findings revealed that both students and teachers found mobile apps effective in providing personalized learning experiences and increasing engagement. Students reported higher motivation, while teachers appreciated the convenience of real-time feedback and assessments offered by the mobile apps and AI tools. However, challenges such as limited access to technology and the need for digital literacy training were identified, underscoring the necessity for equitable access to these resources. These findings highlight the importance of integrating technology into literature and language learning while addressing the challenges that may arise in its implementation. By employing a qualitative phenomenological approach, the study captured the lived experiences of students and teachers, offering in-depth insights into how mobile apps and AI tools shape literature and language learning. Participants shared personal narratives of their engagement with these technologies, revealing how they navigated both the opportunities and obstacles presented by mobile apps and AI tools in their educational contexts. The

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application of the four theories mentioned in the theoretical framework provided a robust background for understanding these experiences and how students and teachers actively constructed their knowledge in the digital landscape. Through semi-structured interviews, focus group discussions, and observational studies, the study gathered rich qualitative data, revealing saturated key themes and patterns in the use of these technologies. This comprehensive approach allowed the research to address the complex relationship between technology and language learning in the post-pandemic era, offering practical recommendations for educators, policymakers, and future researchers while reflecting the authentic lived experiences of the participants. The researcher's proposed "program" aims to boost the respondents' specific literature and language learning needs, ensuring that the integration of technology into language learning is both effective and culturally relevant.

VIII. RECOMMENDATIONS

Based on the study's findings, it is recommended that educators integrate mobile apps and AI tools alongside traditional teaching methods to provide a more personalized and engaging learning experience. Digital literacy should be a priority, ensuring that both students and teachers are equipped with the skills necessary to effectively utilize these tools. Therefore, the "SmartSpeak and LinguaLitBoost Program" stands out as a noteworthy initiative for implementation among teachers. Students should actively engage by embracing technology, staying consistent, seeking support, providing feedback, and in developing digital literacy to maximize their language learning experience. Likewise, school administrators should work to ensure that all students have equal access to technology, addressing the digital divide that limits access to these valuable resources. Furthermore, school administrators should focus on developing professional development programs for educators, helping them integrate technology into their teaching practices effectively. Researchers are encouraged to explore the long-term impact of mobile apps and AI tools on literature and language learning, as well as their potential to foster cross-cultural understanding and address issues of access in marginalized communities.

Other research could focus on longitudinal studies to assess the long-term impact of mobile apps and AI tools on language acquisition, particularly how these technologies influence language retention over time. Additional research could explore how mobile apps and AI support cultural exchange and communication in language learning, which could enhance cross-cultural competence among students. Furthermore, investigations into the equity of access to technology in different demographic groups are essential to ensure that all students benefit from these advancements. Lastly, further studies could examine the potential of AI to alleviate teacher workload by automating administrative tasks and personalizing lesson plans, providing deeper insights into how AI can be leveraged to improve both student and teacher experiences.

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