
Exploring the Impact of Mobile Language Learning Applications on Language Proficiency: Teacher Perspectives and Implementation Challenges

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ABSTRACT: This article is an exploratory study investigating teachers' perceptions of mobile language applications as a tool to increase language proficiency and their perceived challenges toward implementing the applications in the classroom. Different nationalities and linguistic specializations participated, giving each unique insight. Through a mixed-methods approach, using both focus groups and surveys, it has been proven that while less experienced instructors faced difficulties using MLAs like Duolingo, Memrise, Rosetta Stone, and Babbel, tech-savvy instructors frequently used them. Some of the chief advantages cited are flexibility, more effective individualized learning, and an increased level of student engagement. The major challenges were connected to problems in tracking success, technical issues, and coordinating MLAs with the curriculum. Teachers remarked, however, that although the MLAs often did not manage complex grammar, students' vocabulary, speaking ability, and listening skills had improved. This study therefore recommends better educational integration, institutional support, and teacher training if MLAs are to be effectively integrated into the classroom. It is through such improvements that MLAs really can become powerful tools in language teaching; otherwise, their utility is greatly dependent on careful planning and resource allocation.

KEYWORDS: Mobile Language Learning Applications, individualized learning, coordinating MLAs with the curriculum, enhanced educational integration, and meticulous preparation.

1. INTRODUCTION

1.1 The rise of mobile language learning applications (MLAs) in education

Mobile learning refers to using electronic gadgets like iPads, tablets, and smartphones to facilitate learning anywhere, at any moment (Cross et al., 2019). In today's modern era, mobile learning has become very vital because so many college and university pupils are connected with these kinds of devices (Alzieni, 2024; Neffati et al., 2021). Higher education institutions are always trying to integrate new technology into their course delivery process (Crompton & Burke, 2018). For the past years, several researches have been conducted on learning through mobile devices in institutions of learning. The advent of technology in the classroom has revolutionized the field of language learning (Tuzlukova, 2016; Bugon, 2016; Eragamreddy & Kazumyan, 2024). According to Godwin-Jones (2017), these apps offer learners easily accessible personalized, and flexible learning opportunities. MLAs allowing users to exercise language proficiency at their own pace, including Babbel and Duolingo, foster autonomous learning (Loewen et al., 2019). Due to the aforementioned appealing and engaging features of these platforms, language proficiency is also associated with their use (Kukulka-Hulme et al., 2017). Furthermore, MLAs incorporate adaptive learning technology and gamification to keep learners motivated and engaged (Reinders & Benson, 2017). The recent development in online instruction where mobile devices are viewed as effective instruments for improving linguistic competency is reflected in the move towards MLAs (Stockwell & Hubbard, 2013). However, problems persist regarding the motivation of students to use these technologies, digital technology proficiency, and the integration of technologies into formal education contexts (Kim & Kwon, 2012). The importance of MLAs in language learning will likely increase as technology advances, offering a range of new opportunities as well as challenges for both teachers and learners.

1.2 The problem

Due to the flexibility in giving individualized educational opportunities, MLAs have drawn much attention in the field of language learning (Godwin-Jones, 2017). The usefulness of MLAs in language competency remains largely unknown, given their potential benefits, especially when considering a teacher's perspective. Problems stemming from a lack of digital literacy, inadequate teacher training, and a general reluctance to blend technology with traditional teaching methods mean that instructors often hesitate to

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integrate apps into their educational programs (Kukulka- Hulme, 2020). In addition to this, although MLAs like Babbel and Duolingo are popular with students, there is some controversy over whether these applications comply with official pedagogical standards (Reinders & Benson, 2017). This gap between the potential of MLAs and the actual classroom practice points out the further need for investigation into the attitudes of teachers and the challenges they confront in using such tools. The understanding of these challenges is important for developing processes that effectively integrate MLAs into formal language teaching, ensuring that students not only engage with these platforms but also achieve measurable improvements in language proficiency (Loewen et al., 2019). By examining teacher attitudes toward the use of MLAs while considering the primary challenges to successful implementation, the current study aims to bridge this gap in implementation.

1.3 Significance of the study

For teachers as well as students, the study of how MLAs impact language ability from a teacher's perspective is very essential. With MLAs spreading rapidly, it is extremely vital to understand their advantages and disadvantages to incorporate them into language courses. This will also provide significant perspectives on how educators view the innovations and the major barriers they face in using them, including gaps in technological proficiency, a lack of organizational support, and a lack of congruence with pedagogical norms (Kukulka-Hulme, 2020). The gap between technology innovation and classroom application is essentially what the effort tries to close by identifying such barriers and by providing solutions. Moreover, researching teachers' views helps in developing more specific training and educational courses that incorporate MLAs in ways that complement traditional language instruction (Godwin-Jones, 2017). This is necessary to ensure that MLAs are beneficial learning aids as well as exciting activities. The results will also guide educators, educational organizations, and app designers regarding the assistance and improvements needed to ensure that MLAs maximize their potential as instructional tools (Loewen et al., 2019). In the end, this study is essential to improving language instruction's efficacy in the digital era.

1.4 Research questions

1. How do educators feel about using MLAs to assist pupils become more proficient in the language?
2. What are the primary difficulties that educators face when incorporating MLAs into their language education courses?
3. How do educators evaluate MLAs' conformity to official pedagogical standards?
4. In light of teacher input, what techniques may be suggested to enhance the incorporation of MLAs into standard language instruction?

2. LITERATURE REVIEW

2.1 Definition and types of MLAs used in language education

Using portable devices like phones and tablets, mobile learning enables pupils to access course materials whenever they want and from any place. Before COVID-19 in 2020, it was employed as an addition to standard in-class training (Faudzi et al., 2022). The majority of students worldwide were forced to rely increasingly on online learning to minimize interaction during the pandemic. Since most people cannot afford to buy a personal computer, smartphones and tablets have become the go-to online learning tools for many students (Faudzi et al., 2024). When mobile learning—also referred to as m-learning—was first introduced, it was described as an expansion of e-learning made possible by portable computing devices like smartphones and PDAs. As a part of virtual education, it was combined with e-learning (Georgiev et al., 2004). Mobile learning is described as employing personal gadgets to gain knowledge in a variety of scenarios involving social and material interactions (Crompton, 2013). Furthermore, Rosman (2008) described m-learning as the transmission of digitalized information to cell phones connected to both employment and schooling, as well as the incorporation of mobile technology (such as smartphones and personal laptops) to improve the method of learning.

Spanish, French, German, and Italian language classes are available on the well-known Mobile platform Duolingo. It is a well-liked option since it employs a gamified strategy with badges, rewards, and immediate feedback (Kazu & Kuvvetli, 2024). In the realm of English language instruction, Memrise is a well-liked mobile learning program. According to Łuczak (2017), Memrise is a mobile app program that assists learners acquire vocabulary in a variety of languages, notably English, by employing gamification features and repeated practice methods. The platform provides an extensive selection of classes and sessions aimed at enhancing pupils' language proficiency, with a particular emphasis on grammar, pronunciation, and vocabulary. Another program that can aid with English language improvement is Rosetta Stone, a mobile software (Zambrano & Garcia, 2024). This program focuses on speaking and pronunciation, allowing pupils the opportunity to practice their pronunciation through vocabulary activities and interaction. According to Firdaus (2019), employing the Rosetta Stone program to practice pronunciation and pay attention to expressions is a useful way for learners to get more proficient in pronouncing words correctly. Babbel is another mobile app that provides activities to help with both receptive and productive skills. Daily Interactions and AI-enhanced speech recognition are two of its distinctive characteristics. With pronunciations, dialects, and ranges taken into account, the AI-enhanced

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Speech recognition tool evaluates speech to determine pronunciation. The Everyday Conversations tool helps students become ready for practical situations by simulating real-world discussions. Babbel helps language learners at any level by incorporating their language abilities into their everyday lives (Jordi, 2024). Another smartphone software for learning languages is called Mondly, which combines chatbot and sophisticated speech recognition technology with lexicon and sentence learning. Using game-based execution, it provides immediate feedback on grammar, conjugation tables, and pronunciation. This app has an AI-based assistant called Luna, an AI-powered assistant that converses with users in real time while interpreting their language, intents, and conversational flow to provide tailored responses (Jordi, 2024).

Other smartphone language learning apps give distinctive methods for language learning in addition to prominent ones like Duolingo and Babbel. Pimsleur places more of an emphasis on audio-based learning, whereas Busuu gives individualized feedback from native speakers. Drops employs visual clues to assist users in retaining vocabulary, while HelloTalk links language learners with native speakers to facilitate language communication. Contextual sentence practice in Clozemaster promotes proficiency, whereas interactive teaching and augmented reality technologies are used in Mondly. Language Reactor promotes language immersion, Beelinguapp combines multilingual reading, Tandem provides real-time language interchange with native speakers, Lingvist uses AI to create tailored learning routes, and Quizlet allows flashcard-based learning.

2.2 Challenges of mobile language learning application (MLA) integration

While there are advantages to using mobile phones in language study, there are also challenges and disadvantages (Nghì & Thang, 2024). One area of concern is the quality and effectiveness of the language learning apps that are now on the market. According to Hasan and Kabilan (2024), many apps rely too much on gamification and entertainment and lack good educational concepts. Van den Branden (2006) has commented that this goes against evidence-based language acquisition methodologies. Many EFL learners encounter unexpected challenges while trying to study a language via cell phones. According to Pham et al. (2022), one such barrier is the risk of distraction and low cognitive involvement. This is partly because, as noted by Huang et al. (2017), students find it hard to maintain concentration or even interest in using mobile devices as they get easily distracted and end up doing activities that are not learning-related at all. Research works about this have shown negative consequences on language skill development and even academic performance (Crompton & Burke, 2018). According to Crompton and Burke (2018), mobile learning may worsen the digital gap among EFL students. This is based on the fact that not every student has an equal degree of accessibility to internet connectivity and mobile devices. The cost of cell phones and mobile internet subscriptions may be expensive for some language students, especially in underdeveloped countries.

As a result, they have few choices in learning through mobile phones. Several issues are lined up for consideration while preparing courses for EFL classes involving mobile learning. One major challenge is the limitation of institutional and resource support. Many institutions of higher learning in developing countries lack the resources and infrastructure to offer this type of instruction (Linh & Vu, 2021). In addition to this, most of the educational institutes around the world that offer EFL programs still largely depend on traditional, teacher-centered approaches because of which mobile learning is hard to effectively include (Tra, 2020). Another problem is that teachers of EFL are not quite skilled in using language learning apps and mobile devices (Chen & Hsu, 2020). The complexity of mobile technology, according to the study of Domingo and Garganté, (2016) can overwhelm many instructors, which may make them find it difficult to incorporate it into their curricula. The problem is even more important since the use of technology in integration is not emphasized in many English teacher preparation programs (Vu & Ha, 2020). Moreover, it may be challenging to keep track of new developments and maintain the validity of mobile learning courses simultaneously, since technology is changing at a very fast pace (Kukulka-Hulme & Shield, 2008). Instructors and course designers must also be constantly innovative and adaptive, as the rapidly changing environment of mobile apps and tools can soon make instructional practices and resources that had been effective until then obsolete (Godwin- Jones, 2011). Lastly, there is still a need for more research on the effectiveness of smartphone-based language acquisition (Linh & Vu, 2021). Despite some studies that have reported benefits such as increased motivation and engagement (Gu et al., 2022), there is insufficient data to make strong inferences about the optimal ways of developing and implementing mobile learning programs (Shadiev et al., 2020). The lack of empirical evidence makes it quite challenging for educators and curriculum designers to make informed decisions on how best to integrate mobile learning into EFL courses.

2.3 Previous studies about MLAs

The importance of MLAs for the improvement of instructors' and pupils' language skills is underlined by the research carried out by Kartika et al. (2024). It is so because, according to this study, male and female learners generally view mobile technology similarly, though it also underlines that female learners have a larger choice for collaborative learning by looking at the relationship between gender and mobile use of technology. Irrespective of gender, educators have similar opinions about technology. This underlines the need for individualized MLA teaching methodologies to cater to a variety of learning styles and ensure effective integration. Additionally, future initiatives would also have to be more sensitive to the value of collaborative learning, which is often underrated. The study carried out by Huang and Li (2024) sheds valuable light on the relationship

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between language ability and learner participation in self-initiated mobile-assisted English learning (MAEL). As they pointed out, there are significant differences in both the frequency and length of MAEL engagement among students with low and high competence. However, the amount of MAEL resources accessed is almost unchanged across all competence levels.

Hasanah (2024) investigated the different perspectives of teacher educators at the State Islamic Institute of Kediri regarding the use of MLAs in Indonesian secondary school classrooms. From the conducted study, it was found that instructors are not in agreement with the use of MLAs. While some believe they can enhance students' ability in English, others are afraid of their tendency to become a distraction for students. These varying views are impacted by things like the diversity of apps, prior teaching experience, and the performance of potential teachers in authentic environments. The results indicate that to apply MLA effectively, instructor issues must be addressed, and measures must be customized to enhance language competency among both learners and instructors. Liu's (2022) study provides important insights into how gamified language learning might enhance English language ability and foster cooperation among vocational college students. The study says that learning outcomes can be dramatically improved with the integration of mobile technology together with collaborative learning methods. To improve EFL learners' reading and listening abilities, Istek and Ironsi (2022) look at integrating mobile education with a context-analysis-practice-exploration paradigm. Their results demonstrate that while instructor preparation and computer literacy continue to be major obstacles, this combination enhances student involvement and results. The research emphasizes that to maximize the efficiency of mobile-assisted language learning, lesson planning must be organized.

3 METHODOLOGY

3.1 Research Design

The researcher employed mixed methods of analysis to provide a comprehensive knowledge of the data through content analysis, guided by the exploratory character of the study questions. Quantitative data were obtained via the survey, while two focus groups and eight open-ended survey questions produced qualitative data. A common mixed method research is the explanatory consecutive approach which consists of a discrete quantitative phase and a qualitative phase (Creswell & Clark, 2017).

3.2 Participants

Teachers of foreign and second languages from all over the world took part in this study. The online poll was disseminated through social media, professional associations, and email. Eighty were among the first replies to the poll. There were 65 full replies after the fifteen responses that were not complete were eliminated from the study. Sixty-two percent of instructors, or 40, identified as female. South Africa, Zimbabwe, Canada, Asia and the Middle East, with 8, 6, 10 and 20 respondents respectively (68% of the sample) were the most represented nations. Eleven contestants were from the USA and ten were from Europe. English, French, and German were the languages most often taught (see Table 1). The author was able to group the evaluations into two groups based on the instructors' self-rated levels of MLAs' usage proficiency for language instruction and in general: low (n = 7), average (n = 25), and high (n = 33). This indicated that the instructors had a solid grasp of MLAs' proficiency.

Table 1: Details of the survey participants

S. No.	Variables and Category	Total	Percentage
1	Gender:	40	62
	Female Male	25	38
2	Teaching language:	36	55
	English German French Spanish	9	14
	Others	9	14
		7	11
		4	6

3.3 Instrument and procedure

Two focus groups and a web-based questionnaire served as the foundation for the data gathering for this research. Three specialists in mobile technology and language learning were requested to create the online questionnaire. To give a comprehensive view of the state of affairs regarding practices and attitudes, this survey tried to capture varied experiences and views that the respondents have about the use of MLAs in boosting student language competency (Creswell & Poth, 2016). The author also followed Dörnyei and Taguchi's (2009) recommendation by seeking an expert panel composed of four Second Language

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Acquisition experts and three experts in mobile learning assistance to verify the validity of the instrument. Feedback from the experts was sought regarding the design, readability, and applicability during the piloting of the survey. After modification, structural validity, face validity, and content validity were verified.

There were three sections to the survey:

Part 1: Elucidated demographic data (Questions 1–5), including gender, age, and expertise in instruction.

Part 2: Questions 6–10 examined participants' knowledge of MLAs, expertise with mobile learning applications, and frequency of usage in the educational setting.

Part 3: Contains five open-ended questions (Questions 11–15) intended to elicit answers from respondents about the value of MLAs in improving language acquisition as well as the difficulties encountered in implementing them into practice. Two multiple-choice questions (Questions 16–17) about the potential benefits and drawbacks of MLAs were added as well in the final part.

Twelve respondents were chosen from among the fifty who consented to take part in focus groups, taking into account their level of experience and MLA usage frequency. There were seven females and five males in the final group of twelve respondents, and their combined teaching experience ranged from two to fifteen years. They imparted knowledge in Arabic ($n = 3$), Spanish ($n = 2$), French ($n = 2$), and English ($n = 5$). They ranged in MLA usage proficiency from basic ($n = 5$) to highly skilled ($n = 7$). Table 1 illustrates the diversity of the sample regarding the usage of technology and expertise in teaching languages. The researcher led two 60-minute focus group meetings via Zoom, with six attendees in each. The open-ended survey results served as the basis for the focus group questions, which were created to extract more in-depth viewpoints and personal insights (Krueger & Casey, 2015). During the focus group, the following queries were posed:

1. How well-versed are you in language learning apps for mobile devices?
2. Which smartphone applications do you recommend for teaching languages, and why?
3. In your opinion, what are the main advantages of using MLAs in your instruction?
4. In what way is using MLAs in your language teaching simple or complex?
5. In terms of MLA usage, have you noticed any benefits regarding pupil results?
6. What difficulties or obstacles did you run with while using MLAs in your instruction?

The conversations were videotaped, and subsequently, they were transcribed for further investigation.

3.3 Analysis

Examining the poll results and transcribing the focus group interviews marked the first steps in the analytical process. A mixed-method approach was used, wherein quantitative data was evaluated using descriptive statistics to describe trends in the usage and efficacy of MLAs, while qualitative data was examined for thematic patterns. Open coding was used by the researcher to analyze the focus group transcripts and the answers to the open-ended survey questions (Questions 11–15) for the qualitative study. Further, the researcher categorized the data to discover common themes and concepts connected to MLA usage, including anticipated advantages, limitations, and interactions with pupil learning results (Saldaña, 2014). The data was arranged into major topics by the author using thematic analysis, which included:

- The perceived significance of MLAs for language acquisition;
- Difficulties incorporating MLAs into the teaching environment; and
- Differences in MLA usage according to teacher specialization

To provide a quantitative study, the researcher examined how respondents dealt with MLAs using Likert-scale questions (Questions 6–10) and descriptive data (mean and standard deviation). An overview of the respondents' MLA usage frequency and degree of familiarity with the technology was given by the statistical data. The researcher requested a panel of experts to assess the data to verify inter-coder reliability. Any differences in the coding were then reviewed and resolved through consultation. Important phrases like "flexibility," "student engagement," and "accessibility" were found to be markers of favorable opinions of MLAs in the content analysis of the open-ended replies, whereas phrases like "technical difficulties" and "lack of training" were shown to be challenges. The participants' replies were consistently interpreted by cross-referencing these phrases with certain themes. Direct quotes from participants were utilized to highlight their viewpoints and experiences as the findings were presented thematically. From the instructors' perspective, the analytical process shed light on the benefits and obstacles that come with using

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MLAs in real-life situations.

4. RESULTS AND DISCUSSION

4.1 Results

4.1.1 Assessing the expertise of MLAs

It is clear from the instructor's replies that there is a wide range of knowledge among educators with MLAs. While the majority of instructors are somewhat familiar with MLAs, there is an apparent trend in the variation in how deeply they use them. More tech-savvy instructors (Teachers 1, 2, 3, 7, 10, 11 and 12 that is 58%) have incorporated MLAs like Duolingo, Babbel, Mondly, and Rosetta Stone into their lessons, showing a significant amount of comfort with these resources. It implies that expertise with MLAs and their utilization in educational contexts are closely linked. On the other hand, educators with less experience (Teachers 4, 5, 6, 8 and 9 that is 42%) say they have little interaction with MLAs and frequently employ them selectively or not at all in their teaching sessions. This indicates that a lack of expertise may prevent these tools from being fully integrated into the curriculum, which might result in the underuse of potentially helpful technology. The sporadic usage of MLAs as additional tools as opposed to primary teaching resources is a common trend. Instructors who have used these applications before believe that they have the potential to improve pupil participation and provide flexible learning options; yet, some are worried about how MLAs will coordinate within authorized teaching requirements.

4.1.2 Recommended MLAs

The instructors' varied goals and methodologies for instruction are reflected in the wide range of MLAs that are suggested for language education that are highlighted in their comments. The most often recommended program (Teachers 1, 4, 6, 9, and 11; 42%) is Duolingo, which is recommended for its free access, gamified learning environment, and easy-to-use interface. Its exciting and captivating framework is very helpful to instructors in keeping students motivated, which is why autonomous learning and novices consider it to be a popular option. Memrise has gained popularity for its easy use and emphasis on boosting vocabulary, as indicated by the recommendations made by Teachers 2 and 8 (17%). These educators value the way it incorporates cognitive tools and normal speech, implying that it presents pupils with valuable language abilities that they can apply to real-world contexts. It shows that practical language use is prioritized over theoretical understanding. Babbel (instructors 3, 7, and 12, or 25% of the total) is recommended for more advanced learners due to its planned lessons that prioritize grammar and communication skills. Instructors like Babbel point out that it is beneficial to pupils with varying levels of competence because of its comprehensive and customized technique. This meticulous strategy seems to fit in well with more conventional teaching strategies. Rosetta Stone is advised due to its comprehensive instructional methodology, which is acknowledged for offering thorough language exposure at all proficiency levels and is supported by Teachers 5 and 10 (16%). This implies that students who gain from an immersive, all-encompassing language environment are likely to choose profound, comprehensive language acquisition.

4.1.3 Advantages of MLAs

The 12 teachers' responses bring out the fact that MLAs are important in increasing student engagement, accessibility, and personalization, among many other important benefits of using them in language teaching. One key benefit that many participants mentioned is the increased motivation and engagement of students. Instructors 1, 6 and 10 point out how the gamified features and the fast incentives offered through software like Duolingo increase the tendency of learners to continue practicing frequently and thus remain engaged with the learning process. Customized learning is another key feature. Teacher 2 stressed that MLAs are customized to learning paths, enabling learners to progress at their needs and pace. As Teacher 12 points out, this personalization is particularly effective in catering to learning styles through offering both audio and visual, as well as interactive, information. Teacher 7 goes on to argue that since these apps allow learners to take ownership of the learning process, they foster independent learning and further increase autonomy. Two other important benefits of MLAs are their availability and flexibility. Instructors 4 and 5 note that students can use the apps at any place, and this is instrumental in stretching learning beyond the four walls of a classroom and supplements classroom learning. Teacher 3 observed that the quick response of MLAs allows learners to correct mistakes almost immediately and hence facilitates more effective learning. Furthermore, as Teacher 8 said, real-time progress tracking helps instructors monitor student development more effectively. Their usefulness in contemporary language instruction is also shown by their affordability (Teacher 9) and appropriateness for homework assignments (Teacher 11), which provide supplemental resources to improve conventional techniques. MLAs are an invaluable supplement to learning a language because of all of these advantages combined.

4.1.4 Complexities of MLAs

The simplicity and complexity of implementing MLAs in classroom instruction are both reflected in the instructor's comments. MLAs are intuitive and easy to use, according to many respondents—especially learners. Instructors 7 and 10 believe, in finding these applications simple to employ for educators as well as pupils. Respondent 1 highlights the apps' intuitive design and

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simplicity of usage. Respondent 3 pointed out that the applications are convenient because they are uncomplicated to use and can be easily incorporated into daily activities (Respondent 11) or brief practice sessions (Respondent 9). However, adding MLAs to organized classroom education presents several challenges. Instructors 2 and 5 identified the integration of MLAs with the curriculum as a key difficulty. Using MLAs to monitor and evaluate pupils' development poses additional difficulties. It can be challenging for educators 3, 4, and 8 to employ app data to monitor real learning results, making it difficult to figure out whether or not learners are gaining in areas outside of the applications' intended focus. Another layer of complication is tailoring MLAs to each pupil's unique requirements and varying competence levels, as Respondents 10 and 11 have noted. According to Instructor 1, technical concerns like app breakdowns or poor internet access worsen the situation. Thus, although MLAs provide an easy-to-use interface with simple access, integrating them into complete, curriculum-aligned training presents several concerns.

4.1.5 Impact of MLAs

According to instructor answers, MLAs have enhanced pupils' performance in a variety of language abilities, with an overall beneficial influence on their academic achievement. The improvement of language retention is an important issue, as Instructors 1, 5, and 8 have pointed out. Instructors have seen that pupils are more motivated in general when they recall terminologies and show a stronger passion for studying. The integration of MLAs has additionally enhanced speaking and listening abilities. Improvements in speaking confidence, proficiency, and pronunciation are reported by Teachers 2, 6, 9, and 10. Improved interactions in the classroom have resulted from the more exposure that the applications give, particularly with learners feeling more comfortable communicating the language. According to Educator 4, who saw learners were more eager to contribute after employing MLAs, these applications seem to boost the capacity of learners to participate proactively in class. Furthermore, cognitive abilities have become stronger; Respondent 12 emphasized particular advancements in reading and listening. Instructor 7 reported very slight improvements in grammar correctness, which indicates that although the apps are valuable, further teaching may be necessary due to their influence on higher-level language structures. Another benefit that has been emphasized is how well MLAs support independent study. Respondent 11 notices that pupils' assessments have marginally boosted which is indicative of an improvement in their capacity for independent learning.

4.1.6 Challenges of MLAs

The Respondents emphasized that pedagogical, pupil involvement, curricular alignment, and technological difficulties are the main obstacles to teaching with MLAs. Several instructors were frequently experiencing technical issues. Challenges including app crashes and irregular internet access were brought up by Respondents 1 and 4, which can disrupt classes and restrict the usage of MLAs. Similar challenges with access to gadgets and dependable internet were noted by Instructors 7 and 11, who noted that some pupils did not have cell phones or were experiencing problems with network reliability. Instructor 2 pointed out that many MLAs do not fit with official educational programs, which makes it difficult to incorporate them well into courses that are planned. Lecturer 5 also mentioned that to give students a more thorough comprehension of the language, more teaching is typically required because the apps frequently fall short in covering more complex grammatical rules. Respondent 12 found it challenging to seamlessly integrate MLAs into conventional lesson planning without creating any disturbances. Getting students involved was another problem. While Respondent 8 pointed out that learners sometimes lose concentration due to interruptions from other applications on their phones, Respondent 3 emphasized that particular pupils find it challenging to remain engaged in the absence of continual monitoring. Instructor 6 also brought up the concern of managing learners' various levels of technical competency, pointing out that every pupil is equally skilled at utilizing these tools.

Ultimately, it was asked if MLAs were useful in evaluating student development. Educator 10 brought up the problem that many applications don't have the complexity required to challenge advanced learners, which lessens their instructional value, and Instructor 9 found it challenging to monitor development in general.

4.2 DISCUSSION

R Q 1: Assessing educator perspectives on MLAs

The study's results reveal that teachers' opinions on the adoption of MLAs to help students improve their language skills are not completely unanimous. This is consistent with other research, like Godwin-Jones (2017), which found that though MLAs are effective in increasing student autonomy and engagement, official educational environments still have difficulty integrating them. The results of the current study show that a large number of instructors acknowledge the benefits of MLAs, specifically when it comes to increasing vocabulary retention, pupil involvement, and independent learning. Participants 1, 5, and 8 noted, for example, that pupils are more inspired and can recall vocabulary better. These results are consistent with Stockwell's (2013) research, which showed that gamified and interactive MLAs, like Duolingo and Memrise, enhance pupil engagement and retention. Educators additionally reported advancements in speaking and listening abilities, which is consistent with research by Kukulska-Hulme (2012) about the advantages of mobile learning for speaking and listening competency. However, as Respondents 2, 5, and 12 have seen, problems were often voiced about curricular conformity and the limits of MLAs in teaching advanced grammar and higher-

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level linguistic concepts. Sweeney and Moore's (2012) criticism, which said that although MLAs can be beneficial for teaching basic language abilities, they would not be able to adequately handle advanced language demands without the support of teachers, is in line with this. Moreover, Instructor 9's observations about the difficulty of tracking students' progress using MLAs confirm David et al.'s. (2024) worries over the lack of comprehensive evaluation capabilities in the majority of MLAs. Subsequently, technological problems and device accessibility continue to be obstacles, as noted in research by Burston (2015), who addressed the digital gap in mobile learning. Ultimately, even if teachers recognize the promise of MLAs, overcoming pedagogical, curriculum, and technical barriers remains crucial for their effective implementation.

R Q 2: Educator challenges

The results of the study emphasize many challenges that educators have in incorporating MLAs into normal language instruction, reflecting those identified in previous investigations. One of the main challenges is technological competency; teachers with less experience (42%) say that they employ MLAs selectively or not at all as they lack the expertise they need. This is consistent with Godwin-Jones' (2017) research, which indicates the difficulty teachers with low- tech proficiency experience realizing the full pedagogical potential of digital technologies. Teachers may misuse or inadequately utilize MLAs if they lack sufficient training, which could prevent growth in pupils and their development of advanced language abilities. Teachers have observed that while MLAs such as Memrise or Duolingo can be useful for learning new vocabulary, they are not always suitable for advanced language development—a gap that has also been pointed up by Kukulska-Hulme and Shield (2008). This makes blending more challenging from a methodological perspective as MLAs are sometimes not aligned with the official curriculum. Teachers discussed difficulties they encountered while trying to integrate technological tools with structured lesson plans and also using digital information to chart students' progress. Research into this by Burston (2015) corroborates this, observing that instead of providing comprehensive outlines for language learning, MLAs typically focus on discrete skills such as vocabulary or pronunciation. Due to this, they cannot be used as efficient central teaching tools and need to be carefully modified to be used with traditional language education. It also points out training problems as being a major issue. Teachers with more experience using MLAs report that they feel comfortable using them, while teachers who are not trained much find it hard to implement them. Related discrepancies were found by Lai and Gu (2011), who summarized that successful MLA integration demands professional development programs with an emphasis on technological literacy and pedagogical integration. Ultimately, it is the addressing of these challenges that requires specific instruction and curricular changes to ensure that MLAs complement rather than substitute for face-to-face teaching while increasing student interest and academic achievement.

R Q 3: Evaluation of MLAs

Teachers make judgments about MLAs' conformity to the set norms of education, which reveal a complex interplay between the positive impacts that teachers perceive in MLAs and the problems that appear when MLAs are integrated into formal curricula. This research question is placed within the more general concerns of introducing technology into the classroom, more specifically in language learning. Teachers generally point out that while MLAs have their merits about accessibility, engagement, and tailored learning, they are not always aligned with the traditional curriculum. A rather mentioned problem, according to Respondents 2 and 5, is that many MLAs do not meet professional and pedagogical standards. Studies by Golonka et al. (2014) and Rosell-Aguilar (2017) note this concern, indicating that while MLAs can help learners acquire language, they cannot facilitate the range of knowledge achievable in more comprehensive language courses. MLAs focus on vocabulary and core language skills, whereas educational institutions require learners to achieve more advanced competencies such as grammar and linguistic complexity (Respondent 5). Additionally, a lot of comments from educators deal with assessment-related subject areas. The real-time feedback aspects of MLAs, as mentioned by Respondents 3 and 10, are beneficial, but not enough to evaluate the consequences of deeper language acquisition. Godwin-Jones (2017) also pointed out this issue. Due to this difference, MLAs are unable to completely comply with curriculum requirements, which call for rigorous evaluation techniques and long-term learning validation. Furthermore, although MLAs strengthen self-directed learning and engagement (Participants 1, 6, 10), technical problems and an absence of assistance for higher-level language proficiency make it difficult to integrate them into formal lesson plans (Participant 12). Therefore, the current study evidence suggests that although MLAs have instructional potential, content constraints and infrastructure issues prevent them from matching official requirements.

R Q 4: Improvement of MLAs

The results of this study reflect the potential and challenges associated with integrating MLAs into conventional language training. It is crucial to employ a comprehensive strategy based on instructor feedback and bolstered by relevant research to improve their integration. First and foremost, professional development plays an essential role for teachers. As shown by Respondents 4, 5, 6, 8, and 9 (42%), there is a wide range of skills among educational professionals, which emphasizes the necessity of continuous training. Research like Burston's (2015) highlights the significance of teachers' competence and confidence while employing digital technologies for effective implementation. Frequent training sessions and peer-learning resources can close this knowledge gap and support instructors with less expertise in completely integrating MLAs into their educational programs. The integration of

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curriculum is also essential. The results show that integrating MLAs into organized courses might be quite difficult (Teachers 2 and 5). According to Godwin-Jones (2011), MLAs require more than just extra resources; they must be in line with the targets of the curriculum and the learning outcomes. To establish blended learning settings where MLAs enhance traditional education rather than replace it, instructors should collaborate with curriculum designers. At the same time, this deals with technological problems. According to the research findings, issues such as limited internet connectivity and application failures limit the use of MLAs (Instructors 1 and 4). Well-established infrastructure and reliable access to technology are prerequisites for the effective integration of MLAs in the classroom, argue Kukulska-Hulme and Shield (2008). Institutions must make investments in improved connectivity and ensure that students have access to the devices they require. Lastly, diverse learner needs can be fulfilled through flexible learning technologies. Utilizing MLAs with adaptive learning capabilities—as recommended by Kukulska-Hulme (2012)—can help in tailoring teaching to individual learner's expertise levels as some instructors reported problems related to varied learner competency levels (Instructors 10 and 11). MLAs can be proactively implemented into language education by addressing the following areas of greatest importance: teacher training, instructional integration, technical infrastructure, and adaptive learning.

4.3 Implications

The findings of this study carry important implications for future research on MLAs. The combination of quantitative and qualitative data through the mixed-methods approach provides an in-depth knowledge of both the patterns of usage and individual interactions with the MLAs in language training (Creswell & Clark 2017). The findings have higher generalizability since the study had a large participant pool and was randomized, drawn from different nations and educational backgrounds. Resources were verified by the experts to be reliable and relevant. The fact that the study was done through rigorous in-depth focus group research (Susanto et al., 2024). This is going to be the different perceptions of educators on both the benefits and drawbacks of MLA integration, including ways through which learner autonomy and motivation can be improved while addressing issues to do with educational alignment and technological barriers. This is rich qualitative and quantitative data, analyzed through the application of thematic and descriptive analyses that emphasize key issues including involvement, flexibility, and the accessibility of MLAs. Results underline the importance of professional development in this respect, showing that teachers who are more competent in using technologies are going to be more likely to incorporate MLAs successfully. Problems raised, such as inconsistent internet connectivity and mismatched curriculum, highlight the significance of training MLAs who are both technologically reliable and pedagogically effective. As a result, this study expands the comprehension of the role of MLAs in language training and offers an outline for future research into how they might be effectively incorporated into varied learning contexts.

4.4 Limitations and recommendations for future studies

The present research utilized a combination of analytical techniques, integrating both qualitative and quantitative methodologies. The 65 participant study sample, meanwhile, might not accurately reflect the worldwide community of foreign language teachers. To overcome this constraint, future research should focus on a broader variety of geographical areas and linguistic varieties and additionally expand the sample size. Furthermore, answer biases resulting from individuals overstating or underestimating their MLA use competency might occur when self-reported data from surveys is relied upon. Researchers should correlate self-reports with real-world practice by implementing observational methodologies, as recommended by Creswell and Clark (2017). Although the usage of focus groups was beneficial in obtaining in-depth insights, the focus group number of participants (n=12) may have limited the range of viewpoints. As suggested by Krueger and Casey (2015), undertaking individual interviews or extending focus group sessions might provide a wider variety of experiences. Additionally, although Saldaña (2014) used thematic analysis to successfully identify important themes, a more stringent inter-coder reliability procedure could enhance the validity of the results. Technical problems and inadequate curriculum alignment placed substantial challenges on the instrument. It is recommended that future studies look at ways to better integrate MLAs into the official curriculum, as noted by Dörnyei and Taguchi (2009). In a nutshell, the potential of MLAs to enhance language perception and motivation calls for more investigation, especially through studies that continue to evaluate long-term impacts, expanding on the results of the present research on student involvement and self-directed learning.

5. CONCLUSION

The research showed that instructors' MLA proficiency differed significantly. Although 58% of teachers made extensive use of MLAs like Rosetta Stone, Babbel, and Duolingo, 42% weren't interacting with these tools enough, showing a lack of experience that restricts complete incorporation into the curriculum. For beginner learners, key MLAs like Duolingo wererecommended, while experienced learners chose Babbel and Rosetta Stone. Enhanced learner involvement, customized learning pathways, and adaptable accessibility are the main benefits of MLAs. However, difficulties including a lack of sophisticated language frameworks, technology problems, and integration of curriculum continue to exist. The study emphasizes

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the significance of MLAs in advancing motivation, involvement, and autonomous learning to improve language competence (Aminatun & Oktaviani, 2019). Speaking, listening, and retention of language skills have all improved noticeably as a result of these gamified programs, and adaptive design. To maximize MLA integration, more study is necessary to address problems such as advanced proficiency development, curricular alignment, and overcoming technological constraints. To ensure that MLAs may fulfill their full potential of improving language competency, a greater comprehension of how they can be effectively integrated into conventional educational paradigms is necessary.

Declarations

Availability of supporting data

On request, the research's supporting data are provided. Kindly get in touch with the writer personally if you seek any other materials or information.

Competing Interests

The author declares no competing interests. This research was conducted independently, and there are no financial or other relationships that could potentially bias the interpretation or presentation of the findings.

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