

The Role of Teachers in Harnessing Mobile-Assisted Game Applications for Assessing EFL Students' English Language Skills (A Case of Higher Education Institutions in Georgia)

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Abstract

The introduction of mobile-assisted game applications in education offers significant opportunities, especially in language learning, to enhance learning and teaching. Despite considerable attention from educators globally, there remains a lack of empirical evidence regarding the adoption and utilization of mobile-assisted game applications for assessing EFL students' English language skills. This study aims to fill this gap by conducting an online quantitative survey among 55 EFL teachers in Georgia. The primary objective is to investigate teachers' roles in leveraging mobile-assisted game applications for assessing students' English language skills. Findings indicate that teachers recognize the importance of using these applications to provide immediate feedback, enhance motivation, increase engagement, and reduce student anxiety during assessments. For effective implementation, the study emphasizes the need for teacher support through workshops and skill development.

Keywords: English language learning, Mobile-Assisted Game Applications, assessing language accuracy, teachers' experience, learning and teaching improvement

1. Introduction

In recent years, the integration of technology into education has revolutionized teaching and learning methods, particularly in the realm of language learning (Pingmuang & Koraneekij, 2022). As English continues to be a global lingua franca, its significance is paramount, especially for non-native speakers enrolled in English as a Foreign Language programs. Consequently, educators are constantly seeking innovative approaches to boost language learning outcomes, particularly in higher education.

According to Gangaiamaran and Pasupathi (2017), as cited by Jamshidi and Zenouzagh (2020), instead of prohibiting students from using their mobile phones in the classroom, teachers should find a way to implement mobile phones in class and make them ready for the educational journey and new learning experiences. One of the innovative approaches is to use mobile-assisted game applications as language assessment tools. According to Zuhriyah and Pratolo (2020), with the help of online game applications, on one hand, students can work on the platform, and at the same time, they can see their results on the screen through the leaderboard. On the other hand, teachers can analyze the number of students answering the questions and, at the same time, download the statistics results in an Excel form. Thus, introducing an assessment tool via online game applications helps students increase their interest and improves engagement.

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According to Refat et al. (2020), while mobile devices, such as smartphones and tablets, have become trendy in today's society, offering unprecedented accessibility and flexibility, they also bring challenges. Critics argue that excessive screen time can have a negative impact on learning and memory, directly impacting academic performance. Research by Madigan et al. (2019), as cited by Neophytou et al. (2021), indicates that prolonged screen time experience impedes the learning and development of problem-solving and language skills. Furthermore, Troll et al. (2021) note that in today's digital era, the increased use of digital devices leads to self-control challenges, causing students to lose concentration and engage in distractions instead of studying.

Despite these challenges, the nature of game-based learning makes these applications a promising avenue for teachers to assess EFL students' English language skills. According to Ishaq et al. (2020), academic institutions globally persist in embracing mobile technology due to its undeniable and inevitable relevance in enhancing teaching and learning. Utilizing mobile technologies for assessment offers advantages over conventional paper-based methods. Unlike traditional assessment, the main characteristic of mobile technologies is their interactivity and immediate feedback provision. The assessment aligns with the increasing demand for ongoing evaluation and assistance in developing learners' knowledge and skills throughout lifelong learning in the 21st century (Nikou & Economides, 2021).

Research Questions

The study aims to answer the following research questions:

- 1. What are teachers' perceptions regarding the effectiveness of feedback mechanisms within mobile-assisted game applications for assessing EFL Students' English Language skills?
- 2. What are the challenges faced by teachers in integrating mobile-assisted game applications into English language assessment practices?
- 3. To what extent do institutional support and resources influence the successful integration of mobile-assisted game applications into English language assessment practices among EFL teachers?

Research Objectives

- To explore how teachers perceive the impact of feedback mechanisms on student engagement, motivation, and language learning outcomes within the context of mobile-assisted game applications.
- To identify the primary obstacles and challenges encountered by teachers when integrating mobile-assisted game applications into English language assessment practices.
- To explore the role of institutional resources, such as training programs, technological infrastructure, and policy frameworks, in facilitating or hindering the integration of mobile-assisted game applications.

Novelty of the Research

The researcher is concentrating on implementing mobile-assisted game applications to evaluate EFL students' English language skills. The Georgian educational system has not previously explored the innovative approach of assessing language accuracy via online game applications. In addition, these applications provide novel insight into pedagogical practices and their influence on students' language skills. Furthermore, the inclusion of mobile game applications adds a distinct institutional perspective to the study and provides significant and valuable insights for educators and any interested stakeholders.



Overall, the integration of mobile-assisted applications, teachers' perception of assessment and feedback mechanisms, and the revealing challenges faced during this process make the research valuable, as it significantly contributes to educators' understanding of technology-enhanced language assessment in the EFL environment.

2. Literature Review

2.1. Mobile-Assisted Game Applications

Mobile-Assisted Game Applications (MAGAs) have gained significant attention in English as a Foreign Language (EFL) education, offering innovative approaches to assessing students' English language skills. This literature review examines the role of teachers in using MAGAs to assess EFL students' language skills.

In recent literature, Rashid et al. (2021), as cited by Yassin and Abdulgalil Abugohar (2022), highlight the increasing adoption of digital technologies, particularly MAGAs, in EFL pedagogy. Educators are dedicating significant efforts to integrate these technologies to equip students with language skills and motivate them in new ways. This trend reflects the recognition of technology's potential to enhance language learning experiences and engage students more effectively. The necessity of integrating technology into EFL learning has emerged as a critical issue, particularly for the new generation of students, who are frequent users of technology, especially mobile applications.

2.2. Advantages and Challenges of Mobile-Assisted Game Applications

Ishaq et al. (2021) assert that mobile learning enhances academic performance, facilitates easy adaptation to the learning environment, and expedites the development of comprehensive language skills. The use of mobile learning applications has been accelerating, leading to the creation of revolutionary learning methods (Fithriani, 2021). Several studies have demonstrated the educational advantages students gain from utilizing mobile devices. For instance, a 2012 study across two schools in England found that mobile phones enhance students' academic performance and facilitate creative homework writing (Thamburaj & Ponniah, 2020). Despite the undeniable importance of learner autonomy for student success, a study by Darsih (2018), as cited by Darsih & Asikin (2020), revealed that most students enrolled in English learning programs have not achieved autonomy or independence in their learning. Interestingly, the study also found that utilizing mobile phones for internet access can effectively promote student-centred teaching and collaborative learning, potentially offering a pathway to fostering autonomy among learners by enabling them to access resources and collaborate more independently.

While the use of MAGAs presents numerous advantages, there are also challenges to consider. Technical aspects such as screen size and internet availability can impact the effectiveness of these applications. Additionally, distractions from incoming calls or messages may hinder students' focus during learning activities (Klimova & Polakova, 2020). Moreover, the deskilling of teachers raises significant concerns about the potential erosion of teachers' traditional roles in evaluating students' language skills. Within the educational context, the concept of deskilling refers to the gradual erosion or diminishment of essential skills and competencies among educators, thereby impacting their effectiveness in delivering quality instruction. In other words, teachers' tasks are increasingly susceptible to external oversight in the name of enhancing educational standards (Gür, 2014).

However, the use of online game applications for language learning presents an opportunity to counteract deskilling by providing teachers with innovative tools and methodologies. These applications, through their interactive and engaging nature, enable teachers to create vibrant learning experiences and facilitate active learning. Teachers play a pivotal role in addressing these challenges by designing engaging and focused learning experiences that leverage the benefits of MAGAs while mitigating their limitations.

2.3. Feedback and Assessment via Mobile-Assisted Game Applications and its Comparison to the Paper-Based Assessment

In education, effective feedback mechanisms are essential for improvement, as noted by Csapó et al. (2012). They highlight the need for establishing goals, implementing interventions, evaluating outcomes, and comparing them against set goals. Traditional paper-based testing methods often struggle to meet these requirements. However, online game applications offer a significant advantage with their ability to provide immediate feedback. This prompt feedback not only enhances the quality of teaching and learning processes but also increases students' engagement, motivation, learning performance, and language accuracy, as suggested by Kalleny (2020). As a result, the use of mobile applications for assessment facilitates the timely provision of feedback, enabling students to recognize their strengths and weaknesses promptly, leading to improvements in future tests and enhancing overall learning outcomes (Yarahmadzehi & Goodarzi, 2020). Additionally, mobile-based testing is considered more environmentally friendly compared to paper-based testing because it eliminates the need for printing numerous test sheets (Saeed Alharbi & Meccawy, 2020).

Using gaming elements in assessments can alleviate learners' anxiety by reframing the evaluation process as a fun learning experience. This approach encourages learners to engage with the assessment as if it were a game, reducing the stress associated with potentially receiving lower scores compared to others. Consequently, it fosters a more enjoyable and interactive learning atmosphere compared to conventional paper-based assessments (Wen & Aziz, 2022). The researcher has summed up the differences in the table below.

Characteristics	
Traditional paper-based assessment	Physical materials- paper, pencils, and answer sheets
	Limited interactivity
	A lack of engagement
	Increased anxiety
	Time-consuming, especially for large-scale assessment
	Accessibility challenges for individuals with visual impairments
Assessment via Mobile-Assisted Game Applications	Digital format- computer, tablet or smartphones
	Eco-friendly
	A high level of interactivity
	Increased motivation - rewards, levels
	Alleviation of learners' anxiety
	Flexible for teachers, increased scalability, be easily distributed to a wide audience over the internet

Table 1. The distinction between traditional Paper-Based Assessment and Assessment via Mobile-Assisted Game applications



Screen reader compatibility, adjustable text size

Created by the researcher

Assessment is an integral part of the learning journey. Brookhart (2019), as cited by Amalia (2020), describes assessment as a dynamic process in which both teachers and students utilize assessment data. Except for student engagement and motivation, it also fosters self-regulation and confidence. By emphasizing progress and accomplishments rather than dwelling on shortcomings, teachers can inspire and support students, ultimately nurturing a positive learning environment. Morris et al. (2021) cited Black and Wiliam (1998), who defined assessment as the various activities teachers and students conduct to gather feedback for adjusting ongoing and learning activities.

According to Marshall and Drummond (2006) and Swaffield (2011), as cited by Schildkamp et al. (2020), many attempts to use assessment in a traditional classroom have failed because they were not fully utilized and were instead limited to mechanically applying a set of predefined principles. However, the case study in an English class at a private university revealed a positive response from the students; they enjoyed the online game application, and after answering questions, they received prizes through memes that appeared along with the results. As a result, students have become interested in completing their assessments and motivated to participate in classroom teaching and learning (Zuhriyah & Pratolo, 2020). Germany conducted the same research, demonstrating that Quizizz, a game-based learning tool, offers numerous advantages to students, including immediate feedback, aligning with the benefits of game-based learning (Permana & Permatawati, 2020).

According to Demo (2008, p. 12), as cited by Junior (2020, p. 33367), "teachers must not lack the skills of the 21st century if they want to train children for the 21st century." Students need to gain different skills, such as communication, collaboration, creativity, problem-solving, and critical thinking. Therefore, traditional teaching methods have not yet adapted to their needs. In this sense, modern gadgets for mobile technologies give teachers opportunities to assess students in a creative and non-punitive way. Pertiwi (2020) asserts that learning activities generally require the implementation of Internet platforms and technology. Quizzezz and Kahoot are two of the most commonly used online game platforms for language learning and assessment, despite the availability of numerous others.

Quizizz is one of the most innovative formative assessment tools for both teachers and students. Quizizz's features, such as leaderboards, avatars, memes, and background music, create an engaging assessment environment that piques students' interest and participation (Moreira & Freire, 2024). One-click can assess numerous activities like vocabulary, grammar, and challenging games offered by Quizizz. Teachers can prepare a quiz by themselves or choose quizzes from the library, including others created by other educators (Degirmenci, 2021).

According to Mdlalose et al. (2022), another game-based application, Kahoot, has the potential to enhance students' ability to reach academic performance and be more engaged in the learning process. Kahoot helps students get immediate feedback and assessment in a fun way. Wang and Tahir (2020), as cited by Kıyançiçek & Uzun (2022), highlight in their seminal work that Kahoot is students' favourite gamification application compared to other platforms such as Socrative or Plickers. Numerous studies have compared Kahoot to these platforms, and it consistently maintains its top position among students.

When participating in a Kahoot game, students receive instant feedback on their answers, allowing them to immediately know if they were correct or incorrect. They will evaluate their responses and strive to understand the reasons behind their accuracy or mistakes. This process promotes deeper comprehension, enhancing student engagement and knowledge retention. Thus,



incorporating Kahoot games into the learning process can improve student focus and foster varied interactions within the classroom.

3. Methodology

The study focused on university teachers and utilized a quantitative research method to achieve its objectives. We collected data by administering an online survey to teachers. The survey aimed to gather information about how teachers use mobile-assisted game applications to assess EFL students' English language proficiency. The survey data facilitated answering the research question and also contributed to assessing the survey instrument's validity and reliability.

3.1. Methods

The current paper attempts to explore the role of teachers in utilizing mobile-assisted game applications for assessing EFL students' English language accuracy. The study utilized a quantitative research design to provide an objective and systemic process to describe teachers' perceptions, experiences and needs in terms of using mobile assessment approaches.

3.2. Participants

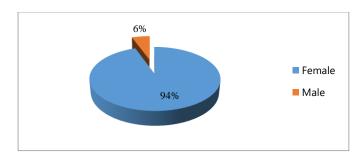
The convenience sampling method was used to select the participants of the study who were chosen based on specific criteria, particularly significant teaching experience and expertise in foreign language teaching methods to align research objectives. 55 EFL teachers from private and public universities in Georgia were involved in the study. The majority has been teaching English as a foreign language for 5 to 20 years.

3.3. Procedure

The researcher created online survey questions specifically for lecturers. The researcher distributed the finalized survey to the selected participants via email and reputable online survey platforms. The researcher paid special attention to maintaining confidentiality and anonymity to ensure that respondents felt comfortable providing honest feedback

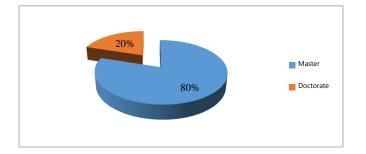
3.4. Results and analysis

Figure1. Gender distribution



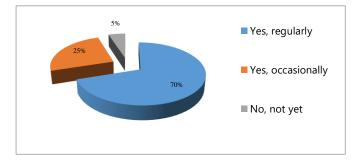
In a study involving 55 lecturers from both public and private universities, the gender distribution among participants was noteworthy, with 94% being women and 6% men.

Figure 2. Distribution of Educational Qualifications among Participants

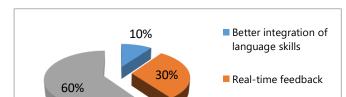


Lecturers' educational qualifications were equally diverse, with 80% holding master's degrees and the remaining 20% having doctorate qualifications.

Figure 3. Frequency of Integration of MAGAs in English Teaching



Regrading the the frequency of integration of MAGAs in English Teaching, survey revealed that a considerable number of 70% regularly use MAGAs, while 25% stated that they occasinally use, and 5% of surveyed respondents have not used it yet.



Enhanced interactivity

Figure 4. Perceived Benefits of MAGAs in English Assessment



Improved interactivity was viewed as a benefit of MAGAs in English assessments by the majority of teachers (60%) followed by real-time feedback (30%) and improved language skill integration (10%).

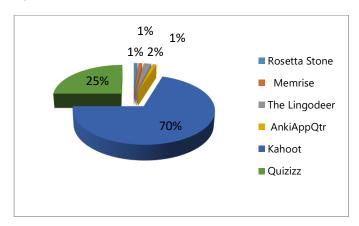
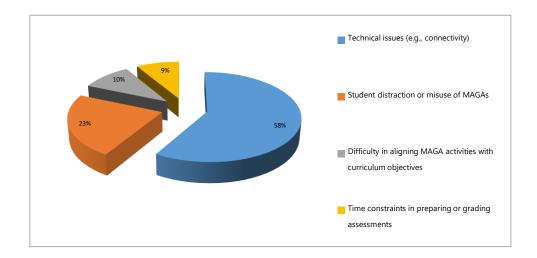


Figure 5. Teachers' Choices for Effective Online Game Applications in English Assessment

Teachers were surveyed to indicate their preferences about the use of effective online game applications in English assessment. Out of the surveyed teachers, 70% preferred using Kahoot, while 25% favoured Quizizz. The Linglodeer was chosen by 2% of teachers, while the same 1% was distributed with Roseta Stone, Memrise, and AnkiAppsQtr.





Teachers were surveyed to express their opinion about challenges Faced in Using MAGAs for Language Assessment. Among the teachers surveyed, 58% reported technical challenges, 23% indicated student distraction or misuse of MAGAs, 10% cited difficulty in connecting MAGA activities with curriculum objectives, and 9% reported time restrictions in preparing or grading assessments.

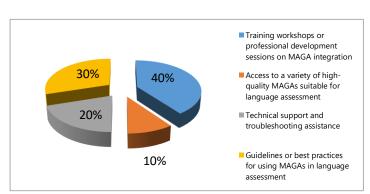


Figure7. Resources Needed for Effective Use of MAGAs in English Assessment

Teachers were surveyed to ascertain their views regarding the materials necessary for the proper utilization of MAGAs in English assessment. 40% of teachers reported receiving training, workshops, or professional development sessions on the integration of MAGAs. 30% mentioned guidelines or best practices for using MAGAs in language assessment. 20% indicated the need for technical support and troubleshooting assistance. Lastly, 10% cited the importance of having access to a diverse range of high-quality MAGAs that are suitable for language assessment.

4. Discussion

The study aimed to identify the role of teachers in utilizing mobile-assisted game applications (MAGAs) to assess EFL students' English language skills. The findings show that most teachers have a positive attitude toward implementing MAGAs in English teaching, consistent with previous research that highlights teachers' openness to using online game applications as supplementary tools for language assessment (Williams, 2022).

Teachers perceive several benefits of using MAGAs in English assessment, particularly the increase in real-time feedback and enhanced student interactivity. Research conducted in Turkey by Köroğlu (2021) supports these findings, emphasizing the importance of digital assessments in fostering collaboration and student involvement. Similarly, Situmorang and Simajuntak (2023) found that online game applications enhance students' interactivity and provide flexible learning experiences.

The current study revealed that most teachers (80%) use Kahoot as an additional tool for students' assessments. Research by Rahmah et al. (2023), indicates that Kahoot serves as an effective alternative evaluation method. The researcher discovered the effectiveness of Kahoot due to its high observation scores, ranging from 70% to 90%.

However, most teachers (58%) reported technical challenges like connectivity issues. This finding aligns with Wahyuni and Etfita's (2023) research, which identified unstable internet connections as a significant weakness of online game applications. Many teachers expressed their readiness to effectively use MAGAs in English assessment, including participation in workshops or professional development sessions on MAGA integration. These findings are consistent with a study by Heil and Ifenthaler

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(2023) in Germany, which states that successful implementation of online assessments, requires teacher support, clear guidelines, and proper alignment.

By comparing these findings to prior research, a more comprehensive understanding of the effectiveness and consequences of MAGAs in EFL evaluation is gained, revealing both the possibilities and limitations of this novel technique. This detailed research aims to add to the continuing discussion about educational technology by providing practical recommendations for teachers, educational institutions, and any interested stakeholders.

4. Conclusion and Recommendations

The integration of technology has brought so many opportunities, as mentioned above. It has significantly impacted language learning, particularly in English as a Foreign Language (EFL) programs. Research has highlighted the importance of using online game applications and conducting assessments through them. Key findings emanating from this study demonstrated that students have a positive attitude towards assessment, as it turns out that the cornerstone of using online game applications and assessment is its effectiveness, as it strives to increase students' engagement and motivation. The study's novelty lies in its emphasis on technology-enhanced language assessment, as well as its potential to improve pedagogical practices and student outcomes. Significantly, lecturers from public and private universities shed light on several key aspects. Lecturers have a positive attitude toward using online game applications to assess language skills. However, they lack the necessary training to align the content with the curriculum and incorporate language skills assessment into the classroom. Teachers expressed their desire and readiness for professional development workshops, as well as funding for applications.

Based on the survey findings, several recommendations have been made for teachers on how to effectively harness Mobile-Assisted Game Applications (MAGAs) for assessing EFL students' English language skills.

- Collaborate with educational institutions to implement mobile-assisted game applications for assessment to boost students' engagement and motivation.
- Provide teachers with adequate training to equip them with the knowledge to implement fruitfully mobile-assisted game applications in the assessment component.

6. Limitation of the study

The study conducted has several limitations. One notable limitation is the number of participants, which does not allow for generalization. Another limitation is teachers' perceptions and prior experience in implementing MAGAs and putting them into practice. This lack of familiarity could have influenced their responses. As a result, teachers' responses may not fully reflect MAGAs' true potential and effectiveness in assessing EFL students' language skills. The researcher recommends conducting further research with a larger and more diverse sample and providing teachers with additional training on MAGAs to gain a more comprehensive understanding of their impact and utility in language assessment.

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