ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

SUPPLEMENTARY VOCABULARY LEARNING TOOLS IN PAKISTANI INTERMEDIATE ESL CONTEXTS: A MIXED-METHODS STUDY OF STUDENT AND TEACHER PERCEPTIONS ABOUT MOBILE GAMING APPS

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Abstract

This article aims to answer what are the perceptions of intermediate-level ESL learners and English teachers regarding the affordances and constraints of mobile gaming apps in learning vocabulary? Instead of purporting that gaming apps directly lead to vocabulary growth, the research focuses on the reported access, preferences, perceived learning value, and reservations of the participants. A pragmatic mixed-methods design was used and questionnaires completed by 50 intermediate students and 30 English teachers in the privately-run English medium institutions in Lahore, Pakistan provided quantitative data. Open-ended responses of the students and semi-structured interviews with 10 teachers provided qualitative data. The survey data were analyzed using descriptive statistics and exploratory cross-tabulations, whereas the qualitative answers were analyzed thematically. Student instrument (Cronbachs alpha =.705) and teacher instrument (Cronbachs alpha =.863) were acceptable and strong respectively. The results indicate a generally positive attitude to mobile gaming apps as an additional vocabulary tool. Students rated their familiarity with gaming apps as high, their support of multimodal features, including sound, animation, video and varied presentation, and their attitudes towards gaming apps as engagement, contextualized exposure and self-paced learning tools. The teachers were also more cautious about the motivational and contextual affordances of gaming apps, although their answers were more consistent. They did not consider the possibility of apps to substitute teachers or books and stressed the importance of close pedagogical coordination, choice of apps, and mediation by teachers. The article contends that mobile gaming apps most likely play an educational role in this scenario not by replacing, but rather by supplementing. Following recent research on Mobile-Assisted Vocabulary Learning (MAVL) and Mobile-Assisted Language Learning (MALL), the study concludes that mobile gaming applications could be viewed as motivational, multimodal, and accessible aids to vocabulary learning the usefulness of which is conditional to guided use, curricular alignment, and realistic expectations.

Keywords: mobile-assisted language learning, vocabulary learning, gaming apps, ESL, mixed methods, learner perceptions, teacher perceptions, Pakistan

Introduction

Vocabulary is one of the most enduring pressure points in second language learning since it lies at the interplay of understanding, fluency and academic achievement. Students with shorter vocabularies usually lack the ability to read and listen well, as well as to be accurate in speaking and writing. That is why, vocabulary development remains one of the main issues of applied linguistics and classroom practice (Nation, 2001; Read, 2000; Schmitt, 2000). Meanwhile vocabulary learning is often reported to be repetitive, decontextualized, and motivationally weak among those learners in which it is distilled down to lists, isolated exercises or recollection testing. Pedagogical problem, however, does not simply lie in teaching more words, but rather in establishing learning environments where vocabulary may be repeatedly experienced in a meaningful and sufficiently involving way on the part of the learner to facilitate retention and transfer.

ISSN E: 2709-8273
ISSN P:2709-8265
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JALT

In the past 20 years, mobile devices have transformed the ecology of language learning by allowing digital content to be accessed outside of the classroom and by allowing learners to engage with language in brief, repetitive and extremely personalized bursts. Research in Mobile-Assisted Language Learning (MALL) has repeatedly shown that mobile tools can extend time-on-task, increase access, and support learner autonomy, especially when vocabulary learning is scaffolded through repetition, audio support, feedback, and flexible use across contexts (Kukulska-Hulme & Shield, 2008; Lin & Lin, 2019; Okumuş Dağdeler, 2023; Teymouri, 2024). Recent reviews and meta-analyses indicate that the effects of mobile applications on vocabulary learning may be positive, though not automatic; performance depends on the design of the applications, the nature of the task, the quality of feedback, the repetition schedule, and the level of pedagogical embedding of the use of mobile applications instead of focusing on the novelty of the technology (Lin and Lin, 2019).

Gaming apps have a special niche within this wider picture of mobile-learning. They are already incorporated into the daily lives of most teenagers and young adults, and they can be characterized by commonly found features that educational research suggests relate to engagement and memory; challenge, immediate feedback, repetition, audio-visual support, goal structures, and reward systems. There is an emerging literature indicating that vocabulary acquisition, motivation, and self-regulation can be facilitated by game-like or gamified mobile learning situations, particularly when learners are exposed to lexical items in context repeatedly (Sandberg et al., 2014; Pratiwi et al., 2024; Enayat et al., 2025; Yang et al., 2025). But recent studies are speaking against exaggerated statements as well. The improvement of language acquisition is not a consistent phenomenon in digital games and educators tend to worry about distraction, unequal language quality, curriculum mismatch, excessive use of technology, and the risk of mixing engagement and learning (Alibakhshi et al., 2025).

These stresses are of interest in test-based ESL environments like Pakistan, where English has high academic and socioeconomic weight, yet in-classroom factors typically merge the pressure of the curriculum, the inequalities of resources, and the ongoing need to adhere to traditional teaching. The question of whether gaming apps work or do not in some general, universal way is not always of use in these contexts, but how learners and teachers make sense of their role, usefulness, and constraints themselves. This is a particular question when the evidence at hand is not that of a controlled intervention with pre and post-tests, but rather that of survey and interviews data that reflects what the participants believed and experienced. A perception-based study will not be able to demonstrate vocabulary gains, but can make a significant contribution to explaining which affordances are perceived by users, in which situations skepticism arises, and how mobile gaming apps can be feasibly incorporated into classroom-proximate vocabulary learning.

The current paper has thus reduced to a single consistent focus: student and teacher perceptions of mobile gaming apps as a supplemental tool in learning vocabulary in intermediate level. This re-framing is of great significance methodologically. The original larger subject matter beckoned claims of effectiveness or substitution of traditional approaches or mass educational change which the data available could not rigorously support. In comparison, a targeted mixed-methods perception study is far more in line with the instruments, analyses, and evidence that were, in fact, gathered. The research question that will be tackled in the study is as follows: How do intermediate level ESL learners and English teachers view the affordances and constraints of mobile learning applications in terms of vocabulary learning? A secondary analytic interest is whether the data confirm the perception of such apps as supplements to, but not the replacement of, teachers and textbooks.

Literature Review

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

The recent research on mobile-assisted vocabulary learning offers a beneficial conceptualization of such question. The systematic reviews all indicate that vocabulary is among the most commonly researched fields in MALL, which may be due to the fact that it can be practiced in small units repeatedly, and mobile interfaces can easily support multimodal, e.g., flashcards, audio, mini-quizzes, and spaced repetition (Lin and Lin, 2019; Okumuş Daagdeler, 2023). A mini review by Teymouri, in turn, mentions learner autonomy, engagement, personalization, and long-term retention as a common benefit of mobile-assisted vocabulary learning, particularly when spaced repetition and gamification are implemented into the online ecosystem (Teymouri, 2024). Similarly, the meta-analysis in ReCALL (2025) indicates a positive correlation between use of mobile apps and vocabulary acquisition, but also notes that design factors and learning conditions determine the magnitude and reliability of such an effect (A meta-analysis on mobile-assisted vocabulary learning: Do mobile applications help?, 2025).

It also appears in the literature that the learning of mobile vocabulary is not the sole and exclusive pedagogical model. There are studies on digital flashcards, messaging-based microlearning and those on more elaborate app ecologies, which integrate gaming, media and self-regulation. An example is Enayat et al. (2025), which finds that two mobile-assisted language learning apps facilitated the receptive and productive vocabulary knowledge differently, which highlights that mobile app learning is not a homogenous treatment by design but rather a design-specific experience. Yang et al. (2025) also show that a mobile application accompanied by self-regulation assistance can enhance vocabulary-related performance and enjoyment by providing a connection between classroom learning and real-life application. According to such studies, it is not whether a device is mobile or not but what type of interactional, motivational, and cognitive environment the app produces.

In that setting, it seems that multimodality is particularly applicable to the acquisition of vocabulary. Sound may be used to aid pronunciation and spoken recognition; graphics and animation may aid inference and concept formation; video may be used to maintain attention and place words into action; and varied presentation may aid in deeper encoding and more flexible retrieval. These characteristics are also in line with traditional findings in vocabulary instruction that repeated exposure, richness of context and modal variety of input may enhance the permanence of lexical acquisition (Nation, 2001; Schmitt, 2000). Mobile apps allow sharing such encounters both in time and space instead of limiting them to a specific lesson. Wang et al. (2015) concluded that iPad-supported vocabulary learning may provide an increase in engagement and performance whereas Liu (2016) revealed that mobile-assisted concept-mapping strategies may assist vocabulary learning in more organized patterns. Multimodal affordances then are not marginal design features of mobile vocabulary studies; frequently they are at the core of the purported pedagogical usefulness of the medium.

Gaming apps introduce other layers such as stimulation via scramble, response, repetition, and emotive sticky interaction. The scholars of educational and game-based learning have long held the position that games can maintain attention, encourage experimentation, and normalize failure as an element of the learning process as opposed to a display of incompetence (Gee, 2003, 2005, 2008). Sandberg et al. (2014) established that a gaming environment and smart adaptation provided value to a vocabulary learning application with a combination of playfulness and personalization are capable of aiding learning in a mobile vocabulary context. Even more recent studies have indicated positive correlations between gamified instruction and vocabulary performance (Pratiwi et al., 2024). Meanwhile, the lexical target implantation in the task is the determinant of the effectiveness of gaming or gamification. A game may be very active but a pedagogically superficial game when the vocabulary is not the focus of development but a decoration.

ISSN E: 2709-8273
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JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

This fact can be used to explain why the views of teachers are still essential. In a recent qualitative study of the perception of teachers regarding digital video games to be used with young language learners, Alibakhshi et al. (2025) discovered that teachers identified motivational and engagement advantages and emphasized the necessity to consider the match of the type of game to the purpose of teaching a language. Their results are consistent with a greater body of literature where teachers understand the possibilities of technology and are cautious about tools that are mismatched, superficial interactivity, or an increase in preparation loads. Although learners can be positively receptive to digital tools, the teachers remain mediators in the process of selecting, framing, sequencing, and evaluating the resources. This mediation is particularly significant in vocabulary learning since the lexical knowledge is not merely an exposure issue but rather an appropriateness, collocation, pronunciation, application in various contexts, and suitability with curricular and proficiency objectives.

That leads to a theme which has been reiterated in research on MALL: the idea of supplementation and not substitution. Early research in mobile vocabulary like Thornton and Houser (2005) and Başoğlu and Akdemir (2010) demonstrated promising results on the use of mobile phones in vocabulary acquisition but the results did not indicate the obsolescence of teachers and textbooks. Further studies have also been able to promote mobile learning but also focus on integration, curation, and balance (Kukulska-Hulme and Shield, 2008; Lin and Lin, 2019; Okumuş Dağdeler, 2023). That is to say that mobile tools tend to be most beneficial in the event that they augment, solidify or customize learning as opposed to being placed as independent substitutes in existing educational frameworks.

The current research comes into this discussion with the background where access, familiarity, and perceived usefulness can be considered as important as formal measures of achievement. It has a role to play thus, as it is interpretive rather than interventionist. It queries what participants themselves consider the core affordances of mobile gaming apps in vocabulary learning and where they perceive they are being offered more than they are given by combining survey data with open-ended responses and teacher interviews.

Methodology

The research design was a pragmatic mixed-methods research that involves the use of questionnaires with qualitative responses of students and semi-structured interviews with teachers. This design was suitable since the research question was related to perceptions, reported experiences, and practical judgment, and not a treatment effect that was very narrow and experimental. The quantitative element gave a descriptive map of the attitudes of the participants whereas the qualitative element gave the interpretive depth and assisted in the explanation of why certain survey patterns were visible.

The sample was gathered in Lahore, in English-medium institutions, which are privately owned in Pakistan. The sample of students was 50 intermediate level learners, equally split in terms of gender (25 male, 25 female), with ages between 16 and 21 years old. There were 21 first and 29 second year students enrolled. The survey results also revealed that 44 out of the 50 students (88%) had personal access to at least one mobile device. Smartphones, cell phones, tablets, iPod/MP3-type devices, and laptops were reportedly owned. The sample of the teachers comprised of 30 English teachers who are academically diverse, with teaching experience of 1-27 years. Moreover, 10 teachers were included in semi-structured interviews that were aimed at investigating their perceptions of motivation, pedagogy, teacher roles, app quality, and the role of gaming apps in vocabulary learning.

The student survey consisted of 21 Likert scale questions and three open-ended questions. The Likert items concentrated on the perceptions of technology preference, being popular with gaming apps, contextual learning, self-paced learning, memory support, animation, video, audio, hyperlinks, and vocabulary-learning affordances. The open-ended questions required

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

students to provide the names of games they enjoyed playing, to make comments about whether gaming applications help in building vocabulary or are a waste of time, and how they might be used to teach them English. The teacher survey comprised of 18 Likert-scale questions concerning innovation, workload, contextual richness, independent learning, self-paced learning, critical thinking, competitive scoring, teacher recommendation, and related concerns. Semi-structured interview questions also delved into the interest of gaming apps, their attention-grabbing, replaceability of teachers or textbooks, ESL learner suitability, and the dangers associated with their use.

The initial hypothesis presented internal consistency results of the two survey measures. When the student questionnaire was run, a Cronbachs alpha of .705 was obtained when six students who did not have a mobile device were excluded and three others who did not answer one question were excluded. A Cronbachs alpha of.863 was obtained by the teacher questionnaire. The values suggest that the student instrument has acceptable reliability, and the teacher instrument has strong reliability. Since the purpose of the given article is interpretive and descriptive, these reliability values will be enough to justify the careful utilization of the survey data as the evidence of patterned attitudes and not psychometrically sophisticated latent scales.

The quantitative analysis was based mainly on descriptive statistics. Strong patterns of agreement, hesitation and resistance were identified using frequencies and percentages. The original analysis had exploratory cross- tabulations by grade level and teaching experience but they are sparingly used here due to the small sample sizes as well as the main point of the article is not to make a claim of subgroup generalization. The thematic analysis of open-ended student responses and transcripts or transcript-like summaries of teacher interviews was performed as qualitative analysis. The emphasis was on repetition of the ideas as opposed to the exhaustive density of coding. Themes were considered as patterns of meaning that facilitated contextualization of results of the survey.

The initial project was ethically oriented focusing on volition and confidentiality of the participants. The questionnaires did not demand any names and the teacher interviews were carried out in a manner that was perceived to motivate the participants to be honest. In the current article, the data are only reported in aggregate form. The article makes no statement about the direct improvement of vocabulary, causal superiority over traditional approaches or the generalizability of the results to other similar institutional settings given the design and evidence provided.

Table 1

Participant profile

Group	N	Profile	Notes
Students	50	Intermediate-level ESL learners; 25 male, 25 female; ages 16–21	44 students (88%) reported access to at least one mobile device.
Teachers	30	English teachers from private English-medium institutions	Teaching experience ranged from 1 to 27 years.
Teacher interviews	10	Semi-structured interviews	Used to deepen interpretation of survey findings.

Results

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

The findings are reported in four sections: learner preparation and availability, student attitudes towards affordances and constraints, teacher attitudes towards value and constraints, and qualitative themes lifted out of student and teacher accounts.

The initial interesting observation is that the student sample was already highly oriented towards mobile engagement. The technological precondition of mobile vocabulary support seemed to be in place as almost nine out of ten students (88%) had personal access to a mobile device. This is important since in most MALL studies access is a latent inequality factor: students cannot take advantage of mobile tools that they cannot access on a regular basis. Currently, the access was broad enough to make perceptions of gaming apps meaningful as opposed to being hypothetical.

There was a very positive attitude towards technology and gaming on the general level with a majority of students. Eighty-eight percent of students responded that new technology was their favourite way of learning English language, and 98 percent responded that gaming apps were in favour with the young people. The two findings do not, in themselves, determine the educational usefulness, but they do indicate that gaming apps are within the cultural world of the learners and not outside it. Practically, that is important since pedagogical technologies are more apt to be implemented when they resonate with the existing media ecologies and habits of the learners.

Table 2

Selected student survey responses relevant to vocabulary-learning affordances

Student item	Agree/Strongly agree	Interpretive note
New technology has become preferred for English learning	88%	Students are strongly oriented toward technology-based language learning.
Gaming apps are popular among young generation	98%	Gaming apps are culturally familiar rather than marginal tools.
Gaming apps help learn English more quickly than traditional methods	80%	Students perceive speed and efficiency benefits, though this remains self-reported.
Gaming apps promote active learning and interaction	80%	Supports the engagement claim more than a direct achievement claim.
Gaming apps help learn new words without barriers of time and place	88%	Highlights portability and access as perceived strengths.
Gaming apps help apply new words to new situations and contexts	82%	Students value contextual rather than purely list-based exposure.
Gaming apps provide immediate access to maximum information	46% (32% unsure)	This item produced hesitation and weakens any claim that apps are complete information sources.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

Prefer online vocabulary learning rather than books or rote learning	52% (38% negative)	Students are open to mobile learning but not uniformly willing to replace books.
Audio-visual effects support memory retention	70%	Multimodality is one of the clearest perceived advantages.
Sound components polish spoken skills and spelling	94%	Audio support is the strongest student-rated affordance.
Variety in presentation gives long-lasting information	83% of 47 responses	Students strongly associate varied presentation with retention.

When the survey shifted to popularity to perceived vocabulary-learning value, the student responses were generally positive, but more differentiated. Eighty percent concurred that gaming applications had the potential to teach them English faster than the conventional techniques, 80% concurred that gaming applications fostered active learning and interaction, 88% concurred that gaming applications were full of knowledge pertinent to the four language skills, and 88% concurred that gaming applications could assist them to learn new words without being restricted by space and time. Equally, 82 percent of them were in agreement that gaming apps gave them a chance to use new words in new situations and contexts. Combined, these reactions are indicative of students not merely perceiving gaming apps as fun distractions; many of them perceived them as versatile and potentially valuable learning aids.

Yet, not all items were highly endorsed. Learners only agreed with 46 percent that gaming apps were the best way to have instant access to all the maximum information within the palm and 32 percent were not sure, and 22 percent said no. It is also significant that this hesitation indicates that students did not consider gaming apps as whole informational spaces. This ambivalence was also observed when the students were questioned whether they found it better to learn vocabulary online instead of using books or rote learning: 52% said that they would prefer to do it online, though 38% did not. That is, the students were willing to use gaming apps, but they were not equally prepared to drop the more traditional resources. This is among the most evident causes why the evidence would favor a supplementary and not a replacement model.

The same balanced pattern is observed in the responses to the items of review, self-pacing, and teacher support. Fifty-eight percent of the respondents said that gaming apps helped them to revise vocabulary, and 64 percent of respondents said gaming apps helped them to learn vocabulary in their own speed and ability. These are good results, but not as decisive as the reactions on headlines on technology preference and popularity of apps. More notably, 30 percent of students said that their teachers promoted the use of gaming apps to learn English language, with 58 percent saying otherwise. Such a discrepancy between student preparation and expected teacher support indicates that the adoption of classroom technology might be outpaced by student mobile-friendliness.

Multimodal features had the largest number of consistently positive student responses. Seventy percent concurred that audio-visual effects enhanced further memory when new words were being memorized. Two-thirds of them affirmed that video clips attracted students to learning vocabulary. Three-quarters (78 percent) said that animation made them get to know the meaning of a new word on their own. Ninety-four percent said that sound elements sharpened

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

verbal talents and spelling. Sixty-six percent responded that hyperlinks provided a bridge to additional information about a word. Out of the 47 students who responded to the last item, 83% of them agreed that presentation variety enhanced face to face and sustained information about the word. The results of this study are highly relevant to the explanation that multimodality is regarded as one of the fundamental educational benefits of mobile games settings among students.

Figure 1

Gaming trend among ESL Learners

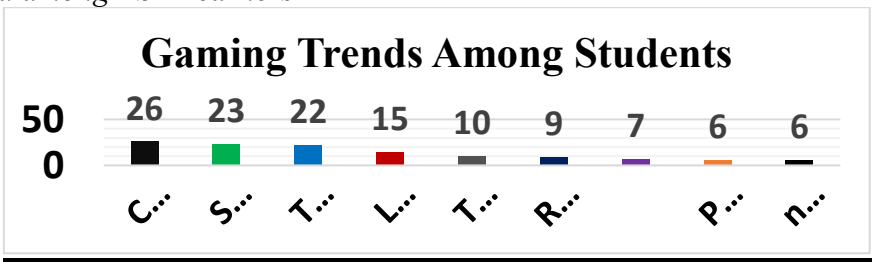

Table 3

Selected teacher survey responses relevant to pedagogical value and constraint

Teacher item	Agree/Strongly agree	Interpretive note
Gaming apps are innovative instruments for teaching vocabulary	90%	Teachers broadly recognize innovation and relevance.
Gaming apps offer great potential to enhance vocabulary	83.3%	Teachers acknowledge educational value in principle.
Gaming apps provide rich context for grasping new vocabulary	80%	Contextual exposure is one of the strongest teacher-recognized benefits.
Gaming apps provide a platform for independent and self-learning	76.7%	Teachers accept autonomy benefits, though not as replacement.
Encouraging gaming apps can improve vocabulary at learners' own pace	86.7%	Teachers see paced individual practice as valuable.
Gaming apps reduce the tedious workload of teachers	50% (36.7% negative)	Teacher convenience is contested rather than settled.
Teachers suggest students should download gaming apps to improve vocabulary	66.7%	Teachers are cautiously supportive but not unreservedly promotional.

This positive-but-cautious picture was widely confirmed by the teacher survey data. Ninety percent of the teachers responded that gaming apps were new teaching tools in the ESL classroom. Eighty-three percent believed that gaming apps had tremendous potential to improve vocabulary and 80 percent believed that gaming apps offered rich context to

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

understand new vocabulary. A big majority, too, concurred that gaming applications offered an independent, self-learning platform (76.7%), that vocabulary development could be promoted by encouraging learners to use vocabulary gaming applications (86.7%), and that gaming applications could be used to support critical thinking and problem solving (70%). These findings indicate that teachers did not have a problem with digital vocabulary learning in principle. Quite to the contrary, they saw a lot of potential.

However, the teacher data also had a lot more signal of caution than the student data. Half of the teachers believed that gaming apps decreased the tedious workload of teachers, with over one third of them disagreeing. The answers to the question of whether the gaming applications would substitute the traditional approach to English language learning were split into agreement, uncertainty and disagree. The item-level pattern indicates that teachers might support the pedagogical utility of educational applications of games without supporting assertions of substitution, simplification, and automatic effectiveness.

The qualitative data provided by students assists in clarifying the reason why most students gave positive responses. The list of named apps had both entertainment-based and explicitly language-based apps, including Candy Crush, Temple Run, Subway Surfer, Word Brain, Word Search, Word Scrabble, Learn English Vocabulary Pop, and Drops. This spectrum suggests that the students were not not differentiating between pure games and learning tools; rather, the language learning affordances perceived a continuum of digital experiences. Students in their open-ended remarks explained that they learned using varying contexts, online games, audio directions, pronunciation aids, dictionary use, video clips and repetition. They also associated gaming with retention of memories, problem solving and informal learning. These reactions indicate that it was not only the lexical content that students were appreciating but the contextual, repetitive, stimulating, and low-pressure interaction.

Meanwhile, qualitative responses of students were not blindly enthusiastic. When it was not focused or balanced, some termed gaming as a waste of time. Others proposed that gaming apps only helped when chosen based on learner level and when they were actively utilized as opposed to passively. These remarks support the survey data that student endorsement of gaming applications did not always involve an endorsement of unregulated or unlimited use.

These tensions were elaborated by teacher interviews in much more detail. Gaming apps were characterized by many teachers as innovative, interesting, and autonomy-supportive. They mentioned on numerous occasions that modern students are already phone- and app-obsessed and that games can draw attention and reduce boredom as well as provide incidental exposure to vocabulary. Some teachers specifically associated the attractiveness of gaming applications with their user-friendly nature, the opportunity to learn in free time, and the fact that these applications could provide students with repetitive exposure to words under different circumstances.

Nonetheless, unconditional endorsement was not the strongest qualitative pattern among the teachers and conditional acceptance was. Over and over again teachers mentioned that gaming applications could not substitute a teacher. Others believed that apps could help learners become more self-reliant, yet the majority believed that the process of learning the language still needed to be explained, guided, an app chosen, and a human involved. They were particularly doubtful about the notion that gaming applications were more useful than textbooks in any general way. There were teachers who found apps worthwhile since they could maintain longer periods of interest, but many claimed that textbooks could offer to them wider and deeper lexical worlds, more purposeful sequencing, and more certain pedagogical coverage. Many respondents claimed that the most effective would be a combination: they should combine the textbooks and the gaming apps instead of opposing them to each other.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

Interview data also indicated issues regarding quality of the apps, language quality, and teacher workload. Other teachers had concerns that the English in games was disproportionate or socially disproportionate. Others emphasized the importance of playing gaming apps in a responsible way by ensuring that the teachers considered the accuracy, relevance, authenticity, and the fit to the learner level and the lesson objectives. Quite on the contrary, digital integration might add work to workload since, in order to find and mediate tools, the teachers needed to choose tools carefully. In brief, educators became aware of the affordances of gaming applications but were not ready to accept the rhetoric of the easy technological replacement.

Table 4

Qualitative themes emerging across student comments and teacher interviews

Theme	Who emphasized it	Meaning for interpretation
Gaming apps increase interest and reduce boredom	Students and teachers	Motivation is a real perceived strength and likely a major reason for learner acceptance.
Multimodal support helps vocabulary learning	Mostly students; acknowledged by teachers	Audio, video, animation, and scenario-based presentation are core affordances.
Gaming apps support independent or self-paced learning	Both groups	Autonomy is valued, but not treated as self-sufficient pedagogy.
Gaming apps should supplement rather than replace teachers and textbooks	Strongly teachers; indirectly students	This is the most stable pedagogical conclusion across the dataset.
Unguided or excessive gaming may distract from learning	Both groups	The educational value of gaming depends on control, selection, and purpose.
Teacher mediation is necessary because app quality varies	Teachers	Language standard, relevance, and curricular fit remain gatekeeping concerns.

Discussion

The results point to a clear interpretation: in this study, mobile gaming apps are considered as effective supplements for vocabulary learning for their motivational and multimodal qualities, but not as stand-alone or comprehensive teaching and learning tools. This finding is in line with recent MALL and mobile vocabulary studies. Literature reviews and meta-analyses have demonstrated the potential of mobile applications for vocabulary learning, but these applications are only effective under certain contexts and designs (Lin & Lin, 2019; Okumuş Dağdeler, 2023; Teymouri, 2024). The current research is in line with this research in that learners and teachers see value, but also in that value is limited.

Perhaps the most obvious bounded value is that of multimodality. In particular, students loved sound, animation, video and multiple presentation. This lends credence to the hypothesis that

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

mobile settings may reduce the abstract nature of vocabulary learning through the integration of word forms with dynamic cues, pronunciation and context. These factors probably account for students linking playing games not only to fun but also remembering and performing. In the present study, it was not replacement of books but particular app features that make words easier to perceive, practice and recall that received the strongest endorsement from students. This is a valuable refocusing. It implies that the pedagogic potential of gaming apps is not related to their being "games" but to the lexical encounters that they afford.

A second take out is that student enthusiasm is tempered by pedagogic realism. Students expressed their enthusiasm for technology-enabled learning, but were uncertain about the possibility of replacing books or using gaming apps as "complete" information sources. Teacher responses reinforced realism. Teachers were optimistic about innovation and engagement but were sceptical of replacement. This finding is consistent with the literature, which shows that mobile learning is often successful when it is used to supplement or individualise instruction, rather than when it is expected to replace instruction, curriculum and paper-based resources (Kukulska-Hulme & Shield, 2008; Burston, 2013; Alibakhshi et al., 2025).

The disconnect between students' readiness and teacher encouragement is also significant. While students said they were heavy users of gaming apps, and device ownership was high, few thought their teachers were encouraging of such apps for English learning. This could be due to a range of factors: curriculum constraints, institutional pressures, a lack of institutional support and guidance, concerns about the quality of apps, concerns about distraction, a lack of training for teachers or a genuine conviction that mobile gaming should only be used as an extension of their learning. Regardless, this finding suggests that uptake is not simply a function of student choice. The path from personal to pedagogical use is mediated by perceptions of teachers and the norms of the institution.

The current results also shed some light on the inferences that can be drawn from perceptions. It would be inappropriate to translate these data into a claim that gaming apps lead to "hard" improvements in vocabulary. There was no intervention, no pre-test and post-test vocabulary assessments, and no comparisons of individual apps in a controlled learning environment. But it can show that participants perceive certain affordances (contextual learning, self-directed learning, multimodal learning, pronunciation, repetition and engagement) and that these perceptions are clustered in a non-random fashion. Data on these perceptions matter for educational planning because they indicate the aspects of mobile learning that users are willing to accept and those about which they are doubtful.

In this context, textbooks and teachers must be highlighted. In some of the technology debate in education, a replacement logic is still being used: if a technology is engaging and easy to use, then it must replace other technologies. Such is not the case in the current data. Students were not clear about whether they preferred online vocabulary programs over books, and teachers were even more emphatic that textbooks offer depth, sequencing and breadth of learning that gaming apps do not necessarily offer. Similarly, teachers were adamant that apps could not be a substitute for the teacher. These data do not reflect digital Luddism. They are signs of a sophisticated awareness of the nature of language learning as interpretative, contextual and social. Mobile gaming apps can help with vocabulary learning but teachers are still needed to make judgements about what words are important, what are acceptable uses of the words and how the digital interactions align with the curriculum.

That is, the study supports the principled use of supplementation. Mobile gaming apps can be pedagogically appropriate when they are adopted because they support target vocabulary, offer frequency of exposure, include audio or video support that learners can use, and encourage learners to spend more time engaging in English. They are less justifiable when they are

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

selected because they are popular, when the vocabulary is incidental but unstructured, or when pedagogical goals are usurped by unstructured play. Our interview data, in particular, indicate teachers are prepared to adopt gaming apps, as long as they are able to regulate their use. This stance is consistent with recent research that highlights the need for intentional design, self-regulation and pedagogic fit in mobile vocabulary learning (Enayat et al., 2025; Yang et al., 2025).

One last point of interpretation has to do with context. The learners and teachers in this study were intermediate level learners and teachers in private English medium institutions. These students' comments reflect the fact that their context values English, has relatively high access to technology, and that mobile phones are familiar and ubiquitous. This study shouldn't be taken as a generalisation of all ESL contexts. The affordances and constraints might be different in contexts where access is lower, for example, in public institutions or with younger students. But the study does offer a context-specific account of the nature of mobile games apps in this educational context and why a supplementary framing for technological integration is methodologically and pedagogically superior to a transformational framing.

Pedagogical Implications

Pedagogical implications are clear. First, vocabulary teachers should not use mobile gaming apps as a "killer app" to replace textbooks, but they shouldn't ignore mobile gaming apps as distractions. It is more beneficial to use apps judiciously to supplement exposure, target vocabulary, pronunciation practice and provide low-risk practice outside of class. Second, teachers must be able to select apps. Such criteria include coverage of relevant vocabulary, suitability of level, English pronunciation, feedback, audio, and the extent to which words are presented in context. Third, students' knowledge of games can be leveraged. Teachers do not have to "gamify everything", but can draw on the resources that students appear to like: sound, animation, video, the scenario-based nature of the games, and feedback. Finally, institutional support matters. If teachers are to learn to use mobile gaming apps in the classroom, they need time to explore and experiment and must be provided with training and opportunity to assess resources, rather than learn by trial and error.

Limitations

This study has several limitations. The sample is small and includes private English as second language (ESL) institutions in one urban environment - we therefore urge caution in interpreting the results beyond similar settings. Our quantitative evidence is descriptive and relies on perceptions rather than actual vocabulary learning. The qualitative data provide interpretive depth, but cannot replace observation of app use or experiments with learning outcomes. Further, some of the survey items conflated several ideas, so that the percentage of agreement should be seen as general attitudes rather than a measurement of one narrowly defined variable. These restraints do not invalidate the study, just the claim.

Conclusion

This article has deliberately focused a general thesis question on one specific question about attitudes towards mobile gaming apps for vocabulary learning. When the evidence is read from its own perspective, it's clear. The intermediate ESL students in this study were well-versed in gaming apps, were highly motivated to pursue technology-based learning, and particularly valued the multimodal learning that makes vocabulary learning more memorable, contextual, and fun. Teachers also saw significant potential in gaming apps for their motivation, contextualisation and practice potential. But teachers were resistant to stronger claims about apps; they could stand in for textbooks, reduce workload, or replace teachers' pedagogical expertise. It is therefore more plausible to say that the power of gaming apps is not that they transform vocabulary learning, but that they can be used as a valuable supplement to a balanced, guided, curriculum-relevant vocabulary learning pedagogy. That's more accurate

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

methodologically and more likely to be true pedagogically than the more emphatic claims made in much general discourse about technology in language learning.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

References

Alibakhshi, G., Zarei, M. A., & Labbafi, A. (2025). Digital video games and language learners' vocabulary learning, motivation and engagement: Teachers' perceptions of types and effectiveness. *Computer-Assisted Language Learning Electronic Journal*, *26*(1), 94–113. https://doi.org/10.54855/callej.252616

Alqarni, A. (2024). Effect of mobile assisted learning on English language vocabulary and grammar: The Saudi Arabian context as a case study. *Arab World English Journal (AWEJ)*, (10), 246–265. https://doi.org/10.24093/awej/call10.16

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, *1*(2), 164–180. https://doi.org/10.1111/j.1745-6916.2006.00011.x

Başoğlu, E. B., & Akdemir, O. (2010). A comparison of undergraduate students' English vocabulary learning: Using mobile phones and flash cards. *Turkish Online Journal of Educational Technology*, *9*(3), 1–7.

Burston, J. (2013). Mobile-assisted language learning: A selected annotated bibliography of implementation studies 1994–2012. *Language Learning & Technology*, *17*(3), 157–225. http://hdl.handle.net/10125/44339

Burston, J., & Giannakou, K. (2021). MALL language learning outcomes: A comprehensive meta-analysis 1994–2019. *ReCALL*, *33*(3), 278–298. https://doi.org/10.1017/S095834402100001X

Child, D. (1993). *Psychology and the teacher* (5th ed.). Cassell.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Deng, Q., & Trainin, G. (2015). Learning vocabulary with apps: From theory to practice. *The Reading Teacher*, *69*(1), 49–57. https://doi.org/10.1002/trtr.1365

Enayat, M. J., Asadi Ghadim, N., & Arabmofrad, A. (2024). Effects of two mobile-assisted language learning apps on L2 receptive and productive vocabulary knowledge: A mixed-methods study. *System*, *125*, 103415. https://doi.org/10.1016/j.system.2024.103415

Gee, J. P. (2003). *What video games have to teach us about learning and literacy*. Palgrave Macmillan.

Gee, J. P. (2005). Learning by design: Good video games as learning machines. *E-Learning and Digital Media*, *2*(1), 5–16. https://doi.org/10.2304/elea.2005.2.1.5

Gee, J. P. (2007). *Good video games + good learning: Collected essays on video games, learning, and literacy*. Peter Lang.

Gee, J. P. (2008). Learning and games. In K. Salen (Ed.), *The ecology of games: Connecting youth, games, and learning* (pp. 21–40). MIT Press.

Hwang, G.-J., & Wu, P.-H. (2014). Applications, impacts and trends of mobile technology-enhanced learning: A review of 2008–2012 publications in selected SSCI journals. *International Journal of Mobile Learning and Organisation*, *8*(2), 83–95. https://doi.org/10.1504/IJMLO.2014.062346

Klimova, B. (2019). Impact of mobile learning on students' achievement results. *Education Sciences*, *9*(2), Article 90. https://doi.org/10.3390/educsci9020090

Koleini, N., Boroughani, T., Eslami, Z. R., & Xodabande, I. (2024). Exploring the impacts of mobile-assisted learning on university students' technical vocabulary knowledge. *International Journal of Educational Research Open*, *7*, 100344. https://doi.org/10.1016/j.ijedro.2024.100344

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile-assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, *20*(3), 271–289. https://doi.org/10.1017/S0958344008000335

Lin, C. C., & Yu, Y. C. (2017). Effects of presentation modes on mobile-assisted vocabulary learning and cognitive load. *Interactive Learning Environments*, *25*(4), 528–542. https://doi.org/10.1080/10494820.2016.1153424

Lin, J. J., & Lin, H. (2019). Mobile-assisted ESL/EFL vocabulary learning: A systematic review and meta-analysis. *Computer Assisted Language Learning*, *32*(8), 878–919. https://doi.org/10.1080/09588221.2018.1541359

Liu, P.-L. (2016). Mobile English vocabulary learning based on concept-mapping strategy. *Language Learning & Technology*, *20*(3), 128–141. http://hdl.handle.net/10125/44484

Ma, Q. (2017). Technologies for teaching and learning L2 vocabulary. In S. Thorne & S. May (Eds.), *Language, education and technology* (3rd ed., pp. 45–61). Springer. https://doi.org/10.1007/978-3-319-02237-6_4

Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press. https://doi.org/10.1017/CBO9780511811678

A meta-analysis on mobile-assisted vocabulary learning: Do mobile applications help? (2025). *ReCALL*. Advance online publication. https://doi.org/10.1017/S095834402500003X

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.

Okumuş Dağdeler, K. (2023). A systematic review of mobile-assisted vocabulary learning research. *Smart Learning Environments*, *10*(1), Article 19. https://doi.org/10.1186/s40561-023-00235-z

Peng, H., Jager, S., & Lowie, W. (2022). Narrative review and meta-analysis of MALL research on L2 skills. *ReCALL*, *34*(3), 278–295. https://doi.org/10.1017/S0958344022000085

Poláková, P., & Klímová, B. (2022). Vocabulary mobile learning application in blended English language learning. *Frontiers in Psychology*, *13*, Article 869055. https://doi.org/10.3389/fpsyg.2022.869055

Pratiwi, D. I., Fitriati, S. W., Yuliasri, I., & Waluyo, B. (2024). Flipped classroom with gamified technology and paper-based method for teaching vocabulary. *Asian-Pacific Journal of Second and Foreign Language Education*, *9*, Article 16. https://doi.org/10.1186/s40862-023-00222-4

Read, J. (2000). *Assessing vocabulary*. Cambridge University Press.

Sandberg, J., Maris, M., & Hoogendoorn, P. (2014). The added value of a gaming context and intelligent adaptation for a mobile learning application for vocabulary learning. *Computers & Education*, *76*, 119–130. https://doi.org/10.1016/j.compedu.2014.03.006

Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge University Press.

Sharples, M. (2000). The design of personal mobile technologies for lifelong learning. *Computers & Education*, *34*(3–4), 177–193. https://doi.org/10.1016/S0360-1315(99)00044-5

Stockwell, G. (2022). *Mobile assisted language learning: Concepts, contexts and challenges*. Cambridge University Press.

Teymouri, R. T. (2024). Recent developments in mobile-assisted vocabulary learning: A mini review of published studies focusing on digital flashcards. *Frontiers in Education*, *9*, Article 1496578. https://doi.org/10.3389/feduc.2024.1496578

Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of Computer Assisted Learning*, *21*(3), 217–228. https://doi.org/10.1111/j.1365-2729.2005.00129.x

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL

Viberg, O., Khalil, M., & Baars, M. (2020). Self-regulated learning and learning analytics in online learning environments: A review of empirical research. In *Proceedings of the Tenth International Conference on Learning Analytics & Knowledge* (pp. 524–533). https://doi.org/10.1145/3375462.3375483

Wang, B. T., Teng, C. W., & Chen, H. T. (2015). Using iPad to facilitate English vocabulary learning. *International Journal of Information and Education Technology*, *5*(2), 100–104. https://doi.org/10.7763/IJIET.2015.V5.484

Xodabande, I. (2017). The effectiveness of social media network Telegram in teaching English language pronunciation to Iranian EFL learners. *Cogent Education*, *4*(1), Article 1347081. https://doi.org/10.1080/2331186X.2017.1347081

Yang, Y., Song, Y., Yan, J., & Ma, Q. (2025). Bridging classroom and real-life learning mediated by a mobile app with a self-regulation scheme: Impacts on Chinese EFL primary students' self-regulated vocabulary learning outcomes, enjoyment, and learning behaviours. *System*, *132*, 103671. https://doi.org/10.1016/j.system.2024.103671