

EFL TEACHERS' PERCEPTIONS OF MOBILE-ASSISTED LANGUAGE LEARNING INTEGRATION IN VOCABULARY INSTRUCTION

Azimova Muborak

azimovamuborak66@gmail.com

+998918208121

Uzbekistan State World Languages

University | Master student

Abstract

While a substantial body of research has examined learners' engagement with mobile-assisted language learning (MALL), considerably less attention has been paid to how the teachers responsible for implementing these tools actually perceive them. Teachers' beliefs about a technology's usefulness, their confidence in using it, and the institutional constraints they operate under are widely recognized as decisive factors in whether classroom technology adoption succeeds or stalls. This study examined EFL teachers' perceptions of integrating mobile applications into vocabulary instruction, drawing on the Technology Acceptance Model (Davis, 1989), the Technological Pedagogical Content Knowledge framework (Mishra & Koehler, 2006), and Ertmer's (1999) distinction between first-order and second-order barriers to technology integration. A qualitative-dominant, mixed-methods design was used with 12 EFL teachers at Ixlos International School in Tashkent, combining a short questionnaire with semi-structured interviews, analyzed thematically following Braun and Clarke (2006). Findings suggest that teachers broadly perceived mobile applications as useful for vocabulary reinforcement and learner engagement, but expressed reservations rooted in classroom management concerns, uneven student device access, and uncertainty about how to pedagogically integrate application-based practice with existing curricular demands. The discussion situates these findings within the broader MALL literature and considers implications for teacher training and institutional support in the Uzbekistani EFL context.

Keywords: *EFL teachers, teacher perceptions, mobile-assisted language learning (MALL), vocabulary instruction, technology integration, TPACK*

1. Introduction

Research on mobile-assisted language learning has grown substantially over the past fifteen years, documenting the affordances mobile devices offer for vocabulary practice, extended exposure, and learner-controlled review (Kukulska-Hulme & Shield, 2008; Godwin-Jones, 2011). Much of this literature, however, has approached MALL primarily from the learner's side — examining usage patterns, engagement, or

retention outcomes — while comparatively less research has asked what the teachers implementing these tools actually think about them, and why some embrace mobile applications readily while others remain reluctant. Stockwell's (2010) finding that both learners and teachers were, in his study, unexpectedly reluctant to adopt mobile phones for vocabulary learning is a useful corrective here: technological capability alone does not guarantee classroom uptake, and teachers' own beliefs and working conditions plainly shape whether a tool moves from theoretical possibility to daily practice.

Two theoretical frameworks are particularly useful for understanding this gap. Davis's (1989) Technology Acceptance Model proposes that a user's intention to adopt a technology is shaped primarily by two beliefs: perceived usefulness (whether the tool will improve performance) and perceived ease of use (whether the tool is easy to operate), with usefulness generally exerting the stronger influence on adoption. Applied to teachers rather than end-users in a business setting, this suggests that a mobile vocabulary application's fate in the classroom may depend less on its technical sophistication than on whether teachers are convinced it actually helps students learn vocabulary, and whether they feel capable of managing it alongside everything else a lesson demands.

Mishra and Koehler's (2006) Technological Pedagogical Content Knowledge (TPACK) framework offers a complementary lens, arguing that effective technology integration requires teachers to hold not just technological knowledge in isolation, but an integrated understanding of how technology, pedagogy, and subject content interact in a given teaching situation. A teacher may be perfectly comfortable using a mobile application personally yet still struggle to see how it fits meaningfully into a vocabulary lesson's pedagogical goals — a distinction that matters for interpreting teacher perceptions, since comfort with technology and confidence in its pedagogical integration are not the same thing.

Ertmer's (1999) distinction between first-order barriers (external constraints such as device access, infrastructure, and institutional support) and second-order barriers (internal factors such as teacher beliefs, confidence, and perceived value) provides a further way of organizing what teachers report. Ertmer's later work with colleagues (Ertmer et al., 2012) suggested that of the two, second-order barriers rooted in teacher beliefs often prove more resistant to change than first-order resource constraints, even though first-order barriers remain a real and frequently cited obstacle in under-resourced settings. This framework is well suited to a school context such as Uzbekistan's, where both types of barriers plausibly coexist: variable student device ownership and connectivity (first-order) alongside teachers' own uncertainty about how to pedagogically frame application-based vocabulary work (second-order).

Despite the relevance of these frameworks, few studies have applied them specifically to EFL teachers' perceptions of MALL for vocabulary instruction in

Central Asian secondary school contexts. This study addresses that gap by examining, in teachers' own words, how they perceive the usefulness, feasibility, and classroom fit of mobile applications for vocabulary teaching.

Research questions.

RQ1: How do EFL teachers perceive the usefulness of mobile applications for vocabulary instruction?

RQ2: What barriers, first-order and second-order, do EFL teachers associate with integrating mobile applications into vocabulary teaching?

RQ3: How do teachers describe the pedagogical role mobile applications should play relative to conventional vocabulary instruction?

2. Method

2.1 Research Design

A qualitative-dominant, mixed-methods design was used, combining a short closed-item questionnaire (to capture broad patterns of agreement across the sample) with semi-structured interviews (to capture the reasoning and nuance behind those patterns). This combination was chosen because perception research benefits from both a structured baseline and space for teachers to explain their views in their own terms, something a questionnaire alone cannot capture.

2.2 Participants

Participants were 12 EFL teachers at Ixlos International School in Tashkent, with teaching experience ranging from 2 to 15 years. Teachers varied in their prior exposure to mobile applications in their teaching practice, from regular users to those with little or no prior classroom use, providing a reasonably broad range of perspectives within a single institutional context.

2.3 Instruments

Two instruments were used:

Questionnaire: a short set of Likert-scale items adapted from Technology Acceptance Model constructs (perceived usefulness, perceived ease of use) and from Ertmer's (1999) barriers framework (first-order resource items, second-order belief and confidence items), administered to all 12 participants.

Semi-structured interview protocol: covering teachers' current use (if any) of mobile applications in vocabulary instruction, perceived benefits and drawbacks, perceived barriers to greater integration, and views on how mobile applications should relate to conventional vocabulary teaching methods. Interviews lasted approximately 25–35 minutes and were audio-recorded and transcribed with participants' consent.

2.4 Procedure

Teachers completed the questionnaire first, followed within the same week by an individual semi-structured interview. Interviews were conducted in English or

Uzbek according to participant preference and translated into English for analysis where necessary.

2.5 Data Analysis

Questionnaire responses were summarized descriptively to provide a broad picture of agreement across the sample. Interview transcripts were analyzed using thematic analysis following Braun and Clarke's (2006) six-phase process: familiarization with the data, initial coding, searching for themes, reviewing themes, defining and naming themes, and producing the final analytic account. Coding was organized deductively around the study's guiding frameworks (perceived usefulness/ease of use, first-order/second-order barriers, pedagogical integration) while remaining open to inductively emerging themes not anticipated by those frameworks.

3. Results

(Illustrative placeholders reflecting a plausible pattern — replace with your actual questionnaire summaries and coded interview themes once data collection is complete.)

Table 1. Questionnaire Summary (percentage agreeing or strongly agreeing, n = 12)

Item	% Agreement
Mobile applications are useful for reinforcing vocabulary	83%
Mobile applications are easy for me to use in class	58%
I have adequate institutional support to use mobile applications	42%
Most of my students have reliable access to a suitable device	50%
I feel confident designing vocabulary tasks around a mobile application	50%

Table 2. Interview Themes

Theme	Illustrative Focus
Perceived usefulness for reinforcement, not replacement	Teachers saw mobile applications as valuable for repetition and out-of-class reinforcement, but not as a substitute for explicit classroom instruction
First-order barriers: device access and connectivity	Uneven student access to smartphones and reliable internet was repeatedly cited as a practical constraint
Second-order barriers: pedagogical uncertainty	Several teachers reported feeling unsure how to structure a lesson around application-based practice, despite personal comfort with the technology itself

Theme	Illustrative Focus
Classroom management concerns	Concerns about monitoring on-task use of devices during class time
Desire for structured training	Teachers expressed interest in professional development specifically on integrating MALL tools into existing curricula

4. Discussion

The pattern suggested by these illustrative results is broadly consistent with what the Technology Acceptance Model would predict: teachers' perceived usefulness of mobile applications for vocabulary reinforcement appears higher than their confidence in the practical ease of integrating them into an actual lesson, echoing Davis's (1989) finding that usefulness and ease of use are related but distinct constructs, with usefulness typically carrying more weight in adoption decisions. Teachers in this study appear to accept the underlying premise — that mobile applications aid vocabulary retention — while remaining considerably more cautious about the mechanics of classroom implementation.

The coexistence of first-order barriers (device access, institutional support) and second-order barriers (pedagogical confidence) among the same group of teachers supports Ertmer's (1999) original argument that these two categories operate somewhat independently: a teacher might have reasonable access to technology and still lack confidence in integrating it meaningfully, or vice versa. The finding that several teachers wanted more structured training, specifically on pedagogical integration rather than on operating the applications themselves, is consistent with the TPACK framework's central claim (Mishra & Koehler, 2006) that technological knowledge and pedagogical knowledge do not automatically combine into effective technological pedagogical content knowledge; teachers may need deliberate support connecting the two.

The “reinforcement, not replacement” framing that emerged in the interview data is also worth situating within the broader MALL literature. It aligns with the general tenor of Kukulska-Hulme and Shield's (2008) argument that mobile learning extends rather than substitutes for classroom instruction, and it tempers any assumption that teachers view mobile applications as a wholesale alternative to conventional vocabulary teaching. Stockwell's (2010) observation that even motivated MALL researchers found lower-than-expected enthusiasm for mobile-based learning among some teachers and learners is a useful reminder that positive perceptions of usefulness do not automatically translate into enthusiastic day-to-day adoption, particularly where practical classroom constraints intervene.

4.1 Limitations

This study's findings are drawn from a single institution and a modest sample of 12 teachers, limiting generalizability to other schools or educational systems. The reliance on self-report data (questionnaire and interview) means findings reflect teachers' stated perceptions rather than observed classroom behavior, and social desirability effects cannot be fully ruled out, particularly for teachers aware of the study's focus on technology adoption.

5. Conclusion

This study suggests that EFL teachers at Ixlos International School generally perceive mobile applications as useful for vocabulary reinforcement, while identifying both first-order barriers (device access, institutional support) and second-order barriers (pedagogical confidence, integration uncertainty) that complicate fuller adoption, consistent with Ertmer's (1999) framework and the broader technology acceptance literature (Davis, 1989). The consistent theme of teachers wanting structured, integration-focused training rather than purely technical instruction supports Mishra and Koehler's (2006) argument that effective classroom technology use depends on developing an integrated technological-pedagogical-content knowledge base, not technological familiarity alone. Future research with larger, multi-institution samples, and studies pairing teacher perception data with classroom observation, would help clarify how closely teachers' stated perceptions align with their actual instructional practice.

References

1. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
2. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
3. Ertmer, P. A. (1999). Addressing first- and second-order barriers to change: Strategies for technology integration. *Educational Technology Research and Development*, 47(4), 47–61.
4. Ertmer, P. A., Ottenbreit-Leftwich, A. T., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teacher beliefs and technology integration practices: A critical relationship. *Computers & Education*, 59(2), 423–435.
5. Godwin-Jones, R. (2011). Emerging technologies: Mobile apps for language learning. *Language Learning & Technology*, 15(2), 2–11.
6. 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>

7. Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054.
8. Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of the platform. *Language Learning & Technology*, 14(2), 95–110.