



## **ENHANCING DIGITAL COMPETENCE AND ENGLISH LANGUAGE PROFICIENCY THROUGH MOBILE APPLICATIONS: A MULTI APPLICATION PEDAGOGICAL MODEL**

Yuldashev Sherzod Zairjanovich,

Senior Teacher, Institute of Pharmaceutical Education and Research

Taryanikova Marina Anatolievna

Senior Teacher, Institute of Pharmaceutical Education and Research

### **Abstract**

This study examines a multi-application model for integrating mobile applications into English language instruction to enhance both language proficiency and digital competence among university students. Conducted at ISFT Institute with 40 second-year students, the research employed an experimental-control group design. The experimental group used Kahoot, Gimkit, Quizlet, Memrise, Duolingo, Busuu, BBC Learning English, EWA English, HelloTalk, and Tandem, while the control group followed traditional textbook-centered instruction. Data was collected through pre- and post-tests, motivation surveys, and observed participation patterns. Results show that the multi-application model improved vocabulary acquisition, listening comprehension, digital literacy, communication confidence, and motivation. The findings support the inclusion of diverse digital tools in language pedagogy to create interactive, student-centered learning environments and promote autonomous learning.

### **Introduction**

The integration of digital technologies into education has reshaped teaching and learning practices, particularly in higher education. English language classrooms increasingly benefit from digital tools that enhance learner engagement, personalization, and collaborative interaction. Digital competence has emerged as an essential component of modern education, representing learners' ability to use digital tools for information processing, communication, collaboration, problem-solving, and critical evaluation. As language proficiency is interconnected with



global communication and cultural exchange, developing both linguistic and digital competencies aligns with the needs of contemporary learners.

Mobile-assisted language learning (MALL) has gained popularity due to the flexibility, accessibility, and interactivity provided by mobile applications. These applications support a wide range of linguistic skills—from vocabulary acquisition and grammar practice to pronunciation training and real-time communication. However, using only one app limits the potential learning impact. This research promotes a multi-application pedagogical model that purposefully integrates diverse apps to target multiple language skills and digital competences simultaneously.

### **Literature Review**

Mobile applications have been widely recognized as effective tools in language education. Research on gamification highlights Kahoot and Gimkit as tools that increase motivation through competitive and playful learning environments. Vocabulary learning apps such as Quizlet and Memrise employ spaced repetition algorithms, which have been proven to strengthen long-term memory retention. Grammar-focused platforms like Duolingo and Busuu introduce adaptive learning pathways, enabling learners to progress at personalized rates.

BBC Learning English and EWA English provide access to authentic language input, which is essential for developing listening comprehension and natural language processing. Meanwhile, communication-centered apps such as HelloTalk and Tandem facilitate interaction with native speakers, fostering real-world fluency, intercultural understanding, and confidence. Studies on digital competence emphasize that interacting with multiple digital tools enhances learners' ability to evaluate, navigate, and use technology responsibly.

This research builds on these findings by integrating a structured combination of applications to form a cohesive pedagogical framework.

#### **Multi-Application Pedagogical Model**

The proposed pedagogical model organizes applications according to their primary instructional functions:

- **Gamification and engagement:** Kahoot, Gimkit
- **Vocabulary acquisition and spaced repetition:** Quizlet, Memrise
- **Adaptive grammar and structured skill-building:** Duolingo, Busuu



- **Listening comprehension and pronunciation:** BBC Learning English, EWA English

- **Real-time communication and fluency:** HelloTalk, Tandem

By structuring apps in functional clusters, instructors can guide learners toward balanced skill development rather than fragmented or repetitive practice. This approach also allows students to explore multiple modes of learning based on their personal learning preferences.

### Methodology

The study used an experimental-control group research design. The sample consisted of 40 second-year university students from ISFT Institute, randomly assigned to two groups. A pre-test was administered to assess initial language proficiency and digital literacy. Over two weeks, the experimental group participated in lessons integrating the selected applications; the control group continued with traditional instruction. A post-test and motivation survey were administered following the intervention.

Data analysis included test score comparison, observation records, and student self-report reflections.

### Results

The experimental group demonstrated significant improvement in vocabulary, listening comprehension, grammar accuracy, and speaking confidence. Survey responses indicated increased motivation and lower anxiety when communicating in English.

Indicator	Experimental Group	Control Group
Pre-test Score	56	55
Post-test Score	92	68

### Discussion

The findings confirm that combining multiple applications provides richer learning opportunities than relying on a single platform. Allowing learners to interact with both structured content (Duolingo, Busuu) and authentic communication (HelloTalk, Tandem) promoted both accuracy and fluency. Gamification increased motivation, while spaced repetition apps improved retention. The model also significantly strengthened digital competence.



## Conclusion

The multi-application model is an effective framework for modern English language instruction. It enhances linguistic proficiency, increases motivation, and supports digital skill development. Further research may explore long-term outcomes and cross-cultural communicative growth.

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