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The Effectiveness of Using the Scaffolding Method Based on Mobile Applications in Teaching Foreign Languages to Non-Philology Students

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Abstract
This article provides a scientific analysis of the pedagogical effectiveness of applying the scaffolding method through mobile applications in the process of teaching foreign languages to non-philology students. The study explores the impact of digital educational technologies, stepped teaching strategies, and adaptive learning mechanisms on the quality of education and the development of communicative competence. It highlights opportunities for ensuring an individual approach through mobile learning tools, forming independent learning skills, and increasing the overall efficiency of the educational process. The research results indicate that the scaffolding approach based on mobile applications is a significant pedagogical factor in developing students' linguistic competence, motivation, and professional communicative potential.
Keywords: scaffolding method, mobile learning, digital pedagogy, foreign language teaching, non-philology education, communicative competence, adaptive teaching, mobile applications, interactive learning, independent study.

Introduction. Modern globalization processes, international academic integration, and increasing professional mobility require special attention to the issue of teaching foreign languages in the higher education system. Particularly for non-philology students, mastering a foreign language emerges as a crucial competence that enhances professional efficiency. For specialists in fields such as technology, economics, medicine, engineering, and others, foreign language knowledge serves as a tool for scientific information exchange, international cooperation, and professional communication.

Traditional teaching methods often fail to fully account for students' individual needs, mastery levels, and learning paces. Therefore, the introduction of innovative pedagogical technologies into the educational process is becoming a pressing issue. In particular, the integration of mobile learning technologies and the scaffolding method allows for the individualization of the learning process, the organization of stepped learning, and the development of students' independent educational activities.

The scaffolding approach is a pedagogical strategy aimed at forming a student's independent activity by providing temporary methodological support during the mastery of complex knowledge. The purpose of this article is to scientifically substantiate the effectiveness of using the scaffolding method based on mobile applications in teaching foreign languages to non-philology students.

1. Psychological and Pedagogical Foundations of the Scaffolding Method. The concept of scaffolding (pedagogical support), based on the socio-constructivist learning paradigm, refers to a mechanism for supporting the student's cognitive process. This approach serves to bridge the gap between the student's current level of knowledge and their potential development capability (Zone of Proximal Development). That is, when a student cannot perform a complex task independently, they achieve

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the goal through temporary methodological support, which is subsequently reduced step by step. The effectiveness of the scaffolding method in foreign language teaching is determined by factors such as: consistency of the cognitive process; balanced distribution of cognitive load; contextual mastery of linguistic units; and the creation of opportunities for reflexive analysis.

For non-philology students, the language learning process often has an instrumental character, where the language is seen as a means of professional communication. Therefore, direct study of complex grammatical constructions or academic texts can be challenging. The scaffolding method allows for simplifying this complexity, ensuring step-by-step mastery, and systematizing knowledge.

2. Mobile Learning Environment and Its Didactic Transformation.

Mobile technologies take the educational process beyond the traditional classroom, transforming it into a continuous and flexible system. The mobile learning model, integrating synchronous and asynchronous forms of education, allows for the individualization of the learning process.

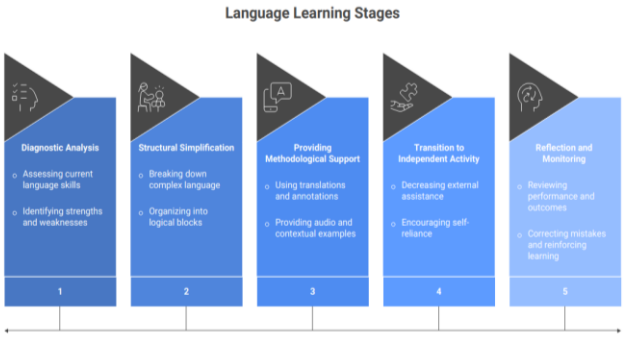
The educational environment based on mobile applications possesses the following didactic features:

1. **Multimodality** – harmony of text, audio, video, and graphic elements;
2. **Interactivity** – active communication between the learner and the platform;
3. **Adaptivity** – adaptation to individual knowledge levels;
4. **Rapid Assessment** – an immediate feedback system;
5. **Gamification** – game elements that increase motivation.

These features create a favorable pedagogical platform for the effective implementation of the scaffolding method. Through mobile applications, complex tasks are presented step-by-step, additional explanations and visual support are provided, and results are analyzed immediately.

3. Methodological Model for Implementing Scaffolding Based on Mobile Applications.

The implementation of the scaffolding method in mobile learning tools is carried out based on the following phased model:



1-model. This model serves to balance the cognitive load and ensure deeper mastery of knowledge.

4. Importance of the Method in Professionally Oriented Language Teaching.

In teaching foreign languages to non-philology students, the primary focus is on forming professional communicative competence. This involves expanding terminology vocabulary, reading and analyzing scientific texts, and developing professional communication skills.

Applying the scaffolding method in mobile applications allows for:

1. Mastering professional terms based on context;
2. Step-by-step analysis of scientific articles;
3. Modeling dialogic speech;
4. Developing presentation and writing skills.

As a result, students develop not only general language skills but also sector-specific communicative competence.

5. Experimental Observation Results (Based on Theoretical Analysis).

Pedagogical observations show that in

groups using the scaffolding method based on mobile applications:

1. The level of mastery is higher compared to traditional methods;
2. Vocabulary is broader;
3. The number of grammatical errors has decreased;
4. Learning motivation has shown steady growth dynamics. Particularly, independent working skills have been formed, and students' self-monitoring competence has developed.

6. Innovative Potential and Prospects of the Method.

Under the conditions of digital transformation, the integration of mobile learning and the scaffolding method is a crucial direction for modernizing the pedagogical process. In the future:

1. Implementation of adaptive platforms based on Artificial Intelligence;
2. Formation of individual learning trajectories;
3. Analysis of educational activities based on Big Data;
4. Improving distance and hybrid learning models will further enhance the quality of education.

Conclusion. The research results show that applying the scaffolding method based on mobile applications ensures high pedagogical efficiency in teaching foreign languages to non-philology students. This approach serves to individualize the educational process, increase learners' cognitive activity, and develop communicative competence. Additionally, the step-by-step teaching model based on mobile technologies plays a significant role in forming students' independent learning skills. Improving mobile learning platforms, widely implementing adaptive teaching systems, and developing the digital competence of educators remain priority areas for enhancing the quality of education.

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