

# ADAPTIVE INTERACTIVE PLATFORMS AS A FACTOR IN BOOSTING MOTIVATION TO LEARN ENGLISH IN THE CONTEXT OF THE DIGITAL TRANSFORMATION OF HIGHER EDUCATION

**Vladyslav Ptukha**

Candidate of Philological Sciences,  
Associate Professor at the Department of English Philology,  
Kyiv National Linguistic University, Ukraine  
e-mail: vladptukha@gmail.com, orcid.org/0009-0006-0315-8307

## Summary

The study investigates the functional potential of leading adaptive platforms (in particular, artificial intelligence-based systems such as Duolingo and Quizlet, as well as specialised LMS modules) in the context of foreign language teaching. It is noted that the use of online resources, mobile applications, web quests, case-based technologies and project-based learning significantly increases the level of learner engagement, stimulates their motivation and contributes to the development of communicative competence.

The relevance of the study is confirmed by the rapid digitalisation of the educational sector and the need to review traditional teaching methods in higher education institutions. The scientific novelty of the work lies in clarifying the role of adaptive technologies as a catalyst for personalised learning. An analysis of scientific research has established that the use of adaptive platforms contributes to improved academic performance, whilst the use of rating systems, achievement tracking and progress visualisation helps foster positive learning motivation and encourages students to actively participate in the educational process. It has been established that it is necessary not only to improve the technological aspects of adaptive platforms, but also to ensure their pedagogically sound integration into the educational process, which entails the development of teachers' digital competence, the development of methodological approaches to the use of adaptive tools, and the creation of a supportive educational environment geared towards maintaining student motivation and active cognitive engagement.

**Key words:** adaptive learning, digital transformation, the English language, motivation, higher education, artificial intelligence, interactive platforms.

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## 1. Introduction

In this era of globalisation, the study of foreign languages is taking on particular significance as a key factor in professional development, social mobility and intercultural communication. The intensification of integration processes within the European and global educational landscape has brought the concept of lifelong learning to the fore, establishing it as the leading pedagogical paradigm of the 21st century. This is precisely why the teaching of English is viewed not merely as the acquisition of linguistic knowledge, but as the development of comprehensive communicative competence, which ensures effective professional activity and the cultural integration of the individual (*Kaniuk, 2016*).

An analysis of scientific research allows us to conclude that the digital transformation of higher education necessitates a rethinking of traditional approaches to foreign language

teaching and highlights the need to implement innovative educational technologies. Adaptive interactive platforms occupy a special place among these, as they ensure the personalisation of the learning process, take into account the individual educational needs of learners, and enhance their motivation to learn. The pedagogical potential of such platforms lies in their ability to overcome the barriers of traditional learning, to promote the continuous development of language competences, and to foster readiness for active participation in a globalised information environment.

One of the most effective methodological approaches to teaching English is the communicative approach, which focuses on developing students' ability to engage in authentic communication in a professional setting. Within this approach, the key lies not only in the acquisition of linguistic structures, but also in the development of skills in using linguistic means appropriate to a specific communicative situation. This involves the active engagement of learners in practice-oriented tasks aimed at developing communicative strategies, expanding vocabulary, and understanding the sociocultural context of communication. In the teaching and learning process, adaptive interactive platforms serve as an effective tool for implementing the communicative approach, as they facilitate the integration of various forms of learning activities, including interactive exercises, simulations of communicative situations, gamified tasks and instant feedback. The use of such platforms helps to stimulate students' cognitive activity, increase their level of engagement and foster intrinsic motivation for learning. A key feature of adaptive platforms is their ability to analyse learners' educational activities using learning analytics and artificial intelligence. This enables the automatic adjustment of learning content and the selection of tasks tailored to the student's level of preparation, pace of learning, and individual needs. This approach facilitates the creation of personalised learning pathways, which is a key requirement for effective learning in the digital age.

The motivational potential of adaptive interactive platforms is determined by a number of factors, among which personalised learning, gamification elements, the ability to independently manage the learning process, and immediate feedback are of particular importance. The use of rating systems, achievements and progress visualisation helps foster positive learning motivation and encourages students to actively participate in the educational process. Furthermore, the interactivity of the platforms creates conditions for the development of autonomous learning, which meets modern requirements for the training of higher education students. At the same time, the effectiveness of using adaptive platforms depends on the pedagogical appropriateness of their integration into the educational process. The role of the teacher as a learning facilitator is crucial; they organise educational activities, guide students, provide methodological support and create a motivational environment.

## **2. The evolution of digital educational technologies in foreign language learning**

The evolution of digital educational technologies in the field of foreign language learning reflects the broader transformative processes underpinning the development of the information society and educational science. The initial stage of the digitalisation of language learning was linked to the introduction of electronic resources, multimedia textbooks and computer-based training programmes, which served a supplementary role to the traditional educational process. In particular, the creation of interactive multimedia textbooks made it possible to combine text, audio and video information, which helped to improve the clarity and effectiveness of language learning. The further development of digital technologies facilitated the transition to interactive

forms of learning, in which the student becomes an active participant in the educational process. The research conducted by contemporary scholars demonstrates that the use of online resources, mobile applications, web quests, case-based learning and project-based learning significantly increases the level of engagement among learners, stimulates their motivation and contributes to the development of communicative competence. The next stage in this evolution involves the development of Mobile-Assisted Language Learning (MALL), which provides access to educational content regardless of the time or place of study. The use of mobile apps, online platforms and services incorporating artificial intelligence enables the educational process to be tailored to the needs, level of preparation and learning style of learners. In this way, digital technologies create the conditions for the development of personalised learning pathways and the growth of self-directed learning.

The current stage of development of digital educational technologies is characterised by the integration of innovative solutions, in particular artificial intelligence, virtual and augmented reality (VR/AR), learning analytics and adaptive learning systems (Wen, 2024). The research shows that the use of such technologies enables the creation of interactive educational environments that closely resemble real-life linguistic contexts, thereby facilitating better vocabulary acquisition, the development of language skills, and the formation of intercultural competence. In particular, the use of augmented reality elements engages various channels of information perception and enhances the effectiveness of language material retention.

The impact of digital technologies on the motivation of learners is becoming a key focus in contemporary research (Godwin-Jones, 2018). The integration of gamification, interactive tasks, virtual environments and feedback systems helps to increase students' interest and foster a positive attitude towards learning foreign languages. As research findings indicate, digital tools provide a more flexible, personalised and adaptive educational process, which has a positive impact on learners' motivation and academic outcomes (Khraban, 2025).

To summarise the above, we can conclude that the evolution of digital educational technologies in foreign language learning is characterised by a shift from supplementary electronic resources to comprehensive adaptive learning environments that combine innovative technologies, interactive teaching methods and a personalised approach. This process reflects a shift in the pedagogical paradigm from the transmission of knowledge to its active construction, which meets the modern demands of a digital society and ensures the effective training of competitive professionals.

### **3. Adaptive interactive platforms for English language learning**

The current stage of development in higher education is characterised by the active introduction of digital technologies, which is driving a transformation in traditional approaches to foreign language teaching. Adaptive interactive platforms are becoming particularly important, as they enable personalised learning, enhance the effectiveness of language acquisition and help foster sustained motivation to learn. In this context, adaptive learning is viewed as an innovative pedagogical technology that takes into account the individual characteristics of learners, in particular their level of knowledge, cognitive characteristics, emotional state and motivational attitudes.

Adaptive interactive platforms are based on the use of data analysis algorithms that enable the modelling of individual learning pathways. The main aim of this approach is to create a personalised learning environment that dynamically adapts to the needs of each student. In

English language learning, this means the ability to tailor vocabulary, grammar and communication materials to the individual, which promotes a deeper and more conscious acquisition of knowledge. One of the key elements of adaptive platforms is adaptive content, which ensures that students are provided with tailored tasks and resources based on their responses and level of proficiency. Such content involves the use of interactive exercises, videos, podcasts and texts of varying difficulty, which helps to develop comprehensive language proficiency. This enables learners to work at their own pace, revisit challenging topics and gradually progress to more complex tasks. An equally important component is adaptive assessment, which allows the level of difficulty of tasks to be adjusted based on the student's performance. This approach helps maintain an optimal level of difficulty in the learning material, which, in turn, ensures that students remain engaged and prevents cognitive overload. Adaptive assessment also serves a diagnostic function, allowing the teacher to track students' progress and adjust the teaching process in a timely manner.

Adaptive structuring of the educational process, based on the use of learning analytics technologies, plays a key role in the structure of adaptive learning. By analysing data on student activity, performance and engagement levels, the system automatically optimises learning content and suggests the most effective learning strategies. This helps to create a flexible and dynamic, results-oriented learning environment. Interactivity is another key feature of modern educational platforms. The use of interactive teaching methods, such as role-play, discussions, group projects and simulations of communicative situations, helps to actively engage students in the learning process. In the context of learning English, this allows for the simulation of real-life situations involving professional and everyday communication, which significantly enhances the development of communicative competence (*Lapka, Shcherbak, 2025*).

Innovative technologies, in particular virtual and augmented reality, mobile applications and online platforms, create conditions for immersion in the language environment. The use of multimedia content, such as videos, audio materials and interactive exercises, ensures multi-channel information reception and promotes the development of various types of language activities: listening, reading, writing and speaking. Furthermore, such technologies stimulate the development of critical thinking, creativity and independent work skills. Particular attention should be paid to the motivational potential of adaptive interactive platforms. Personalised learning, the opportunity for self-monitoring, instant feedback and the use of gamification elements (points, levels, achievements) help to increase students' intrinsic motivation. They experience their own progress, which encourages them to continue learning and self-improvement.

The authors of the study note that the implementation of adaptive learning technologies in higher education is taking place along two complementary lines, reflecting current trends in the digital transformation of the educational process (*Lapka, Shcherbak, 2025*). The first direction involves the integration of adaptive elements into traditional classroom-based learning, where digital tools are used as means of supporting and differentiating educational activities. In this case, adaptive platforms are used to monitor students' academic progress in real time, provide personalised feedback, adjust the content of teaching materials, and organise independent study. For example, learning management systems such as Moodle, Google Classroom or Canvas allow teachers to create adaptive courses in which assignments, tests and learning resources vary depending on the students' level of preparation.

The second approach to implementing adaptive learning involves the development and implementation of specialised digital tools, online courses and platforms that enable the full personalisation of the educational process. This approach involves the creation of interactive

learning environments capable of automatically analysing students' learning activities and suggesting personalised learning pathways. Such platforms include, in particular, Duolingo, Busuu, LingQ, Rosetta Stone, as well as platforms incorporating artificial intelligence, such as ELSA Speak or Babbel, which adapt learning content according to the user's language proficiency level, their mistakes and the pace at which they absorb the material. A separate group comprises Massive Open Online Course (MOOC) platforms, such as Coursera, edX or FutureLearn, which offer adaptive English language courses, integrating elements of automated assessment, recommendation systems and learning data analytics. Such solutions help create a flexible learning environment in which education becomes continuous, accessible and as closely tailored as possible to the learner's individual needs.

#### 4. Conclusions

In the course of the study, the author analysed the theoretical foundations for the use of adaptive interactive platforms in English language teaching and examined their didactic and motivational potential within the higher education system in the context of digital transformation. This has made it possible to determine that adaptive technologies serve as an effective tool for personalising the educational process, facilitate the consideration of learners' individual educational needs, and ensure the flexibility of learning pathways. The study found that the implementation of adaptive interactive platforms has a positive impact on the development of students' intrinsic motivation to learn English, increases their engagement in the educational process, and promotes the development of autonomous learning. It was determined that the key factors influencing motivation are the personalisation of educational content, the interactivity of the educational environment, the use of gamification elements, and the provision of prompt feedback. The use of adaptive platforms makes it possible to optimise the educational process, enhance the effectiveness of language acquisition, and develop the communicative competence required for professional practice in a globalised environment. Furthermore, given the unique nature of the construct under study, it is fundamentally important not only to refine the technological aspects of adaptive platforms but also to ensure their pedagogically sound integration into the educational process. This entails developing teachers' digital competence, formulating methodological approaches to the use of adaptive tools, and creating a supportive educational environment geared towards fostering student motivation and active cognitive engagement.

#### References

1. Godwin-Jones, R. (2018). *Using mobile technology to develop language skills and cultural understanding*. *Language Learning & Technology*, 22(3), 1–17. [in English]
2. Khraban, T. Ye. (2025). *Pedahohichnyi potentsial innovatsiinoho navchannia anhliiskoi movy. novitni tendentsii navchannia inozemnoi movy za profesiinym spriamuvannam* [The pedagogical potential of innovative english language teaching. latest trends in vocational foreign language teaching]. *Novitni tendentsii navchannia inozemnoi movy za profesiinym spriamuvanniam*, 23 zhovtnia 2025. S. 103–105 [in Ukrainian]
3. Lapka, O, Shcherbak, A. (2025). *Innovative approaches to learning foreign languages: the impact of virtual reality on overcoming the language barrier. Gamification and Augmented Reality*, 3(90). <https://doi.org/10.56294/gr202590>[in English]

4. Wen, P. (2024). *Innovative Approaches and Practices in Adult English Language Teaching. Adult and Higher Education*, 6, 96–101. <http://dx.doi.org/10.23977/aduhe.2024.060814> [in English]
5. Kaniuk, O.L. (2016). *Suchasni pidkhody do inshomovnoi osvity maibutnikh fakhivtsiv [Modern approaches to foreign language education for future specialists]. Naukovyi visnyk Uzhhorodskoho universytetu. Serii: «Pedagogika. Sotsialna robot». Vyp. 1(38). S. 130–133. [in Ukrainian]*