SOME ASPECTS OF AUTOMATED LEARNING SYSTEMS APPLICATION IN FOREIGN LANGUAGE TRAINING

Shumskyi O. L.
Doctor of Pedagogical Sciences, Professor,
Professor at the Department of Foreign Languages and Cross-Cultural Communication of Simon Kuznets Kharkiv National University of Economics,
Kharkiv, Ukraine
Harmash A. M.
First year student of the Educational and Scientific Institute of Economics and Law of Simon Kuznets Kharkiv National University of Economics
Kharkiv, Ukraine

Rapid technological advancements and changing educational needs in response to modern challenges are driving growing interest in the use and adaptation of automated learning systems (ALS), which involve implementing of digital technologies and pedagogical methods aimed at optimizing and individualizing the educational process. ALS is usually divided in two types.

1. User-controlled systems, such as an electronic library or electronic textbooks, which may have a sequential or hypertext structure.

2. Self-guided systems that manage the learning process by providing material in text, graphic, audio, and video formats. At the end of each section, users are offered assessment tasks. Unlike systems with the first type, the learner's actions influence the subsequent course of study. The degree of process control depends on the system's adaptation to the individual student, allowing for personalization of learning and improving its effectiveness.

According to the level of autonomy, systems can be fully autonomous, which operate without the teacher's participation, and partially autonomous ones that require the teacher's involvement in terms of monitoring and adjusting the educational process.

The current state of ALS is characterized by the integration of advanced technologies, particularly artificial intelligence (AI), adaptive (personalized) learning, interactivity, and big data analysis. Learning becomes more effective and motivating because modern ALS take into account the individual features of students, their interests, and needs. Intelligent Tutoring Systems (ITS) adapt content to individual

learning styles, increasing the effectiveness of interaction with users. AI is the tool for adaptation in such systems, helping to create personalized educational content tailored to each student's personality and information processing characteristics [1, p. 48].

Self-Adaptive Software Systems dynamically create adaptations based on real-time context alterations, increasing system's responsiveness [2, p. 3]. Online controller adaptation technology integrates meta-learning to adapt control parameters using robotics, allowing for rapid adjustments for optimal ALS performance under changing conditions.

ALS are currently widely used in foreign language teaching. ALS' adaptation for this purpose aims to improve students' listening, speaking, reading, and writing skills, as well as develop intercultural competence. The use of AI and specialized analytical algorithms – an important part of modern ALS – allows self-paced language learning platforms, such as Duolingo, to track students' strengths and weaknesses, so that, if they miss or misunderstand something, the system can return them to problematic areas. Duolingo also analyzes students' language proficiency, allowing them to receive appropriately challenging assignments as well as gradually and effectively develop these skills.

Voice assistants and chat agents – technologies that process natural language to engage in conversations with users and provide feedback – are becoming important tools for studying foreign languages. The use of chat agents has been shown to positively impact the development of students' speaking skills, increase their engagement in learning, and provide support to students who lack regular interlocutors in a foreign language [3, p. 1611]. However, chat agents have some drawbacks, namely they cannot always provide support to the teacher in the context of developing grammar skills, as they can sometimes give senseless answers.

Modern ALS are rapidly developing and increasingly better meet such requirements as interactivity to enhance students' motivation; adaptability, which fully reflects the current trend toward individualization of education; and the ability to assess and provide feedback.

The integration of these technologies into foreign language instruction maximizes learning opportunities, taking into account the interests, needs, and characteristics of students; contextualizes the process of mastering a foreign language; and promotes more successful and rapid acquisition of foreign language knowledge and gaining relevant language skills.

References:

1. Peronaglio F. F. et al. Adaptação automática de conteúdo aplicada em ambiente interativo de aprendizagem individualizada. *Revista Brasileira de Informática na Educação*. 2023. Vol. 31. 104 p.

2. Cardozo N., Dusparic I. Auto-COP: Adaptation generation in context oriented programming using reinforcement learning options. *Information and Software Technology*. 2023. Vol. 164. P. 1-12.

3. Cislowska A. I., Pena-Acuna B. Integration of chatbots in additional language education: A systematic review. *European Journal of Educational Research*. 2024. Vol. 13. №. 4. P. 1607-1625.

ASYNCHRONOUS LEARNING AS THE NEW DEFAULT IN US EDUCATION SYSTEM

Rodrigues R.
PhD, Associate Professor
Texas A&M University-Commerce
Texas, US
Opryshko N.
PhD in Philology
Department of Language Training
Kharkiv National Automobile and Highway University

By 2026, the American education system has moved beyond the «emergency remote teaching» of the early 2020s. What was once a secondary alternative to in-person instruction has become a foundational pillar of both K-12 and higher education. This shift is characterized by asynchronicity: a model where students engage with materials, participate in discussions, and complete assessments on their own schedules rather than at a fixed time.

This transformative shift toward asynchronous online learning within the American educational landscape has become significant since the post-pandemic recovery period (2024-2026). Recent data highlights a decisive preference for this modality. In higher education, institutional surveys show that over 54% of online students now prefer asynchronous courses over synchronous ones [see: 2]. At major public universities, enrollment in asynchronous sections often outpaces «live» digital