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THE ROLE OF ARTIFICIAL INTELLIGENCE IN ORGANIZING STUDENTS' INDEPENDENT WORK

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РОЛЬ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В ОРГАНИЗАЦИИ САМОСТОЯТЕЛЬНОЙ РАБОТЫ СТУДЕНТОВ

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Abstract. Artificial intelligence (AI) plays an increasingly important role in the transformation of educational processes. This article investigates the impact of AI technologies on the organization of students' independent work. Key benefits of AI applications, such as individualizing learning trajectories, providing quality feedback, and increasing the availability of educational resources, are discussed. The existing limitations are analyzed, including the risks of data loss and the need to train the participants of the process to work with new technologies. On the basis of the analysis, the prospects for further implementation of AI in the educational environment are identified. The work can be useful for researchers, teachers and developers of educational technologies.

Аннотация. Искусственный интеллект (ИИ) играет все более важную роль в трансформации образовательных процессов. В данной статье исследуется влияние технологий ИИ на организацию самостоятельной работы студентов. Рассмотрены ключевые преимущества применения ИИ, такие как индивидуализация учебных траекторий, обеспечение качественной обратной связи и повышение доступности образовательных ресурсов. Анализируются существующие ограничения, включая риски утраты данных и необходимость обучения участников процесса работе с новыми технологиями. На основе проведенного анализа определены перспективы дальнейшего внедрения ИИ в образовательную среду. Работа может быть полезна исследователям, преподавателям и разработчикам образовательных технологий.

Keywords: artificial intelligence, independent work, education, technology, personalization, educational analytics, feedback, adaptive learning.

Ключевые слова: искусственный интеллект, самостоятельная работа, образование, технологии, персонализация, образовательная аналитика, обратная связь, адаптивное обучение.

Modern education is at the center of global changes caused by the development of digital technologies. One of the key technologies transforming the learning process is artificial intelligence (AI). It has a significant impact on all aspects of the educational environment, including students' independent work, which plays a crucial role in building self-learning skills, critical thinking and responsibility.

Traditional approaches to organizing independent work often face a number of limitations: lack of individualized approach, insufficient feedback, and difficulty in monitoring progress. Artificial intelligence, with its ability to adapt and analyze data, opens new perspectives in addressing these challenges.

Independent work plays a key role in building student skills such as self-organization, critical thinking, time management, and responsibility for learning outcomes. It promotes deep learning, broadens the mind, and develops research abilities. However, students often face challenges including:

- Lack of quality feedback.
- Problems with goal setting and prioritization.
- Difficulties in accessing relevant and useful learning materials.

These problems can be solved by modern technology, including artificial intelligence, which offers new approaches to organizing the learning process.

Benefits and limitations of using AI

- Benefits:

Saving teachers' time on routine tasks.

Ensuring accessibility of educational resources.

Continuous availability of AI tools.

- Limitations:

Limitations of algorithms in understanding context and nuance.

Possible technical glitches.

Risks of loss of personal data.

Need to train students and faculty on how to use AI.

Prospects for implementing AI in independent work

- Development of cognitive AI technologies capable of deeper understanding of context.
- Improved personalization of learning trajectories.
- Increased interaction between students and virtual assistants.
- Integration of AI into hybrid learning (a combination of online and offline formats).

Artificial intelligence is becoming not only a tool, but also an important partner in the educational process, enabling students to achieve their goals more effectively and prepare for the challenges of the modern world.

Artificial Intelligence (AI) opens a wide range of opportunities for effective development of English-speaking skills.

Extracurricular work in foreign language has a great educational and developmental value. Extracurricular work not only deepens the knowledge of a foreign language, but also stimulates the study of language and culture of another country, contributing to the expansion of students' cultural views, development of their creative activity, aesthetic tastes. Constant improvement of the system and practice of education is conditioned by social changes taking place in the society. The issue of improving the quality of education and the level of education of the individual remains a priority in the modern methodology of teaching a foreign language [3].

Modern AI technologies such as speech recognition systems, adaptive platforms and virtual assistants allow learners to improve pronunciation, vocabulary and conversational skills at a personalized pace. The following are the key benefits of using AI in this area.

1. Personalized approach to learning

AI algorithms analyze language proficiency levels and tailor materials and tasks to the specific needs of the learner.

The ELSA Speak app uses AI to analyze the user's accent and suggest personalized exercises to correct pronunciation errors.

Benefits:

- Quick identification of weaknesses such as incorrect accent or intonation.
 - Flexible learning that allows students to practice at their convenience.
2. Improved pronunciation through speech recognition and analysis

AI is able to analyze pronunciation and provide feedback on speech accuracy, including correctness of sounds, intonation, and rhythm.

Platforms such as Speechace and Pronunciation Coach use machine learning to assess pronunciation quality based on comparisons with native speakers.

Benefits:

- Pronunciation training in a safe environment without fear of being judged.
 - Automated analysis with detailed feedback.
3. Developing spontaneous speech skills with virtual interlocutors

Chatbots and virtual assistants such as ChatGPT or Google Assistant create opportunities to practice speaking in a dialog format. The Mondly app offers virtual interlocutors that respond to the user's spoken phrases in real time.

Benefits:

- Simulate real-life conversational situations, such as ordering at a restaurant or booking a hotel.

- Increased confidence in using the language in practice.

4. Variety of interactive exercises

AI platforms offer a wide range of interactive exercises such as games, dialogs and phrase building tasks that make learning more fun.

- Example: Duolingo uses game mechanics and voice exercises to practice pronunciation and sentence building.

Benefits:

- Increased motivation through gamification.
- Ease of integrating learning into everyday life.

5. Accessibility and convenience

AI technology allows students to learn anytime and anywhere using only a smartphone or computer.

The HelloTalk app connects students with native speakers and AI helps correct their mistakes in real time.

Benefits:

- Ability to learn without having to attend language schools.
- Reduced cost of learning compared to traditional methods.

6. Progress monitoring and analytics

AI systems automatically track learner progress, provide data on skill development, and offer recommendations for further learning. The FluentU app uses learner error data to personalize subsequent exercises.

Benefits:

- Ability to track improvement trends.
- Quickly adjust the learning plan to achieve better results.

7. Developing cultural competence

AI applications help not only to master the language, but also to learn the peculiarities of cultural communication. Some of them include tips on how to use phrases appropriately in different situations.

Rosetta Stone integrates elements of cultural context into language exercises.

Benefits:

- Preparation for real-life communication with native speakers.
- Reduces language barriers in international communications.

The organization of extracurricular work in a foreign language is the starting point that determines the requirements for its content, methods and forms of organization. They demonstrate the essence of the pedagogical activity of a teacher who organizes extracurricular activities that meet the goals and objectives of extracurricular work in a foreign language at school. This guiding principle of organizing extracurricular activities obliges teachers to timely identify students' interest in extracurricular activities and language, arouse interest in the subject, involving them in extracurricular activities. This principle determines the content of extracurricular activities and determines the need for constant support, deepening and development of interest in learning a foreign language [6].

AI greatly simplifies the process of learning to speak English by making it accessible, interactive and personalized. The benefits of AI technologies include improving pronunciation, developing confidence in speaking, and tailoring the learning process to the needs of each learner. However, it is important to combine AI tools with traditional learning methods such as interacting with teachers and participating in language clubs to maximize the impact. The introduction of AI technologies into the educational process shows great potential for improving the quality of students' independent work. Adaptive platforms, analytics tools and virtual assistants enable personalized learning, increase motivation and provide access to quality educational resources. However, there are a number of challenges associated with the use of AI, including technical limitations, risks of data loss and the need to train all participants in the educational process to use the new technologies. However, it is clear that the further development of AI and its integration into the educational environment will lead to the creation of more effective and flexible learning models. Such models will take into account the individual characteristics of students, contribute to the development of their autonomy and unlock their potential. It is recommended to further explore the application of AI in learning, including: 1. Developing innovative tools for independent work. 2. Evaluating the long-term impact of AI on educational outcomes. 3. Forming ethical and legal standards for the use of AI in education.

Artificial intelligence is becoming not only a tool, but also an important partner in the educational process, allowing students to achieve their goals more effectively and prepare for the challenges of the modern world.

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