THE EFFECTIVENESS OF ARTIFICIAL INTELLIGENCE IN ADVANCING LINGUISTIC SKILLS IN HIGHER EDUCATION

Д. Абжелиева¹

Abstract:

The analysis of foreign and Russian publications on the emergence and use of artificial intelligence (AI) has shown how modern technological advances are being introduced into the educational process of higher educational institutions, including the foreign languages teaching. This paper defines artificial intelligence as an educational technology, studies this process in order to predict the future nature of the higher education system in the world, where AI is becoming a part of the structure and not only of education, but our entire society. Some of the advantages and disadvantages that can be encountered both by higher educational institutions and students in the study of foreign languages are identified and analyzed. The specific areas of work with AI, which can increase the efficiency of foreign languages teaching, are described.

Key words: higher education, foreign languages, artificial intelligence, chatbots, teaching, technical progress.

doi: https://doi.org/10.2024/f3691941

Today, AI's influence on education is regarded as a transformative technological revolution. However, it raises concerns about replacing humancentric pedagogical solutions with elementary computer algorithms. Understanding these dynamics is crucial as AI continues to impact higher education globally. Based on this, as a research task, we define the identification of such conditions for the use of AI in the educational process of universities, in which its real potential will be aimed at expanding human capabilities, as well as improving the effectiveness of teaching, learning and research. Another task is to predict the possible negative consequences of the introduction of AI into the educational process, which may affect the quality of pedagogical communication and interaction with students.

To achieve these goals, we conducted a study and analysis of a number of modern foreign and domestic studies on the use of AI in education. As we expected, the authors, including not only university professors, but also well-known computer science experts, recognizing the enormous possibilities of AI to facilitate routine work in any sphere of life, do not cease to warn about the possible negative

¹ Абжелиева Диана Ансеновна, Преподаватель кафедры лингвистики и межкультурной коммуникации, Государственное бюджетное образовательное учреждение «Крымский инженерно-педагогический университет имени Февзи Якубова»

consequences of the penetration of this technology into the learning process of the younger generation.

The role of digital technologies in higher education is to develop human thinking and expand the possibilities of the educational process, and not to reduce it to a set of procedures for transmitting information, monitoring and evaluating its assimilation. With the advent of AI, it is becoming increasingly important for educational institutions to remain vigilant and monitor whether power is monopolized by hidden algorithms in computer programs by those technical structures that created them.

Professor F. Pascal, in his famous book The Black Box Society, notes that decisions that used to be based on human reflection are now made automatically, software encodes thousands of rules and instructions calculated in fractions of a second. The researcher shows that today there is not only a quasi-concentrated and powerful monopoly on these solutions, but also a deliberate concealment of the transparency of algorithms, as well as for what purposes they are used. This is veiled as a normal state of facts, a natural device of the Internet era, but such a situation can lead to a very dangerous concentration of undeniable power, because in an information society, power is determined by the possession of information. Whoever controls algorithms controls AI solutions, gaining unprecedented influence on people and every sector of modern society [3, p. 81].

If we touch on the problem of using AI in the production sector, i.e. where university students usually undergo industrial practice, then as an example we can refer to the experience of the largest enterprises with all the resources to implement AI. Tech giants such as Apple, Google, Microsoft and Facebook are currently competing in the field of artificial intelligence and investing heavily in new applications and research. The internal architecture of megacorporations does not correspond to the democratic model, it is a model of "benevolent dictators" who know what is best and make decisions without consulting their internal or external actors. Monopoly and strict control of information sources, suppression of criticism and the actual concealment of facts that are not consistent with the interests of the technocratic leadership are in direct opposition to the ideas of free personalityoriented education. One of the main functions of universities is precisely to develop extraordinary thinking, creative initiative, and the ability to criticize even established doctrines, the only way great scientists and inventors can appear within the walls of universities. Higher education withers away when freedom of thought and research is suppressed in any form, as manipulations and limitations in the process of cognition distort a person's worldview and creative impulse. According to a group of Mexican researchers, if we achieve to the point where the content of universities' activities will be determined by a handful of technocrats and they will gain control over research and the ethos of universities, higher education will turn towards a bygone era. This set of risks is too important to overlook and not explore, bravely meeting the challenges of modern technology [4].

At the same time, artificial intelligence is already able to replace a large number of administrative staff and auxiliary teaching staff in higher educational institutions [5]. Therefore, it is important to study the impact of these factors on the learning process, especially in the context of the growing demand for initiative, creativity and the "entrepreneurial spirit" of graduates. AI is infiltrating universities along with so-called assistive technologies, i.e. computer programs that allow you to convert text to speech and speech to text, scale, predict text, spell check and run search engines. The listed examples are just some of the technologies that were originally created with the goal of helping people with disabilities or freeing employees from routine activities [6]. Then the use of these technological solutions was expanded, and now we attribute them to common characteristics in all personal computers and mobile devices. These technologies are currently creating conditions for educational interaction between students all over the world, expanding the opportunities for learning and designing educational experiences [7, p. 77]. In addition, artificial intelligence is currently improving the tools used day by day: from Internet search engines, smartphone functions and applications to public transport and household appliances [8].

So, the analysis of domestic and foreign scientific literature has shown that the following can be attributed to the most serious disadvantages of using AI in the educational process of a university:

- AI does not possess purely human qualities - morality, the ability to sympathize, empathize, provide friendly support, etc.;

- lack of intuitively correct reactions to different life situations;

- there is a potential opportunity to use AI to collect personal information that can be used against a person's will, etc.

Despite the presence of a number of disadvantages, AI should be perceived in the learning system as an innovative technology. However, as with the use of any technical innovations, it should be remembered that the purpose of "smart machines" is to help people, and not to nullify human, pedagogical communication, to destroy such a carefully constructed environment of personal maturation and upbringing, which is created at universities. As noted by a well-known researcher in the field of pedagogy A. Schleicher, innovation in education is not just a matter of introducing new technologies into the learning process, it is about changing approaches to learning so that students acquire the competencies and skills they need to develop in a competitive global economy [9, pp. 23-25].

In this regard, scientific interest in artificial intelligence as a potentially effective direction for the development of digital technologies in education is constantly increasing. However, until now, scientific research has not clearly defined this phenomenon in terms of its use in the educational process of higher education. It is customary to describe it through the enumeration of currently available technical solutions, technologies, learning tools [10], as well as its functions for modeling human intelligence and the type of tasks to be solved [11].

References:

[1]. Childs M. John McCarthy: Computer Scientist Known as the Father of AI [Electronic resource] // The Independent. URL: https://www.independent.co.uk/news/obituaries/john-mccarthy-computer-scientistknown-as-the-father-of-ai-6255307.html (accessed: 10/15/2020).

[2]. Russell S.J., Norvig P. Artificial Intelligence: a Modern Approach. Upper Saddle River, 2010. 1152 p. [3]. Pasquale F. The Black Box Society. The Secret Algorithms That Control Money and Information. Cambridge, 2015. 320 p.

[4]. González V.M., Robbes R., Góngora G., Medina S. Measuring Concentration While Programming with Low-Cost BCI Devices: Differences between Debugging and Creativity Tasks // Foundations of Augmented Cognition: 9th International Conference, AC 2015 / ed. by D.D. Schmorrow, C.M. Fidopiastis. P. 605-615. https://doi.org/10.1007/978-3-319-20816-9_58.

[5]. Maderer J. Artificial Intelligence Course Creates AI Teaching Assistant [Electronic resource] // Georgia Tech News Center. URL: http://www.news.gatech.edu/2016/05/09/artificial-intelligence-course-creates-aiteaching-assistant (date of reference: 10/18/2020).

[6]. Isaeva T.E. Evaluative competence of a university teacher: content and meaning // Higher education in Russia. 2014. No. 10. pp. 106-112.

[7]. Isaeva T.E. Modern University: changing priorities // Philosophy of education. 2005. No. 1 (12). pp. 76-79.

[8]. Shefieva E.S. The use of Internet services in distance learning, including foreign languages, in the context of the coronavirus pandemic // Higher school teacher in the XXI century: materials of the 17th International Scientific and Practical Conference. Rostov n/A, 2020. C. 398-402.

[9]. Schleicher A. Schools for 21st-Century Learners: Strong Leaders, Confident Teachers, Innovative Approaches. OECD Publishing, 2015. 80 p. http://dx.doi.org/10.1787/9789264231191-en.

[10]. Esionova E.Yu. Artificial intelligence as an alternative resource for learning a foreign language // Humanities and social sciences. 2019. No. 3. pp. 155-166.