

The use of generative artificial intelligence for teaching English to future physical culture specialists

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Abstract

Objective of the study is to develop didactic content for English language classes using artificial intelligence technologies that increase the engagement of future physical education specialists in the learning process.

Methods and structure of the study. The materials used included lesson plans created with the help of neural networks based on generative artificial intelligence, such as Perplexity, DeepSeek, and the specialised web application Character.ai, which helps develop oral and written foreign language communication skills. The study was conducted at the Institute of Physical Culture, Sports and Life Safety of the I.A. Bunin Yelets State University in the 2023-2025 academic years in English classes for 1st and 2nd year bachelor's degree students in the following areas of study: 49.03.01 Physical Education, 49.03.02 Physical Education for People with Health Disabilities (Adaptive Physical Education). A total of 62 students participated in the experiment.

Results and conclusions. Several lesson plans have been developed using neural networks on the following topics: 'My hobby,' 'My future profession,' and 'Sport in my life.' A specialised chatbot has been developed in the Character.ai application to improve the foreign language communication skills of physical education students.

Keywords: artificial intelligence, neural networks, foreign language, skills development, chatbot, physical education and sports students.

Introduction. Over the past few years, there has been explosive growth in artificial intelligence (AI) technologies around the world. Russia has also shown considerable interest in studying the phenomenon of artificial intelligence in general and in the education system in particular. This issue is of great importance to the state, as reflected in many regulatory and policy documents. In particular, the country's leadership has repeatedly noted the need to develop the professional competencies of university graduates, which must meet the needs of technological breakthroughs and the challenges of the digital economy. However, the required level of professionalism of a modern graduate is impossible without well-developed foreign language skills. Generative artificial intelligence technologies have great potential in solving this problem, as they help to make foreign language lessons more attractive.

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Results of the study and discussion. Many Russian scientists (Shobonov N.A., Bulaeva M.N., Zinovieva S.A.) [3] and foreign researchers (Arosio L.) [4] are working on improving the educational process based on artificial intelligence. The application of artificial intelligence-based educational technologies in English language teaching has been studied by Sysoeva P.V., Evstigneeva M.N., Polyakova O.G. [1], Tverdohlebova I.P. [2] and other specialists. Thus, artificial intelligence today is becoming not just a new technology, but a full-fledged participant in the educational space. At the same time, there is a lack of research in the field of applying AI technologies to develop foreign language communication skills in students of physical education and sports, which is an important condition for preparing the younger generation for interpersonal and intercultural communication in a changing world. It should be noted that the integration of student interaction with artificial intelligence technologies should take place outside of class time.

In our study, both in practical foreign language classes with bachelor's students in physical education and as part of independent work to practise oral and written communication skills, we used the specialised web application Character.ai, which allows users to work with various chatbots. When you're not in an authentic language environment and can't chat with native speakers, working with a chatbot can be a great way to get some extra language practice.

For our work, we created a bot with the following characteristics: a) Character name: British Sport Bot.

b) Tagline: Native Londoner. c) Description: A good citizen, a reliable friend, and a responsible family man.

d) Greeting: Hello sir, how can I help you? e) Voice: «British» @ErisCreed. f) Definition: This is a 52-year-old man. He has lived in London all his life and knows British sport like the back of his hand. He can tell you every major football result since the 1970s, explain the offside rule to a five-year-old. His name is Reggie. He is friendly, opinionated, and full of banter, with a sharp wit and a love for winding up rival fans. He speaks with a proper London accent, drops old-school football phrases. He'll always help out if someone's confused about the rules of cricket or needs a history lesson on British boxing. If you ever need a guide to British sport, or just a proper chat, Reggie's your man. g) Visibility: Public

This bot can be used both in written form and orally, communicating by voice.

In addition, to increase student engagement in the learning process, a series of lessons was developed using the Perplexity neural network. The topics of the

lessons touched on the immediate interests of student athletes. As a result, lessons were developed on the following topics: Sports in my life. The following prompt was used to develop the lesson: How to write an English lesson plan on the topic 'Sports' for a group of A2-B1 level students. Next, according to the plan proposed by Perplexity, we developed the exercises we needed using this neural network as well; Football. Prompt used: Plan a 60-min lesson about football in Britain for a group of A2-B1 students. My Future Profession. Prompt: Plan a 60-minute lesson on the topic 'My future profession' for a group of A2-B1 students who major in sports.

Using the neural network allowed us to take into account the age of the student, their interests and goals. We also specified in detail what types of tasks we wanted to receive.

Conclusions. The use of artificial intelligence technologies to develop English language lessons allows for the personalisation and individualisation of the material used to more effectively develop the foreign language communication skills of physical education bachelor's students. Tasks and exercises generated by neural networks reflect the specific nature of teaching at physical education departments and prepare students for more productive interpersonal and intercultural communication.

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References

1. Sysoev P.V., Polyakov O.G., Evstigneev M.N. et al. Obuchenie inostrannomu yazyku na osnove tekhnologiy iskusstvennogo intellekta: kollektivnaya monografiya. M-vo nauki i vyssh. obr. RF, FGBOU VO «Tamb. gos. un-t im. G.R. Derzhavina». Tambov: Izdatelskiy dom «Derzhavinskiy», 2023. 132 p.
2. Sysoev P.V., Tverdohlebova I.P. Aktualnye voprosy integratsii generativnogo iskusstvennogo intellekta v obuchenie inostrannym yazykam. In: Inostrannye yazyki v shkole. 2025. No. 2. Pp. 2-3.
3. Shobonov N.A., Bulaeva M.N., Zinovieva S.A. Iskusstvennyy intellekt v obrazovanii. Problemy sovremennogo pedagogicheskogo obrazovaniya. 2023. No. 79-4. Pp. 288-290
4. Arosio L. Generative AI as a Teaching Tool for Social Research Methodology: Addressing Challenges in Higher Education. Societies. 2025. No. 15(6). Pp. 157.