

## **CHATBOTS FOR COMMUNICATION IN EDUCATION**

The current stage of digitalization in education requires implementing the tools that provide instant access to information and personalized learning.

Chatbots — programs based on artificial intelligence or predefined algorithms — are becoming an effective mediator between educational institutions, teachers, and students, transforming traditional communication models. [3, p. 46]

The main advantage of such systems is their 24-hour operation, which helps address critical communication problems. Thanks to automated responses, bots instantly provide information about class schedules, classroom locations, task deadlines, and curriculum content. This considerably reduces the workload of administrative staff, as the algorithm processes routine inquiries from prospective and current students, enabling staff to dedicate more time to addressing complex tasks.

Communication using a chatbot serves not only an informational, but also a direct educational purpose, acting as an effective tool for supporting learning. Within the microlearning framework, a bot can deliver small portions of learning material, short tests, or reminders of key terms, which help improve knowledge retention. Another important component is immediate feedback when students take quick tests through popular messengers. This allows the teacher to assess students' understanding of the topic in real time and adjust the learning process accordingly. [2, p. 12]

The issues of personalization and inclusivity are also addressed by the implementation of chatbots that adapt the interaction to the specific needs of the user. Students can work at their own pace, solving complex questions without the psychological pressure typical of public classes. [1, p. 20] For people who have difficulty with social interaction, text communication provides a safe and less stressful environment to receive the necessary help.

Despite their significant potential, the integration of chatbots is associated with certain difficulties, the most important of which are the technological barriers related to the development of high-quality artificial intelligence algorithms. In addition, the lack of emotional intelligence prevents the bot from completely replacing the mentoring and psychological support provided by the teacher. Another important aspect is the security of students' personal data when using third-party messengers. In conclusion, it can be argued that chatbots are a promising tool for optimizing communication, acting as a digital assistant to make the educational environment more flexible, accessible, and student-centered.

## **REFERENCES**

1. Биков В. Ю. Цифрова трансформація суспільства і розвиток комп'ютерно-технологічної платформи освіти і науки. Інформаційні технології і засоби навчання. 2019. Т. 70, № 2. С. 1–26.
  2. Гуржій А. М., Каргашова Л. А., Лапінський В. В. Дистанційне навчання як сучасна освітня технологія. Вісник післядипломної освіти. 2020. № 11(40). С. 10–25.
- Коваль Т. І. Інформаційно-комунікаційні технології в сучасній освіті: стан та перспективи розвитку. Науковий часопис НПУ імені М. П. Драгоманова. 2021. Вип. 28. С. 45–52.