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**CHATBOTS: ARE THEY EFFECTIVE TEACHING TOOLS?  
(ON THE POTENTIAL OF USING CHATBOTS IN THE EDUCATIONAL PROCESS)**

**Abstract.** This article discusses the potential of chatbots as interactive learning tools used for organizing students' independent work. The advisability of the use of chatbots is justified. The paper considers the designed methodological recommendations for using chatbots as supplementary educational tools within the framework of teaching foreign languages. In addition, the authors consider the possible ways of introducing chatbots into the educational process and illustrate them with practical examples of training activities.

**Keywords:** chatbot, educational digital assistants, technology-mediated learning (TML), FLT

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**ЧАТБОТЫ – ЭФФЕКТИВНЫЕ СРЕДСТВА ОБУЧЕНИЯ?  
(К ВОПРОСУ О ПОТЕНЦИАЛЕ ИСПОЛЬЗОВАНИЯ ЧАТБОТОВ  
В ОБРАЗОВАТЕЛЬНОМ ПРОЦЕССЕ)**

**Аннотация.** В статье рассматривается потенциал использования чат-ботов как интерактивных средств организации самостоятельной работы студентов. Обосновывается целесообразность внедрения чат-ботов в образовательный процесс. Приводятся методические рекомендации по использованию чат-ботов как дополнительных учебных средств в рамках преподавания иностранных языков. Авторы рассматривают и иллюстрируют практическими примерами заданий возможные пути внедрения чат-ботов в образовательный процесс.

**Ключевые слова:** чатботы, образовательные цифровые ассистенты, обучение с применением ИКТ, преподавание иностранных языков

Nowadays the use of IT tools and products in teaching foreign languages is said to contribute to the improvement of students' motivation for acquiring new knowledge and skills and their willingness to put their knowledge into practice. According to the results of several studies into the latest trends and tendencies in teaching theory and practice, it is justifiable to suppose that information technologies can make the process of gaining new knowledge more meaningful and relevant for the new generation of students [1-2].

These days EFL teachers have a wide range of various IT teaching products and tools at their disposal. Chatbots are considered to be one of the most promising and effective teaching tools that could be aimed at facilitating classroom and independent students' work. It is increasingly common for students at all levels of education to use various kinds of messaging services to communicate with each other and, occasionally, with their teachers. These are standard features of modern online class management systems, which allow an exchange that mainly means asking questions and obtaining answers. These tools could facilitate the learning process outside the classroom and

could be used for organizing students' independent work. Chatbots can make learning and development of initiatives more productive and beneficial for both students and their teachers.

Intelligence agents or chatbots have a tremendous potential since they can communicate with users and simulate an intelligent conversation with human users via auditory or textual channels. It means chatbots are software tools that interact with users on a certain topic or in a specific domain in a natural, conversational way using text and voice messages [3-4]. Such a dialogue simulation technology could be considered as a personal assistant in absolutely various areas of users' life ranging from helping with settling different every day issues to training. The key chatbot functionality depends on the purposes of its creation and it could vary greatly. But in general, chatbots are able to provide information, answer questions, discuss a specific topic, or perform a task. These basic functions make it possible for educators to use chatbots as educational digital assistants, used for organizing independent students' work [4]. Let us consider the benefits of using chatbots for educational purposes.

Chatbots are interactive educational tools that facilitate a new type of individual learning process, during which students can proactively use intelligence agents in their studies in order to increase their academic performance and improve learning outcomes. Let us elaborate on this point.

First of all, chatbots can offer a natural communication experience as they could be given different personalities to meet cultural expectations of different learner populations, this ability for personalization is particularly important for multicultural society [5]. The conversational styles of chatbot communication might be changed depending on learners' demographic data, which means chatbots are able to adapt to different age groups of students (for example, be more relaxed with younger learners and more formal with older ones).

Secondly, digital assistants might provide students with one-to-one lectures by turning a lecture into a series of messages to make it look like a standardized chat conversation [6]. The bot may repeatedly assess the level of understanding of the student by asking concept checking questions and present the next part of the lecture accordingly. Thus, virtual advisers could adapt their work and curriculum to students' abilities and needs. This way, students can follow their own learning pace.

Moreover, a chatbot is a powerful analytical tool since it engages in a dialogue with its trainee and determines the areas where they are falling behind. Then, chatbots analyze this data and notify the teacher about the dynamics of students' learning. Hence, the teacher might adjust their teaching approaches and techniques to suit the needs of specific groups, focusing on troubling areas and keeping students' involvement in learning at a high level.

All the aforementioned aspects characterize chatbots as interactive education tools. To illustrate this point, let us turn to the ways of incorporating chatbots into the educational process.

Chatbots generate positive environment for communication which allows students to gain more knowledge. One of the possible approaches to the introduction of digital assistants in the educational process could be to configure these agents as a knowledge base [7]. Thus, students would be able to ask their virtual adviser about something they could not understand fully or just do not know. In other words, chatbots would help them to find answers or validate their points of view.

What is more, digital education supervisors might give useful tips and tasks to students in order to help them to memorize information more easily and quickly and get them to acquire new knowledge and put it into practice. Chatbots have a capacity of providing tasks in a game mode which is predetermined by teachers. The game modes might be tasks like “find extra words or objects”, “choose the correct answer”, “vocabulary snowball”, etc.

Chatbots allow teachers to create various tasks aimed at training different language skills and provide students with immediate feedback on their progress and further development.

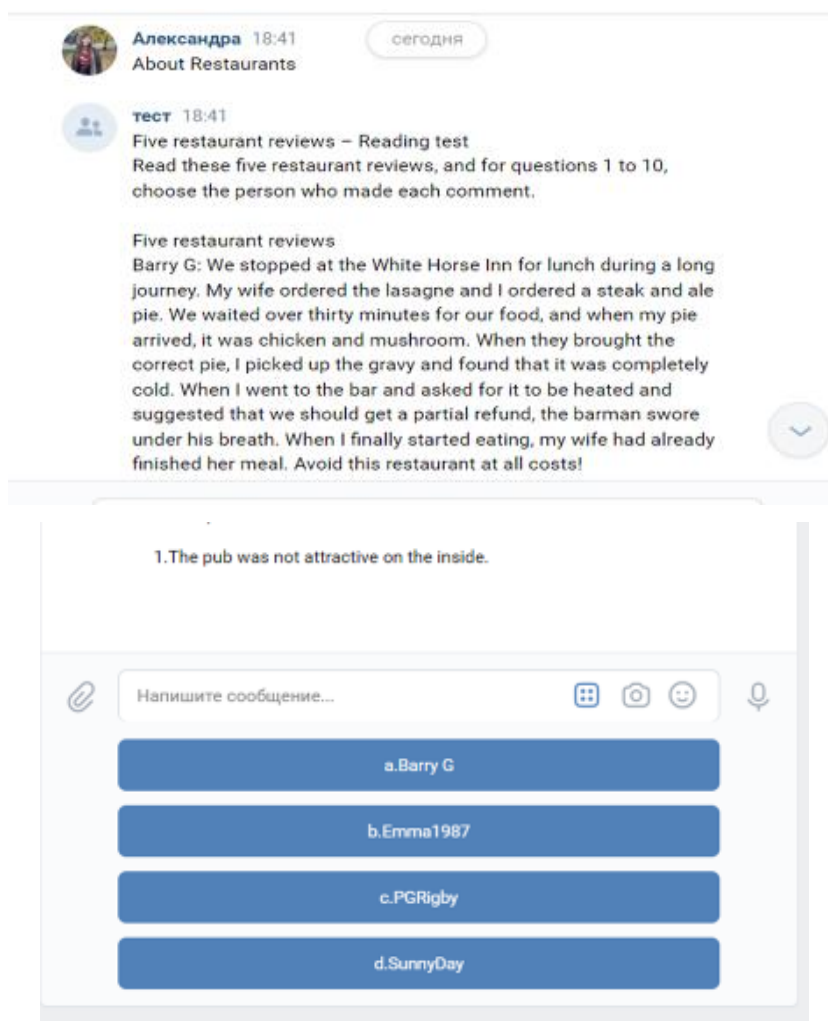


Fig. 1 Sample of a reading task (created by means of a chatbot).

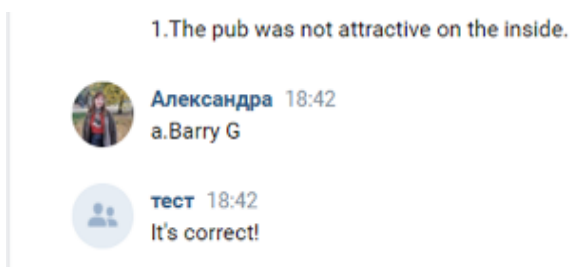


Fig. 2 Teacher's feedback on students' performance (provided by means of a chatbot).

Also, chatbots might help students to organize their time and assign tasks according to their objectives in an effective and accessible way. It means that the educational assistant would choose the most appropriate time for educational activities based on the student's progress in order to achieve the highest result.

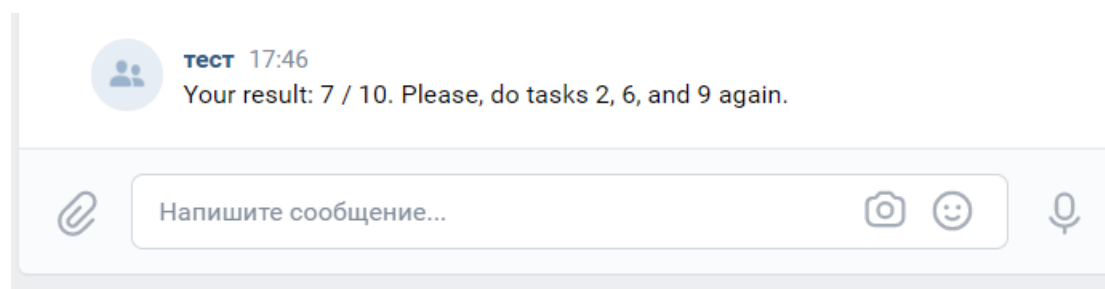


Fig. 3 Teacher's recommendation on students' further actions (made by means of a chatbot)

All in all, chatbots are powerful and effective interactive educational tools that might be used to make the learning process in general and students' independent work in particular more engaging and interesting for the students. They would not only enhance the students' learning, but also foster vision, resilience, and inquisitiveness.

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