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EXPERIENCES OF USING AUTOMATED ASSISTANT BOTS IN THE PEDAGOGICAL PROCESS

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Abstract. This thesis discusses the role of automated assistant bots in the modern education system, methodological approaches to their implementation, and experiences of their use in real educational practice. The effectiveness of automating and interactivating certain elements of the educational process through bots created on the basis of Telegram, Microsoft Teams, and other platforms is analyzed.

Keywords: artificial intelligence, assistant bot, pedagogical process, automation, educational technologies, chatbot, Telegram, digital education

The development of digital technologies requires innovative approaches in the field of education. In particular, automated assistant bots serve to simplify, personalize and increase the efficiency of the pedagogical process. Today, many higher education institutions and general education institutions are automating processes such as taking tests, assessing assignments, and communicating with students through bots developed on various platforms.

Automated bots are software tools that interact with users based on pre-written algorithms. They are effectively used in the following areas:

- -Automatically conduct and evaluate test cases
- -Simplify homework submission and checking
- Quick communication with listeners
- -Database-based information delivery (class schedule, grades, assignment list)
- -Send motivational messages and reminders

The experiment was conducted in several academic lyceums and colleges in Tashkent. The activity of 300 students was monitored using a special student assistant bot created on the Telegram platform. The bot performed the following functions:

Send daily class schedule

Sending individual tests to students and automatically generating results

Accepting homework and preparing statistics

Send reminders to students before class



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The results showed that students responded positively to using the bot due to the time savings, quick access to information, and clarity of the assignments.

Analyzing the results of the experiment, the following were found:

Increased efficiency: The percentage of tasks completed via bots increased by 23%.

Increased interactivity: 78% of readers preferred to communicate via bot.

Teachers' work has become easier: Tasks such as grading and sending notes after class have been automatically completed.

Organizational work simplified: Announcements, schedules, and reminders were quickly distributed via the bot.

The following disadvantages have been identified when using bots:

Challenges for students with low technical literacy

Internet addiction

Lack of ability to fully automate all parts of the curriculum via bots

Suggestions:

Develop short guides for teachers and students on how to use the bot

Creating bots that run on local servers and can provide information even in offline mode

Enriching bots with artificial intelligence elements: personalized responses to user queries, adaptive learning systems

The use of automated assistant bots in the pedagogical process is an important tool for increasing the efficiency of education. They make the communication between the student and the teacher interactive, save time and simplify the educational process. However, technical and methodological preparation is important when implementing such technologies. Therefore, the creation of a modern IT infrastructure, training of teachers and development of effective content for the widespread introduction of bots into the educational process are urgent tasks.

REFERENCES:

- 1. Abduvaliyev A., Qodirov M. Digital education: new methodological approaches. Tashkent, 2022.
- 2. Ergashev B. Artificial intelligence and chatbots in education. Samarkand, 2023.
- 3. UNESCO (2021). AI in Education: Challenges and Opportunities .
- 4. Turdievna K.A. Telegram botlar orqali oʻquv jarayonini boshqarish tajribalari // Pedagogik innovatsiyalar jurnali, 2024.
- 5. Baxridtdinovich, H. B. (2025). TA'LIMDA CHATBOTLAR VA VIRTUAL YORDAMCHILARDAN FOYDALANISH. PEDAGOGIK TADQIQOTLAR JURNALI, 3(1), 156-159.
- 6. Baxridtdinovich, H. B. (2025). THE IMPORTANCE AND APPLICATION OF POLYMORPHISM IN PYTHON. PEDAGOGIK TADQIQOTLAR JURNALI, 3(2), 120-123.



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- 7. Hamroyev, B. B. (2025). PYTHONDA MASSIVLAR BILAN ISHLASH. PEDAGOGIK TADQIQOTLAR JURNALI, 2(2), 88-91.
- 8. Baxridtdinovich, H. B. (2024). PYTHONDA MA'LUMOTLAR TAHLILI. PSIXOLOGIYA VA SOTSIOLOGIYA ILMIY JURNALI, 2(10), 69-75.
- 9. Хамроев, Б. Б. (2024). СТАТИСТИЧЕСКИЙ АНАЛИЗ С ИСПОЛЬЗОВАНИЕМ PYTHON. PSIXOLOGIYA VA SOTSIOLOGIYA ILMIY JURNALI, 2(10), 76-82.
- 10. Baxridtdinovich, H. B. (2024). NEYRON TO'RLI TARMOQLAR. WORLD OF SCIENCE, 7(12), 42-48.
- 11. Hamroyev, B. B. (2025). PYTHONDA MASSIVLAR BILAN ISHLASH PEDAGOGIK TADQIQOTLAR JURNALI, 2(2), 88-91.

