USING ARTIFICIAL INTELLIGENCE AMONG STUDENTS IN THE HIGHER EDUCATION SYSTEM

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Abstract: Artificial intelligence (AI) is becoming a key tool in the educational field, improving the quality of education in universities. This article examines the use of AI by students, with an emphasis on Kokand University Andijan Branch and its application in medical education. The possibilities of AI in personalized learning, development of diagnostic skills and analysis of learning activity are considered. The conducted survey revealed the attitude of students to AI and its impact on their educational activities. The results showed a high interest of students in technology, especially in the automation of knowledge testing and the use of virtual assistants. At the same time, the need for teacher training and protection of personal data was revealed. The study confirms the significant potential of AI in improving the educational process, provided a careful approach to its implementation.

Keywords: artificial intelligence, higher education, student survey, learning efficiency, technology implementation.

Introduction.

Artificial intelligence (AI) is becoming an integral part of the educational process, changing approaches to learning and interaction with educational material. Higher education students actively use AI technologies to solve educational problems, including information processing, preparing presentations, writing papers and learning new topics. To analyze the role of AI in the higher education system, a survey was conducted among students. The study is aimed at studying their practical experience of using AI, perception of its capabilities and barriers, as well as the impact of these technologies on the educational process.

The results of the study will help to identify current trends in the use of AI and offer recommendations for its more effective implementation in the educational environment [1, 2]

Material and methods.

To study the use of artificial intelligence (AI) in the educational process among students of Kokand University, Andijan branch, a quantitative method was used using a questionnaire. The questionnaire included open-ended questions that allow obtaining structured and detailed information about the experience of using AI by students [3]

Survey Procedure:
Sample: The survey participants were mostly medical students from different years, which ensured a diversity of opinions and experiences. In total, over 220 students took part in the survey.

Instruments: The questionnaire was designed based on the main issues related to the use of AI in education. The questions covered topics such as:

Frequency of using AI in education.

Specific AI tools and platforms (e.g., chatbots, knowledge assessment systems).

Perception of the effectiveness of AI for education.

Barriers or difficulties in using technology.

Data Collection: The survey was conducted online through the Google Forms platform, which allowed students to provide their answers quickly and conveniently.

Data Analysis: The obtained data were processed using statistical methods. The following were used for analysis:

Distribution of responses by frequency and percentage.

Correlation analysis to identify the relationship between students' awareness of AI capabilities and the frequency of its use.

Thematic analysis to process open-ended questions, identifying key themes and respondents' opinions [4]

Ethical aspects: Participation in the survey was voluntary, anonymous and agreed upon by the students. All data were stored in encrypted form to protect the participants' privacy.

The proposed research method provides a clear structure for replicating the experiment in other educational institutions or in other academic disciplines.

Results and Discussion

The study collected data from 220 students of Kokand University, Andijan branch. The survey included 17 questions regarding the use of artificial intelligence (AI) technologies in the educational process. The main results are presented below:

1. Distribution by age and gender

The majority of participants (about 87%) are in the age category of 18 to 24 years. This confirms that the main audience of university students is young people who actively use digital technologies.

Among the respondents, 167 were women and 53 were men, which reflects the predominance of women in the sample.

2. Awareness of Artificial Intelligence

About 82% of students (181 people) said they were familiar with AI technologies, of which 73 students had experience using AI. About 18% (40 people) were not familiar with this technology. These data show a fairly high level of awareness, but also indicate the need for additional educational activities on the topic.
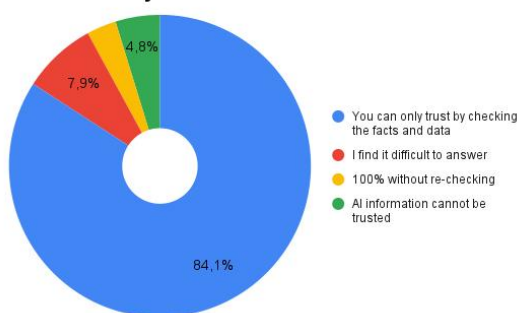
Are you familiar with artificial intelligence technologies?

33,3%

49,2%

17,5%

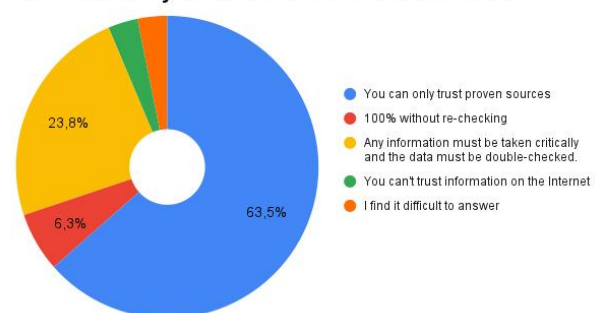● Yes, I had experience using it   ● No   ● Yes, I heard something.
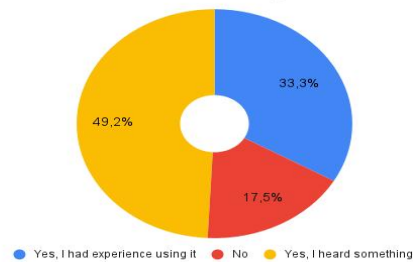
3. Trust in AI data

The majority of students (around 84%) believe that AI data can only be trusted after it has been verified. Only 10 people expressed complete distrust of information obtained using AI, and 7 respondents are ready to trust AI 100% without double-checking. This emphasizes the importance of a critical approach to the use of technology [5]

How much do you think AI data can be trusted?

4,8%

7,9%

84,1%

● You can only trust by checking the facts and data
● I find it difficult to answer
● 100% without re-checking
● AI information cannot be trusted

How much can you trust information on the Internet?

23,8%

6,3%

63,5%

● You can only trust proven sources
● 100% without re-checking
● Any information must be taken critically and the data must be double-checked.
● You can't trust information on the Internet
● I find it difficult to answer

4. Using AI in the educational process

The most popular tasks for which students use AI:

Preparing reports and presentations (66 people).

Finding answers to homework questions (59 people).

Finding materials for coursework and lab work (52 people).

These results indicate the importance of AI in supporting the educational process, especially in performing routine tasks.

5. Using AI during exams

More than half of the students (112 people) were positive about the idea of   using AI during exams. Of these, 70 people noted that they would use AI to check their answers, and 43 would use this opportunity to get help. Only 14 respondents said that they would not use AI.

6. Trust in AI-generated materials

About 76% of students (168 people) trust materials generated by AI. Among the most popular formats are presentations (102 people) and notes (39 people). This indicates a high degree of trust in the practical application of AI technologies in the preparation of educational materials.

7. Checking AI-generated materials

38% of respondents compare AI-generated materials with other sources. Another 29% check individual data using search engines, and 14% ask AI for links to original sources. About 16% of students do not check materials at all.

8. Integration of AI into the educational process

The level of integration of AI into students' materials varies:

For 80 students, the share of technology use is 40-60% of the work volume.

For 59 students, this figure reaches 60-80%.

Only for 7 people, the integration exceeds 80%.

This demonstrates the moderate use of AI in educational activities.

9. Popular AI tools

The most popular tool is ChatGPT (160 respondents). Less commonly used are YandexGPT (31 people) and Telegram bots based on it (28 people).

10. Institutional control

Only 35% of students (77 people) believe that the university tries to control the use of AI. However, many note that control is limited to suspicions and questions. This highlights the need for clearer rules and guidelines for the use of AI in the educational environment.

11. Attitude towards the use of AI

51% of students (112 people) have a positive attitude towards the use of AI, considering it an integral part of the educational process. At the same time, 98 students expressed a neutral attitude. Only 10 respondents were negative, believing that AI should not be used to prepare materials.

The results of the survey among students of Kokand University, Andijan branch, on the use of artificial intelligence (AI) technologies in the educational process allow us to highlight several key findings that require deeper analysis.

1. Awareness of AI technologies

According to the survey results, more than 50% of students are familiar with AI technologies, which reflects the growing interest and awareness among young people. This is in line with the global trend, where AI is actively being implemented in various fields, including education. For example, a study conducted by University College London (UCL) in 2022, which included a survey of over 5,000 students, showed that about 70% of respondents used AI, such as ChatGPT or Grammarly, to write coursework, research papers, and perform other educational tasks. A similar trend is observed in our study, where students of Kokand University also actively use AI to simplify educational tasks, such as preparing coursework or presentations.

2. Trust in AI data. Most students are cautious about trusting AI data, which shows the importance of a critical approach to using technology. Only 20% of respondents said they fully trust AI results, while the rest prefer to check them. This is confirmed by international studies. For example, in 2023, a group of researchers from the Technical University of Denmark found that students use AI to check their work, but they believe that data refinement and additional checks are necessary to increase reliability. The survey did not include a detailed assessment of specific tools, which limits the ability to analyze the level of trust in different technologies.

3. Using AI in the educational process. Students see significant benefits in using AI for educational tasks, such as preparing coursework, lab work, and presentations. These results are consistent with the UCL study, in which students noted that AI technologies help to simplify the formulation of complex ideas, speed up information retrieval, and automate routine tasks. It is important to consider that widespread use of AI may lead to a decrease in the level of student independence, which requires additional rules on the use of technology for educational purposes.

4. Using AI in exams. Most students are in favour of using AI to check their exam answers, raising questions about ethics and oversight of the use of technology during exam sessions. This is supported by a study from the University of Melbourne (2023), where 85% of AI grades matched teacher grades, and 78% of students said automated marking ensures objectivity and speeds up the marking process. Link to the study: Our results show a similar willingness among students to use AI to improve the accuracy of their assessments, but clear ethical guidelines are needed for the implementation of this technology.

5. Oversight of AI use. Despite awareness of AI, a significant proportion of students feel that institutions do not sufficiently oversee its use. This highlights the issue of ethical standards and data protection. International studies also highlight this issue: for example, in the US, 70% of students believe that teachers are not familiar enough with AI technologies, which hinders its implementation in the educational process. Since the study only included one group of students, its results cannot be fully generalised. Analysis of students from other institutions and regions is needed to provide a broader picture. Possible research paths

Expanding the sample: Including students from other educational institutions and regions, which will allow us to assess the general trend in the use of AI in the educational system.

Practical experiments: Conducting tests of specific AI technologies (e.g., chatbots, automatic assessment systems) in real educational settings.Teacher training: Introducing courses for teachers that will enable them to effectively use AI in their work and ensure the ethical use of technologies.Developing ethical standards: Establishing clear norms for the use of AI to protect personal data and prevent abuse.

Conclusion

The conducted study confirmed the importance of artificial intelligence technologies in the educational process, revealing both their positive aspects and existing challenges. Students' awareness of the possibilities of AI is growing, and interest in its application to automate educational tasks, personalize learning and improve the accuracy of knowledge assessment emphasizes the practical value of such technologies. However, the results showed that effective implementation of AI requires training teachers, creating ethical standards and ensuring control over the use of technologies. The practical significance of the work lies in the possibility of implementing AI to improve the quality of education, improve student motivation and optimize the educational process as a whole. Prospects for future research include conducting larger

surveys, testing specific AI tools and developing strategies for adapting them to the needs of students and educational institutions.

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