

DOI: <https://doi.org/10.5281/zenodo.14899618>

DEVELOPMENT OF INFORMATION COMPETENCE IN HIGHER EDUCATION USING SOCIAL NETWORKS AND NEURAL NETWORKS: INNOVATIVE APPROACHES AND METHODS

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Abstract: *This article discusses the methodology for developing students' information competence using social networks in higher education institutions. The article discusses methods for finding non-standard solutions to professional and pedagogical problems, developing analytical skills and enhancing students' professional training through the use of innovative approaches. The study discusses the importance of neural network-based tools such as Testor AI, the impact of Telegram bots and other social networks on improving students' independent thinking skills and developing creative approaches.*

Key words: *development of information literacy, social networks, neural networks, artificial intelligence of the tester, automated assessment, personalized learning, educational technologies.*

The development of information competence of university students has become an integral part of modern education. This competence includes teaching students to successfully navigate the modern IT environment, solve complex problems in innovative ways and develop their skills in using modern technologies.

Main areas of information competence development: Non-standard solutions and analytical thinking. Students learn to use unique and flexible methods in solving professional problems, which develops their analytical thinking skills and gains experience in information and analytical activities.

Of course, I can point you to the following resources for information literacy development ideas:

Above scientific views of scientists' assumptions for example: David Weinberger discusses the importance of information management and analysis in his

book *Everything Is Different: The Power of the New Digital Disorder* (2007) [1]. Howard Rheingold – “*Net Smart: How to Thrive Online*” (2012) explores online information skills and the impact of social media [2]. Thomas Friedman – “*The World is Flat: A Brief History*” In his book “*The Twenty-First Century*” (2005), he talks about globalization and the role of information technology. Peter Drucker - In *The Effective Executive* (1967) and other works, he expresses ideas about information management and the development of innovative thinking.

In our opinion, the current time information competence development need has increased more Today's technology fast development and information flow increase students unconventional thinking and innovative solutions find encourages.

David Weinberger information management about What they said, today digital in the world is very current Students information search, analysis do and coordination skills develop forced It they professional problems for solution making important important have

Howard Reinhold social in networks information with work skills modern in education application needed Students mutually in cooperation work and online in the environment communication to do skills training necessary

Thomas Friedman globalization and information technology about views, students international in the environment competitive be in preparation important They are new ideas work Exit and current do able to be needed

Peter Drucker innovative thinking and information management about teaching today in the day education in the process integrated without students modern problems solution making help gives

So , so, the present time information competence development of students in a successful IT environment move training and their innovative thinking in support of an important role we think that this will play and neurotic network based education tools create them apply we believe that this is necessary.

neural networks: Systems like the Telegram bot Testor AI allow students to engage in independent programming. By creating small programs, they improve their practical skills and become familiar with design approaches.

Application of AI tester and other AI tools in education. The development of information and communication technologies opens up new opportunities for students. By integrating these technologies into the educational process, the following benefits can be achieved:

Personalized Learning: Telegram bots provide customized learning materials and recommendations based on the unique needs of each student.

Automated assessment: AI-powered bots analyze students' responses to determine their level of knowledge.

Continuous monitoring and analysis: With the help of Telegram bots, students' learning is constantly monitored, which helps teachers identify their weaknesses.

Interactive learning processes: Bots interact with students and provide them with quick answers, which helps make the learning process more effective.

Database creation tools: Student data can be collected and used for future learning analysis.

4. Integration of social networks into the educational process

The integration of social networks into the educational process plays an important role in the development of students' information competence. These platforms develop students' skills in quickly searching, analyzing, evaluating and managing information.

Gaining international experience. Foreign experience shows that the use of modern technologies and innovative approaches plays an important role in developing independent thinking and analytical skills in students. Gaining this experience ensures effective results in the educational process.

Strengthening professional training. Developing students' information competence will strengthen their professional training and increase their chances of being competitive in the labor market. This process will become the basis for their success in their future professional activities.

Steps for effective implementation: To improve the effectiveness of these technologies, the following steps are recommended:

1. Preliminary research: Study and analysis of Telegram bots and neural network technologies.
2. Testing. Testing these technologies on small groups.
3. Integration: Integrate Telegram bots into the educational system and make it convenient for students.
4. Continuous development: Updating technologies to meet modern requirements.

The inclusion of social networks and artificial intelligence technologies in the educational process makes the educational process effective and innovative. This creates an opportunity to enhance the professional training of students through the development of analytical skills, team learning and work with modern technologies.

Used literature:

1. Weinberger, D. (2007). Everything Different: The Power of the New Digital Disorder. Times Books <https://a.co/d/7UYHH7k>
2. Reinhold, H. (2012). Net Smart: How to Succeed on the Internet. MIT Press.
3. Friedman, T.L. (2005). The World is Flat: A Brief History of the Twenty-First Century. Farrar, Straus and Giroux.
4. Drucker P.F. (1967). The Effective Manager. Harper and Row.
5. Abdullaev S. (2019). *Innovative education technologies and their formation in the process* role Samarkand: Samarkand State University publication.
6. Karimov I. (2021). *Information and communication technologies and education* Tashkent: Uzbekistan Republic High and middle special education ministry.