pISSN:2349-5707 Volume:13,Issue 5, May -2026 eISSN:2349-5715

DIDACTIC OPPORTUNITIES FOR DEVELOPING STUDENTS' INFORMATION AND COMMUNICATION COMPETENCE IN CLASSROOM LESSONS

Bakhronova Sayyora kizi
Asia International University
Teacher, Department of General Technical Sciences
sayyorabaxranova3s8@gmail.com
https://doi.org/10.5281/zenodo.20265589

Abstract.
This article scientifically and pedagogically analyzes the didactic opportunities for developing students' information and communication competence in the process of classroom instruction in higher educational institutions. The role of the modern digital educational environment, smart technologies, multimedia tools, distance learning platforms, and interactive teaching methods in improving students' skills of working with information, analyzing, transmitting, and engaging in digital communication is highlighted. According to the research findings, it was determined that integrating innovative pedagogical technologies into the educational process significantly contributes to improving students' digital literacy and professional competencies.

Keywords: information and communication competence, didactic opportunities, digital education, interactive methods, multimedia technologies, smart education, competency-based approach, e-learning, pedagogical technologies, distance learning.

Introduction. Today, the processes of globalization and digitalization are deeply penetrating all spheres of human life. In particular, reforms being implemented in the education system require the widespread introduction of modern pedagogical approaches, innovative technologies, and information and communication tools. In the twenty-first century, the informatization of society has imposed fundamentally new tasks on education. Students are now expected not only to possess theoretical knowledge, but also to develop competencies related to searching, selecting, processing, analyzing, and effectively using information.

The recognition of the competency-based approach as a priority direction in higher education has made the development of students' information and communication competence one of the most pressing issues. Information and communication competence is considered an essential professional quality of a modern specialist, enabling effective use of digital tools, electronic resources, virtual communication, and independent learning opportunities.

Currently, higher educational institutions increasingly utilize multimedia tools, e-learning platforms, virtual laboratories, online courses, mobile applications, and systems based on artificial intelligence elements in organizing classroom instruction. Such tools not only improve the effectiveness of education but also create important didactic opportunities for developing students' information and communication competence.

The role of the teacher in developing information and communication competence is also of particular importance. Teachers must thoroughly master modern technologies, organize the educational process interactively and effectively, direct students toward independent learning, and foster critical and creative thinking skills.

Didactic opportunities refer to the possibilities provided by pedagogical tools, methods, technologies, and the educational environment to achieve educational goals. Information and communication technologies constitute an important component of these opportunities. They:

- enrich educational content;
- visualize educational materials;
- increase students' activity;
- develop independent learning;

pISSN:2349-5707 Volume:13,Issue 5, May -2026 eISSN:2349-5715

- expand the possibilities of distance education;
- contribute to the individualization of the educational process;
- strengthen interactive communication;
- create opportunities for rapid assessment of knowledge.

The theoretical foundations of developing information and communication competence in education have been studied by many scholars. Foreign researchers have analyzed the impact of digital pedagogy, media literacy, and e-learning on the educational process, while local scholars have investigated methodological aspects of organizing education based on the competency-based approach.

The relevance of this study lies in identifying the didactic opportunities that contribute to the development of students' information and communication competence during classroom instruction in higher educational institutions and developing scientific-methodological recommendations for their effective use in modern education.

The purpose of the research is to identify, analyze, and develop effective pedagogical approaches for enhancing students' information and communication competence during classroom instruction.

Main part. The research was based on competency-based, systemic, activity-oriented, and learner-centered pedagogical approaches. In addition, the theoretical concepts of digital pedagogy and innovative educational technologies formed the methodological basis of the study.

The competency-based approach focuses on preparing students for practical activity. Within this approach, information and communication competence was considered to consist of the following components:

- information search competence;
- information processing competence;
- digital communication competence;
- competence in using multimedia tools;
- internet safety and media culture;
- skills in working with electronic educational resources.

Now let us define each competence in detail.

Information Search Competence. Information search competence refers to a student's ability to effectively find, select, and appropriately use necessary information from various sources. In the modern information society, the volume of data is enormous, and the ability to identify reliable sources is highly important. This competence includes skills in using internet search engines, electronic libraries, scientific databases, digital catalogs, and multimedia resources.

Information Processing Competence. Information processing competence reflects a student's ability to analyze, systematize, generalize, and apply acquired information in practical activities. This competence is not limited to finding information; it also involves understanding its content and using it effectively.

Digital Communication Competence. Digital communication competence is the ability of students to communicate effectively, exchange information, and collaborate using electronic tools. In the modern educational environment, communication processes are often carried out through virtual platforms. Therefore, students' possession of online communication culture is highly important.

Competence in Using Multimedia Tools. Competence in using multimedia tools refers to the ability to utilize and create audio, video, graphic, animation, and interactive resources. Multimedia technologies increase the visibility of the educational process and help students understand topics more clearly and interestingly.

Internet Safety and Media Culture. Internet safety and media culture competence expresses a student's ability to operate safely, responsibly, and ethically in the digital environment. Due to the rapid spread of internet technologies, information security has become one of the most urgent issues of modern society.

Skills in Working with Electronic Educational Resources. Skills in working with electronic educational resources involve the ability to effectively use digital educational platforms, electronic

pISSN:2349-5707 Volume:13,Issue 5, May -2026 eISSN:2349-5715

textbooks, virtual laboratories, and distance learning systems. In modern education, electronic resources are considered one of the main tools for independent learning.

A student who possesses well-developed skills in working with electronic educational resources can independently manage their educational trajectory, access knowledge anytime and anywhere, and adapt to lifelong learning processes.

Structural Model of Information and Communication Competence.

The structural model of information and communication competence consists of the following components:

Motivational Component Students' interest in ICT tools, their need for using them, and their motivation.

Cognitive Component A set of theoretical knowledge related to information technologies.

Operational Component Practical skills in using computer programs, internet resources, and multimedia tools.

Reflective Component The ability to analyze one's own activities, evaluate outcomes, and strive for improvement.

In recent years, the development of distance learning technologies has created new opportunities in the education system. Online platforms:

- eliminate geographical barriers;
- provide constant access to educational resources;
- ensure flexible learning;
- develop independent education.

Distance learning creates broad didactic opportunities for developing students' information and communication competence. First of all, distance education enables learning through electronic platforms and develops students' skills in working with digital technologies. During online classes, students learn how to work with various information sources, search for necessary information, and select relevant materials. This contributes to the development of information search and information processing competence.

Videoconferences organized through virtual platforms help shape students' digital communication culture. Through the use of e-mail, forums, chats, and video communication tools, students acquire effective online collaboration skills. Distance learning also creates opportunities for extensive use of multimedia tools, which helps students master topics visually and interactively.

Electronic textbooks, video lectures, and virtual laboratories contribute to the development of students' independent learning activities. In addition, distance education teaches students how to manage their time effectively and develop self-control skills. Online testing systems provide opportunities for rapid assessment of knowledge. Cloud technologies support teamwork and collaborative project activities.

Within the distance learning environment, students also acquire competencies related to internet safety and media culture. The use of digital educational resources develops students' creative and critical thinking abilities. Online lessons organized through interactive methods improve the effectiveness of the educational process. Furthermore, distance learning ensures flexibility in education, allowing students to acquire knowledge anytime and anywhere. This plays a significant role in the development of lifelong learning. Modern distance learning technologies therefore serve as effective didactic tools for the comprehensive development of students' information and communication competence.

Conclusion. In conclusion, the effective integration of information and communication technologies into the educational process is an important factor in developing students' competencies, strengthening independent learning activities, and preparing specialists who meet the demands of the modern labor market.

pISSN:2349-5707 Volume:13,Issue 5, May -2026 eISSN:2349-5715

References:

1. Baxronova. (2025). Oliy ta’limda matematika o‘qitishda xalqaro tajribadan foydalanish. Development Of Science, 5(1), pp. 78-86.
2. Baxronova S. B. (2025). Smart texnologiyalar asosida matematik model va vizual vositalar bilan o‘qitishning innovatsion yondashuvlari. Development Of Science, 6(5), pp. 168-175.
3. Baxronova S.B. (2026). Masofaviy ta’limda kasbiy kompetentlik tushunchasining pedagogik mazmuni: taqqoslovchi tahlil. Development Of Science, 1(1), pp. 282-288
4. Kurbonov G‘. G‘., Baxronova S. B. (2025). Ta’lim jarayonida raqamli platformalarning integratsiyasi: amaliy yondashuvlar. Pedagogik akmeologiya 4(21), pp 72-76
5. Kurbonov G. (2022). Didactic possibilities of teaching general subjects on the basis of digital educational technologies. Berlin Studies Transnational Journal of Science and Humanities, 2(1.5 Pedagogical sciences).