International Journal on Integrated Education
https://journals.researchparks.org/index.php/IJIE
e-ISSN : 2620 - 3502
p-ISSN : 2615 - 3785

Content And Educational Resources Of The Development Of Digital Competence In Students Of Pedagogical Higher Educational Institutions

Sheraliyev Odiljon Shuxratjon ugli
Kokan SPI basic doctoral student

Annotation: This article presents the content of the development of digital competence in students of pedagogical higher education institutions, problems that will become an obstacle to the development of digital competencies, the positive impact of the digitized educational environment on students, the classification of educational resources aimed at the development of digital competencies.

Keywords: digital competence, digital competence, education Without Borders, lifelong learning, less costly education, digitization, digital information, artificial intelligence.

Introduction. The globalization process leads to the widespread use of digital technologies in education in the context of digitization of society, the emergence of a digital educational environment. The digital educational environment assumes the following pedagogical conditions, giving the opportunity for continuous self-awareness, self-development of an active, free and creative personality:

- digital education based on digital technologies ensures openness, broad “scalability” of this environment, integration and flexibility of pedagogical technologies in the formation, organization and implementation of the youth environment;
- in the “education-training” system, learners are dominated by interactive self-learning based on constant feedback;
- the digital educational environment will focus the sciences on the development of creativity, cognitive activity and systemic thinking skills;
- natural coherence of learning is ensured (emphasis on the dominance of the type of activity of education; organization of independent educational activities; increase the motivation to learn through the use of modern means of generalizing presentation and exchange of audiovisual information; increase the level of emotional perception of information and the formation of skills for the implementation of various forms of;
- digital technologies ensure that the student passes from one result to another, while creating a positive emotional meaning of the educational process.

Literature review. Although it becomes impossible to fully clarify the didactic capabilities of digital technologies in the atmosphere of acceleration of Science, Technology and development, we will cite some of them below:

- digital education in students is becoming easier to learn in the environment, which makes it possible for OTM professors to work with complex, abstract images, concepts and systems;
- accelerates and enhances the educational process, significantly enhances the cognitive and cognitive activity of requirements, their motivation;

e-ISSN : 26203502
p-ISSN : 26153785

- the interaction of the subjects of the educational process, especially in cases where the verbal description of the object in question is insufficient, the capacity for the adequate transmission of information in this right, is effectively carried out;
- simulating various situations (including those whose imitation is impossible in other ways: an emergency in flight, an accident at a nuclear power plant, etc.k.) formation of appropriate skills and abilities.

The content of the development of digital competencies in students in higher education institutions is described as follows:

1. **Explanation of the essence of the content of digital competence in students.** The ability to take advantage of the possibilities of digital technology from the point of view of the didactics of science, to have initial experience in ensuring its logical compatibility and compliance with its capabilities based on the purpose of the lesson. To convey the possibilities of digital education in those who receive education as a future teacher, the practical knowledge that is effective in their use in life-practical, professional activities.
2. **Observation and assessment of cognitive, emotional-emotional activity of students in dependence on digital educational technologies.** Digital education technologies alter students ' reading and learning strategies and techniques. Futurological analysis will be necessary in the introduction of new digital educational technologies in higher education institutions. Futurological analysis is the process of forming data that determines a possible future state based on existing conditions.
3. 3. **Taking into account technical and organizational aspects for the productive, targeted use of digital educational technologies of students.** Digital education technologies acquire students ' aspirations and interest in acquiring new knowledge. Digital learning technologies, as well as unlimited learning by providing cognitive independence in students, provide the opportunity to work on new data. Ensuring the quality of these processes depends on the technical and organizational aspects.
4. 4. **Ensuring the regularity of communication with students.** Digital education indicates the need for teachers to maintain regular contact with students during the teaching process. In doing so, you will be able to use digital communication tools. Chat, video conferencing are recommended for communication.

5. Ensuring responsibility. Digital educational technologies should allow each student to assess their own attitude to the process of study and learning. Through this, the Student provides a responsible attitude to the dynamics of learning, the transition through intermediate results. It also assesses its own personal aspirations in the continuum of time and efficiency.

Digital assessment serves extensively to assess the effectiveness of digital education programs. Digital assessment simulators and platforms are used to study student activities and track progress in them. In digital assessment, the results of students ' educational programs and student data are stored electronically. This information is used in the Application, Analysis, control and evaluation process between teachers and students. Digital assessment provides hands-on and impactful tools to teachers to perform work-related tasks aimed at individual student appropriation and appropriation.

e-ISSN : 26203502
p-ISSN : 26153785

Students ' effective mastery of digital educational technologies is aimed at improving the quality of training, developing their creative abilities, their desire to acquire new knowledge without interruption. Digital education technologies dictate changes in student group, group member interactions, content of learning cycle cycles, and student role.

Discussion. In order to effectively apply digital technologies in education while maintaining the quality of training, the following tasks must be successfully solved:

First of all, of course, it is necessary to improve the infrastructure of the Internet in our country, improve the quality of services provided by mobile operators and, most importantly, create conditions and benefits for mastering the achievements of the population, especially student youth, after modern information and communication technologies;

Secondly, to extend the scope of the use of digital technologies in the organization of the educational process and to develop information resources, teaching tools and distance learning technologies, to make proposals to the competent authorities to amend regulatory legal documents regulating the activities of higher educational institutions with the involvement of creative students in university digitization projects, to provide high-efficiency digital, the establishment of centers including mediastudias and others, as well as the use of experience gained in it in all higher educational institutions of Uzbekistan;

Thirdly, to ensure a strong integration of modern information and communication technologies and educational technologies, to create additional conditions for the continuous development of professional skills of pedagogical personnel in this regard;

Fourth, to organize and conduct courses to improve the skills of teachers on such topics as the use of interactive presentation systems, the development of interactive and multimedia presentations in connection with the internet for lecture and seminar classes;

Fifth, the implementation of the distance learning process at any time using real-time interactive presentation systems, video conferencing systems, digital halls, electronic resources.

Sixth, it is necessary to develop scientific websites to discuss cloud technologies, digital reality, the use of augmented reality and the use of a 3D printer in the development of didactic materials and experimental designs, the application of digital didactics and digital educational models, projects for teachers and students, diploma works, scientific research, etc. Only then, without lowering the quality of education using digital technologies, it is achieved that students-young people receive knowledge at the level of today's demand.[4]

It is finding confirmation that the notion that active computerization as a means of transmitting information in higher education institutions serves to improve the traditional educational process is incorrect. The scale of information is growing due to the use of quantum computers and nanotechnology. Currently, the widespread introduction of modern digital information technologies in the reform of the educational sphere has been carried out by updating educational technologies.

There are a number of problems with the introduction of digital education that can be seen as an obstacle to the development of digital competencies:

1. The inability of the material supply of educational institutions to respond to the implementation of digital technologies.
2. The fact that science teachers consider traditionalism to be accessible and easy, rather than bringing digital technology into the educational process.
3. Insufficient Electronic Literature.
4. The negative impact of computers and various gadgets on human health, psyche, mediamadaniyat of educators, the concept of “TV mode”, etc.[5]

e-ISSN : 26203502
p-ISSN : 26153785

The digitized educational environment has the following positive impact force on students:

- helps to increase cognitive interest in science in students;
- helps to clearly visualize the advanced achievements of Science in the specialty;
- digital education forms the skills of independent production, modeling activities;
- the clock will help create a state of success of students.

Digital education creates the following didactic opportunities in the educational process:

- opportunity to conduct interactive communication with students using digital educational tools;
- computer visualization of educational data, which includes the presentation of the possibilities of modern means of visualization of objects, processes, phenomena (both real and "Digital"), their models, in the dynamics of development, in time and space;
- computer modeling of studied objects, their relations, phenomena, processes that occur "almost" even in reality;
- automation of computational processes, search for information, processing the results of a training experiment in a session, the possibility of repeating several times the fragment or the experiment itself, which occurred in reality and was presented "almost" on the screen;
- the results of the experiment, the ability to change the values of the parameters (for example, physical quantities) in accordance with the conditions of the experiment, formulate the hypothesis of the experiment, check it, change the situation under study according to the results;
- predicting the results of experiments, research / digitpol;
- to activate various types of activities designed to independently obtain the necessary information, learned to study, learned to independently think, argue, meditate, receive students with sufficient knowledge in science;
- automation of the processes of organizational management of educational activities and monitoring the results of mastering the educational material of the degree;
- creation and distribution of organizational and methodological materials, their download and transmission over the network.

The process of digital education takes place in the pedagogical system, the elements of which are the goals, content, educational, educational and technological subsystem of digital education. It is a process of purposeful, organized interaction between students and faculty and with teaching aids that is not essential to their location in space and time.

The formation of the content of digital education is based on the chosen theory of the organization of educational content, as in the traditional educational system, and takes into account the relevant principles. Digital education makes extensive use of innovative techniques such as active learning methods ("mind attack", "Business games", "case studies", "project" methods, etc. The student is rightfully the main participant in the digital education process, the main "client" of the digital education system. Digital education in turn is characterized by definitions such as" education Without Borders",," lifelong learning",," less costly learning". Digital education conceptually provides the student with special motivation, discipline, access to digital education technologies and tools.

In the digital educational environment, the main task of the teacher is to manage the processes of education, upbringing, development, in other words, to become a pedagogical manager. In this respect, the teacher fulfills roles such as coordinator, consultant, supervisor. Digitization of the educational environment provides pedagogical-didactic opportunities that are

e-ISSN : 26203502
p-ISSN : 26153785

not applied in pedagogical practice on the basis of the traditional form of education, are not material and are not implemented today.

Educational resources aimed at the development of Digital competencies and their description are presented in the table below:

EDUCATIONAL RESOURCES AIMED AT THE DEVELOPMENT OF DIGITAL COMPETENCIES AND THEIR DESCRIPTION

Educational resources	Description
E-Learning	Online platforms, courses and tutoring classes develop students ' digital competencies. It is possible to use educational resources in an independent educational setting, as well as to learn under the supervision of professors.
Blended Learning	This educational resource is a combination of traditional lesson training with online learning activities. This educational resource creates a learning environment that is flexible and suitable for each student, through which their digital competencies develop.
Massive Open Online Courses	There are countless online courses offered for students for free or cheaply, with the content of these courses directing students to professional and pedagogical activities. The educational resource also provides courses on the development of digital competencies of students.
Coding Bootcamps	Provides students with short-term courses in most cases related to intensive programming, software development. Bootcamps provides students with training in team form by developing their practical skills.
Hackathons	Educational resource aimed at developing practical skills in programming and problem solving in the short term of students. They will also have the opportunity to work on innovative projects in it.
Peer-Learning	Platforms or groups for online meetings, negotiations, aimed at supporting a form of cooperation in which students exchange mutual knowledge and experiences with each other.
Mentoring	An educational resource based on an individual approach to students by another student or specialist with certain experience. In the development of digital competencies, mentors answer individual questions of each student based on the speed of learning.
Project-based education	Education aimed at the development of digital competencies as a result of students ' learning, activities in the medium of various practical projects. In this, a real problem is selected for the project, which develops their readiness for professional-practical activities.

e-ISSN : 26203502
p-ISSN : 26153785

Learning in place	The activities that are organized at the place of study, which meets the technical requirements in the study room, and not at a distance of digital competencies of students, will be effective and focused on practical activities.

Within the framework of the research work, questions and tasks related to the content of the development of digital competence in students and educational resources were formulated based on the goals and objectives of the study.

Pedagogical observations, professors, experts in digital technologies, as well as questions and assignments from scientific and theoretical analysis are aimed at determining the dynamics of the development of digital competence of students.

As the main condition for the development of digital competence in vocational-pedagogical activities in students, they are characterized by the formation of knowledge, skills and qualifications for digital technologies in everyday-life activities. From this, these aspects were taken into account in the formation of questions and assignments.

Questions and assignments were formulated according to the following components and content of the development of digital competence in students:

- digital information finding tools;
- using search engines;
- to be able to use digital tools in everyday-life activities;
- responsible attitude in the use of digital technologies / technology;
- filtering and searching for digital information;
- how to check the reliability of digital axboort;
- targeted use of artificial intelligence capabilities;
- digital technology and sustainable development continuity;
- digital technologies and security of personal data;
- virtual and cloud technologies.

The content of the development of digital competence in students of pedagogical higher educational institutions is formed in the Ravis corresponding to the dynamic development of digital technologies. The dynamic development of digital technologies and its consequent absorption into the content of education is considered impossible to regularly be expressed in regulatory documents of Educational Directions. From this it is recommended to use new, innovative digital technologies based on the content of science topics, to instill pedagogical conditions and didactic capabilities of their use.

Conclusion. Educational resources, which are seen as an important tool for the development of digital competencies in students, are widely used in the educational process, as well as in the context of Independent Education. Unlimited technical and organizational capabilities of educational resources lead to a deviation from the content and purpose of science. The advantages and disadvantages of each educational resource recommended by professors and teachers can be reasonably explained to students, an analysis of educational resources from a pedagogical point of view allows them to develop digital competencies on the basis of the requirements of professional and pedagogical activity.

References

1. Kayumova M.Sh. Digital Culture Development formation system in Higher Education / / Current issues of bio economics and digitalization in the sustainable development of regions,

e-ISSN : 26203502
p-ISSN : 26153785

International scientific – practical conference. – 532-537 B.

2. Pirnazarovna, D. F. ., & Salahitdinovna, B. S. R Some Reflections on the importance of incorporating aqamli technologies into the educational system. Electronic Journal of the integration of Science, Education and practice, 2022.- B. 88-92. https://journal.bilig.uz/isepsmj/article/view/543

3. Askarov A.D. Competencies of professors and teachers of higher education institution on information and communication technologies, https://www.researchgate.net/publication/347999746

4. Prokhorova M.P., Bulganina S., Burkhanov S.V. "Izuchenie tsifrovix navikov studentov". Problemi sovremennogo pedagogicheskogo obrazovaniya. 66-3, 2020. - S. 232-236.

5. Yuldashev Sh. Digital education technologies-the foundation for the program "Digital Uzbekistan-2030" / https://ndpi.uz/uz/2019/01/07/2945/https://giu.uz/e-resurs/malaka-oshirish/e-didaktika/infografika/