DIGITAL PEDAGOGY IN HIGHER EDUCATION

Before starting to talk about digital pedagogy, it is worth understanding what it means. In the word combination “digital pedagogy”, the main word which sets the meaning of the concept is “pedagogy”. The question is not what digital resources a teacher should use, it is not a specific introduction of virtual technologies into the educational process. Pedagogy is the science of purposeful activity in the formation of a person, the forms, content and methods of upbringing, education and training. Thus, the addition of the adjective “digital” to the name of a particular branch of professional activity indicates its direct connection with digital computer technologies, which provide new opportunities for the development of both the industry itself as a whole and the specific person carrying out this activity. It is a means that should not become an aim.

Another important distinction is that “digital pedagogy” is not the same as “online pedagogy”. If in the first case we are talking about the widespread use of technology in “live” lessons, than online studies involve remote, and sometimes distance learning. In general, digital pedagogy is much more then online pedagogy. Now digital pedagogy became a ubiquitous phenomenon, and therefore it is actively criticized and discussed. Everyone wants to understand what it can bring to the usual educational process, and what, on the contrary, can be taken away from it.

Initially, digital pedagogy meant pedagogical activity using information computer educational technologies, that is, modern technical teaching aids: an electronic projector instead of a slide projector that allows teachers to demonstrate visual material made in PowerPoint; electronic boards, e-mail, the Internet, webinars, teleconferences and, of course, distance learning technologies. Digital pedagogy uses digital tools to improve the quality of teaching and learning while noting that the digital environment cannot function effectively without specially trained teachers. The mission of digital pedagogy as a learning tool is provided by technological opportunities, which are manifested partly in the improvement of the old quality and partly in the emergence of a new quality of education.

Accordingly, the pedagogy of higher education is a branch of pedagogical science, a section of professional pedagogy that studies the theoretical and practical problems of higher education, the main components of the educational process at a university (patterns, principles, forms, methods, technologies, content), as well as features and conditions that ensure effective providing
educational services to all students, everywhere and anytime. And if we are talking about digital pedagogy, then we add the words “with the help of information technology and the Internet” to the above definitions of pedagogy, emphasizing that “digit” is only a means, a mechanism for the innovative development of the educational process, which can significantly affect all of the above elements as well as on the student himself [1]. This can be anything from simply using PowerPoint in the classroom to massive open online courses (MOOCs) like Udacity [2] and Coursera [3]. Examples of elements of a learning process organized based on digital pedagogy are blogging tasks, the use of social networks to organize discussions, the use of digital tools to test ideas. Digital pedagogy expands the possibilities of teaching, training and learning, offers various ways of doing independent work, conducting practical classes, evaluating completed work, etc. Digital pedagogy allows teachers to develop teaching methods aimed at introducing students to creative practice, stimulating students’ creative manifestations, using figurative models of theoretical concepts. At the same time, it is necessary to direct pedagogical efforts to form students’ desire for new knowledge, the desire to discuss new knowledge, hear someone else’s opinion, create new knowledge, which is ensured by the organization of informal communication in social networks, online communities, blogs, via Skype, WhatsApp, Zoom etc. And then we will be able to say that information technologies contribute to the development and maintenance of the cognitive activity of students.

So, digital pedagogy implies:

- information and communication technologies for creating multimedia projects;
- significant simplification of the learning process: both gamification and interactive formats make learning easier and more fun;
- saving time: many digital resources allow the teacher not to spend hours checking homework and long layout of materials for lessons;
- individual learning paths: with the help of digital resources, it is easier to select individual tasks for each student, focusing on his level of knowledge;
- fast and mobile data update: while the information in printed textbooks could remain the same and therefore outdated for three years or more, digital materials allow new data to be constantly taken into account.

By the way, thanks to the digital economy, the teacher also becomes a student. He/she constantly needs to master new tools and acquire new knowledge.

There are also major structural changes. LMS (Learning Management System) or DLS (distance learning systems) appear. These are special platforms on which all the information necessary for the student to learn is collected. They also allow users to build a quick feedback between students and teachers.

Everything new inevitably collides with previously formed attitudes and stereotypes that prevent the introduction of innovations. The first-order barriers to the integration of information and communication technologies in teaching and learning include a lack of resources, time, access and technical support. The second-order obstacles are teachers’ beliefs about information and communication technologies. It should also be noted the problem of academic dishonesty of students, which has increased significantly due to digitalization, or rather the Internet – the problem of borrowing in student written work. For students, one more difficulty can be noted – unpreparedness for work in the modern educational environment. Students do not have the necessary competencies to perform written work that requires a clear statement of the question, the search for information and reasoned answers, in most cases they do not know how and do not want to debate, participate in discussions and other forms of learning activities offered by digital pedagogy.

As for the risks of digital pedagogy, we may note:

- academic dishonesty of students associated with the problem of downloading essays, homework, problem solving and tests;
• opposition of the teaching staff to the massive introduction of information and communication technologies in the educational process;
• the risk of negative consequences of the impact of information technologies on a person;
• digital divide – a gap in digital education, due to different conditions of access to digital services and products, depending on the level of well-being of students. Recently, the digital divide is also discussed in another aspect: the dependence of students on the level of ability to use digital technologies, which is expressed in the fact that some people are capable of creative activity, and some people are only capable of standard communication operations.

Digital pedagogy should be based on other concepts of education compared to the traditional approach to the organization of the educational process, which has become widespread recently. Modern innovative and communication educational technologies are largely based on philosophical and psychological concepts that have been developed since the middle of the twentieth century. The future of higher education is seen in the development of collaborative or joint learning (learning in collaboration), gamification, which is an application of approaches embedded in computer games to develop and implement gaming learning methods that increase motivation for learning solutions applied tasks, online mentoring, collegiate environments and other educational technologies implemented only with the help of information and communication technologies.

References: