

*Sh.A.Gulamov.*

*department of biological physics, informatics, medical technology*

*Andijan State Medical Institute*

***THE USE OF INNOVATIVE TECHNOLOGIES IN TEACHING A  
BIOPHYSICS LESSON.***

*Abstract: This article analyzes the results of the introduction of innovative educational technologies and didactic models in the use of the biophysics lesson.*

*Keywords: BigData, Blockchain, Data Science, blended learning, flipped classroom.*

The use of social networks in the educational process. Organization of distance education programs based on modern information and communication technologies. The use of "cloud technologies" in educational processes that allow you to track and master lesson processes online, as well as impose them on electronic information keepers. Organization of educational processes based on the game.. The use of "IoT" in educational and learning processes. The Internet of Things (IoT) connects devices to a computer network and allows them to collect, analyze, process, and transfer data to other objects through software, programs, or technical devices. The use of robots in educational processes: an object of control; as an assistant to a teacher. 8. The use of artificial intelligence in the educational process. Creation of conditions for granting universities the status of an innovation smart University.. Development of the multiservice cross platform program, which implements a virtual educational environment in universities and provides all types of educational services. Teacher (or instructor)-to create a virtual environment for the learning process, which is part of electronic and mobile learning based on the wishes of

students, and through it, in the traditional form of teaching, to exchange information and work in a team through an active network between students.

Use of innovative educational technologies to educate and engage international students:

1. To develop the use of modern programs widely used internationally, based on the specificity of Educational Directions and specialties.
2. Improving the methodological and technical characteristics of publicly open online courses.
3. Creating a website for scientific research.

**Use of innovative pedagogical models:**

1. Transformation of traditional didactic models into innovative models using innovative educational technologies.
2. Individualization of educational processes on the basis of digital technologies, development of Distance Learning Services, widespread introduction into practice of the "flipped classroom" model of webinar, online, blended learning technology.

**Introduction of the scientific approach to education:**

1. To continue and expand the subscription of OTM for the use of World electronic educational resources, electronic libraries, databases, laboratory protocols, etc.
2. The introduction of tools of the highest level of digitalization, such as BigData, Blockchain, Data Science, into the educational process.

Analysis of the results of the introduction of innovative educational technologies and didactic models: development of digital educational pointers in ensuring

reliable identification of changes made in the digitization of universities. Ensuring a healthy competitive environment between universities; development of a metrological standard for quantitative and qualitative assessment of the digital skills of teachers, university employees and digital content.

Promotion of results and best practices through: media; regional and national seminars; national and international conferences; social networks; national network of innovation education technology centers; IT - club; startup projects.

To start the digital transformation of education, it is necessary to do the following:

1. In the field of traditional education: the use of an interactive whiteboard and monitor; the development of interactive, internet-connected and multimedia presentations for each lecture.
2. In the field of synchronous distance learning (Real-time): the use of the video conferencing communication system; the use of a virtual study room.
3. Asynchronous in the field of distance learning (at any time): creation of online training courses; recording video recordings; use of cloud technologies.
4. In the field of mixed education - to achieve the highest efficiency, it is necessary to optimally combine traditional and electronic forms of training.

The "flipped classroom" model of blended learning technology provides high interactivity and the ability to perceive students' learning and performance. By conducting passive learning experience out of class, teachers can use the lesson to involve students in activities such as solving their problems in a small group, the assessment of group mates, and practical activities; it has been proven that such active learning exercises have significantly improved learning outcomes. In doing so, autocadirovated assessment data determine their own strategies for

teachers to target their classes and fill gaps in student understanding and invite classes to further courses.

### **References:**

1. Sung K. A case study on a flipped classroom in an EFL content course. *Multimedia – Assisted Language Learning*, 18(2), Korea, 2015.

2. Chen, Y. J. Dimensions of transactional distance in World Wide Web learning environment: A factor analysis. *British Journal of Educational Technology*, 32(4), British 2001.

W. Ray Crozier. *Individual Learners: Personality Differences in Education*. London and New York