

UDC 371

**EDUCATIONAL DIGITAL TRANSFORMATION:  
ADVANTAGES AND DISADVANTAGES**  
**ЦИФРОВАЯ ТРАНСФОРМАЦИЯ ОБРАЗОВАНИЯ:  
ПРЕИМУЩЕСТВА И НЕДОСТАТКИ**

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*Keywords: digitalization, digital transformation, massive online education, massive open online courses.*

*Ключевые слова: цифровизация, цифровая трансформация, массовое онлайн-образование, массовые открытые онлайн-курсы.*

*Abstract. The article discusses the issues of higher education digitalization technologies in modern conditions. The main idea of the educational digital transformation is the movement towards the educational process personalization based on the usage of digital technologies. Massive online education is developing at a rapid pace nowadays. The article provides examples of Massive open online courses (MOOC) such as Coursera, the Academic Earth website, the Russian national platform for open education (NPOE), Stepik and others. The advantages and disadvantages of MOOC are given.*

*Аннотация. В статье рассматриваются вопросы технологий цифровизации высшего образования в современных условиях. Основной идеей цифровой трансформации образования является движение к персонализации образовательного процесса на основе использования цифровых технологий. В настоящее время массовое онлайн-образование развивается стремительными темпами. В статье приведены примеры массовых открытых онлайн-курсов (МООК), таких как Coursera, Academic Earth, Российская национальная платформа открытого образования (НПОО), Stepik и другие. Приведены преимущества и недостатки МООК.*

The main idea of the educational digital transformation is the movement towards the educational process personalization based on the usage of digital technologies. Its important feature is that digital technologies help us in practice to use new pedagogical practices (new models of organizing and conducting educational work), which previously could not take a worthy place in mass education due to the complexity of their realization by means of traditional technologies [1].

Digital technologies are radically changing the content of the disciplines being taught and the form of their presentation. Direct connections to electronic databases,

news, forums are available. Publishing houses specializing in educational literature are increasingly switching to electronic versions of their textbooks and teaching aids.

During practical exercises, you may use social networks. Using Skype, Zoom, Webex, messengers, it is possible to participate in a lesson held by a leading expert. The data of using these platforms especially during the pandemic situation are presented in the article (see Fig. 1–3).



Figure 1 – The data of using Skype by the users

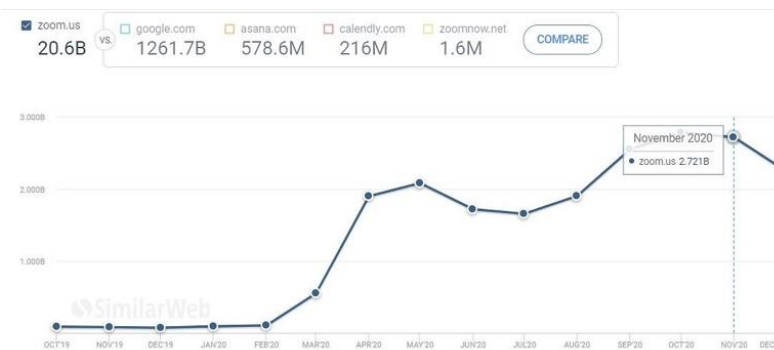


Figure 2 – The data of using Zoom by the users



Figure 3 – The data of using Webex by the users

Massive online education is also developing at a rapid pace. Since the late 1990s, lecture video recordings by educational institutions and individual teachers began to appear on the Internet. In the early 2010s, full-fledged interactive courses with tests appeared. Some popular courses currently have hundreds of thousands of students.

MOOC (Massive open online courses) is a training course with massive interactive participation using E-learning technologies and open access via the Internet. It is one of the distance education forms. In addition to traditional curriculum materials such as videos, reading, and homework, massive open online courses provide the ability to use interactive user forums to help building and maintaining communities of students, teachers, and assistants.

MOOC Coursera cooperates with universities and students. After completing courses and passing tests and exams, students receive full-fledged certificates. The technical platform is both the Coursera website and the mobile app for iPhone and Android.

Since 2009, the Academic Earth website has been launched, which hosts video lectures by professors of Moscow Technical University, Berkeley, Harvard, Princeton, Stanford, Yale on economics, political science, mathematics, physics, chemistry, history, philosophy, literature, psychology, etc.

The Russian national platform for open education (NPOE) is also working successfully. So, since 2016, for all courses at the Higher School of Economics at NPOE, users after passing the test with personal identification can receive a confirmed certificate that is an actual analogue of an academic transcript, which can be accepted for transfer by other universities.

Another MOOC is Stepik. It first appeared in 2013. It develops adaptive learning algorithms, helps in conducting Olympiads and retraining programs. The idea of Stepik is open and convenient education in different spheres: computer science, mathematics, statistics, biology, engineering, natural sciences, foreign languages. Using Stepik a person can study material individually, whenever he/she wants choosing suitable level of education [3].

There are several advantages of using MOOC, as well as, disadvantages.

Table 1 – Advantages and disadvantages of MOOC

Advantages	Disadvantages
Mass and globality	Lack of direct communication
Free access, opportunity of flexible schedules	Technical difficulties
Attracting teachers from the most prestigious universities	The difficulties of building a course
A rich but concise presentation of the theory	Requiring a good level of IT competence for students
Multimedia content of educational materials	Insufficient English proficiency
The latest interactive and information technologies	Problematic enforcement of intellectual property
Mutual verification of tasks	Difficulty in privacy and data protection
Intercultural learning	Course Funding Sources
Gamification (awards, ratings, badges)	The difficulty of student self-organization

It should be noted that the university transformation under the digitalization influence during the knowledge economy formation is a multicomponent process that does not develop equally in its various areas.

Now consider the digitalization advantages as a factor in the educational transformation:

1. The growth in demand for knowledge while increasing its availability due to digitalization.

2. Through the digitalization of the graduates' (future employees) knowledge the university contributes to the economy digitalization.

3. Greater accessibility of education.

There are the following disadvantages of digitalization as a factor in the education transformation.

1. The close connection between the education digitalization and the educational service market brings the entire negative things of the market into education. A student is seen as a source of money, not a person, not the future of a state or a nation. The competition in modern education is for money that follows a student, and not for the minds, for the "heads".

2. The translation of all educational programs into English or any other foreign language for the education export leads to the loss of the national specifics of education.

3. The teachers' work is becoming precarious work, which creates socio-economic threats.

The noted advantages and disadvantages of digitalization can be concretized using the example of distance learning. The main advantages of distance education are well known:

- enriching the traditional educational process by introducing video components into the course curriculum,
- using online tests,
- checking written works for plagiarism
- remote round-the-clock access to course materials,
- the delivery of study papers online,
- exchange of current organizational information,
- the absence of spatial and temporal restrictions due to the place and time of the behavior of classes,
- the habitual perception of information in digital form by today's students.

But the main advantage of digital education is economic that is the reduction in the administering the educational process cost.

The disadvantages of distance education are also obvious:

- the time of direct interaction between a student and a teacher is reduced to a minimum;
- the possibility of individual teacher work with each student is reduced;
- the student preparation for the practical use of scientific knowledge is in question;
- ethical issues of digitalization have not been resolved [2].

As a result, the channel of implicit knowledge transmission from person to person is narrowed; students do not acquire social skills necessary for future work; the teacher's personality, their work becomes not important.

In conclusion we should mention that the labor market requires a qualitatively different content for training of graduates. Digitalization affects not only the content of education, but also its organization. A teacher from the bearer of the transferred knowledge and skills turns into a navigator who helps to navigate the knowledge bases.

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UDC 378.147:81(045)

### **USAGE OF DEBATES FOR THE DEVELOPMENT OF IT BEGINNER STUDENTS' FOREIGN LANGUAGE COMMUNICATIVE COMPETENCE**

### **ИСПОЛЬЗОВАНИЕ ДЕБАТОВ В ПРОЦЕССЕ ФОРМИРОВАНИЯ ИНОЯЗЫЧНОЙ КОММУНИКАТИВНОЙ КОМПЕТЕНЦИИ СТУДЕНТОВ ИТ-ПРОФИЛЯ НА НАЧАЛЬНОМ ЭТАПЕ**

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*Ключевые слова: дебаты, иноязычная коммуникативная компетенция, студенты ИТ-профиля.*

*Abstract. The article deals with the technologies and formats of organising and holding debates for the development of IT students' foreign language communicative*