

ON THE WAY TO OPEN EDUCATION

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The article is devoted to new trends in education. The system of open education is the path to a single world educational space, which offers unique opportunities not only for new educational initiatives on a global scale, but also for modernization of existing educational institutions.

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1. Introduction

Humanity of the XXI century lives in the age of information society, information technologies and virtual reality. The influence of the basic laws of information society development makes it necessary for people to constantly master new instruments for working with information, new skills and professions. This imposes a number of demands on the education system, which must inevitably adapt to changing society.

Thus far the education system has developed in such a way that the main mission of modern education is to form a worldview that is necessary for human improvement and preparedness not for contemplation of future events, but for active conscious participation in them.

2. Purpose of the study

According to data provided by Brandon Bastide, Executive Director of Education Department of Gallup, only 14% of students believe that knowledge obtained at universities will be of use in the future. Only 6% of university employees believe that they prepare students for future work. And only 11% of employers find in graduates skills and knowledge required for work.

Thus, it is necessary to determine the main opportunities and directions for introducing modern educational technologies to increase the level of demand for graduates.

3. The main part

The creation of single open educational space is a global task. For example, in France higher education institutions provide education only in humanitarian fields. All informational and technical programs are provided in specialized schools and colleges.

The reasons for the development of online education in engineering in France are:

- High unemployment rates.
- Poor preparation of students for professional activity in higher education institutions.
- Easy and effective opportunities for training in IT.
- The need to develop international relations.

Openclass project, which implements innovative educational technologies, has created the first distance education platform in Europe. At this moment the project has 3 million users, of which 1 million active users per month. As much as 1000 courses has already been implemented, among which there are both separate courses and programs created in collaboration with partners – educational institutions and employment centers. All educational programs are accredited (www.openclassrooms.com).

In order to assess the effectiveness of implementation of open education system, a study has been conducted on how online education changes the educational system. This study is a project of The Open University of the United Kingdom and The William and Flora Hewlett Foundation. The goal of this project is to study to what extent open online education, mass open online courses and open learning materials change education in the world. Online resources have been studied for 2 years in 4 education sectors: secondary school, secondary vocational education, higher education and informal education. During this time, through the efforts of 15 different educational projects, 20 mass polls were organized, which collected more than 6,000 responses from participants from the United States, the United Kingdom, India, South Africa, Australia and China.

The two main hypotheses proposed by the scientists are as follows:

- Efficiency – the use of open educational resources produces an increase in learning efficiency and student engagement.

- Openness – open educational resources create different models of usage and implementation than other online resources.

The results of the study showed that, firstly, the hypothesis stating that open educational resources increase academic performance of students seems completely justified, although this factor is largely influenced by increased level of trust, satisfaction and enthusiasm. Openness and accessibility for all users is also confirmed for almost 80% of users of resources. An important result was that the influence of open resources was stronger than expected. It turned out that students begin to use online resources as means of preparation for their main educational subjects, and continue to use them as an auxiliary tool. Education workers also promote open online resources, motivating colleagues to use the network's potential in their practice.

To date, the following areas of development of education in information society have been defined:

- establishing links between education, scientific knowledge and culture;
- accessibility of education at all stages of development and formation of a person;
- openness of education;
- activity orientation of education;
- integrity of education through the implementation of interdisciplinary links of various fields of knowledge;
- application of information technologies in education.

In this regard, one of the main requirements of professional training of specialists in any field of activity is inclusion in the educational process of not just modern information and innovative technologies, but of new types that create real opportunities for their use in the education system with the goal of forming special competencies for future specialists.

To implement new tasks at the end of 2014, the Council of the Ministry of Education and Science of the Russian Federation for Open Education was established at the initiative of the rectors of the leading universities of Russia. It supported the idea of creating a National Platform for Open Education. The task of this platform is to create a national portal for high-quality open online courses as a public site for all students and educational organizations. The portal project has already been implemented and online learning is available (<https://openedu.ru/>).

For approbation of open online courses and elaboration of mechanisms of their usage by students it is necessary to solve the following problems:

- Determine the list of courses in which the educational organization is interested;
- Redistribute the place of the online course in the educational program or make the necessary changes;
- Provide for the possibility of receiving credits for a taken online course according to rules established in the educational organization.

The developed platform for open education includes the use of computer networks in education, which in time allows to create a united world educational space, open to any citizen of the planet. According to modern concepts, open education includes the following components:

- a variety of educational institutions of different types;
- numerous computer networks of educational institutions connected to the Internet;
- a single database and a single knowledge base;
- standardized tools for creation of teaching materials;
- electronic libraries, catalogs and means of searching for primary sources;
- internationally agreed educational standards and educational programs.

The conditions that ensure the implementation of online education projects include the following:

- Possibility of acquiring higher, postgraduate and additional education is not in one, but in several educational institutions. This is academic mobility, i.e. intensive exchange between educational institutions of different countries by students, postgraduate students, interns and academic staff.
- Possibility of obtaining any (naturally, unclassified) educational information by any student.
- Possibility of using any modern information technology available to any student in order to receive educational information.

4. Experience of the Dubna State University

These conditions are successfully implemented in Dubna State University that started effectively using distance learning and educational portals that are part of the open education system since 2014.

The Center for Distance Learning of the Institute for System Analysis and Management has been operating at Dubna State University as a structural unit for more than 10 years (<http://sdo.uni-dubna.ru>). Employees of the center and professors of Dubna State University developed and implemented more than 100 online courses in different fields. They are developing methods and technologies for using distance learning in various forms of education, creating electronic educational materials using multimedia technologies, organizing conferences, round tables and school seminars with the participation of leading specialists in the field of distance learning.

5. Conclusion

In conclusion, it is important to note that the system of open education represents the way to a united world educational space that opens unique opportunities not only for new global educational initiatives but also for modernization of existing educational institutions.

Open education also provides opportunities for free development of individuals that ensures, on the one hand, acquisition of necessary knowledge, skills and performance potential, and on the other hand, a comfortable life in a society.

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