Universities are Waiting for Restructuring: Peculiarities of the Open Education

Timakova R.T.*, Radkovskaya E.V.

Ural State University of economics, Yekaterinburg, , Russian Federation 620144
*Corresponding author. Email: trt64@mail.ru

ABSTRACT
The digital transformation of higher education through the quantitative accumulation of the attributes of innovative technologies leads to a qualitative change of the content of educational resources by adapting modern online resources that are widely used in foreign practice and are actively promoted in the open educational space of the Russian Federation in order to increase the effectiveness of the so-called self-regulated students’ learning, motivation for studies and self-control. The use of online education technology is a modern trend for increasing the competitiveness of universities and the formation of a new generation of specialists, having knowledge, skills and competences for working in the global information infrastructure. Opportunities for open education allow to master the new resource potential in the framework of full-training and individual modular projects. The content analysis of the subject of Russian online courses has revealed a number of problems dealing with the organization of online courses: in accurate determination of the target audience, the shortage of interactivity and the lack of courses tracking. Blended learning with an increase in the share of online courses in basic disciplines can be considered the best solution for undergraduate studies. Keywords: higher education, open educational space, online learning, digitalization

1. INTRODUCTION
The development of open education in the age of digitalization reflects the peculiarities of the development of the global information infrastructure in the form of information and technological impact through the conversion of software computing and communication tools which form the basis of internet technologies. The path of the development of higher education is determined by the priority development of digital technologies and the formation of a global information infrastructure. The effectiveness of the domestic higher education system is predetermined by the possibilities of leveling the cyber security risks within the framework of the countries’ national security to ensure the competitiveness of open educational resources. Nowadays modern higher education institutions form various competitive models in a free educational space, generating knowledge, skills in the field of vocational education. The basic principles of the state policy of The Russian Federation in the field of education make it possible to ensure the unity of the national educational space with ongoing integration into the online space with the educational systems of other states [16]. At the same time a directional vector of predicted development is being formed on the basis of the consolidation of resource potential which requires optimization of procedural approaches in the terms of identity and preserving the self-sufficiency of Russian universities to ensure competitiveness in the open educational space and determines the goal of conducting research of the peculiarities of the domestic open educational space.

2. RESEARCH METHODOLOGY
The official sources and research literature were used as the research material; theoretical and empirical research methods in the framework of a comparable analysis and interpretation of research results were applied. The research approach is based on the search for an innovative model for the development of higher education in the interpretation of the law of unity and struggle of opposites. This law characterizes the direction of the entire development process linked with other laws of dialectics, since the emergence and development of a contradiction is at the same time an accumulation of quantitative changes and its resolution is a leap, i.e. the transition to a new qualitative state and the dialectical negation of the old quality by the new one. The leap as a complex interaction of the basic laws of dialectics is the final stage in the struggle of opposites and the resolution of contradictions, as well as the completion of the process of negating the old [1]. Moreover the efforts of the movement of opposite directions set the trend for the evolutionary development of the system [2].
3. RESEARCH RESULTS

Higher education, which until the 90s of the last century was an elite superstructure of the countries’ economic system, has now become a mass educational product in the terms of relative accessibility for different segments of the population as a result of the commercialization of educational services along with reducing state budgeting. The transformation of higher education in accordance with the Bologna process and the entry into the so-called European Higher Education Area (EHEA), whose strategy is aimed at providing balanced differences between institutional and national policies as a result of cooperation based on collaboration, with the prevalence of academic values in the conditions of tolerance and further recognition of qualifications [3, 4].

The implementation of the Bologna system in the Russian Federation takes place on the basis of the existing high education system as a result of its modernization and augmented reality: the reformation of the basic specialty system with transformation into undergraduate and graduate programs, the transition to a competency-based approach through indicators and descriptors with the active use of information technologies. In order to increase competitiveness despite of various development paths of universities and their status, open education technologies, contributing to the strengthening and consolidation between universities are actively promoted in the educational environment [5]. However their identical borrowing and/or coping, including individual elements does not form an unambiguous competitive advantage requires a commensurate assessment with global and national educational processes with a focused approach to the possibility of students’ quickly mastering new competences in the open educational space.

Digital transformation presupposes a qualitative change in the content of the educational process, which ultimately will meet the needs of all its participants (students, teachers, employers) and provide a worthy place for the university in the world ratings according to [6].

Traditional learning technologies (offline) are increasingly being replaced by blended learning technologies with the elements of the open educational resources (online and information technologies) in order to increase the effectiveness of the so-called self-regulated learning, motivation for learning, planning, management and self-control. Information technologies penetrate into the entire structure of the educational environment, both technology and disciplinary courses. Accordingly, educational innovations associated with the development of technological applications contribute to the development of the practical application of education [7].

The most important advantage of mass open online courses (MOOC) is provided by the availability of educational resources anywhere and anytime [8]. As it is noted [9] the MOOC data contains not only profiles and learning results, but also a projection representation for identification of students, reflection of common sequential patterns in a group, illustration of transitions between sequential events and/or processes and augmented sequence chains for comparing personal sequences.

In connection with the “growing number of learning resources available online through massive open online courses and learning management systems”, personalized recommendation in the field of e-learning are needed, for example, through the ontology to create relevant materials as it has been established [10]. The results of studies related to the sociability of the online environment through the implementation of projects aimed at socializing students in the learning process happen to be interesting, but the appearance of communication instead of deeper social connections in direct communication is noted [11].

The studies [12] have established that both in the global and regional domestic educational services markets, high international competitiveness is primarily demonstrated by universities with special status located in Moscow and Saint Petersburg. The university income is also a significant fact in international competitiveness. According to the Passport of the priority project in the field of education “Modern Digital Educational Environment in the Russian Federation”, it is planned to bring the number of students studying at the educational institutions that have mastered online courses to 11 million people by the end of 2025. Online education can be considered as a holistic (universal) system or as an addition to offline education, distance or accelerated education, actively distributed on well-known educational platforms—Lectorium, Coursea, Universarium, Internet University of Information technologies (INTUIT), National Open Education Platform and others.

At the same time the general graduation of students in undergraduate, speciality and masters’ programs (according o 2018) every eighth student mastered an educational program using and learning; 4448 people or 0.5% of graduates studied in the network form of implementing educational programs which indicates the advancement of digitalisation technologies in the higher education system of Russia [13].

The effectiveness of training in the MOOC system depends on the cognitive characteristics of a person. For verbal students learning with MOOC is more effective than learning in a traditional way. At the same time half of the Russian students surveyed consider online education an auxiliary tool and only 17% of students consider it an independent field of education.

The negative points include a high dropout rate of students, which can reach 90% [14]. At the same time limited funding, insufficient knowledge of foreign languages as well as small number of programs implemented in foreign languages at the universities, difficulties in finding foreign educational programs and partner universities comparable to the two level system,
and the lack of normative documentation and normative terms of stay outside the resident university are an obstacle to mobility for Russian students [15].

4. DISCUSSION OF THE RESULTS

But the quantitative accumulation of knowledge resources itself does not lead to a qualitative change in the content of educational resources. It is possible to rise to a more advanced level, consistent with today’s moment of universal digitalization only in the case of the “denial” of formalized attributes of teaching (lectures, seminars, workshops and traditional colloquiums) that are so familiar and so convenient in spatial dimensions for teachers, perhaps through the adaptation of modern resources used in foreign educational practice or in advanced domestic higher educational institutions and the development of individual educational trajectories and conceptual models. The development of the professional higher education in the era of the economics of highly intelligent products should be determined by modern market trends, as the market for professions is actively changing and transforming and the possibilities for open education allow to master new knowledge and competences both within the framework of full training and as a part of individual design decisions in the form of modules. In this case the possibilities for open education make it possible to obtain new necessary competences during the life. At the same time the slowness of educational system, overburdened with the need to achieve rating indicators does not meet the needs of the digital economy fully. Rigorous standardization forms a standardized non-competitive specialist. The content analysis of the substance of Russian online courses has revealed a number of problems associated with the selection and organization of online courses, namely, inaccurate determination of the target audience, the lack of interactivity and the lack of tracking courses. On the other hand, 2 mutually exclusive positions are possible in the students’ environment: the lack of students readiness for self-organization, for independent study of courses of disciplines in the online mode and no motivation of students to study other material beyond the online course. At the same time a part of students motivated to obtain knowledge in order to increase their competitiveness in the labor market is not taken into account. For universities that are studying to develop the online learning market it is advisable to introduce online courses in 1-3 basic disciplines of other universities, which allow to determine the effectiveness of the introduction of online learning. The strong points of such a project based on the results of the SWOT analysis include: the use of informative lecture and test materials, the use of advanced technologies, the ability to monitor the progress of training in real time for the teacher; visualization and repeatability of the course, the possibility of the independent study of the course at a convenient time and convenient place for the students. The university is increasing the flow of students without compromising the quality of submission of knowledge. The weaknesses of the organization plan can be identified at the stage of implementation of the project solution, the outflow of financial resources from the university and a partial loss of control over the students can be the threat. At the next stage it is possible to organize once’ own online courses to insure the competitiveness of the university and the performance of rating indicators. So blended learning with the increase in the share of online courses in basic disciplines can be considered the best solution for undergraduate studies.

5. CONCLUSIONS

The use of systematic approach to the adaptation of universities in the open educational space using the technology of online education, which is a modern trend in education and a competitive advantage of the university will provide a competence-based approach to the formation of a new generation of future specialists to work in the global information infrastructure.

REFERENCES

[1] S.Yu. Ivanov The manifestation of the basic laws of dialectics in scientific knowledge // Bulletin of the Orenburg State University. 2008. No. 7 (89). S. 75-79.

[2] R.T. Timakova Philosophical approach to the repositioning of tourist territories // IX International Scientific and Practical Conference “Modern approaches to improving the quality of service in the tourism and hospitality industry in the context of intercultural communication”, Ural State Economic University, April 25–26, 2019. S. 63-66.

[3] E.V. Guslyakova, A.L. Demchuk, I.G. Teleshova The entry of the higher education system of the Russian Federation into the European space of higher education: problems and challenges // Higher Education in Russia. 2014. No. 10. P. 5-10.

[4] Budapest-Vienna Declaration on the European Higher Education Area. March 12, 2010. URL: http://www.ehea.info/Uploads/Declarations/Budapest-Vienna_Declaration.pdf (дата обращения: 07.03.2020).

[5] F. Nascimbeni, D. Burgos, E. Spina et al. Patterns for higher education international cooperation fostered by Open Educational Resources // Inovations in education and teaching international. 2020. DOI: 10.1080/14703297.2020.1733045.
[6] E.N. Klochkova, N.A. Sadovnikova Transformation of education in the context of digitalization // Open Education. 2019.Vol. 23, No. 4. S.13-22.

[7] J. Sole Blanch The educational change in front of the technological innovation, the pedagogy of competences and the discourse of the emotional education. A criptic approach // Teoria de la Education. 2020. Vol. 32, № 1. P.101-121.

[8] F. Shahzad, G. Y. Xiu, I. Khan et al. The moderating role of intrinsic motivation in cloud computing adoption in online education in a developing country: a structural equation model // Asia pacific education review. Vol. 21. № 1. P. 121-141.

[9] Q. Chen, X. Yne, X. Plantaz et al. ViSeq: Visual Analytics of Learning Sequence in Massive Open Online Courses// The transactions on visualization and computer graphics. 2020.Vol 26, № 3. P.1622-1636.

[10] C. George, A.M. Lal Review of ontology-based recommendation systems in e-learning // Computers & Education. 2019. Vol. 142:UNSP 103642/

[11] J. Weidlich, T. J. Bastiaens Designing sociable online learning environments and enhancing social presence: An affordance enrichment approach // Computers & Education. 2019. Vol. 142:UNSP 103622.

[12] D.A. Endovitsky, V.V. Korotkikh, M.V. Voronova Competitiveness of Russian universities in the global system of higher education: quantitative analysis // Higher education in Russia. 2020.Vol. 29, No. 2. P. 9-26.

[13] M.V. Seroshtan, N.P. Ketova Modern Russian Universities: Positioning, Development Trends, Opportunities for Building Competitive Advantages // Higher Education in Russia. 2020.Vol. 29, No. 2. P. 27-40.

[14] J. Weidlich, T. J. Bastiaens Designing sociable online learning environments and enhancing social presence: An affordance enrichment approach// Computers & Education. 2019. Vol.142:UNSP 103622.

[15] N.L. Smith Academic mobility: an instrument of globalization of education or a challenge to higher education in Russia? // Service in Russia and abroad. 2014. No. 7 (54). S. 229-241.

[16] Ustyuzhanina E.V., Molokova E.L. (2020). Deviant behaviour of stakeholders in Russian higher education. Upravlenets – The Manager, vol. 11, no. 1, pp. 70–83. DOI: 10.29141/2218-5003-2020-11-1-7.