REMOTE EDUCATION IN THE ERA OF DIGITAL TRANSFORMATION*

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Abstract

With the onset of the post-industrial age, the educational system underwent significant changes, giving rise to various forms of education, including distance education. Initially, distance education relied on traditional learning theories, but as these theories failed to address the challenges of the new era, the theory of communication emerged. This article aims to explore the impact of communication on teaching and learning in the digital age. It presents a systematic review of scholarly articles from reputable journals. According to the theory of connectionism, learning is like networking and communication between networks. Knowledge is distributed among people and tools, creating an environment where learners have control. Consequently, the classroom's learning environment, as well as the roles of teachers and students, undergo significant changes. The network assumes many cognitive functions, and education employs new technologies. The theory of communication has a crucial role in distance education. Therefore, educational institutions, particularly distance education courses, should design their programs based on this theory. This ensures that learners

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actively participate in creating knowledge, building meaning, interacting with one another, and using various types of media and specialized tools for teaching and learning.

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1. Introduction

A person is an integral unity of spirit (basic social and personal values and principles), soul (all mental processes) and body, which implements goals and executes programs set by the previous two "instances" (Yakovlev, 2020). It can be said that due to the changes in today's world, the transformation of the world of education is necessary. For educational organizations, adopting digital transformation in education can be new ways for educational institutions. After the coronavirus pandemic, people have a better view of education-oriented technology and holding online events (Gairbekova 2021; Gilmeeva and Shibankova 2020; Lomovtseva, 2020; Morozov and Samborskaya, 2020; Semenova and Al-Dirawi, 2022; Starichenko, 2020; Verbitsky, 2019).

Considering that the digital world makes educators find new ways to teach, so schools that better manage the change and evolution of the world of education with the introduction of virtual education are more successful than other schools. In this article, we try to examine the change of education through digital education.

2. Method

Apparently, at the moment, with all the variety of approaches and technologies, the existing system of higher education in Russia has reached the limit of efficiency. Attempts to pump the system with money at the beginning of the XXI century delayed the moment when it became obvious that the approaches used were not able to ensure not only the competitiveness of university graduates, but also the competitiveness of the country. The declared "diversity" of approaches has turned into a poverty of strategies. The creation of federal universities may be a belated action when the knowledge-intensive economy and education began to move in the opposite direction to the most dizzying variety of alternatives. Calls for real action on the transition to a "new" higher education run into the irritation of university leaders and teachers. Hundreds of papers have been written about what higher education should be like in modern Russia, but at the same time the writers proceed from the following assumptions (Semenova, 2022; Uvarov et al., 2019; Yakovlev, 2021):

1) the fundamental identification of the essence of the information society with the essence of industrial society;

2) modernization of education does not imply a radical change in its content, since it is important for the existence of Russia's cultural identity to "preserve the great traditions of higher education."

The information society is changing the ontology of education, because the space (topos) and time of the life world (temporality) of a person are changing. In the information society, there are changes at the level of the deep basis of time, manifested in the desynchronization of processes in real and virtual reality. The gap between the high-speed flow of information in the virtual education sector (distance education) and the slow passage of time in the traditional educational process is increasingly felt in the higher education system. Continuous higher education today should be understood as a pluralistic, non-equilibrium system with characteristics (Gairbekova 2021). In higher education as such , the following trends can be identified today:

1) the appearance, along with the educational localities of the virtual educational space of strings and streams, i.e. the formation of literally blurred, spilled, lost clear boundaries (distance education);
2) shortening of temporal and spatial connections between participants of the educational process. In the information age, Long life Education turns out not to increase the length of a person's stay in the education system, as it was understood in industrial society, but to virtualize the space and time of education;

3) spatial shifts in the placement of educational centers (reduction of dependence on the former imperial division into metropolitan and provincial education);

4) globalization of education. Internal competition between universities of one country is increasing, which is complemented by external competition between countries for educational resources. Internal and external competition is intensifying not only in the field of well-known and traditional educational programs for higher education, but also in the field of innovation. This is manifested in the fact that participants in the educational services market (educational institutions) react quickly to changes in demand. Capital in the education market works in the same way as capital in the financial asset market, i.e. it acquires the features of a flash market.

3. Results

In fact, the educational process is managed through an information system that provides continuous communication between the teacher, the administrator and the student in online mode (distance education, MOOC). Distance education provides a multiplication of ways for students to access educational resources. The educational platform simultaneously scans hundreds of learning users to identify the slightest fluctuations in the choice of a particular educational trajectory, exercising control and support in a matter of minutes, actually creating an "instant" education. There is an opportunity for the real, and not the desired, functioning of an individual educational program.

The result of the lack of balance and synchronicity between the virtual and real sectors of higher education may be the desynchronization of the ontology of education. Therefore, special managerial efforts are needed to maintain a virtual cluster of the education system and an optimal balance between the sectors of virtual and real education. The role of the teacher is changing. The teacher creates an educational environment, sets tasks for students, who, in turn, come to their own conclusions in search of solutions. A modern teacher cannot be just a didactic machine. This is a personality, coordinator and role model in education.

At the end of the XX century, humanity made a leap from the material economy to the intangible economy. The emergence and instant consolidation of intangible factors of education by many participants in the educational process has gone unnoticed because education since the time of Aristotle has been interpreted as the elevation of the Spirit. On the other hand, the higher education system has a strong inertia. Therefore, the virtual sector of the higher education system does not occupy a leading position in the formation of a knowledge-intensive economy in Russia.

The current trend of distance learning is a change of emphasis from the gnostic approach to the activity approach, where the main goal of education is considered as the formation of a person's ability to be active, to work in all its forms, including creative professional work. Knowledge, on the other hand, turns from the main goal of education into a means of personal development.

Virtualization of education is expressed in the development of intangible assets of education. The higher education system (as well as the global economy) today is characterized by a shift towards a product with a growing surplus value. We are talking about that rapidly developing and rapidly "inflating" cluster of the economy, which is expressed in the concept of "e-economy". In order to succeed in virtual education, careful evaluation must be done. Fortunately, the same methods we use to measure classroom instruction can be used to measure the success of online instruction. In fact, you can check your success rate in virtual education at four different levels. Level 1: Measure participants' reactions. It should be checked that the reaction of the participants is to the extent that they find the course interesting and enjoyable. In a face-to-face setting, instructors typically take the pulse of the class through an end-of-course survey, asking students basic questions such as how they liked the content, the format, and the instructor.
Work experience at the university shows the lack of readiness to implement the process of
digitalization of education. There are not enough computers and ICT equipment in universities, and
of what there is, a lot does not work or has long been obsolete. Obsolete computers of universities
would be relevant to use in schools or educational institutions. Many teachers have poor knowledge
of ICT competencies, which is reflected in the level of quality of education. Improving the ICT
competencies of teachers should become the main focus of advanced training.

4. Conclusion

In conclusion, it is crucial for teachers to be proficient in digital technologies to create
effective online lectures, tests, and courses. However, without adequate ICT competencies, the
quality of online courses, testing, and evaluation systems can be compromised. Currently, there is
no established system for assessing the quality of the digital educational process. To address this
issue, a competitive basis for creating online courses among teachers, combined with financial
incentives, can be implemented.

Additionally, developing a single portal or distance learning program with open access to
online courses for all universities can be beneficial. However, universities need to invest in licensed
software programs as demo versions may not suffice to provide modern information and
educational training.

Therefore, financial investments must be increased to support the digitalization of education.
It is essential to implement the digitalization process methodically, taking into account foreign
experience, the Russian education system's specificities, and the state of the digital economy in the
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