

# Markers of Modern University Education in the Transition to an Innovative Economy

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**Abstract**—The article actualizes the problems associated with the transformation of university education under the influence of modern socio-economic factors. It was revealed that at present university education is based on a combination of scientific, innovative and educational activities, the balance of which determines the role of the university in socio-economic development. Markers of modern university education are highlighted, which can be considered institutional “isomorphism” in higher education, the antinomy of education, large-scale online learning and the strengthening of the role of the university as an institution of the socio-economic system of a region (city). It is shown that “national” specificity of the development of the educational system is the leading role of the state as the main actor in educational policy. The question is raised about the formation of a network of "flagship" universities and their role in the development of the regional economy.

**Keywords:** *higher education, university, innovative economy, markers, online education*

## I. INTRODUCTION

Studying the university in the context of institutionalization, as well as its role in the development of the state economy, is dictated by the increasing role of education and science in the modern world. The program of modernization of higher education, which has been going on in Russia for a decade, provides modern students with greater freedom of choice - in selecting a profession, in the level and stages of specialization, in organizing their own future. Science-based companies in the economy and society are creating a growing and rapidly changing professional labor

market, for which universities must train specialists who are able, within the framework of their competencies, to aggregate knowledge and produce new ones in the field of their professional economic implementation.

The purpose of this article is to identify markers of the changing role of the university in the context of Russia's transition to an innovative economy, which allows us to formulate a long-term strategy for the development of the higher education system in the country. We consider the university not only as a scientific and educational institution, but also as a community of professors and students, the legal, social and political status of which has become an indicator of the changing historical role of the Russian university.

## II. METHODS

The research on the topic was carried out within the framework of a systems approach using comparative historical method, an economic and interdisciplinary analysis.

## III. RESULTS

The development of society and higher education are interdependent processes. The transformation of the education system is potentiated by the development of scientific knowledge and the changing demands and needs of society, which are now beginning to outstrip the offer generated by the education system. At the same time, each country has its own national specificity, determined by the influence of previous institutional forms on subsequent ones. Researchers examine the early history of universities in the Russian Empire in the

context of the adaptation of European educational traditions to Russian reality [1]. The Russian model of the university was built "from above" by combining several national models and merely Russian features of bureaucratic and power relations. She subordinated the activities of the university community to the goals and conditions determined by the state, and, at the same time, determined the type of social relations within the university.

Currently, as a result of socio-historical transformations in Russia, new types of universities are emerging, on the one hand, following the classical tradition, which combines educational and research activities at the university, and on the other hand, the principle of educational organization is currently based on this collaboration through research [2, 3]. In addition, entrepreneurial universities appear that differ from the classical model in a new managerial approach, expanding the basic functionality of universities through the commercialization of scientific knowledge [4]. In general, as the researchers note, the principle of the "triangle of knowledge" lies in the basis of various models of modern universities, which means the combination of three types of activity: educational, scientific and innovative. The combination of these three activities determines both the main mission of the university and its internal organizational structure [5]. Particular attention in modern studies is given to the long-term planning for the development of university education, in which the authors try to model the relationship between the predicted development vectors and new types of universities [6]. Considering the likely prospects for the development of higher education, researchers note serious organizational and structural changes that are taking place in the scientific and educational space at present [7, 8].

The results of studying the criteria by which the university rating level is currently defined indicate that they are determined by the institutional framework established directly by the state. According to experts, domestic universities are striving to increase the status characteristics in world and local ratings (the struggle for the status of federal, research, and flagship universities), which gives an advantage in obtaining additional state funding and, accordingly, targets new development opportunities [9, 10]. Universities and other subjects of higher education play a key role in new socio-economic models, being the main providers of competencies and giving expert support in the development, implementation and evaluation of strategic concepts and policies. The modern university educational system is becoming variable, a new educational space is being formed, which must meet modern criteria and be competitive in the educational services market. In the context of the development of an innovative economy, modern university education is being transformed, forming a new type, characterized by the presence of certain markers.

#### IV. DISCUSSION

In the 18th century, the establishment of new universities in Germany and on the periphery of the European world – in Russia, was equally connected with the needs of the state. The Russian University was a state institution from the very beginning, and so is now. The very model of the first university in Russia – the Academic one, assumed that the

created scientific institution would become both a center for the dissemination of knowledge and a center for learning. Each national university, appealing to the European tradition, performed its own tasks. Universities in the Russian Empire, established by state power at the beginning of the 19th century, pursued purely pragmatic goals, training educated officials [11]. Thus, both in the past and in the present, universities were directly dependent on the tasks allotted by the state and society. The unchanging function of the university remains the preparation of a person for self-realization in the modern economic system, society, and more broadly – in new civilization conditions.

Markers of modern university education reflect the process of social development and are correlated with the requirements of the time.

Education and the social processes that it targets are actually indicators of decisions and policies of the authorities. As noted above, the Russian model of university education is characterized by special institutional conditions for the functioning and development of the higher education system, in which the state is the main customer. The need to permanently respond to the innovative needs of society requires a certain institutional flexibility from the educational system. At the same time, there is a high dependence on the traditionally established model of university education. Based on the results obtained in the course of the study, we can single out the dualism of the education system, which primarily manifests itself in the need to adapt to the world agenda, to ensure national innovation projects, and secondly tends to standardize organizational, structural, financial processes due to "institutional isomorphism".

The state is constantly developing and introducing new directions in universities to implement the training of high-quality professional specialists and forms of cooperation with employers. One of the fundamentally new forms was the creation of flagship universities, which included the Murmansk Arctic State University – the first university in the Arctic with this status. At the same time, the dependence of universities on the state determines the institutional homogeneity of the university educational system. The state sets professional and educational standards and is a key source of financial facilities for universities. Researchers note that the level of institutional isomorphism is determined by the degree of influence of the state [12]. As the analysis of the modern education system shows, the amount of public funding is crucial for the formation of a university development strategy. So, when introducing the system of flagship universities in the regions, the key factor of the involvement of universities in this process was the assignment of a special status of a "flagship" university, emphasizing the legitimacy of an educational institution, as well as the amount of funding. If in 2016 11 applications for the assignment of the status of "flagship university" were approved, then already in 2017 – 22 regional universities became flagship ones.

In April 2017, Murmansk Arctic State University became the first university in the Arctic to have this status. The aim of this project was to solve the problems of the regional economy and provide the local labor market with highly qualified

specialists [13, p. 207]. Flagship universities need to respond to the demands of regional economies and, at the same time, comply with global and national innovation practices. It is important to note the existence of duplication of a number of functions of federal and flagship universities. So, Northern (Arctic) Federal University named after M.V. Lomonosov and the flagship Murmansk State University simultaneously claim a dominant role in socio-economic and innovative development in the Arctic. The development of the university educational system in the Arctic region is a clear example of the influence of institutional isomorphism when universities from the regions use the innovative practice of federal universities [14].

Another distinguishing feature of the modern system of higher education in Russia is the existing contradiction between the rapid development of knowledge and the cognitive abilities of students. In the traditional sense, education focused on knowledge transmission, and the acquisition of high-quality or unique knowledge guaranteed a person a competitive advantage. In modern conditions, it is necessary to create an educational model that provides training for a specialist who knows how to implement the acquired skills in a knowledge economy [15]. Meanwhile, in modern conditions, the student's consciousness often leaks out the difference between knowledge and information, and there is seen a lack of critical analysis of information, which contributes to the formation of knowledge. This is actually one of the "painful issues" of education in the conditions of unlimited access to information. "The antinomy of education" is manifested in the fact that a modern specialist must constantly update their knowledge (lifelong learning), replacing existing ones with new ones [16].

The continuous process of updating knowledge and skills which is necessary in the conditions of a modern innovative economy is ensured mainly through distance education [17]. Educational services of universities that are able to offer the customer to study some disciplines remotely are in great demand in modern society [18]. Large-scale online education is an important marker of the modern development of university education. Meanwhile, the question arises about the interaction of university culture and digital technologies, as well as ways to develop this form in the university educational space. It seems that the features of the online learning process cannot be compared with the characteristics of traditional learning, which takes place in the lecture hall of the university. Studies show that online education can only approximately correspond to the standard of legitimate educational practice, which, ultimately, is determined on the basis of the experience of a traditional university [19, p. 13].

A distinctive feature of university education in the context of the development of an innovative economy is the increased influence of the university on the formation of the socio-economic system of a region (city). In general, this influence is expressed in the following main forms: the university's contribution to the development of the regional economy, the scientific, educational and innovative potential of the region, the impact on the formation of the social environment in the region. There are different roles and types of cultural and social interactions between urban and university communities.

A rigorous analysis of this concept allows researchers to conclude that the communities of a university city (a city that develops simultaneously with the university in direct connection) differ from others culturally and socially [20].

## V. CONCLUSION

The mission of Russian universities, both in the past and in the present, is to train highly qualified specialists for the labor market, create intellectual and innovative potential, ensure a constant influx of modern-minded and socially responsible citizens. The state is constantly developing and introducing new directions in universities to implement the training of high-quality professional personnel and forms of cooperation with employers. One of the fundamentally new forms was the creation of flagship universities, which included the Murmansk Arctic State University. It became the first university in the Arctic to have this status. The mission of the university is aimed at the formation of personnel, intellectual and sociocultural potential for the development of the Murmansk region as a key Russian subject in the Arctic zone of the Russian Federation.

Nevertheless, on the basis of the study, it can be stated that today there is no direct relationship between higher education and the growth of social welfare. The authors have identified modern trends in the changing role of the university as a sphere of knowledge generation and dissemination, new functional features of its activities that determine the transition from a knowledge economy to a knowledge society, as well as related changes in the institutional environment. The following are identified as markers of modern university education in the transition to an innovative economy: institutional "isomorphism" in higher education, the antinomy of education, large-scale online education, the emergence of entrepreneurial universities and the strengthening of the role of the university as an institution of the socio-economic system of a region (city).

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