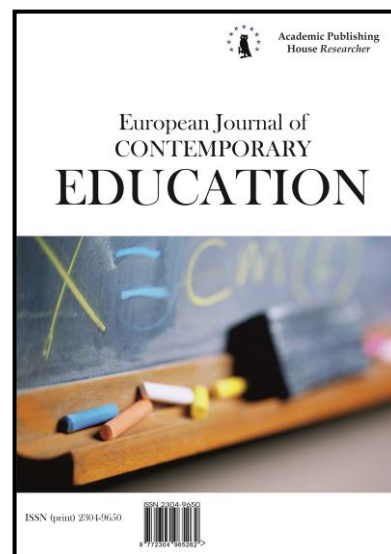




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The Models of Higher Education in Russia and European Countries at the beginning of the XXIst century: the Main Directions of Development

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Abstract

The article examines current trends in the development of the national models of higher education in Russia and European countries. The paper reveals the key problems of their functioning in the context of the processes of globalization, standardization, and integration into the pan-European and global educational space. These processes are described through the prism of the national interests of the states. Emerging from the comparative description, content presentation and qualitative analysis, the article assesses the level of development of the national models of higher education, i.e., Russian, European and American. This allowed identifying key similarities, as well as the most important differences, which mainly stem from the difference in the state regulation of national educational systems. It is the role of the state that is leading in the formation of national educational systems and the creation of high-quality models of higher education. The state is also responsible for the transformation and adaptation of these models. The models target providing the national and world labor market with highly professional human resources.

Based on the comparative aspects outlined in the article, as well as on the qualitative analysis data, the authors have come to the following main conclusions regarding the trends and prospects for the development of the Russian higher education sector:

a) Firstly, the Russian model of higher education was built during an accelerated transition from a one-level to a multilevel education. The result of this shift is the labor market disbalance,

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which nowadays does not allow the formation of the adequate perception of specialists holding a “bachelor’s degree” which is unfamiliar and obscure to many employers;

b) Secondly, the Russian educational system, and the higher education model, replicate the Western European and American approaches without considering the realities of the national educational market and the labor market. Therefore, the high proportion of the population with higher education cannot provide the necessary socio-economic development potential of the country;

c) Thirdly, the reform of the Russian model of higher education should continue but not in terms of accelerating the processes of its integration into the world educational system. There is much evidence that the correct direction lies within the domain of creating incentives and conditions that will ensure the training of highly skilled professionals correlating with the market demand.

Keywords: education, higher education, models of education, European policy in the field of education, Bologna process, modernization of education, European educational models, Russian model of higher education, multilevel educational system.

1. Introduction

The sphere of higher education in all countries of the world, including the Russian Federation, is undergoing fundamental changes. The 21st century saw an unprecedented increase in the quality level of the higher educational system. Education becomes a more complex, global system, but at the same time, the role of international recognition of national educational systems’ quality or individual components of these systems is growing.

In the last decade, new actors and objectives, conditions and factors, programs, norms, standards, criteria for assessing the results of the functioning and development of the world and national educational systems have emerged. Globalization, integration, standardization and internationalization are an important driving force behind these changes, resulting in the formation of various national models of higher education. These models search for the most effective constructional option to improve the quality level of the educational system or its individual components.

Current national models of higher education target the formation of highly intelligent human resources that have the necessary competencies for modern markets. There is much evidence that intended future experts should be capable of continuous independent development, the renewal and reproduction of knowledge. In this regard, the sphere of higher education in modern conditions should be maximally involved in the so-called “world technology race”, associated with the competition of knowledge and requiring constant modernization (*Strategicheskiye zadachi strany...*). Researchers ([Kuchukov, 2010](#); [Curaj, 2012](#); [Gluzman, 2018](#)) argue that “amortization of knowledge” in today’s conditions of science and technology development occurs every year and a half.

It is this periodicity, in the authors’ view, that should be considered as the defining “benchmark” for reviewing the goals and improving the structure of the national models of higher education. As a response to such trends at the beginning of the 21st century, in Russia, as in many countries in the world, major changes in higher education are taking place in the context of the pan-European integration processes.

The Russian sphere of higher education emerges in the works of educational experts ([Demidenko, 2005](#), [Nesterov, 2012](#), etc.) as a key to solving urgent cultural and socio-political problems, as well as eradicating the problems of the economic, scientific and technical spheres. This system needs a radical reform today. For many decades of the XXth century, the sphere of higher education in Russia was conservative, and its model was not open to change. Only in the 1990s, the vector of its development was changed towards a competency-based, open to innovation paradigm. But it should be recognized that these trends, however, to a lesser extent, manifested themselves in the national models of higher education in other countries.

In modern conditions, the situation has dramatically changed, the rate of change has significantly increased. It requires an accelerated evolution of educational models on a national scale. However, it is well known that accelerated evolution very often causes unexpected and, in some cases, negative consequences. These outcomes require special attention of science experts and should target the improvement of Russian educational models and their quality in comparison

with similar processes and phenomena in foreign countries. The study of this problem in the context of the sphere of national higher education is the focus of the paper. The authors are sure that these problems are of great importance. It is necessary to emphasize the fact that today the search for the most effective educational models and directions for their further development appears as one of the topical and at the same time debatable directions of the modernization of higher education (not only in Russia but also in other countries). The directions of educational development encompass both theoretical-methodological and practical aspects.

Proceeding from the thesis, the authors assume that during higher education models' development the countries of the world continue to maintain their national specifics, despite the impact of globalization processes. However, the influence of universal educational integrative tendencies and the requirements for the genesis of a unified educational space increasingly exhibit common typological features. Within the framework of this hypothesis and in accordance with the stated goal of the research, the results of which are presented in this article, the authors highlighted such problems as studying the current state of the Russian national educational models and the models in European countries. The authors also identified promising directions for their development, describing the problems and factors affecting the evolution of the educational system, as well as conducted comparative analysis of key trends in the genesis of higher education models.

2. Materials and methods

The research stems from the methodological foundations of applying the systematic, historical, evolutionary, descriptive, comparative, structural approaches. These approaches allowed the authors to interpret the problem under study in the context of its numerous components. The components determine the processes of formation, functioning and evolution of higher education models. In accordance with the provisions of the system approach, the authors used a set of methods and techniques to test the hypothesis and solve the set tasks, which are as follows:

- the analytical and synthetic study of scientific sources related to the problem under analysis;
- the logical methods of the analysis of the phenomena under discussion, i.e., interpretation, comparison, concretization, generalization, extrapolation, synthesis, universalization;
- the method of problem-content analysis;
- the method of analogies, observation, analysis of secondary data, the methods of quantitative and qualitative processing of actual data.

To fix the differences in the development of higher education models in Russia and other countries, the authors applied research methods which included both primary observation and secondary “abstract study” methods. They presuppose the systematization and analysis of data submitted by Russian experts (Grebnev, 2004; Maykova, 2004; Sorokina, 2004; Pokholkov et al., 2004; Demidenko, 2005; Lobovskaya et al., 2005; Razumova, 2009; Kislitsyn, 2010; Nesterov, 2012; Tsiguleva, 2014; Komleva, 2017; Vorozheykina, 2017; Gluzman, 2018, etc.) and foreign experts (Gapinski, 2010; Winter, 2010; Meny 2014; Hotson, 2016; Enders *et al.*, 2016; Praneviciene *et al.*, 2017; Matthews, 2017, etc.). Because of the limited volume of the publication space, the authors highlighted here only the works of scientists and researchers who have publications in leading scientific periodicals (encompassing those included in international citation bases). The authors also used monographic and dissertational studies, methodological online resources and analytical expert reports of international organizations, e.g., “Modernization of Higher Education”, “Higher Education in the EU”, “National Reforms in Higher Education”. These distinguished works provided an empirical basis for the study.

The quantitative study of the data stems from statistical indicators presented by such sources as the reports on the world educational system's situation (the Organization for Economic Cooperation and Development – “Education at a Glance, 2017”), analytical data (Monitor ICEF – “Megatrend, 2017”) which describe international educational industry. Simultaneously, to objectively identify the causes and factors that influenced the development of national models of education, the authors supplemented the quantitative analysis of the data. The authors applied the methods of qualitative analysis, and problem and content analysis to present the resulting picture in a descriptive context (Education at a Glance, 2017; Megatrend, 2017).

To determine the sample, the authors applied the technique of nonrandom explication of materials in correlation with the thematic, chronological and geographical factors. The geography of the study emerges from studying educational models operating in Russia, as well as Western European countries, predominantly, and Eastern European countries, to a lesser extent. From the chronological point of view, the main period of the study is limited to the time framework of 2000-2018. To carry out a more detailed study of the causes, trends and factors that influenced the development of higher education models in Russia and other countries described in the paper, the authors highlighted the genesis of the educational structures at the end of the XXth century (namely in the 1990's).

3. Results

One of the major findings is the fact that the study highlighted the quantitative analysis of statistical data. The data are to some extent the markers for the development of national models of higher education. This assumption is further developed in the article in the qualitative analysis' part. In the context of the data study presented in the "Education at a Glance" report (2017) published by "The Organization for Economic Cooperation and Development", the authors discovered that there are five countries, which occupy leading positions in the development of higher professional education at the end of 2017 (see Figure 1). These countries are as follows:

- a) Canada. In this country in 2017, 57 % of Canadian population received higher education. This is a spectacular achievement compared with 2012 when only 52 % graduated from higher education organizations.
- b) Russia. Compared with 2012, the country dropped from the 1st to the 2nd place (54 % and 56 % in 2012 and in 2017, respectively),
- c) Israel (46 % and 50 %), Japan (45 % and 50 %)/
- d) The United Kingdom (42 % and 46 %), and the United States (46 % in 2017) shared the 5th position, although in 2012 they were not among the five top-leaders.
- e) Australia (44 % in 2017, in 2012 Australia was not among the five top-leaders).

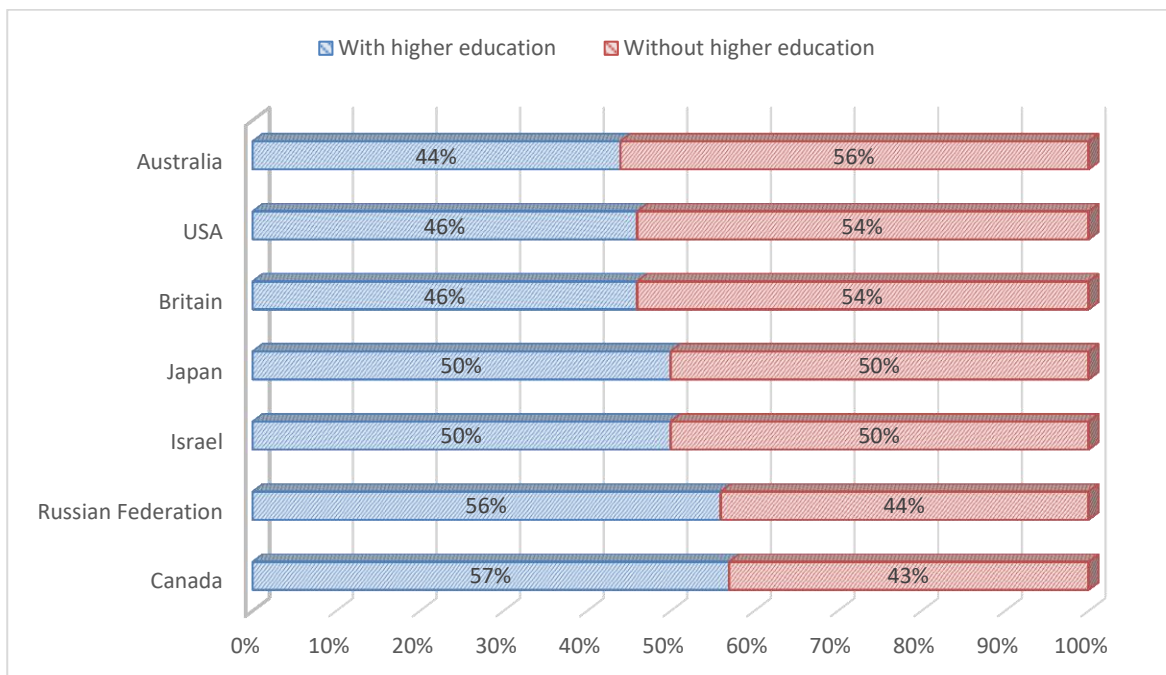


Fig. 1. The proportion of the population with higher education in the leading countries in 2017 ([Education at a Glance, 2017](#))

The comparison with the data for previous years (beginning with the 1990s) indicates that by now there has been an almost twofold increase in the number of people receiving higher education. Such a significant interest of the world population was undoubtedly reflected in the evolution of

higher education models. The models act as a catalyst for the rapid development of higher education in quantitative and qualitative dimensions at the beginning of the XXIst century.

During the analysis of theoretical materials (Lobovskaya et al., 2005; Razumova, 2009; Kislitsyn, 2010; Nesterov, 2012; Tsiguleva, 2014; Komleva, 2017), the authors identified that the beginning of the XXIst century emerges as the period of the active modernization of European policy in the sphere of education. It determined the strategies for the development of national educational models, including the strategies for the development of higher education. The development encompassed such conceptually important basic vectors in the field of education as: continuity, openness, the complexity and fundamentality of education, the globalization of the educational space and standardization improving the quality of educational results (“A Memorandum of Lifelong Learning”, 2000, “Education and Training 2010”, “Strategic Framework for European Cooperation in Education and Training”, ET 2020, etc.). The main principles that determined the content of modern models of higher education were as follows:

a) the provision of continuous and universal access to basic knowledge and educational skills necessary for inclusion in a single professional, economic, educational, information society;

b) the provision of models of education with new methods of teaching and active training, encouraging a creative approach to learning to ensure its continuity, fundamental and integrated purposes, meeting the requirements of the “knowledge society”;

c) the increased investment in human resources; the development and introduction of new systems for assessing education to improve its quality;

d) the development of methods and practices of mentoring and counseling to ensure practice-oriented education, free access of everyone to information on educational opportunities in Europe;

e) ensuring professional mobility of training staff and students and, at the same time, bringing educational opportunities closer to home through a network of training and advisory posts, as well as information technology opportunities to preserve the professional potential of specialists in the field.

In accordance with the objectives and specific directions, the functioning of the models of national education in the countries of the European Union (Progress towards ..., 2009) at its highest level should reach the following quantitative indicators by 2020: among the population aged 30-34, the proportion of people with higher education should exceed 40 %; at least 15 % of adults should be engaged in lifelong learning (Higher education in the EU...; the Modernization of Higher Education, 2014; National Reforms...).

The process of integration and globalization contributed to the creation of world standards. The cause of these standards is urgent since the 1980s. The world organizations working in this field are the International Organization for Standardization, the Initiative Center for Educational Research (CERL), the European Center for the Development of Professional Training (CEDEFOR). But the development of the standardization mechanism emerged from within the framework of national educational systems, which determined the existence of different approaches to educational standards. Accordingly, it is possible to single out the so-called Russian, European and American approaches (Matthews, 2017; Nesterov, 2012; Pokholkov et al., 2004; Razumova, 2009; Tsiguleva, 2014). In Russia, the development of a national model of higher education stems from an approach to the standardization, associated primarily with the state regulation of educational content. Russian standardization emerges from the historically conditioned necessity of ordering its significant and variable content. There was a radical change in the structure of educational standards at the end of the XXth century when the state controlled the standards. The opposite approach is observed, for example, in the USA model. The European model determines the desire to balance the content standardization of education on the part of the state and the independence of regions and educational institutions. European educational experts develop and approve of the requirements system at a local level while maintaining their accountability to the state control, as well as public participation and influence. Comparing with Russia, the degree of public participation and influence in Europe can be estimated as sufficiently high (Komleva, 2017; Vorozheykina, 2007; Gluzman, 2018).

In the context of the historical aspect, it should be noted that the significant steps outlined in the Bologna Declaration (1999-2018) (Bologna Process ...) were aimed at making the national higher education models more transparent and being as comparable as possible with the same type of educational cycles in the world (bachelor’s – master’s degree, subsequently expanded to a three-

level educational cycle). The mutual recognition of academic qualifications emerged from the introduction of a single system of easily convertible credit units and comparable degrees, as well as the same forms of recording the qualifications. The creation of common criteria for assessing the quality of teaching and education, integrated training programs and research. It contributed a lot to the greater attractiveness of the European educational system. The Bologna process targeted the creation of a unified zone of European higher education by 2010, which, it must be admitted, does not yet function in full force. However, it is the common belief of some experts that the European educational model is much ahead of the Anglo-Saxon education tradition (Kislitsyn, 2010).

To achieve the objectives, the higher education models were subjects for re-evaluation at national and European levels. Educational experts reorganized and changed the higher education program. They significantly developed the system of higher education based on scientific research. Educational experts improved the quality and standardization system, a common terminology system, the compatibility of educational institutions, programs and degrees.

There is much evidence that the inclusion in the Bologna process did not mean for most leading European countries (unlike Russia) the beginning of a new stage of radical reforms in higher education. Bologna process in Europe resulted in the further improvement of already existing models. There is much concern that the magnitude of the tasks that the Bologna Process laid down, the absence of effective algorithms and other methodological foundations, naturally revealed the complexities and contradictions in the construction of a unified system for obtaining higher education in the participating countries. Obviously, they emerged, in particular, in the UK, Germany, and also in Finland. The need for significant changes in the national educational models of higher education did not immediately come to the fore among the heads of universities' authorities and ministries in some states.

For example, in Finland, in the process of reforming the national model in the direction of its harmonization with the pan-European level, there was a discrepancy between the demand and the supply of educational services ([Higher Education in the EU...; National Reforms...](#)). The existing inflexible system of entrance exams, the extended period of study, the high drop-out rate, unhealthy competition among universities and polytechnic institutes were minimized only after the country's educational system transitioned to a two-stage model ([Ahola et al., 2003; Gapinski, 2010](#)). Significant problems in reforming the national model of education were also noted in Germany, where modernization faced such contradictions as transitions from bachelor's, master's and doctoral phases. There were problems of a misconnection between higher education and professional activity. Of much importance is the fact that before the beginning of the harmonization processes German universities offered single-level educational programs, i.e., analogues of the previous Russian system. In Germany, technical departments' students graduated with a diploma in science or could obtain a master's degree, i.e., Magister Artium. The students of social and theological universities and departments, majoring in liberal arts and humanities, were to take the state examination (Staatsexamen) within the framework of independent qualification (for civil servants or state-controlled jobs). But unlike in Russian higher educational system where the mass transition to a two-level model occurred simultaneously in 2011, in Germany bachelor's and master's degrees were emerging gradually, with the parallel preservation of the traditional one-level structure and new learning structures ([Ahola et al., 2003, Kislitsyn, 2010, Tsiguleva, 2014; Gapinski, 2010; Winter, 2010](#)).

At the same time, during the unification of the national model, the researchers of the Technical University of Dresden ([Bologna Process...](#)), as well as several other research groups ([Focus on Higher Education in Europe...; European higher education area...](#)), recorded critical shortcomings in this area. The main topical points of these issues are as follows:

- the subjectivity of the intensity perception of the learning process by students and teachers;
- clarity shortcomings in the modular construction, the exam system, the learning objectives, the recognition of results achieved outside the learning process and the inability to learn according to an individual plan;
- the contradictions of some requirements to curricula general requirements for universities in Germany, especially in regional universities;
- unlike in traditional diploma-oriented system of education, there was less freedom in organizing the educational process, as a result, less attention was paid to students' practice;

- almost half of the problems in the search for work by bachelor graduates arose from the fact that employers required diplomas of a different type;
- the recognition by German universities of studies' results in foreign universities is hampered;
- the problems concerning the difference of German studying plans with the plan of a foreign university.

The existing difficulties in modernizing and harmonizing the national model led Germany to the fact that the country began to experience a deficit of highly qualified specialists, which in subsequent years (2015-2017) was largely compensated by attracting foreign students and creating conditions for their demand in Germany. Unlike German policy, the policy of reforming the traditional national educational model in the UK, which still maintains its stability, now, encompasses the combination of independent actions, which is clearly discernible in parallel with the European harmonization and unification course. One of the surviving advantages of British higher education national model, according to the researchers (Winter, 2010; Meny 2014, Hotson, 2016), is an extremely flexible curriculum. Students can study a wide variety of disciplines, even if they are taught at different faculties.

It should be noted that the two-level system of training introduced within the framework of European harmonization processes was traditional for the British model of higher education. The only significant problem in this area for the country is the need for the continued integration of single-level master programs into the structure proposed by the Bologna Declaration. Most of the countries of Eastern Europe preferred a gradual transition to a two-level education system. This preference stems from the fact that, unlike the western sector, they had the most obvious differences in this area. For example, in Poland, along with the traditional five-year course of study, three-year professional training programs emerged giving the right to receive a bachelor's degree. At the same time, some countries paid more attention to the elaboration of detailed legislative acts and "roadmaps" regulating all aspects of the transformation at the state level.

By the beginning of the XXst century, it is possible to distinguish two established directions of the modernization of national higher education models, i.e., intensive and slow. Thus, the intensification of international cooperation, the processes of globalization and internationalization in the international educational market, and the participation in the programs of the European Union (such as Tempus and others), stimulated several European countries to actively revise and unify, at an accelerated pace, their educational systems. In Italy, Norway, the Netherlands, the harmonization processes have led to rapid changes in legislation which assisted the adaptation of a single European model. Other states actively analyzed the issues of integration into the Bologna space with the aim of joining the ongoing processes and increasing the competitiveness of national educational models, stretching the educational reforms for several years. The summit of the implementation of the reforms of national models occurred in the period 2010-2012 (Bologna Process...). By 2015, 49 countries (not only from Europe) and the European Commission have become participants of the Bologna Process, which have committed themselves to reforming national systems and models in accordance with the main provisions of the document (European Higher Education Area...; National Reforms...). In 11 countries that signed the Bologna Declaration initially, the process of reforming the national models of higher education is fully implemented at the state level. However, in other countries, there are significant differences in its implementation. For example, on a voluntary basis, the Bologna process is currently being implemented in countries such as Belarus, Egypt, Israel, the Palestinian territories, Kyrgyzstan and Tajikistan (Komleva, 2017; Vorozheykina, 2007).

As of early 2018, virtually all European countries harmonized their national models of higher education in accordance with the requirements of multilevel training. At the same time, some countries, with a focus on national traditions and the identity of educational models, are following the transformation of traditional five-year programs (in the field of engineering, natural sciences, medicine, etc.) into mono-training programs, culminating with a master's degree corresponding to all-European requirements. Others (for example, Finland, as stated above) at the state level recognized the inadequacy of the three-year bachelor's cycle for graduate preparation and decided on the master's degree as the main one, which, if possible, should be received by all university students.

As for Russia, in the process of modernization of the higher education model, the country has chosen its own unique trajectory and strategy, in contrast to European countries. Russia abolished the legislatively agreed percentage of budget spending on education, retained state support for only a small part of universities, put the education prices on the shoulders of citizens, simultaneously, fixed and detailed the standards of education at the state level, defining the basis for an objective assessment of the level of education and qualifications of graduates independent from the forms of education. However, the model of national education, which historically existed for quite a long time and functioned in a closed, inert mode, acted as a catalyst for some problems faced by Russia in the implementation of harmonization processes:

- a) the inertia of the perception of the bachelor's degree by the labor market;
- b) the unwillingness of some Russian universities to act as an equal partner in mobility programs;
- c) the lack of flexibility, adaptability of training programs;
- d) the inadequate readiness of many universities and educators to form new graduates' competencies aimed at mobility in the labor market.

The surveys of students and potential employers confirm the above theses. For example, the survey of graduate students of the Russian Academy of Science and Technology (the researchers interviewed 213 of their students studying in the social and humanities department) and the interview with the Peoples' Friendship University of Russia graduates (268 students studying natural science and technology) shows the following results of the graduates' satisfaction with the quality of the education received. The research also indicates the key problems of Russian education from the point of view of students (Table 1).

Table 1. The structure of answers of students of final graduate courses of the Russian Academy of Sciences and the Peoples' Friendship University of Russia (the question: "What is the main reason for choosing the university where you studied")?

	Variants of Answers						total amount
	education at a prestigious university	training in state-financed opened places	availability of a research base in the university	the availability of employment programs in the university	availability of social and domestic facilities in the university	other	
graduate students studying at social and humanities department	69 32,4%	21 9,9%	15 7,0%	55 25,8%	43 20,2%	10 4,7%	213 100%
graduate students studying at science and technology departments	62 23,1%	29 10,8%	77 28,7%	38 14,2%	50 18,7%	12 4,5%	268 100%
Total	131	50	92	93	93	22	481
<i>The number of degrees of freedom 5, the value of the criterion $\chi^2 = 41,507$ (The critical value of χ^2 at the significance level $p = 0.01$ is 15,086)</i>							

The prestige of the education received, the availability of employment programs and the availability of a social base are the main reasons for choosing a university, according to the students of the social and humanities departments. For students of technical departments, the universities' own research base is more important. All other reasons for choosing an educational institution remain the same. It should be noted that the descriptions of Russian higher education key problems almost completely coincide (Table 2).

Table 2. The structure of answers of students of final graduation courses of the Russian Academy of Sciences and the Peoples’ Friendship University of Russia (the question: “What is the main problem of Russian higher education, in your opinion”)?

	Variants of Answers						Total Amount
	Educational standard, which equals all abilities	The lack of independent choice of disciplines	The weak interrelation of the obtained knowledge with the future	Obsolete educational programs	The weak interest of the labor market in graduates of universities	other	
graduate students studying at the social and humanities department	0 0%	59 27,7%	31 14,6%	62 29,1%	53 24,9%	8 3,8%	213 100%
graduate students studying at science and technology departments	21 7,8%	77 28,7%	30 11,2%	78 29,1%	50 18,7%	12 4,5%	268 100%
Total	131	50	92	93	93	22	481

The number of degrees of freedom 5, the value of the criterion $\chi^2 = 20,008$ (The critical value of χ^2 at the significance level $p = 0.01$ is 15,086)

In addition, the authors conducted a survey of the employers (the heads of personnel services or directors of small, medium and large enterprises operating in the manufacturing and industrial sectors located in Moscow and the Moscow Region). The distribution of answers on satisfaction with a set of professional competencies with which graduates of higher education institutions come to the labor market are presented [Table 3](#).

Table 3. The structure of the answers of employers (the question: “Are you satisfied with the quality of the basic professional competencies with which graduates of Russian universities come to the labor market?”)

	Variants of Answers					Total Amount
	Certainly YES	Probably YES	Probably NO	Certainly NO	Difficult to answer	
The representatives and heads of small enterprises	31	33	45	63	3	175
The representatives and heads of medium-sized enterprises	27	40	66	39	5	177
The representatives and heads of large enterprises	18	22	57	40	7	144
Total	76	95	168	142	15	496

The number of degrees of freedom 8, the value of the criterion $\chi^2 = 17,741$ (The critical value of χ^2 at the significance level $p = 0.05$ is 15.507)

Most employers and their representatives (more than 62 % of the total number of respondents) answered that they were not satisfied with the quality of the basic professional competencies of graduates of higher education institutions. As far as the main factors that may be

the reason for the low quality of the acquired professional competencies are concerned, employers identify the following (Table 4).

Table 4. Structure of employers' answers (the question: "What, in your opinion, are the main reasons for the low quality of the basic professional competencies of university graduates?")

	Variants of Answers (possible to specify a few)					Total Amount
	Obsolete programs	Weak connection between theory and practice	Universities do not develop labor mobility among students	Graduates of universities do not have unique knowledge and cannot compete in the labor market	Difficult to answer	
The representatives and heads of small enterprises	40	159	14	39	5	257
The representatives and heads of medium-sized enterprises	71	88	37	56	8	260
The representatives and heads of large enterprises	90	82	41	76	3	292
Total	201	329	92	171	16	809
<i>The number of degrees of freedom 8, the value of the criterion $\chi^2 = 78,692$ (The critical value of χ^2 at the significance level $p = 0.01$ is 20.09)</i>						

Most respondents who represent small enterprises indicated that the problem of the low quality of the professional competencies of university graduates consists in a weak link between theory and practice. For small businesses, this is especially important, since the organization of labor in them involves the combination of professional positions. This, in turn, means that the training programs in higher education institutions are largely outdated, and, accordingly, the graduates of universities do not have any unique skills, so their competitiveness in the labor market is very low.

The results of the analysis show that the Russian system of education differs from other national systems. The major difference lies in the term of study, the number of disciplines studied during a semester and the choice of the educational trajectory by the student. Neither the EU nor other national models of higher education, individually, have a single national curriculum or educational standard. However, in the EU, up to 50 % of subjects are selected by students individually. It is also necessary to consider the existing, rather significantly different cultural and historical paradigms, the history of the development of the educational system in Europe and Russia.

So, starting from 2011, higher professional education in Russia, as the authors have already noted, integrated the "Bachelor-Master" structure in its model with the accelerated pace. The foundations of this transfer were fixed by the Federal State Educational Standards, i.e., the orientation toward learning outcomes expressed in the competence format and considering educational activities in credit units. At the same time, only 50 % of the bachelor's curriculum emerged as the basic one. For the master's program "Variable Part" was more than 70 %. It should also be noted that, even in the "mandatory" part of the program, except for a few positions in the course of humanities and socio-economic disciplines, the first place belongs to nonfixed training courses and the requirements to the competencies formed as a result of studying the corresponding cycle of disciplines.

In the Russian model, several factors, including the already isolated historical one, significantly restrict the multilevel education that is being introduced. Now, Russian higher

education in practice remains close to the one-level approach, having absorbed not the trends of the European educational model, but the original integration of the historically established Russian model with the Anglo-American model as the basis for its development. Unlike in Western universities, in Russian universities, the bachelor's degree is not yet fully adapted to national educational traditions. The training period is 4 years which is by 1 year less than in the previous form of training. Most employers still consider this to be an incomplete higher education (Tsiguleva, 2014). Thus, in Russian conditions, one can talk about the creation of a hybrid model within the framework of general European trends.

4. Discussion

Describing the results of the analysis, confirming the hypothesis, it should be recognized that while acquiring typical features, at the same time, higher education models in the world retained their national specifics. During the reforms of the late XXth and early XXIst centuries, in contrast to the European decentralization processes, in the USA, UK and Russia there has been a generally stable system of centralization of higher education with some degree of unification within the framework of the development of European models. The general trend, manifested during the reform, is state regulation (with some degree of sovereignty) and the management of higher education processes with the actualization of social forces (including various subjects of the educational process).

There is some evidence that some experts made inaccurate predictions saying that clearly expressed specificity of universities and specialized institutions in Western and Eastern Europe, as well as in Russia will not allow the countries to integrate these types of educational institutions into national systems and this will hamper the harmonization of national models of higher education which at some point will face a state of “skidding” in the XXIst century. The inaccuracy of these predictions is evident from the analysis performed in 2018 (Gluzman, 2018). The new qualitative stage of the development of national models in the process of pan-European and world integration is characterized by the emergence of universities and other kinds of training structures of integrated training which develop the principle of multilevel higher education. They combine research and training specialists in a wide range of professions; they offer interdisciplinary units that provide unique opportunities to acquire new integrative knowledge and conduct interdisciplinary research. It should be recognized that the reforms of the European education have substantially modified the system for organizing the training of specialists in higher education in Western and Eastern Europe, as well as in Russia. The main integration emerged in the direction of providing broad interdependent and interconnected interdisciplinary training. The current structure of universities and organizations of high education practice various flexible patterns, depending on the specifics of the models of education (mostly in Western Europe, less in Russia). They vary the educational material if necessary, provide students with a choice in the study of disciplines, organize complex scientific research, i.e., prepare multifarious educated, mobile experts.

During the modernization of national educational systems in several European countries, the tendency to create variative multilevel models of continuous higher education has clearly manifested itself. The advantage of these models is that they do not lead to a uniform level of theoretical and practical training, aimed at promptly meeting the needs of the education system and personal needs of students themselves. Let us emphasize that the Russian educational model moves in this direction and there is a need for the further development of this model. During the reform, there have also been significant changes in the content and structure of higher education. The ratio of educational, special-subject and professional components of specialist training has cardinally changed. From a varying degree of intensity, the tendencies to establish the optimal scientifically grounded balance among the disciplines of different cycles, theoretical and practical blocks, began to appear. More attention was paid to the specialization of students, which in many universities began to be implemented almost from the first studying years.

The current state of the national models of higher education in Russia and Western Europe allows offering a variety of forms of nontraditional or alternative education: distance learning, various forms of correspondence and summer-time education. The implementation of the concept of a “world university” based on an international information network also applies to current trends in the development of national models towards harmonization and globalization. The active

quantitative and qualitative development of indicators and parameters of national models as objects of a single European educational space also reveals problems that remain in this area. There are several negative tendencies in the development of national models of higher education in Western Europe. According to scholars (Enders et al., 2016; Komleva, 2017; Lobovskaya et al., 2005; Praneviciene et al., 2017), they are as follows:

- the high commercialization of a part of higher education institutions, a strong orientation to the needs of the market and global capital with a decrease of the scientific component;
- a deliberate decline in the level of mass education (the master’s program is designed for a very small percentage of students);
- the acquisition of fragmented knowledge, and yet the insufficient level of fundamentality of preparation;
- the limitation of public funding for higher education.

Concluding the analysis, the authors emphasize the fact that the experience of reforming the national models of higher education in Western Europe, is more sensitive to the requirements of the Bologna Process. This situation may be explained by the historical conditions. The situation in Western Europe is today of considerable scientific and practical interest for Russia, where, within the framework of the development of the national and original model of higher education educational experts continue to actively search for forms and mechanisms of integration, internationalization resulting in a unified educational space. At the same time, due to the historical traditions, there are a lot of difficulties related to the adaptation to the given processes of the national educational system. In the authors’ opinion, it is the historical factor that allows outlining new directions and setting a unique vector for the development of the national model, considering the acquired experience, the methodology and practice in the field, the fundamental nature of the content of higher education.

Nowadays, Russia has several institutions of higher education that have taken an active part in implementing the reforms of the Bologna process for many years, while demonstrating a varied approach and the gradual introduction of innovations, considering their correlation with the quality content of education. For example, Lomonosov Moscow State University is implementing a multistage (for economists) and traditional one-stage instruction with a training period of up to six years (for physicists). The University also develops the systems of the preparation of these specialists in correlation with the fundamental nature of the competencies and their specific knowledge. For several decades, Moscow Institute of Physics and Technology has a multilevel training program. Bauman Moscow State Technical University, Saint Petersburg Electrotechnical University and other leading universities of Russia are engaged in shared programs with the participation of employers, providing innovative models of “bachelor’s degree in a major field” and “master’s degree in engineering” (Grebnev, 2004; Maykova, 2004; Sorokina, 2004).

When analyzing the effectiveness of reforming the Russian system of higher education, it is necessary to dwell on the obvious shortcomings of Russia’s integration into the single European educational space and the adaptation of foreign experience in this field. Among them, experts (Pokholkov et al., 2004; Komleva, 2017, etc.) point out the trends which are as follows:

- a) a decrease in the attractiveness of Russian higher education and the drop in the demand for it because of the lack of practical orientation of educational programs;
- b) the threat of a massive outflow of human capital to foreign countries while entering the single European space. This may be accounted for the high level of Russian people’s mobility to the West;
- c) the problematic employment of graduates with bachelor’s degrees due to the lack of real customers and consumers in the Russian labor market who will recognize the bachelor’s and master’s degrees as relevant academic qualifications;
- d) the decline in the quality of Russian higher education, the disruption of its established structure and the loss of fundamentalism due to the mixing of the module teaching of various disciplines and the violation of the logic of their study.

Therefore, the introduction of the main provisions of the Bologna Declaration today is still a difficult problem in the context of the development of the Russian model of higher education. This model differs substantially from the Western European model both historically and informatively, structurally and organizationally. Obviously, it would be inappropriate for Russia to copy the

European educational models that are completely inadequate to Russian educational traditions (and they differ sufficiently among themselves). To overcome the difficulties mentioned above an extremely specified and detailed scientific-methodological and evolutionary research is required. This process requires a clear problem analysis in the projection to the Russian historical experience. The analysis will allow the experts to determine the most optimal vector of qualitative development.

5. Conclusion

One of the major findings is the fact that the national Russian model of higher education, which has retained its closeness and inertia for a long time, has become more open to innovations, changes, and the implementation of cooperation. This is, undoubtedly, the positive result of European integration and the development of foreign national models. It is very important that in the accelerated modernization and harmonization of the Russian model it is advisable to reduce the speed of changes, turning the vector not in the direction of quantitative indicators but the development of qualitative parameters. Russia cannot irretrievably lose the rich experience of domestic higher education accumulated for many centuries, including the structure of education, the connection with practice, which has proved its effectiveness over many decades.

Another important finding is that in the quest for integration in the global higher educational system, Russia must not forget the national interests. The higher vocational education of Russia has a stable basis in the form of fundamental content and can now react more actively to the changing needs of society. Russian vocational training can offer the experience, structure, tested forms and methods of organizing the educational process, ways of assessing knowledge to the attention of European countries. Positive experience stems from Russian special practices of academic competitions, honor students with academic achievements, an individual approach to the process of admission to universities, expressed in the variability of the forms of examinations.

Studying foreign experience of the globalization of higher education, its exchange among countries and its methodical adaptation to the practice of national models of education will contribute to solving the problem of training even higher-quality specialists of a broad and integrative profile in all countries of the world. It is in this context that the authors see the further development of national models of higher education in Europe. Only in this case it can be expected that innovations within the framework of the Bologna process will allow the preservation of the uniqueness of the national models of higher and general education, enrich them with new experiences, innovations, contributing to the attractiveness, competitiveness of the higher education sphere, its fundamental nature in ensuring the progressive socio-economic development both in national contexts and in the global dimension.

Within the framework of this article, the authors carried out a comparative analysis of the circumstances and development trends of national models of higher education in Russia, in the countries of the European Union, as well as in the USA. The authors analyzed the educational models from the qualitative and quantitative point of view. The data obtained will be used to develop new methodological approaches to assessing the quality of national higher education models, which the authors plan to present in their further research on this topic.

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