Abstract: The EU initiative to create a unified European system of higher education (as a response to the dominance of US universities in the field of education and to the need of integration the dissimilar systems of individual European countries education) has initiated a significant process of rethinking the notions of higher education in both individual countries and globally. The Russian education system was involved into the European process of reform and modernization by the own initiative, trying to find answers to the new challenges posed by the market economy and by the new socioeconomic structure of Russia. However, even after 20 years of continuous transformation, the current higher education system of the Russian Federation still remains before a real list of unresolved problems and challenges.

Keywords: Higher Education System; Labor Market; Russian Federation

1. Introduction

The EU initiative to create a unified European system of higher education (as a response to the dominance of US universities in the field of education and to the need of integration the dissimilar systems of individual European countries education) has initiated a significant process of rethinking the notions of higher education in both individual countries and globally. The Russian education system was involved into the European process of reform and modernization by the own initiative, trying to find answers to the new challenges posed by the market economy and by the new socioeconomic structure of Russia. However, even after 20 years of continuous transformation, the current higher education system of the Russian Federation still remains before a real list of unresolved problems and challenges.

Outside of the customary planned economy, the traditional higher education institutions have given rise to considering themselves as the not modern structures that ostensibly lag behind the demands of the labor market. At the same time, the European and world criteria for universities became as the main criteria for the definition of a “modern university” in RF. The quality of education and the relevance of graduates to the labor market have become among the main criteria for assessing the activities of Russian universities. As a result, a noticeable difference manifested between the existing content of the Russian Federation higher education, based on academic standards and actual requirements of employers to graduates. (Pilipenko, Zhidkov, Karavaeva & Serova, 2016, pp. 5-15) This difference was most noticeable in the group of classical universities that created during the Soviet period. They found...
themselves in the most difficult situation in market economy, so as they traditionally focused in education on the development of fundamental researches.

In accordance with international experience, the harmonization of the education system and the labor market is realized as a result of creation the National Qualification System (NQS). The process of NQS formation in Russia as a regulator of the Russian labor market began in the last decade and has entered now its active phase. The developing NQS in Russia includes:

- The list of professional activities types in the 34 professional activity sectors (like these: Education, Health care, Culture and art, Agriculture, Power engineering and so on);
- Professional standards (developed for a specific type of professional activity). As of March 2017, 1001 professional standards approved\(^1\). Their number will increase to 1130 in the near future.

The documents of NQS are developing by: the Ministry of Labor and Social Protection of the Russian Federation; by President’s National Council for Professional Qualifications\(^2\); and by Councils for professional qualifications, created in certain sectors of professional activity.

At the same time, the current legislation of the Russian Federation requires that the system of professional education (including higher education -HE) be brought into the line with the requirements of professional standards, guiding that this will ensure the quality and relevance of graduates. The Federal State Educational Standards (FSES) are the instruments to support quality assurance in the RF higher education system. FSES regulate the basic parameters of educational content, the requirements for the competence and qualification of graduates, the conditions for the implementation of the education process, etc. In total, there are about 500 FSES in RF higher education. The Ministry of Education and Science is responsible for design the educational standards, which relies on its own developments and on recommendations of Federal Educational and Methodological Associations created in the academic environment.

To implement the harmonization of the requirements of professional standards with the FSES, the Ministry of Education and Science sets the task of updating (“actualization”) of all FSES of HE without exception, by July 1, 2017, ensuring their interfacing with professional standards. However, this task in itself proved to be extremely complex and lacking linear and unambiguous solutions. The announced “actualization” is the next (already the fourth) stage of significant modernization of state educational standards since 2001.

The each stage of modernization and introduction of a new standards was accompanied by extensive technical, bureaucratic and increasing reporting work within educational organizations. The paradox of the current stage of modernization is also that the professional standards themselves did not have time to pass sufficient approbation and don't have convincing evidence of their positive impact on the Russian labor market. Moreover they are full of contradictions, inaccuracies and mistakes. As a result, a wide range of problems in the education system is complemented by another major organizational challenge and is a source that causes instability and tension in the academic environment.

This report shows some features of Russia NQS formation (in comparison with similar processes in the countries of the European Union and the USA) and outlines the risks of an immediate restructuring of the higher education system to introduced professional standards requirements.

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\(^2\) The official site of the National Council for professional qualifications at President of the Russian Federation http://nspkrf.ru.
2. Features and problems of NQS formation in the Russian Federation:

1. The NQS of Russia does not have an approved National Qualifications Framework (NQF).

The National Qualifications Framework is a tool for linking the world of labor and education. NQF is a general description of the qualification levels recognized at the federal level and establishing the correspondence of professional qualifications and educational qualifications. NQF is the main way to achieve qualifications in the territory of the state, which approves NQF and puts it into operation.

The experience of the countries that developed the NQS shows that when it is created, the NQF is developed and approved first. The NQF serves as a kind of interface between professional qualifications and qualifications in education. In addition, the NQF is a tool for comparing and recognizing national professional and educational qualifications with qualifications operating on the world labor market and in the world market of educational services. For example, European countries form the NQF on the basis of the European Qualifications Framework, approved in 2008 by the European Commission.

2. The process of NQS establishing in Russia began with the development and approval of a large number of professional standards. They regulate individual types of professional activity that are often randomly and with varying degrees of generalization. But the full innovative economic model for development of the Russian labor market wasn’t built. In fact, hundreds developed professional standards were “attracted” to the areas of professional activity (and not vice versa). This approach led to direct contradictions in the formalization of activities in the modern labor market and some important sectors of professional activity in the National Qualifications System were “lost”. So, for example, the sector “Science”, which is one of the most important spheres of activity not only in academic and industry institutes, but also in the field of higher education, has not come to the list of professional activity sectors. As a result, the area of direct employment can’t be determined it for university graduates in the classical research areas of training (as so Mathematics, Physics, Philosophy, History, etc.). That leads to the artificially created dangerous picture of “non-demand” of such graduates by the modern labor market.

Another example of real challenge to the higher education system (in the current time) is the new professional activity sector – “Administrative Management and Office Activities”. This type of activity was previously considered an auxiliary activity and wasn’t distinguished as a separate sector. As a result, for 90% of the current FSES (in which the organizational and managerial type of activity is indicated), the requirement of “actualization” leads to uncertainty - use this new professional standard sector only or use profile sector standard, which also has organizational and managerial functions.

In general, it should be noted that only 30% of all professional standards approved to date require the highest level qualifications (that is, 7.8, and 9). The remaining 70% of standards require only a bachelor level and below!

The cited examples display the existence of “system-wide” problems that inevitably arise in the “actualization” FSES in HE, the overcoming of which requires analysis and time.

3. The list of activity areas specified in the Register of Professional Standards of the Russian Federation, approved by the order of the Ministry of Labor and Social Protection, does not correspond to the areas of activity identified by International Standard Classification of Occupations (ISCO-08). The existing distinction creates problems in the harmonization of the Russia professional qualifications system with the international system of qualifications. For the higher education system it may be reflected in the problem with the recruitment of foreign students. The existing distinction does not adequately reflect the qualifications for interested foreign partners.
4. Formally, the NQS of Russia does not include vocational education and vocational training, so they have a passive role, which does not correspond to world trends. At the heart of Russian professional standards are not the competence of employees that presuppose the possibilities of development and their career growth, but labor actions, knowledge and skills that fix the situation of work for today (and sometimes for yesterday).

5. In the NQS of Russia there is no transparent and technological tool for certification of qualifications and for the implementation of the model of lifelong learning education. In the European Union, such a tool is the European system of accumulation and transfer of academic credits (ECTS), which is a kind of “framework” for the entire system of competencies certification and learning outcomes received by the employee in the process of formal (basic and additional) and informal education. (Lokhoff, Wegewijs & Durkin et.al, 2010)

6. A negative feature of the procedure for developing professional standards in the RF is the lack of a unified model of requirements for personal and professional competencies of employees as the basis for the development of all professional standards. As a result, the developed and approved professional standards are so different from each other in the used approaches. So the “actualization” of educational standards on the base of professional standards in this conditions don’t allow to organize the integrity and interrelation of requirements. Therefore, the “actualization” of the FSES of HE needs to analyze more than 80,000 labor functions (and about 30,000 labor actions, necessary knowledge and skills) registered in more than 1000 professional standards. This problem is a real challenge for the RF higher education system.

An example of a consistently built system of qualifications and competencies of employees is the National Competency Model USA (http://www.onetonline.org/). In 2008, the Department of Employment and Training of the US Department of Labor developed and published a basic model of requirements for employees of the US labor market at various levels in the form of the Employee Competencies Pyramid. The Department recommended this Pyramid to all research-intensive areas of activity and priority industries to develop industry-specific requirements for the qualifications and competencies of its employees.

As a result, the educational modules are formed on the bases of industry competence pyramid (sectoral requirements for the qualifications and competencies of employees), which are open electronic resources. These resources allow universities to build flexible modular educational programs that are tailored to the needs of a particular labor market sector, and employees plan their career paths through lifelong learning.

7. The modern system of structuring the higher education area, that has been formed in the Ministry of Education and Science of the Russian Federation, contains nine enlarged educational groups: Mathematical and natural sciences (includes 46 FSES); Engineering, technology and engineering (216 FSES); Health and medical sciences (10 FSES); Agriculture and agricultural sciences (24 FSES); Social science (64 FSES); Education and pedagogical sciences (10 FSES); Humanities (29 FSES), Arts and culture (71 FSES); Defense and state security (19 FSES). Total 489 FSES. In turn, the Ministry of Labor and Social Protection has identified 34 areas of professional activity, in which more than 1,000 professional standards have already been formed. The inconsistency of these two classification processes leads to depressing misunderstandings, which are painfully reflected in the higher education system of the Russian Federation. For example, it can already be stated that the absolute majority of Councils for professional qualifications don’t see their interests in research-intensive (fundamental)
areas of training at all (for example, the physicist-researcher turned out to be “unnecessary” neither nuclear, nor atomic, nor the space industry, nor the nanotechnology).

8. A highly specialized classification of professional and educational standards can significantly impede the training of specialists in interdisciplinary fields of activity. For example, the development of the Russian pharmaceutical industry innovative model needs specialists from such different educational fields (each from different enlarged educational groups) as biophysics, informatics, biochemistry, pharmacology, clinical medicine, fundamental medicine, chemical technology, farm economy, farm law, etc. It is not clear now how professional and educational standards can take into account all the required diversity of interdisciplinary educational trajectories.

3. Conclusion

The transformation of the labor market language into the degree program language (FSES) and vice versa is a very difficult task, requiring a systematic and balanced approach. Hasty “actualization” of FSES (Federal State Educational Standards) in HE does not correspond to the established international practice and common sense. It is necessary first to carry out a comprehensive analysis of the current and foreseeable labor markets and to compile a complete list of the required areas, types and tasks of professional activity. In addition, it is necessary to carry out a comprehensive work to establish the justified correspondence of the professional activity areas and education areas, types of professional activity and competencies of educational programs graduates.

The education system should not be faced with the task of directly transferring provisions of professional standards to FSES, as the number of professional standards is increasing and their content is updated consistently to reflect the current needs of the labor market. While the FSESs should be formulated in such a way as to ensure the technological and knowledge-based development of the Russian economy, and also meet the needs of society and the individual.

In educational standards, it is impossible even in formally form to record all the results of education, a list of disciplines and modules due to the constant change in science, technology, and approval of new professional standards. For this reason, the process of establishing the NQS is continuous and requires constant in-depth discussion by stakeholders: labor market-education system-society. It should be noted that practice shows that the necessary qualification of an employee can be achieved in various ways, including those not associated with professional education.

4. References


The official site of the National Council for professional qualifications at President of the Russian Federation http://nspkrf.ru.