

## HOW TO SUBORDINATE LEARNING TO THE TASKS OF THE INDUSTRY

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## **ABSTRACT**

The ambiguous nature of the reforms of higher education manifests itself primarily in the goal setting of the educational process, when in a kind of confrontation there are education and professionalism, universality (fundamentalism) of knowledge and applied preparation of the student for the profession. On the example of transport education, the authors of the article show how the Bologna model has violated

the traditional forms of education, how school and university programs are combined in content and time, what impact is imposed by all of this on the specificity of the disciplines studied. At the same time, the role of educational standards, international and industry requirements is assessed, the issue of professional-public examination of the quality of education with the participation of employers and in the interests of the transport industry is raised.

Keywords: transport, higher education, reform, education, professionalism, quality, expertise.

**Background.** The experience of development of states oriented towards civilized development and competitiveness shows the main and permanent priority of personnel policy.

The professionalism of the nation is an indicator of all times, and if before Russia was proud of the craftsmen who could «pack a flea», now it is «IT boys» who win the world olympiads. But the innovative and operational requirements of everyday life are aimed at ensuring a sustainable life, effective and without emergency situations. High-quality specialists must meet these requirements and be in demand in the international exchange of labor resources.

**Objective.** The objective of the authors is to consider modern state of personnel training after the reform of higher education.

**Methods.** The authors use general scientific methods, comparative analysis, economic evaluation.

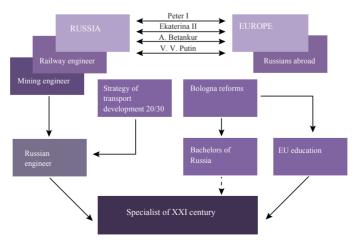
**Results.** The integration of Russian higher education with the Western European training system has its own historical roots and traditions. Pic. 1 shows the traditions of mutual enrichment of education systems.

On transport, a typical example of continuity is the training of navigators and engineers working in all the fleets of the world, but it is becoming increasingly difficult to preserve these traditions in the context of higher education reforms of the last decade, and therefore there is a need to share responsibility for education and professionalism.

The crisis of higher education in Russia has become a consequence of educational reforms, subordinated to its adjustment under a decade of decreasing funding. The problem has reached a high social and political heat and is discussed on TV channels, professional «round tables».

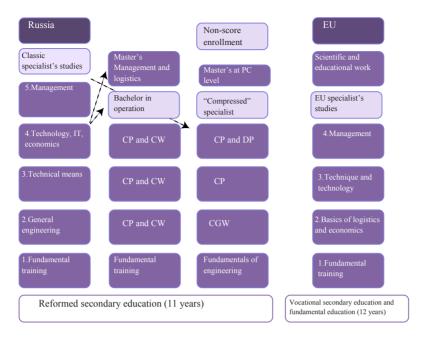
The reform of higher education has led to the fact that the engineering and industrial components of education have practically disappeared in the training of personnel for transport, including for port infrastructure. Bachelors before the second year of training undergo fundamental training, then depending on the work plan of the university there may be two options for further educational trajectory (Pic. 2).

The 1<sup>st</sup> option – the 5-year curriculum of the specialist's program (preceding the transition to the two-level training «bachelor's – master's studies») was compressed to 4 years of study in bachelor's program. There are computational and graphic works (CGW), course projects (CP) and diploma projects (DP). For master's studies there is a non-core enrollment without restrictions for the direction of the first stage of higher education – bachelor's (that is, any bachelors – philologists, lawyers, managers, economists, philosophers, etc. can enter the master's studies). The first year of master's studies becomes an adaptive introduction to the specialty, further training is conducted at the level of professional competencies (PC).

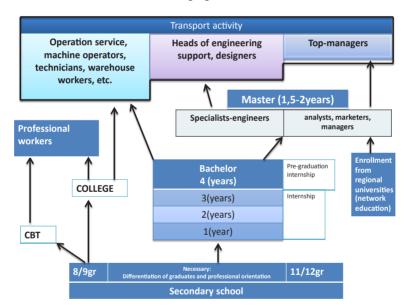


Pic. 1. The traditions of mutual enrichment in education.

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Pic. 2. Reforming higher education.



Pic. 3. Staff for transport.

The 2<sup>nd</sup> option – in the curriculum the disciplines of the 5<sup>th</sup> year of study in the specialist's program are mechanically cut off and taken to the next stage of higher education – master's in management and logistics. Diploma projects are excluded, hours for engineering and technical disciplines, the number of course projects, research work are reduced. At the output of the first stage of higher education, the graduate has general ideas about the specialty and operational logistics (separately in the functional areas). There is no integral paradigm in mastering the specialty.

It should also be noted that secondary education in the EU continues for 12 years, and the last year of training is devoted to professional and fundamental training, close to the profession chosen in the 11<sup>th</sup> grade. That is, a European bachelor acquires

knowledge, skills and competencies for five years – one year at the secondary level and four years at the higher education level. Until 2011, in the Russian Federation, this education, in fact, corresponded to the specialty.

As a result (Pic. 3), the middle managerial link remains without staff trained by the higher education system. For bachelors in the proposed conditions do not meet the requirements either because of the lack of proper training in engineering and practice, or in management. And they can only pretend to the level of exploitation services, technologists, economists, etc., which are trained in secondary vocational education in Russia (technical schools, colleges).

The analysis of the changes that have occurred after elimination of the specialty in the field of training





personnel for transport activities allows us to draw the following conclusions:

- 1. The two-level system of higher education «bachelor master» does not allow to obtain the necessary engineering, economic and managerial competencies for providing the personnel requirement in the sphere of the country's changing port infrastructure.
- 2. When studying in the Master's program there is no continuity of the previous stage of higher education and further improvement of the qualification requirements, since the admission rules do not impose restrictions on the direction of the first stage of higher education bachelor degree.
- 3. Training in bachelor's program does not give graduates of higher education the advantages in the received competences in comparison with the programs of in-depth training of secondary vocational training.

The proposed structure of personnel training (Pic. 3) allows to bring the Bologna structure – a twolevel form of education in line with the content necessary for staffing the economy of the country. The need for personnel at these levels of activity is different and corresponds to the proportion between bachelors and masters. To achieve the goal of modern economic development of the Russian Federation, in particular in transport, it seems important to us to subordinate the two-level education system to the structure of the demand for personnel. In higher education, to strengthen the operational and technological training in the bachelor's program, keeping the basics of management, and to divide master's studies into two profiles: engineering and management, and most importantly, to restore the professional training of workers and technicians in combination with industry education.

On the example of the transport industry, we propose a model of personnel support for the revival of all the areas of economic management that are needed today.

In accordance with the decision of the Education Council of the Federal Agency for Marine Fleet (Protocol No. 27), a conceptual version of «Professional-public examination of the quality of education» has been developed with the justification of its relevance in modern conditions. The conceptual part of the work was completed in 2013. Coordination with the employers of the examination programs took place later, and then everything went into the testing mode.

The Law «On Education in the Russian Federation» has been amended in terms of professional-public examination of educational programs (adopted by the Duma on May 20, 2016) in order to recognize the quality and level of graduates' training by employers and their associations. The President of the country has set the task of creating and mastering the mechanism of such expertise. We believe that this should be done at the sectoral level, and not at the level of the Ministry of Education and Science. Experts must have at least 10 years of work experience, graduation from the university «with honors», an

effective track record and recommendation of the relevant employers' association (see the annex to the Law of 2016, signed by V. V. Putin).

Prolonged unpopular in the country education reforms have disagreed with the tasks of the government to boost the economy. This period was particularly difficult for specialized universities. It was necessary to preserve the content of training and the quality of graduates in conditions of "breaking" the forms of education, underfunding, the loss of teaching staff and the change of generations, to provide innovative updating of educational programs.

A separate problem is coordination of training of personnel in transport universities and provision of interaction between modes of transport in this area. The standard of education of the third generation scattered earlier existing general transport training. Even in one transport industry each university makes its educational programs. Previously, they have been coordinated in the NMS-C in the corresponding UMO. This «confusion» is especially dangerous in the training of specialists in the organization of transportation and transport logistics. At the level of education standards of the second generation, there was a coordinating council for transport education and logistics. With the strengthening of the vertical of power, this institution came out of fashion, and we lost coordination not only between transport branches, but also with foreign colleagues.

**Conclusion.** Transport universities are obliged to adhere to state educational standards, but in the professional part they must be guided by international and industry requirements, form the competencies of the specialist, updated by employers, associations of professionals in accordance with innovative trends.

Our task in this situation is to protect transport education, to preserve the traditions of training engineers and their innovative renovation, to put on a competitive level the training of managers in the organization of transportation and transport logistics, to provide the possibility of intermodal interaction in international logistics supply chains.

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