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International Conference «Land Economy and Rural Studies Essentials»**ECONOMIC DISCIPLINES IN THE FORMATION OF THE
COMPETENCE OF TECHNICAL UNIVERSITIES GRADUATES**

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Abstract

The subject of analysis in this article is the role and position of economic disciplines in technical universities, their feasibility, and the importance of teaching them. It analyzes difficulties and contradictions of an organizational and methodological nature, and emphasizes the need to teach economic disciplines in engineering specialties, as well as the role of economic literacy in the competence of specialists (engineers). The author offers directions for solving emerging problems. The main task is insufficiently solved - improving the quality of preparedness of specialists of all levels of training, which negatively affects the development and implementation of new technologies, the development of the state economy, including medium and small businesses. It is extremely important in the coming years to increase the volume of budgetary financing of higher education, to attract employers and sponsors to finance education. The social orientation of modern engineering education requires a theoretical understanding of the role and place in it of the block of humanitarian and socio-economic disciplines in general and the course "Economics" in particular.

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1. Introduction

Education in modern society is one of the most extensive spheres of human activity and in recent years its social role has significantly increased as a leading factor in socio-economic progress. The main idea of educational policy in the world is to define it as a tool for solving political problems. The world today unites efforts in the field of education, the desire to educate a citizen of the world and the entire planet. The world educational space is gradually developing. The educational process has its own internal patterns and logic of development, which does not always correspond to the level of economic development and the specifics of political life (Addison et al., 2018; Carol, 2017; Dao & Edenhofer, 2018; Forni & Pisani, 2018; Goryunova et al., 2017; Mateo-Perez et al., 2015; Sadykov, 2009).

2. Problem Statement

Modern society should be focused on the formation of economic competence as a necessary element of the competitive potential of an individual. The economic competencies mastered by students enrich the content of their professional activities. In this case, the formation of the graduate's economic competence is one of the results of the educational process. The need of modern production for economically literate, competitively capable, professionally trained specialists requires the improvement of the educational process by the content, the use of new progressive and effective ways and methods of identifying the optimal conditions for the economic education of students.

The article discusses the formation of economic competencies of future engineers in the process of training in technical universities. Economic competencies are determined by a set of theoretical knowledge and practical skills required for a specialist, i.e. act as the means by which the trajectory of life, career and success is built (Mukhametshin & Kuleshova, 2020; Sadykov, 2018; Tyncherov et al., 2017; Zaichenko et al., 2011)

3. Research Questions

Models developed by many scientists believe that high-quality specialists should:

- be able to set high personal goals, have a normal lifestyle, be in shape, constantly improve their skills, express thoughts clearly and intelligently;
- be able to predict the development strategy of the enterprise, the efficiency and competitiveness of products, study and evaluate factors, be able to prove their own ideas orally and in writing;
- be able to form the goals of other people, understand the character and personality traits, adequately assess oneself and other people, maintain a normal psychological climate in the team and smooth out conflict situations;
- know the technical and technological features of production;
- be able to analyze, predict, evaluate economically and make decisions under conditions of uncertainty;

- be able to focus on achieving the set goals, perform the functions of a resource distributor and coordinator, delegate functions and responsibilities in accordance with the level of management, encourage employees to implement marketing concepts, improve the quality and save resources.

According to this model, three criteria for the formation of students' economic competencies were identified: cognitive, motivational and activity-aimed ones. The proposed criteria can be called objective, since we use them to determine the degree of compliance of a graduate of a technical educational institution with economic imperatives as an expert.

4. Purpose of the Study

One of the main tasks of engineering technical education at present is the preparation of a competent engineer, and special attention is paid to the quality of education of specialists. The quality of education is conditioned, on the one hand, by the increasing requirements for a specialist-engineer, who must ensure the normal vital activity of workers. On the other hand, it is achieved by the development of production, which occurs on the basis of not only technical, but also economic processes.

A specialist - a graduate of a higher educational institution is characterized as an employee with professional knowledge, skills and abilities to fulfill his duties, as well as life values, social, economic, political, socio-cultural norms.

The work of an engineer is interdisciplinary. To do this, it is necessary to ideally possess information technology, to be aware of environmental problems, both in terms of causing damage to the environment and in terms of predicting the consequences of the activities of the engineering community. For this it is necessary to be involved in the management of science and technology, in the solution of various social and economic problems.

5. Research Methods

The development of the country's economy, including science-intensive industries, is impossible without high-quality training of engineering personnel. A modern engineer cannot work without the ability to process and store technical documentation, carry out its structural and graphic design, organize and statistically analyze information, search for normative and reference materials, get acquainted with technical innovations in his field of activity, and work with automated control systems. That is why employers give preference to specialists who not only know the main technological processes, but also have information technology competencies and are able to see the results of their work.

Economic competences are understood as the union of economic knowledge and characteristics, as well as the possibility of their successful application in professional activities. The objective need for the formation of economic literacy of students of all directions and profiles of training determines topical issues regarding the clarification and classification of economic competencies. This is evidenced by the analysis of the educational model of the third generation. Within the framework of this model, the competence-based approach means the mandatory acquisition of those qualities that help the graduate to adapt to the changing conditions of the post-industrial society.

Analyzing the content of general cultural and professional competencies within the framework of general educational programs in many profiles of personnel training, it is easy to notice and highlight the essential economic component that is used in most general cultural and professional competencies. Based on the above, we understand economic competence as a set of acquired economic knowledge and abilities, as well as the possibility of their successful application in professional activities in the field of economics, and the solution of appropriate relations with people, organizations, government and other economic institutions.

The proposed classification is based on the division of economic competences, which are mandatory for all students, regardless of the direction and profile of their training (specialty) and qualifications. Professional competencies are specific (implemented in the professional activity of graduates of non-economic profiles and applicable in a specific field of activity) and pure (collectively forming professional competencies of graduates of students of economic profiles) (Akhmetov & Mukhametshin, 2018; Dos Santos & Sadykov, 2016; Mukhametshin, 2018; Zeigman et al., 2017).

In recent years, the problems that cannot be solved within the framework of educational reforms have become clearer, which has led to a worldwide crisis in education. The essence of higher education was reduced to the training of narrow specialists, i.e. the goal was not the holistic development of man, but only some of his abilities that correspond to the division of labor.

Theoretically, the crisis of education began in the late 60s and early 70s of the 20th century, after the publication of the book by the English scientist Coombs "The Crisis of Education in the Modern World". The author saw the essence of the global education crisis in the gap between the existing education systems and the rapidly changing conditions of society. As well as the ever-increasing development in the level and quality of education between rich and poor countries and between social strata within the country.

The global education crisis has left its mark on Russian society. There is no unambiguous point of view on this issue among domestic researchers. A detailed presentation is presented in the work of Bodrova and Nikitina "Crisis of the education system. Search for a new paradigm of education at the turn of the 20th-21st centuries". Despite the multiplicity of positions, the authors are inclined, nevertheless, to consider the existing provisions of Russian education as a crisis, accompanied by the presence of "errors" in the work of the entire educational system, which do not allow it to effectively perform its functions.

The Soviet education system was considered one of the best in the world. The events of the late 20th century destroyed all its dignity. The teaching methods accumulated over the centuries, developed by state professional standards, were, in fact, "destroyed". Education not only lost its accumulated dignity, but by 2003 it lagged the developing countries - world leaders. Since 2003, the education system has been constantly reformed, which leads to misunderstanding, but only introduces confusion and disorder, destroying the old and not creating the new.

A significant increase in universities, the renaming of provincial institutes into academies, universities, without changing the material and technical base, as well as the qualifications of the teaching staff, led to a decrease in the quality of training. It is very upsetting that despite the regular implementation of reforms to improve the domestic education system, the quality of modern Russian education is not improving. Russia ceased to be an exception among the leading countries where there

were no private higher education institutions. A practical analysis of the activities of graduates made it possible to establish that in most cases they are not able to fulfill their labor duties until they have completed internships for their position. The inability of graduates to realize themselves in modern market conditions leads to disappointment in their chosen profession, a change of profession or emigration. Young graduates-specialists are forced to find a job outside their specialty, universities have little or no effect on the employment of their graduates. Even though most universities have the necessary practice, they often do it somehow, which has nothing to do with production.

One of the main problems facing the system of higher education is underfunding, which leads to a shortage of educational institutions with laboratory, technical and informational equipment, visual aids, special equipment and instruments, and literature.

An undeniable problem today is paid education in higher educational institutions. Universities received the right to commercial activities. The number of budget places is decreasing every year. This suggests that the number of students from low-income and medium-income families is decreasing. The population does not like paid education, since it does not allow capable students who do not have rich parents to get higher education. In the system of higher education, in addition to the state, new customers have appeared: families of students, students themselves, as well as (although not a large) number of employers.

The most important problem facing the higher education system at the present time is the transfer of the education system to the system of providing educational paid services. In their works, many scientists and specialists believe that the concept of “training” and “services” are not compatible. It should be noted that the provision of services implies the performance of work, in terms of volume corresponding to the amount of payment. Compared to the fact that an educational institution provides educational services, there is no need to talk about the quality and accessibility of education for everyone.

6. Findings

At all times, Russian technical universities were distinguished by the high quality of training. And today, we can say with great confidence that the best Russian technical universities are at the level of the world's leading engineering centers. Based on the experience formed over the past decades, contradictions have been revealed in terms of training engineers and bachelors of technical directions of economic disciplines. It's not a secret that not all graduates of technical universities work in their field and even qualifications. Not having received the appropriate economic, theoretical training, graduates are faced with the problem of lack of economic thinking, culture, inability to navigate the economic environment.

The economic training of a modern engineer is the acquisition by a student in the learning process of knowledge, skills, personal qualities that allow him to effectively solve private and public economic problems.

Economic education and economic education are the most important condition for preparing a graduate of a technical university for activities in modern conditions. The economic training of specialists from technical universities allows not only to determine the ways of labor economics, but also to calculate labor productivity; calculate the cost of production; justify the best options for technological solutions; use the latest methods in calculating economic efficiency.

Consequently, the presence of not only professional, but also economic competencies is a fundamental requirement for a modern engineer.

The amalgamation of economic disciplines since 2013 has led to a reduction in disciplines such as:

- fundamentals of a market economy;
- taxes and taxation;
- the basics of marketing;
- basics of management;
- -financial and credit mechanism of the enterprise;
- economic foundations of enterprises, etc., which negatively affects the competence of graduates of technical universities.

The practice of working with foreign students shows that, along with the study of disciplines in their specialty, their interest is aimed at economic competence after graduation. They need to be able to navigate economic (tax) reports and express their point of view in their engineering activities. Therefore, the problem of teaching economic disciplines in technical universities should be solved deliberately, relying on practice, considering the experience of the Soviet system of higher education. Solving the problems of modern Russian education is impossible without restoring the status of the teacher as the country's elite and the most respected member of society. Naturally, this status must be confirmed by the appropriate salary and respect, both from the public and from the government]. In the Soviet Union, teachers had a special status: parents did not doubt the proficiency of teachers and did not question their recommendations for raising the development of children, and schoolchildren and students treated them with exceptional respect and respect.

7. Conclusion

Currently, many of the problems facing domestic higher education require a serious restructuring of the mechanism for its financing, which should be aimed at ensuring transparency and competition, and increasing the investment attractiveness of the system. In this regard, the natural proportions in the training of specialists with secondary and higher education have been violated. The main task is insufficiently solved - improving the quality of preparedness of specialists of all levels of training, which negatively affects the development and implementation of new technologies, the development of the state economy, including medium and small businesses.

It is extremely important in the coming years to increase the volume of budgetary financing of higher education, to attract employers and sponsors to finance education. In addition, it is necessary to make every effort to return the country to the natural path of development, which is inextricably linked with the socialist past of our state. Studies by many scientists show that the formation of economic competence is associated, first of all, with the need to determine the criteria necessary for assessment, highlight the features and determine the characteristics of various learning conditions. At the same time, such sciences as psychology, pedagogy, economics, and sociology should be taken into account to minimize socio-economic conflicts. The social orientation of modern engineering education requires a theoretical understanding of the role and place in it of the block of humanitarian and socio-economic disciplines in general and the course "Economics" in particular.

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