Practice-Oriented Technologies in the Educational Process as the Basis for the Economic Development of Society

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Abstract—At present, the world economy is moving to a new level of development. New technologies are developing at an accelerated pace and most production processes are being automated. These variations lead to a rapid change of economic and social order in society. Modern society and economics are on the path to digitalization. The world is entering the era of the digital economy, which dictates its requirements for education and the acquisition of knowledge. The new economy requires specialists of a new type in the labor market. Previously mentioned leads to fundamental changes in the professional and educational sphere. The digital world is a world of rapid change and a wealth of information. New realities require new competencies and skills from specialists.

The formation of a set of skills, having mastered that, employees will be able to gain a foothold in one or another activity of the future, being ready for subsequent retraining, comes to the first place when receiving education. In this regard, the educational process is changing from traditional to practice-oriented, which allows you to obtain the necessary set of skills and competencies quickly.

In the framework of the study, the team of authors developed and described a mechanism for using practice-oriented technologies in the educational process of the university in order to increase the business competencies of teachers and the quality of education in general. The using of this mechanism in practice in educational institutions will increase the involvement of students into educational process, students will be able meet the modern realities of changing society, the main priority of which is adaptation to rapidly changing working conditions.

Keywords: globalization of the economy, advanced practice-oriented technologies, accelerated development, continuous improvement of education quality, clip thinking, quality of education, competency-based approach

I. INTRODUCTION

The modern stage of society development is characterized by a change in educational paradigms, that is, a transition to new practice-oriented [1, 2, 3, 4-14] pedagogical technologies, the essence of which is to develop the creative potential of students, develop skills for quick inclusion in innovative processes and abilities correlate their professional activities depending on objective and subjective conditions.

The avalanche-like approach of the financial technology era requires constant self-development from teachers. It is not competition between teachers that comes to the fore in higher education institutions, but a pool of efforts for timely response and decision making in the context of the globalization of the
economy and society as a whole. In order to ensure the successful functioning of the educational organization implementing the higher education program, it is necessary to consolidate the efforts of all participants in the educational process. Only in cooperation with financial institutions and employers education can ensure sustainable economic development for society. Nowadays, statistics are not optimistic, most university graduates are employed not with the specialization was gotten, and the reason for this is the strict requirement on the part of employers - the availability of work experience. At present, in the leading universities of the country, at a fairly high level, the academic competencies of all teachers have been formed, what are steadily leading us to by professional standards, and how much business competencies have formed today? Meeting the realities of the modern world, for all participants of the educational process, in preparing graduates of any profile, the task of strengthening the practical training of future specialists comes to the fore. The team of authors considers one of the priority areas in solving the problem as the introduction of new, effective teaching technologies [15]. Currently, educational technologies based on active and interactive learning methods are relevant, which include design or problem-oriented methods [1, 2, 3, 4-15].

II. LITERATURE REVIEW AND RESEARCH METHODS


III. METHODS

The empirical basis of the study was the study and analysis of Russian and international experience of using practice-oriented [1, 2, 3, 4-14] technologies in the educational process of leading universities. The methodological basis of the study was the scientific and educational literature, which was recited in the list of sources. The systematic approach made it possible to comprehensively and holistically study the problems of «containing» the use of these technologies in practice. When setting the goal and main objectives of the study, the team of authors used the abstract-logical research method. The present study also applied the methods of synchronous and diachronous analysis of the use of advanced practice-oriented technologies in Russia and abroad. During the discussion, heuristic and logical methods were used. The reliability and validity of the results confirms the use and application of such methods as statistical and experimental.

IV. RESULTS

Modern society puts forward double demands in relation to education [18, 19-24]. On the one hand, it is the preservation of the fundamental nature of education, and on the other hand, the constant updating of its content by strengthening practical focus. In such conditions, the team of authors considers the most effective strengthening of the role of practice-oriented [1, 2, 3, 4-14] technologies in the educational process, that is, a harmonious combination of theoretical knowledge in solving practical issues. Without completely reducing the importance of the theoretical block, the practice-oriented approach aims educational organizations [18, 19-24] to develop such forms of educational process that allow the effective use of case study [4, 6-8], master classes, trainings, business games [5], design and problematic techniques, independent research (Figure 1).
The using of this mechanism in the educational process of a university [18, 19-24] involves certain difficulties, which are caused by two main reasons, this requires:

1) certain conditions and qualifications of teachers, the investment;

2) continuous improvement of the professional competencies of the teacher through vocational training.

Fig. 1. The mechanism of using practice-oriented technologies in the educational process

At present, in Russia is implementing a two-level higher education [18, 19-24], which is due to Russia's entry into the Bologna process in 2011. The division into bachelor's and master's degrees in itself provides great opportunities for students, including the opportunity to get two completely different specialties in 6 years. Therefore, having completed training in the technical field, students enter the master's program in the humanitarian field and vice versa. This aspect has a positive effect on the demand for graduates by employers.

However, this is also associated with some difficulties: mastering the master's program for students with non-core basic education is difficult, since the focus of master's programs involves an in-depth study of certain aspects of a specific training direction, the development of which requires students with non-core basic education more efforts than students, completed training in a specialized direction of undergraduate training. In this case, there is a need to maintain a certain balance between the various basic levels of training of students [18, 19-24] in the magistracy.

Two-tier education required higher education teachers to be more professional, to constantly improve their skills in using the latest teaching technologies for future bachelors and undergraduates.

Nowadays the problem of advanced training is quite acute in every university of the country, because it is required from their organization to obtain a full range of necessary information in the field of the latest scientific achievements, as well as advanced foreign and domestic experience in any field. However, unfortunately, in practice these courses are sometimes formal. In this case, the solution of the problem is also possible through the implementation of practice-oriented technologies in the realization of teacher development programs [1, 2, 3]. Using such tools as case studies [5-14], basket-methods, project-training methods, that is, methods based on imitation of problems encountered in the daily work of teachers, the effectiveness of obtaining business competencies [19-24] would be much higher.

Present education needs modernization to ensure the sustainable economic development of society as a whole. Today, employers demand from university graduates, not only professional and general cultural competencies, but also business competencies, such as the ability to propose and develop business ideas, find innovative solutions and evaluate the current situation, and offer relevant solutions. Freedom of expression and choice of educational path for students today is a priority in choosing an educational institution. The degree of involvement and designing of one's own education, depending on the needs of individual and creative self-realization of students, is a task facing higher education today.

The main problem of the low professional competence of graduates, according to the authors, and their uncompetitiveness in the labor market is the lack of practice in solving problems in the field of future professional activity. The proposed mechanism for using a practice-oriented [1, 2, 3, 4-14] approach is based on the close relationship between employers, teachers and graduates.

A significant step in this direction can be called the contest of student work of the project «Professional training 2.0», organized by the platform «Russia - the country of opportunities» and the All-Russian Popular Front. The site «Profstajirovki.rf» [25] today offers cases formed by enterprises in the real sector of the economy so that students can plunge into the problems of enterprises while still studying at the university. Nevertheless, according to the authors, the conditions of this site need to be improved in order to provide students with the opportunity to gain work experience in the learning process at the university.

The mechanism described by the authors team for using practice-oriented [1, 2, 3, 4-14] technologies in the educational process, it is assumed that employers throughout the entire training period will attract students through various types of practices (training, production, pre-diploma) for solving specific practical problems. This will allow education to follow the program of accelerated development, and society as a whole will develop steadily.

V. DISCUSSION

The development of information technology and computer technology has triggered the development of the so-termed
According to the same IDA report [26], less than 1% of all existing information in the world is analyzed. Every day we have to process a huge amount of data. Today, people send messages from mobile phones, through social networks, view news feeds, videos, materials on the Internet, read posts on social networks, every second a modern person processes information from various sources.

Such global informatization [27, 28-31] leads to a change in the thinking of the younger generation. The constant change of information requires its rapid assimilation, so the so-called “clip (fragmentary) thinking” is formed among young people. For the first time, this concept was introduced by the American scientist E. Toffler [32], who presented the concept of clip culture as a characteristic of a society moving from mass and serial production to information.

Today, due to the pace of information, modern students do not need details for its assimilation, students need a general picture of what is happening. Clip thinking allows you to absorb a large amount of information without focusing on details, but perceiving only a general idea. This is facilitated by presentation of information itself [8] around us. Information on the Internet [28-31] is represented by short text messages, basically all information is visualized by pictures, infographics, slide shows, flash animations. Visualization of information using images and videos speeds up its processing. Films, cartoons, series, commercials, news, and even computer games show scenes in small blocks that often succeed without a logical connection. All of this leads to a fragmented perception of information, having not yet mastered one topic - a modern person switches to another. This perception allows you to increase the speed of processing and filtering information without overloading the brain. However, such a fragmentary perception of information does not allow modern students [33] to analyze the situation, conduct relationships, structure and construct thoughts in a logical order. It should be noted that modern students lose the ability to analytical and critical thinking due to the reality in which we live. The above-described features of the perception of information by the young generation pose the challenge for higher education institutions [33] to transfer the education system to a qualitatively new level. Traditional methods of teaching [34] and conveying information to students do not work [33], and do not allow them to absorb knowledge.

Traditional teaching methods [34] are aimed at a different type of thinking, which was characteristic before the formation of the information society [33], textual and sequential. The traditional methods of teaching at the university include lecturing, conducting discussion seminars and practical classes, conducting laboratory work. As a rule, these methods involve a monotonous and consistent presentation of the material, which allows us to come to some kind of conclusion. Nevertheless, since students with clip thinking experience the perception of information in a diffractal and visual way (without analyzing it), they cannot perceive the information given to them in the classroom.

Based on the foregoing, the team of authors came to the conclusion that it is necessary to change the methods and methods of teaching and delivering information to modern students according to the requirements of the new information society. Modern education requires the introduction of active teaching methods.

In 1969, Edgar Dale [35] a teacher at Ohio State University (USA) identified the most effective teaching methods (Figure 3).

According to Dale’s theory, the most effective way to assimilate information, memorize it, and then use it is to perform a real action, i.e. putting the acquired knowledge into practice. According to the authors, this method in education makes it possible to implement the technology of "business simulation" in full. Business simulations allow students to gain specific skills and competencies.

The main task of business simulation is to solve a number of interrelated problems to achieve a specific result. Business simulation allows each student to try himself in a certain business role and evaluate the effectiveness of the adopted economic, production and management decisions. Computer business simulations allow you to use the features of modern
clip thinking of students, as they are made in the computer game form. At the same time, business simulators allow you to develop analytical and systemic thinking, as well as learn to critically assess the situation, i.e., to develop those skills that are not enough for modern students.

VI. CONCLUSION
In the system of modern education, in order to achieve sustainable economic development of society, the development and implementation of practice-oriented 1, 2, 3, 4-14 technologies, such as business games, business and case technologies, technology of business [36] simulations. These technologies contribute to increasing the level of motivation of students, the attractiveness of the cognition process and the quality of education in general. The need to use a practice-oriented [1, 2, 3, 4-15] approach in education is caused by the desire of society to provide an improvement in the quality of people’s life based on a comprehensive solution of social, educational, economic problems, and, consequently, the formation and development of industry and regional services markets.

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