

Development and Structure of Professional Competences in The Conditions of Continuing Economic Education

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Abstract: Introduction. The transition of the Russian Federation to market economy necessitated economic training of specialists for successful work in the new socio-economic conditions. **Methods.** The efficiency of economic education is regarded in the context of vocational training, taking into account a set of factors that allow considering economic education as a component of global education. **Results.** Basing on generally accepted principles of continuing education (basic general education, multilevel structure, diversification, complementarity of general, professional and postgraduate education, versatility, succession, integration of educational structures, flexibility of organizational forms), the authors pay special attention to economic competence drawing on the market economy requirements in the preparation of competitive specialists. **Discussion.** The principle of economic competence establishes the relationship between knowledge as information and knowledge as an activity necessary to form a competitive specialist with a certain level of economic competence in the course of professional education. **Conclusion.** Continuing economic education is an obligatory component of continuing vocational education. In the context of market economy, it is focused on the formation of competitive in-demand specialist, possessing necessary economic competences, which are formed in the course of economic training and economic education in vocational education institutions.

Index Terms: continuing economic education, principle of economic competence, structure and content of economic competence of students, levels of vocational education, educational program specialization.

I. INTRODUCTION

In current conditions of unstable socio-economic situation in society, and the complexity of economic development projection, it is difficult to form the profile structure of vocational training. Loosening of traditional ties between educational institutions and employers, weak influence of professional communities on the development of educational system, and underdevelopment of the labor market complicate the process of bringing the content of education in line with the needs of economy and social sector, organization of practical training of students, as well as

Revised Manuscript Received on September 05, 2019.

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employment of graduates in Russia.

The challenges facing education in the 21st century and its numerous forms affect whole human life. Continuing education that meets the demands of modern society, involves the need to learn throughout life [1].

With the development of market relations, the scope of educational needs is expanding and their structure is changing. It brings to the fore the solution of such problems as:

- bringing the number of vocational educational institutions and their types in line with regional needs;
- establishing the content of educational programs adequate to the needs of society and the interests of students;
- ensuring different levels of continuity in education;
- developing and implementing innovative learning technologies capable for maximum fulfillment of individual's needs, and taking into account personality's individual characteristics [2].

In the context of transition to market economy, there is an urgent need for a vocational training system which can quickly and adequately respond to the changing market conditions. In this regard, the idea to strengthen the emphasis towards fundamental education, which has longer period of validity, is more conservative, and, if properly formed, allows moving from education for life to lifelong education. Lifelong education is considered as the only opportunity to be in demand in any socio-economic conditions [3].

II. METHODS

Prof. T.Yu. Lomakina pointed out that in the current context the concept of continuing vocational education should be considered as an economic policy tool aimed at increasing competitive ability, facilitating full and successful employment, ensuring professional mobility of employees in connection with the implementation of new technologies, and thus it should be based on the following principles: basic general education, multilevel education, diversification, complementarity of basic and postgraduate education, versatility, succession, integration of educational structures, and flexibility of organizational forms [4]. These principles will be examined in detail further.

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A. Algorithm

The principle of basic education means that in order to move further in the world of education, any person should have basic or general knowledge. According to A.V. Novikov [5], basic general education corresponds to the matriculation certificate (or school-leaving certificate). After completing this educational program, a person will be able to build his/her individual educational trajectory to get basic vocational education as the first level of professional education, regardless of the previous educational background.

The multilevel education principle implies the presence of various levels and stages in the system of education that allow training specialists of different educational backgrounds and skills, who will be able to be successfully employed in the labor market.

The diversification principle implies the expansion of activities in the educational system through acquiring new and previously extrinsic forms and functions.

The principle of complementarity (or mutual complementarity) of basic and post-graduate education means that in the context of continuing education, every person is supposed to continue learning for the rest of one's life, regardless of whether or not he/she decides to study at the next educational level.

The principle of versatility of educational programs means that there is a possibility of changing the type of activity or acquiring parallel education in various areas. For example, today it has become quite common for students to study simultaneously in different specialties at two educational institutions, or to master two specialties in one college or university.

The succession principle provides for consistency and coherence in the content of vocational educational programs, forms and training methods, as well as the nature of the educational and cognitive activity of students. The need for training based on the principle of succession of educational stages is dictated by the continuous development of society, the constant updating of curricula and educational programs, improvement of technical means of training, publication of new textbooks and manuals, and the emergence of new educational technologies that contribute to improving the quality of education.

The principle of educational structures integration means that one and the same educational program can be implemented in different types and level of educational institutions.

The principle of flexibility of organizational forms implies a variety of educational forms, their flexibility, and variability to ensure the free promotion of a person in the educational space in a market economy environment, because many educational services have become reimbursable, and not every family can afford themselves to allocate money from family budget for education.

Development and practical implementation of learning technologies started begun in 1960-70s in Europe and the United States and is associated primarily with the works of B. Bloom [6]. Researchers F. Percival and G. Ellington pointed out that the term "technology" in education included any possible means of presenting information [7]. They included

technical equipment, used in education, such as television, various means of images projection, etc. In other words, educational technology often implies the application of audiovisual means.

Many researchers distinguish four profiles of scientific understanding and the use of term "educational technology". These profiles include:

- educational technology as INSTRUMENT, i.e. production and application of methodical tools, educational equipment and technical means of training for the educational process [8,9].

- educational technology as METHOD, i.e. the process of communication (strategy, model, technique to perform educational tasks), based on a certain algorithm, program, system of the interaction of pedagogical process participants [10,11];

- educational technology as research DIRECTION, considered as a vast area of knowledge based on the data of social, managerial, and natural sciences [12,13];

- educational technology as MULTIDIMENSIONAL CONCEPT, which represents multidimensional approach, and considers pedagogical (educational) technologies as a multidimensional process [14,15].

American educator and researcher James D. Finn noted that "only unsophisticated people believe that educational technology is just a set of hardware, equipment and teaching aids. Technology means much more than that. It is a way of organizing education, a way of thinking concerning training content, people, institutions, model, and man-machine systems".

Based on the analysis of more than a hundred sources, related to the definition under study, P.D. Mitchell described the educational technology as "an area of study and practice (within education) concerned with all aspects of the organization or educational systems and procedures whereby resources are allocated to specified and potentially replicable educational outcomes." [15].

IV. RESULTS AND DISCUSSION

Based on the established principles of continuing education (basic education, multilevel nature, diversification, the complementarity of basic and postgraduate education, versatility, succession, the integration of educational structures, and the flexibility of organizational forms), M.G. Sergeeva distinguishes the *principle of economic competence* based on the market economy requirements in the training of competitive specialists.

Analysis of the research works [16,17,18] allowed determining *competence* as an integral personal and professional quality of a person, who has acquired a certain educational background, expressed in the readiness and ability on its basis to successful, productive, and effective activities, taking into account its social significance and associated social risks; providing an opportunity for effective interaction with the environment through appropriate competencies.



Competences constitute an open system of knowledge and skills acquired in educational process and adjusted during the practical activity. The expediency of the introduction of professional *competence* concept is due to the breadth of its content, and integrative character that combines commonly used concepts, such as professional skills, qualification, professional abilities, etc. In this study, we define professional competence as an integral personal entity, which combines a system of values in the understanding of social reality, specific vocational knowledge, acting as guidelines for action, ability to self-determination, personal ability to implement professional technologies in the main spheres of human activities [19].

Analysis of the State Educational Standards (SES) of three generations currently applied in Russia revealed the following features [20]:

- features of the first generation SES (mandatory minimum content of basic educational programs; maximum volume of students' academic load; requirements to the preparation level of graduates);

- features of the second generation SES (taking into account the tariff and qualification characteristics of the Russian Ministry of Labor when forming requirements for graduates; coordinating qualification requirements for graduates and the content of education with the federal executive authorities; developing standards in the integrated areas of training professionals in the field of engineering and technology);

- distinctive features of the Federal State Educational Standards (FSES) of the third generation from the previous SES (limited regulation; independence of educational program; modular structure of programs; competences as educational results; focus on the needs of labor market). The FSES give a clear definition of the competence concept as the "ability to apply knowledge, skills and personal qualities for successful activity in a certain area". The logic of this concept with respect to the field of vocational education is that the student, studying chosen specialty profile, receives a certain amount of basic (theoretical) knowledge; a set of methodologies and techniques for the application of this knowledge in practice; certain professional experience (in the course of traineeship and other practices, laboratory work and self-instruction, etc.). At that, all these parameters should be assessed equally. Competences are divided into professional (specialized in certain fields of activity), and universal (necessary for an educated person, regardless of the training profile).

Our research confirmed that the implementation of the third-generation standards takes into account competence-based approach and is based on the following aspects:

- *the changes occurring in the labor market* (shifting the demand for new skills and changes in work organization; the decline in demand for unskilled manual labor; the proliferation of automated control systems of production processes; the decline of mass production; the increase of individual responsibility of employees for work quality; the increase in the level of interaction between employees in the team work; blurring the boundaries between various professions);

- *new requirements for professional/vocational training*

(labor activity is formed around processes, rather than operations; nontechnical aspects of labor, such as planning, coordination, communication, and decision-making are essential; adaptability is a leading indicator of the quality of professional training);

- *the interaction mechanism between the labor market and the educational services market* at different levels (federal and regional), which involves the implementation of state policy in the field of vocational education and professional training; provides the developing labor market with the necessary number of specialists of the required profiles and qualifications, taking into account the main trends of regional strategic development; ensures rapid adaptation of vocational educational institutions, as well as retraining of the personnel according to changes in the labor market, contributes to increasing human resources, vocational mobility and competitiveness of employees;

- *competence-based model of a graduate* of a vocational educational institution, corresponding to the developed structure of economic competence, containing the following seven competence blocks: educational, personal, intellectual, professional, communicative, informational and economic. The block of economic competences emphasized in this research in connection with the need to train a specialist with a certain level of economic knowledge, ready for adequate decision-making in various socio-economic situations, regardless of qualification [21].

V. DISCUSSION

The principle of economic competence establishes the relationship between knowledge as information and knowledge as an activity necessary to form a competitive person with a certain level of economic competencies in the course of vocational education. When determining the economic competence of a graduate of vocational educational institution, we focused on the concepts of *competence/competency*, and *professional competence*, which define the terminological field of research and characterizing the concept of economic competence.

Economic competence is considered as integral qualitative and professional characteristics of individual, which includes economic capabilities, forming economically significant qualities (competitiveness, initiative, mobility, entrepreneurship, independent decision-making, and critical thinking), and reflecting the willingness and ability to effectively carry out professional activities in various spheres and segments of economy through building their career, based on individual values and projecting them in accordance with the development strategy of society, as well as moral grounds and rules.

At the same time, *economic competences* constitute an open system of knowledge, skills, experience of practical economic activities and personal responsibility, which is activated and replenished in the course of vocational activity as real-life economic problems arise before a graduate of vocational educational institution [17].

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Analysis of competences classifications, made on various grounds (general cultural and vocational context of the tasks under consideration; corporate, managerial, and vocational level of competencies distribution; threshold, and differentiating development level; cognitive, personal, functional, social, etc. essence and content) allowed us to develop a *structure of economic competence* of students, which includes the following components:

- *key competences*, which include basic economic knowledge necessary for adaptation to professional activity in market conditions;

- *professional competences*, which include the ability to apply economic knowledge in practice, the ability to assess new economic situations and make the most appropriate cost-effective decisions;

- *additional competences*, which are the ability of creative economic behavior, effective behavior in the labor market, continuous economic self-education, etc.

The basis to distinguish this structure of economic competence was the selection of the content of the modules of the studied disciplines: general humanitarian and socio-economic disciplines – key competences; general vocational disciplines – vocational competences; and special disciplines (vocational modules) – additional competences.

In consequence of our research work, the levels of continuing economic education in the vocational education system (basic, vocational and additional) were identified. These levels allow students to perform the necessary labor actions and hold the appropriate positions after the completion of training at a certain level.

The purpose of the basic level of economic education in the system of vocational education is to form knowledge and motives of competent consumer behavior in the market economy, to form differentiated initial economic knowledge with the ability to use it in everyday life.

The purpose of vocational level of economic education in the vocational education system is to prepare students for ordinary positions that require vocational economic training (time-keepers, technicians and process estimators, accountants, secretaries, etc.).

The purpose of additional level of economic education in vocational education system is to prepare graduates for direct practical economic activities in the context of creative approach and successful employment in the spheres of marketing, advertising and trade, to conduct analysis of economic activity of enterprises, to reveal potential for growth, to make plans and forecasts, as well as to generate effective ideas in non-standard economic situations, to teach economic disciplines, and to carry out research activities.

VI. CONCLUSION

Thus, continuing economic education is an obligatory and integral part of continuing professional education, which in the conditions of market economy is focused on the formation of competitive professional, demanded in the labor market, and possessing necessary economic competencies, formed in the course of economic training and education. The levels of continuing economic education (basic, vocational, and additional), developed by the authors of this research work

with regard to the vocational education system, are congruent to economic competences (key, vocational, and additional ones) and involve the transition from one stage of economic education to another. They ensure preserving the continuity, universality, integrity of vocational education, taking into account psychological and age development of individual, and providing graduates the opportunity to hold appropriate positions after completion of training at a certain level of continuing economic education.

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