Level structure of professional competence in continuous education system

Estructura de nivel de competencia profesional en sistema de educación continua

Iryna Nikolaevna TONKAVICH 1; Andrey Gennadievich SHLYAKHTUNOV 2; Oleg Viktorovich MATVEEV 3; Anatoly Mikhailovich YASTREMSKY 4; Alexandra Sergeevna SOKOLOVA 5; Andrey Grigorievich KIRILLOV 6; Anastasia Alexandrovna PODGORBUNSKIKH 7

Contents
1. Introduction
2. Research methodology
3. Research results
4. Discussion
5. Conclusion
References

ABSTRACT:
As a result of Russia’s transition to market economy, there is an urgent need in the economic training of specialists, successfully working in new social and economic conditions. The solution of this task becomes possible by organizing the continuous economic education which is an obligatory part of continuous professional education and, in the conditions of market-oriented economy, focused on forming a competitive and labour market relevant expert with necessary economic competences which are formed in the course of economic training and economic education. Research methodology. The efficiency of students’ economic education is considered on the basis of features of the vocational training process taking into account a complex of the factors allowing to consider economic education as a component of global education of an individual. Research results. Based on the known principles of continuous education (basic education, multilevel character, diversification, complementarity of basic and postgraduate education, manoeuvrability, succession, educational structures integration, organizational forms flexibility), a principle of economic competence based on the demands of
1. Introduction

Forming of a specialization-oriented structure of training is difficult under the unstable social and economic situation in the society, lack of economic development projection. The breakdown of traditional communication between educational institutions and employers, little influence of professional communities over the development of educational system, insufficient labour market development impede adjusting content of education to the requirements of the economy and social services, organizing practical training of students, job placement of graduates. According to RAE academician A. Novikov, the main objective of professional education is the professional development of an individual. An employee’s adaptation to a certain working environment can be achieved in the process of practical training, on different retraining and further training courses (Sergeeva, Ippolitova, et al., 2018).

Challenges of the 21st century education and its multiple forms affect the entire life of a person. Meeting the needs of modern level of societal development, continuous education means the necessity to study throughout the whole life. Today quality professional education is continuous. A specialist gets an opportunity to constantly raise the level of proficiency in line with the changing requirements to the nature of his\her work. Continuous education defines new functions: it is necessary to “teach how to learn” rather than “to transfer knowledge” (Sergeeva, Sokolova, et al., 2018).

Continuous education is a principle of forming a personality, it is set of interrelated, interdependent educational links, changes of which will inevitably affect the others, instead of being a group of separate educational institutions.

T. Lomakina points out that continuous vocational training solves three interrelated challenges: common culture improvement, staff resources development and their modernization. Solving the first challenge means acquiring basic knowledge and general culture of education; tackling the second challenge means training of professional staff, their forming of basic knowledge and skills necessary for the inclusion in the market economy; answer to the third means modernization, development of personnel resources with the view of their effective adaptation to the constantly changing production and social environment.

T. Lomakina developed a structure of continuous vocational training allowing to provide flexible and fast training and retraining of professional staff with expanding their horizons and forming an integrated personality. However, according to the author, this structure lacks the concept of vocational guidance which is an independent aspect of continuous vocation training realized throughout a person’s whole life (Sergeeva, Flyagina, et al., 2017).

The structural organization of the continuous vocational training system is a complex of educational institutions providing organizational and informative unity, succession and
interaction of all links of vocational training, jointly addressing the tasks of education, learning and development of every person taking into account topical and long-term social needs that satisfy a person’s hunger for the lifelong self-education and self-development.

The market relations development leads to an increase in educational needs and change in their structure which brings to the forefront tackling such challenges as adjusting the number of professional educational institutions and their types in accordance with the regional needs, as well as determining the educational content adequate to the demands of the society and interests of the students; providing varying levels of succession in education; developing and introducing innovative technologies of teaching that will enable to fully satisfy the needs of a person, to consider their individual characteristics (Mukhin, Mishatkina, Samokhin, et al., 2017).

In the context of a country’s transition to the market economy, there appears a significant need in the system of training specialists that could quickly and adequately respond to the changing market conditions. In this regard, the opinion is supported that it is necessary to increase an emphasis on the fundamental education which has a greater survival rate and more conservative nature and, when formed properly, allows to move “from the education for life to the lifelong education” (Dmitrichenkov and Dolzhich, 2017). The lifelong education is considered as the only way to be relevant under all socio-economic conditions.

Nowadays, the continuous education becomes a priority issue for a number of social sciences: economics, sociology, psychology, management theory. The system of vocational training is a part of general system of education of a person throughout his whole life. A special role in this system is played by economic education. Forming of the system of continuous economic education is caused by changes in socio-economic environment in which it is realized. The environmental factors define the set of circumstances – social and pedagogical conditions that facilitate an effective functioning of the continuous economic education system (Sergeeva and Nikitina, 2016).

2. Research methodology
We regard the efficiency of students’ economic education taking into account the peculiarities of the process of professional training. At the same time, it is important to consider a set of factors influencing the given processes:

- active involvement of the national educational system in the globalization processes, particularly in the Bologna Process;
- methodological restructuring of the educational system, transition to the innovative teaching and training of personnel;
- a more comprehensive reflection of the content of global education and its intrinsic ideas, values and meanings on all the stages of general and vocational training;
- further mastering of new information technologies, development of a unified educational environment integrated into the World Wide Web in the Russian educational system;
- transformation of vocational training institutions into business organizations closely related to the economic, social and cultural development of the region, country and world; increase in its contribution to the knowledge economy development on that basis;
- establishment of the continuous education system embracing the whole working life of a person; increase in the contribution of education to the knowledge economy development on that basis (Micheeva, et al., 2017).

Influence of these factors gives us an opportunity to consider economic education as a component of global education of a person.

The last years vocational training functions in market conditions. Market is a complex system of relations between a maker and a consumer of goods and services functioning of which, in turn, takes place in the system of political, economic and social relations secured by the developed legal infrastructure. Transition to the market relations and transformation of the whole economic system in Russia make us search for new innovative ways of development of the educational system as well (Ju, et al., 2017).

As applied to the economic education, the idea of continuous education in the context of the progress in science and technology and changing conditions of the social life of the society
provides a constant replenishment and mastering of economic knowledge boosting the person confidence in any situation of the reality and promoting his development as an actor throughout their whole life.

In our view, the frequent addressing the problems of economic education by the national teaching theory and practice can be explained by the following reasons and circumstances:
- there is an urgent need in economic development, its transition to a higher level in the modern socio-economic conditions of market relations;
- it is unfeasible to establish economic links, and progress in science and technology and prosperity of society’s social infrastructure are impossible without the economic knowledge of the participants of the economic processes;
- modern production needs zealous specialists who can rationalize and make their work creative, understand and appreciate both social aspect of their labour activity and its moral significance (Sergeeva, Bedenko, et al., 2018).

Economic education is considered as a part of a holistic process of the vocational training of the person throughout his whole life. In modern economic relations it is important to know how to establish business contacts, discuss business, briefly and clearly express thoughts and interests, use economic terms properly, formulate ideas, etc. (Wang, et al., 2018).

Economic education is aimed at training of the younger generation to flexibly react to the needs of the social development and adapt to new conditions of market relations.

Economic education is not something special or isolated from the general and vocational training. A revision of the content, objective and tasks of the educational process in the vocational school, values of students in particular and of education as a whole taking into account market relations allows us to distinguish a general approach in defining this concept. In doing so, we proceed from the fact that economic education allows a graduate to integrate into the economic system of the society under market conditions. Economic education thus is a part of the system of vocational training (Tatarinceva, Sokolova, Mrachenko, et al., 2018).

Economic education is a specially organized educational process that enables a future specialist to form economic knowledge, competence and skills, master ways of economic activity, form economic thinking that reveals itself in the development of adequate ideas about the essence of economic phenomena and their interaction, reasoned opinions on economic issues, gaining experience in analysis of certain economic situations.

Continuous economic education is a part of continuous education facilitating forming of a competitive specialist under the market economy conditions who is relevant in the labour market and directed to formation of economic competence in accordance with his field of study (economic and non-economic) on varying educational levels as provided by the models of a graduate and a teacher and realized by means of economic training and economic education (Tatarinceva, Sokolova, Sergeeva, et al., 2018).

The economic training as a targeted process of bilateral activity of a teacher and student on transferring and mastering economic knowledge results in forming economic competence (key, professional and additional) in accordance with their field of study (economic and non-economic) and on varying educational levels as provided by the models of a graduate and a teacher (Sergeeva, Sinelnikov, et al., 2017).

When determining the peculiarities of the students’ economic education, we took into consideration that maintaining the achieved level of economic development and its further improvement is impossible without the economic education. This problem is solved in the process of education, whose objective is to introduce a person to the norms and values of economy, to form economic thinking and style of activity.

A new market and democratic style of educational process is characterized by the following features in the context of continuous economic education:
1) the formal process of economic knowledge transfer is replaced by the case study in which specific challenges are discussed by a teacher and students;
2) the nature of the transferred knowledge is not reduced to passive memorizing, it lies in acquiring diverse and effective information;
3) the form of communication between a teacher and students is not learning, but mutual exchange of information which leads to a stronger role of students’ self-learning;
4) the student is an initiator and leader in the educational process;
5) cooperation becomes the nature of relations among participants of the educational process;
6) the teacher can be not only a professional lecturer, but also any economic information bearer (Sukhodimtseva, et al., 2018).

T. Smirnova and T. Prosnyakova divide the continuous economic training as a dynamic process into the following stages (Milovanov, et al., 2017):

**I. First** – *emotional and imaginative perception* – characteristic for the upper pre-school age when a child forms first ideas about needs and means of their satisfaction, primary economic skills in those kinds of activity that are available to them.

**II. Second** – *propedeutic* – characteristic for primary school students when they learn about certain economic concepts, children are introduced to thrift, economy, they show creative attitude towards the use of all kinds of resources.

**III. Third** – *stage of search and probing nature* – allows students of V-VII forms to join the economic life of the family and immediate environment and to try to define their place in the economic space.

**IV. Fourth** – *choice of the field of activity, development of professional self-consciousness* – gives a logical systematic orientation to the economic education of the school graduates (IX form): prepares them for labour under the conditions of different types of ownership, diversity of forms of labour organization and incentives; introduces the main aspects of socio-economic protection of the youth in the context of market relations, unemployment and competition.

**V. Fifth** – *specification of the socio-professional status* – means pre-vocational and primary vocational economic training of senior school students (X-XI forms). During this period, students master the optimum of economic knowledge and skills (available in this age) in the chosen area of labour activity, begin to participate in the real economic life.

**VI. Sixth** – *beginning of the professional activity* of students in vocational educational institutions on the basis of studying general questions of economy and peculiarities of the chosen area of labour activity.

Economic education as a systematic and targeted influence on students in accordance with the development of their mental processes (emotional and volitional) has the following objectives: forming of economic thinking of a modern person (within the family, industry, country); development of the professional qualities of an economically educated person consistent with the nature of market (thrift, entrepreneurial spirit, prudence, etc.); accumulation of knowledge in economics, management, taxation (Mukhin, Mishatkina and Sokolova, 2017).

The main objective of the economic education is the development of economic thinking. The achievement of this goal requires solution of a number of tasks in the teaching and educational process (Sergeeva, Komarovskaya, et al., 2018):

- consistent forming of economic awareness of students;
- forming of reasonable needs, capacity to measure them against their means, development of labour focus when searching for the most complete satisfaction of their demands;
- providing skills of economic analysis, forming the habits of thrift and economy, development of the intellectual and manual labour culture, mastering the main aspects of scientific organization of labour;
- development of zero tolerance for irresponsibility, lack of organization in work, dependency, mismanagement, wastefulness, carelessness, etc.
These tasks imply the students’ forming of relevant economic knowledge and skills (training aspect), attitudes and orientations of a person, their qualities (Educational aspect) which are necessary for personal, professional and socially useful labour activity of a person. Thus, economic training of students is a way to prepare them for life and work (Tatarinceva, Sergeeva, et al., 2018).

Continuous economic education of students means that this socio-pedagogical process continuously proceeds from one stage of education to another, each stage retains the main features: succession and universality, the connection of different elements of the system is supported, i.e. the integrity of education remains.

At the same time, continuity of economic education means its division into stages and levels, the necessity for distinguishing them is implied by differences in psychological and age-specific development of a person. It may be assumed that continuity of economic education defines the form and structure of pedagogically built system of training a highly intelligent person, and succession and universality are its content (Neverkovich, et al., 2018).

The form and content as two philosophical categories are closely related, constantly interact, changing one of them inevitably leads to adequate changes of the other. Hence, distinguishing different stages of economic training and development of intellectual elite of the society requires elaborating on the content of this training on each stage of education.

Advanced pedagogical experience also allows to state that continuous economic education can become an integral part of educational process and will promote (Mikheeva, 2016):

- students’ forming of universal knowledge and ways of its acquiring;
- forming of the value system and development of individuality;
- teaching the skills of economic activity (planning, accounting, control, analysis, etc.);
- improvement of the capacities for self-education and self-development.

All the above-mentioned allows us to say that continuous economic education of students can be one of the most important conditions for successful development of intellectual elite of Russian society.

Consequently, further development of continuous economic education in vocational educational institutions will stimulate the development of a system of training a highly intelligent person within the following promising areas of the economic education development (Mikheeva, 2016):

- increase in hi-tech economic knowledge gained in educational institutions;
- broadening of the content of subjects at the expense of cross-curriculum integration and inclusion of economic questions;
- mastering of modern educational technologies of activity and value paradigm;
- involvement of social partners of educational institutions (graduates, industrial and financial organizations, etc.).

The practical realization of each mentioned area of improvement of continuous economic education of students requires from each member of academic staff to use the creative approach to mastering advanced experience and applying it in practice, in order to optimize the pedagogical advisability of developing an intellectual elite of Russian society in educational institutions (Bourina and Dunaeva, 2017).

Thus, **continuous economic education** should progress into a support system for continuous self-development of a person under new socio-economic conditions; only then a person will become an entity of life and professional activity which allows him to be realized as a participant in transforming social interaction. Their self-asserting identity is also formed in this case; their professional stand becomes innovative or a stand of a creator; the development of their values and strengthening of professional and personal dignity and self-respect take place in the process of self-development.

3. Research results
Based on the known principles of continuous education (basic education, multilevel character, diversification, complementarity of basic and postgraduate education, manoeuvrability, succession, educational structures integration, organizational forms flexibility), M. Sergeeva (Sergeeva and Nikitina, 2016) distinguishes a principle of economic competence based on the demands of market economy for competitive experts training.

Literature analysis allowed to define competence as an integral personal and professional quality of a person who completed his education on a certain stage; this quality reveals itself in readiness and capability for successful, productive and efficient activity with regard to its social significance and social risks which can be related to it; it also gives the opportunity to effectively interact with the surrounding world with the help of proper competence. Competence is an open system of knowledge and skills that are acquired in the educational process and updated in the process of practical activity. The expediency of introducing the “professional competence” concept is conditioned by the breadth of its content, its integrative character merging such frequently used concepts as “professionalism”, “qualification”, “professional capabilities”, etc. In our research, we define professional competence as an integral personality-centered education that combines value awareness of social reality, categorical specific professional knowledge that acts as a guide to action, person’s capacity for self-determination, personal ability to use professional technologies in main areas of activity.

The conducted analysis of state educational standards (SES) of three generations showed:
- the peculiarities of SES of the first generation (compulsory minimum of the content of the main educational programs; maximum amount of students’ learning load; requirements for the level of graduates’ training);
- the peculiarities of SES of the second generation (consideration of the wage-and-skill specifications of the Russian Ministry of Labour when developing requirements for graduates; agreement of the requirements for graduates and content of education with federal executive authorities; simultaneous development of SES for all levels of education; development of standards for “aggregative” majors of graduates in engineering and technologies);
- distinctive features of federal state educational standards (FSES) of the third generation compared to the previous SES (limited regulation; independence of educational program; module programs; competence as an educational result; labour market demands orientation). FSES give a clear definition of the concept: “Competence is a way to use knowledge, skills and personal qualities for successful activity in a certain field”. The logic of this concept when applied to the vocational training lies in the fact that students of a chosen specialization get a certain necessary amount of basic (theoretical) knowledge; set of methods and techniques to use this knowledge in practice; definite experience of their practical use (during learning, practical training and other internships, laboratory classes and self-learning, etc.), all these characteristics should be assessed equally. Competence is divided into professional (specialization in certain fields of activity) and universal (necessary for a well-educated person regardless of the field of study) ones.

The conducted research showed that the implementation of the standards of the third generation takes into account the competence approach and is based on: Our study showed that the implementation of third generation standards takes into account the competence approach and is based on
- changes in the labour market (reorientation of the demand on new skills and changes in the labour organization; reduction of demand for the unskilled manual work; spread of automated manufacturing execution systems; decline in mass production; increase in individual responsibility of employees for the quality of labour; rise of the level of cooperation between employees in teams; blurring of the boundaries between professions);
- new requirements for training a specialist (labour activity is formed around processes, not operation; non-technical aspects of labour become significant - planning, coordination and communication, decision making; adaptability as a leading indicator of the quality of a specialist’s training);
mechanisms of interaction between the labour market and educational services market on different levels (federal and regional) of management, which imply carrying out the state policy in professional education and personnel training; providing the developing labour market with the necessary amount of specialists of required qualification with regard for the main tendencies of strategic development of the region’s economy; rapid adaptation of vocational training and retraining institutions to the changes in the labour market, increase in the staff capacity, occupational mobility and competitive ability of employees;

- competence model of a graduate of a professional educational institution, a congruent developed structure of economic competence and consisting of seven units of competence: educational, personal, intellectual, professional, communicative, informational and economic ones. We distinguished the economic competence unit due to the necessity to train a specialist with a certain level of economic knowledge who is capable of taking adequate decisions in different socio-economic situations regardless of the field of study.

4. Discussion

The principle of economic competence sets a balance between knowledge as information and knowledge as activity; this balance is necessary for forming a competitive persona with a certain level of economic competence during the process of vocational training. When defining the economic competence of a graduate of a vocational training institution, we focused on the concepts of “competence”, “awareness”, “professional competence”, which define the terminology of the research and allow to characterize the notion of “economic competence of a graduate of a vocational training institution”.

Economic competence is considered as an integral quality and professional characteristic of a person including economic competencies that form economically significant personal qualities (competitive ability, leadership, mobility, entrepreneurial spirit, independence in decision making, critical mind), and reflects the readiness and capability to work effectively in different fields and segments of economy by building their professional careers based on their individual values and in accordance with the society’s development strategy, moral grounds and rules.

At the same time, economic competence is an open system of knowledge, skills, experience of practical economic activity and personal responsibility, which is promoted and updated in the process of professional activity as and when there is a real economic problem that a graduate of a vocational training institution faces (Sergeeva and Nikitina, 2016).

An analysis of competence classification on various grounds (context of the addressed problems: cross-cultural and professional; level of competence spread: corporate, managerial, professional; level of development: liminal, differentiating; essence and content: cognitive, personal, functional, social, etc.) enabled us to develop a structure of economic competence of students that includes the following economic competences:

- key – basic economic knowledge necessary for adaptation to professional activity under market conditions;
- professional – the ability to use economic knowledge in practice, assess new economic situations and make economically sound decisions;
- additional – the capacity of creative economic behaviour, efficient behaviour in the labour market, continuous economic self-education, etc.

The basis for this structure of economic competence was the selection of the content of studied subjects modules: general humanitarian and socio-economic subjects – key competence; general professional – professional competence; special subjects (professional modules) – additional competence.

The research resulted in distinguishing levels of continuous economic education in the system of vocational training (basic, professional, additional); these levels allow students who completed learning on a certain level to carry out necessary work and hold appropriate posts.

The aim of the basic level of economic education in the system of vocational training is the
forming of knowledge and incentives of competent consumer behaviour in the market economy, development of differentiated basic knowledge of economics and ability to use it in everyday life.

The objective of the professional level of economic education in the system of vocational education is to train students for holding rank and file of posts requiring professional economic training (timekeepers, process estimators, tally clerks, secretaries and assistants, etc.).

The objective of additional level of economic education in the system of vocational education is to prepare graduates for direct practical economic activity in the context of creative approach: in the fields of marketing, advertising, trade; analysis of economic activity of enterprises; detection of reserve increase, planning and forecasting; generation of efficient ideas in non-standard economic situations; teaching of economic subjects; research.

5. Conclusion

In summary, continuous economic education is a compulsory part of continuous vocational training and is aimed in the context of market economy at developing a competitive relevant specialist with the necessary economic competence formed in the process of economic training and economic education. Our developed levels of continuous economic education (basic, professional, additional) in the system of vocational training are congruous to the economic competence (key, professional, additional); they imply the transition from one stage of economic education to the other retaining the principles of succession, universality, integrity of vocational training, taking into account psychological and age-specific development of a person, and providing graduates who completed learning on a certain level of continuous economic education with necessary knowledge to hold appropriate posts.

References


Sergeeva, M.G., Sinelnikov, I.Yu. and Sukhodimtseva, A.P. (June 6-7, 2017). Metasubject...


1. Minsk Innovation University, 12 Lazo Street, Minsk, 220102, Republic of Belarus, E-mail: intonkovich@gmail.com
2. Catherine the Great National Institute, 2 build. 1 Suvorovskaya square, Moscow, 129110, Russia, E-mail: andrey.shlyahtunov@yandex.ru
3. Financial University under the Government of the Russian Federation, 49 Leningradsky Prospekt, Moscow, 125993, Russia, E-mail: maveev4you@mail.ru
4. Financial University under the Government of the Russian Federation, 49 Leningradsky Prospekt, Moscow, 125993, Russia, E-mail: anatoly-fa@mail.ru
5. Moscow State Linguistic University, 38 build. 1 Ostozhenka Street, Moscow, 119034, Russia, E-mail: alex8_s@mail.ru