



## **Psychological and Economical Aspects of the Competency Approach the Paradigm of Higher Education**

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### **ABSTRACT**

In the article the role of education in the modern world, contains an analysis of the psychological and economical aspects of the modern paradigm of higher education in Russia, basic education and psycho-pedagogical problems in formation of modern professionals and managers, social and psychological shape modern managers at all levels. The higher education system must address not only the direct educational objectives but also to prepare specialists capable of solving the difficult psychological and psycho-pedagogical problems in a post-industrial reality. The paper presents an analysis of the literature on the stated issues, discloses the concept of competence and expertise detailed guidelines for implementing competence-based approach in higher education.

**Keywords:** Economic Education, Key Competence, Psychology Paradigm of Education

**JEL Classifications:** A20, H70, I20

### **1. INTRODUCTION**

In modern society, education is the most extensive philosophical, cultural universals. In education, students are busy more than a billion and nearly 50 million teachers. It is difficult to overestimate the importance of social and psychological formation of speaking about the prospects of development of mankind. Education, especially higher education is an essential factor in economic and social progress. The main capital of modern society is a man of his intelligence and the system of values which formed the psychological and social profile of the person, the individual, and expert. The existing education system in the world undergoes reforms. In the last 10-15 years, scientists are increasingly talking about a global crisis of education. American scholar and activist education Coombes spoke about the backwardness of progressive educational content from the modern horizon of science and technology, as well as its non-compliance of the changed conditions of society that lead to the devaluation of the

value of higher education. The main contradiction exists between the high rate of development of science and society and the low rate of renovation of educational content.

The higher education system must address not only the direct educational objectives but also to prepare specialists capable of solving the difficult psychological and psycho-pedagogical problems in a post-industrial reality.

Solving the problem of competence of the expert was necessary and in demand in connection with the search for a link between vocational education and practice, as each business operates independently (in terms of content and conceptual) units. These units in the educational process are the knowledge, skills and experience in the professional sphere - competence. With respect to our research, it is about creating conditions in the learning process when the psychological and pedagogical training practice at the level of formation of key competencies makes certain

demands to the education sector, i.e., it highlights the terms of reference, as well as the range of issues in which the expert (Bachelor or Master) of higher education, polytechnic education, must have professional knowledge and experience. To this end, the educational process should be formed certain competence required for professional activities. Here then, a new systemic quality of personality - competence. You can talk about that competence is a structural element of competence (Shkurkin et al., 2015). Therefore, educational competence can be seen as certain given the requirements for training activities for the preparation of future specialists. Based on the analysis of research in the area of competence-based approach, we can conclude that especially important is the study of the organization and the impact of psychopedagogical conditions of formation of key competences from the experts of higher education. More poorly understood the specifics of using system-structural approach to training specialists to goal setting, selection and training content, the choice of methods, means and organizational forms of information technology training. Also, do not sufficiently explore the influence of the content of key competencies to social becoming experts on their level of professionalism and psychological portrait of the modern graduate high school.

One should distinguish between the concept of “competence” and “competency.” Scope of “competence” and “competency” overlap only partially. They are also different specifications. For example, the concept of “competence” describes a set of functional powers, rights and duties provided by law, statute or other normative act of a particular body or person. The concept of “competency” includes features such as – “appropriate,” “capacity,” that is “useful to the implementation of these powers, the execution of the assigned functions” (Branovsky, 1994; Novikov et al., 2015).

Competence is represented by us as a system made up of individual blocks (competencies), which have an internal and external communications. Therefore, the properties of the system cannot be reduced to the sum of the individual elements of it (competence), while there is some integrative quality inherent only system that determines the “competence” of the expert - economist (Brezgin, 2007.)

Study of the current state of the problem of formation of competence shown that the process of personal formation specialist of high school largely depends on the content and organization of its professional and personal training. This raises the need for continuing education, i.e., continuous development of professional competence in training, retraining and advanced training of economists, including informal and spontaneous forms of education.

## 2. LITERATURE REVIEW

Psycho-pedagogical problems of training qualified professionals competent in professional educational institutions of all levels were considered Arkhangelsky, Batysheva, Medvedev, Puchkov, Tomakov and others. Analysis of scientific works and those of other authors allows concluding that the competence approach in education is a psychological and pedagogical theory, which claims

to be the conceptual basis of policy in the field of education in our country. In Russia, the competence-based approach developed by leading scientists in the field of psychology and pedagogy for the modernization of Russian education “competency” basis. All research materials devoted to the competence approach, it is noted that it is innovative. Competence model in education correlates well with the dynamic “open” society, in which the product of the learning process, the general and vocational training to the full range of vital functions should be the competent authority. Currently, the publication of domestic authors on the competence-based approach to education is formulated its main goal - to strengthen the practical orientation of education, going beyond the limitations of “Knowledge” educational space. According to leading Russian scientists, competence approach implemented in the formation of a new type of educational standards (Zeer; Symanyuk; Tihonenko; Tomac et al.) in which the requirements for the quality of education graduates institutions of various levels are formulated in the form of a list of competences that involves the transfer of all the basic educational standards of language knowledge on language competences.

Based on the analysis of literature and experience in IN, we can conclude that it is based on the idea of the need to project these psycho-educational learning environment in which the content of the learning process would be focused on the development of professionally significant qualities of the future specialist: Competence, responsibility, mobility, flexibility, adaptability and competitiveness. Determining the level of professional training of specialists with economic education devoted to many works of leading scientists in the field of psychology and pedagogy: Abulkhanova-Slavskaya, Verbitsky, Grachev, Dolzhenkov, Zagvyazinsky, Klimov, Krajewsky, Kuzmina, Kulyutkin, Markov, Novikov, Stolyarenko, Yakunin and others. Issues of training, professional skills, qualifications, professional competence is reflected in the works of Bokarev, Vishnyakov, Gorchakov, Grishin, Beetle, Zeer, Kaloshin, Klimov, Kuzovlev, Markovoy, Mickiewicz, Pleteneva, Povarenkov, Selezneva and others.

From the analysis conducted research of leading scientists - teachers and psychologists and practices of higher vocational schools can be concluded that the problem of the organization and the impact of psycho-pedagogical conditions of formation of key competencies among specialists high school is relevant and requires further study.

## 3. MATERIALS AND METHODS

The modern system of higher education should form a socio-psychological shape modern manager at all levels. The manager must possess the following qualities:

- Personal;
- Professional;
- Organizing.

For personal qualities in addition to the traditional society approved of decency, honesty, responsibility for their relatives and subordinates must be recognition of the shortcomings of their own struggle with them, due to which the head is to cultivate

and improve relationships with subordinates. From the point of view of psychology modern manager must possess stress, flexibility, mobility, a positive attitude to the process. Or as they say psychologists strive for the perfect look of the head, engaged in personal cultivation.

It is a professional quality and competence of special administrative, technical, economic, legal, informational, psychological and pedagogical culture, receptivity to innovation technical and social, critical thinking, energy and determination in the process of making strategic and tactical objectives (Fundamentals of Management, 2015).

By organizational qualities include dedication, strength and determination, consistency in solving the problems of interest to the ability of employees, assign responsibilities according to the level of professionalism and competence of the employees, to direct all available resources to professional or industrial tasks. The development of business skills will also contribute to the study of business, the psychological literature, attending seminars and workshops that focus on developing the skills of psychological and business communication (Sperotto et al., 2015).

All these social and psychological qualities of the head are formed in the process of preparation of the expert of higher education. There are several levels of the design of the learning process, for example, in Krajewsky - three of them.

- The first level - A "model project" - records the content, principles and methods of teaching
- The second level - The "project model" - highlights the educational materials, learning the rules of a particular subject, the standard description of the material and ideal learning tools
- The third level - "Final project" - describes the ideal combination of material and training tools specific academic subject (Krajewsky, 1977).

The first level is general scientific understanding of the process of formation of key information - technical competence of the future expert, the basic concepts, principles and conditions for the implementation of this process. This level is conceptual. On a conceptual level, the process of preparing the professional future considered as a system of activities teachers and students. In accordance with our dedicated design principles were defined psychological-pedagogical conditions of formation of key information technology skills.

"Model" (from Latin - Measure, measure, sample rate) in the broadest sense - The image (including conditional or thought - image, diagram, drawing, chart, plan, map, etc.) or sample kakogo - any object or system objects ("original" model), used in certain circumstances as their "deputy" or "representative". In the most general and the most common definition of "simulation" means a material or mental simulate real existing system by creating special analogues, which are reproduced in the principles of organization and functioning of the system. Svetenko said: "First of all, between the model and the original there is a correspondence relationship, which also allows you to explore the simulated object by examining the model" (Svetenko, 1999).

With the help of simulation possible distraction from such properties of the system, which act as irrelevant in this particular regard. The model contains a simplified schematic form the most essential characteristics of the display cases. "Due to this, it allows you to comprehend the deeper real pedagogical process, move it to the construction of new models. Resorting to the simulation, the researcher has the opportunity to move from the analytical study of the individual properties, forms, and processes to a synthetic knowledge of holistic systems accounted for and controlled conditions, using the characteristics of the phenomena studied quantitative indicators" (Smetannikov, 1998).

According to Turbovich "model as an ideal representation of the dynamic process of formation of professional competence allows us to solve scientific (research) and practical problems, identify system-elements, whose role in the impact on the professional competence of specialists in economics can be understood from the analysis of the model" (Turbovich, 1970).

#### 4. RESULTS AND DISCUSSION

Among the main principles of the implementation of the competence-based approach in higher education are the following:

1. The principles of humanization and humanitarisation of higher education aimed at overcoming technocratic thinking of the future specialists in economics institute.

The principle of humanization of education - one of the leading principles of its development, it means that education is directed at creating the conditions for future professionals for the manifestation and development of their individual abilities. It is designed to protect them from the risk of loss of its uniqueness, the alienation from life, the world of nature and culture, and is also aimed at meeting the needs of the individual self-realization, spiritual, social and professional development. The principle of humanization of education is carried out, for example, the increasing number of humanitarian and socio-economic disciplines in the course of training, the expansion of cultural horizons of students, fostering the skills of social interaction. It should include the development in planning, organizing and implementing the training of specialists on the basis of personal, individual, cultural, and professional-oriented approach.

This process can and should be carried out not only in the study of the humanities, but also through humanitarian focus on value-semantic content of education, which involves:

- Actualization of spiritual, moral and aesthetic potential of the studied teaching material;
- Inclusion in the historical aspects of the training content of general technical and specialized information technology knowledge;
- Emphasis on the interaction between man and nature, man and technology;
- Presentation of creative tasks, resulting in the effect of not only theoretical, but also emotional and creative thinking of students;
- Transfer of cognitive (cognitive) problems in the emotional, personally significant problems (Tomakov, 1999).

2. The principle of a holistic psycho-pedagogical development of the individual, involves the organization of educational process in the broad scope, covering not only the study program disciplines that are directly related to the learning process, but also the educational work that goes beyond learning activities (extracurricular activities, creative, scientific, and research activities, etc.). Integrity special needs due to differentiation processes taking place in science and education. It should be noted that the disciplinary and knowledge-approach does not see a coherent picture of the world, it divides into separate blocks of knowledge, discipline, which leads to the fragmentation of knowledge. Only through the integrity of the educational process is possible to achieve the formation of the whole person. According to Medvedev and Alexandrov: "The bases of integration processes in the formation of at least two: First, the world around us is a single entity, both in their 'natural' as well as technical and technological components; Secondly, the identity of the subject, master the world, and united" (Medvedev, 2003).
3. The principle of variability is to promote personal and professional development through a range of specialist individual learning path. This allows you to use a variety of programs of training and education, a variety of educational and training information technology, taking into account the experience of previous generations, and aimed at the development of their own views, attitudes and values. The implementation of this principle should enable the student to set goals, form and content of their professional activities and, at the same time, bear some responsibility for their own life choices.
4. The principle of democracy requires joint work, cooperation of educational process, active engagement of the participants without the use of overt and covert forms of aggression, while maintaining independence - all this will contribute to the achievement of positive results in constructive cooperation. The student becomes the subject of the educational process, to fully implementing it in their abilities, their personality, and the teacher becomes an organizer, coordinator of student providing its formation as a specialist. Respect for the principle of democracy ensures respect for the individual student as equal subjects of the educational process, assistance, cooperation and constructive engagement, achievement of positive openness, mutual understanding, overcome anxiety, fear, feelings of inferiority, the development of democratic methods of teaching students to uphold the principles of pedagogy of cooperation, expansion of self-government in the activities of college.
5. The principle of fundamental nature of education involves the expansion and deepening of fundamental training, while reducing the amount of general and compulsory subjects due to more rigorous selection of educational material. It should be noted that excessive fundamentalization curriculum is sometimes accompanied by a drop in students' interest in learning or difficulty of learning.
6. The principle of competence oriented education is the result of the impact of the "information revolution: On the formation of a global market, as well as the displacement of the ultimate goal of education with knowledge of competence, and competence-based approach to education, which in recent years has become a major, outlining the kind of competence-paradigm in education" (Andreev, 2005).
7. The principle of professional competence ensures professional readiness of experts in the process of learning; they develop the necessary knowledge and skills in their specialty, professional features and behaviors, the system of moral values. In the process of formation of professional competence increased readiness of graduates to the labor and social activities, the ability to operate in a defined purpose, given the situation and position. In modern economic relations particularly important to mobile professionals, providing a change of activity in the course of solving current professional challenges. Professional competence is manifested in this particular situation, which adapts and combines specialist knowledge and skills in accordance with prevailing operating conditions. Competence specialist is also reflected in his ability to perceive new information, constant updating of their professional skills, promoting new competitive ideas, finds solutions to unusual problems.
8. The principle of continuity of education. Defining the essence of lifelong education is given in the UNESCO report "Learning to be," as "a change in the way of being human, when it opens a new experience" (Pakhomov and Tuptalov, 1999). Continuing education is that in the conditions of general, vocational and higher education form a system of knowledge, skills and personal qualities that allow you to continue to educate and improve themselves, to freely navigate in a complex range of social and professional problems, to adapt successfully to changing conditions and to produce the necessary knowledge and skills to shape. To generate the key information - technological competence in such circumstances are such basic competencies as developed systems thinking; possession of methodological knowledge to not only operate on existing in-formation, but also to acquire new, to explore a variety of activities; active life and professional position; the need for professional and personal development and improvement. This principle is reflected in the presence of the concept of continuous vocational training in system of multilevel vocational training.
9. The principle of intensification should be regarded as an intensification of maximizing the effectiveness of training on the basis of improving the system of vocational education. This principle in the form of key competencies from the perspective of competence-based approach has the following symptoms:
  - Saturation of social life of students;
  - Intensification of the learning process, learning at a fairly high level of difficulty, in a tense pace, stimulating creative activities of students;
  - Raising the theoretical level of teaching material, the inclusion of a generalized knowledge about the subject, media, content, products of labor;
  - Further harmonization of the content of education in the integration of professions, providing an extension of the production profile and mobility specialist;
  - The introduction of new educational technologies, creating conditions for the development of the system and productive thinking of students;

- Preparing students to work with modern computer facilities, automated systems;
  - An optimal combination of forms and methods of training, hardware and computer performance-enhancing students and interest in learning.
10. The principle of integration of education relates to the need to provide the maximum opportunity for students to obtain an integrated vocational education, ensuring its free movement in the rapidly changing field of social production, the successful socialization. The educational potential of specialists trained in integrated specialties, enhanced by the generalization of knowledge, to reduce their volume and to reduce the workload on the students while increasing professional mobility specialists. Integration processes, especially intensively developing in the areas of public life, science and industry require a reorientation of vocational education with specialization and the division of areas of expertise in their expansion and consolidation. The integration allows:
- To ensure self-determination and self-realization specialists in different professions and related activities;
  - To create conditions for the formation of a coherent picture of the world and the world of work;
  - To develop systems thinking professional, this allows covering the phenomena in all their relationships;
  - To provide a holistic personal development (social, physical, spiritual, intellectual);
  - To establish closer ties with the practical learning activities, production of science;
  - Solve the problem of overloading students.

The main path and the direction of integration associated with the transition of the system of vocational education from highly specialized training to prepare for the specialty groups. There are several forms of integration:

- Interdisciplinary - the study of basic disciplines involved knowledge of other disciplines;
  - Coordination - the study of this course, the teacher focuses on other areas of knowledge, building it into a single logic of professional activity;
  - Combining several disciplines into one that can be carried out by the simultaneous consideration of the various aspects of a single phenomenon, and by considering this phenomenon sequentially (first one discipline, then the other). In the latter case, the course or lesson 2-3 lead teacher;
  - Formulation of interdisciplinary training and production problems and finding their solutions by bringing material from different disciplines (Tomakov, 2007).
11. The principle of regionalization of education. Regionalization, one of the strategic directions of modern politics, is largely determined by the federal structure of the Russian state (Kostin, 2005). The phenomenon of regionalism, if it is understood as the establishment of autonomous entities independent of political, economic and social relations, due to the development of civil society, rule of law and democracy. Legally, in the Russian Federation (RF) Law "On education" for the first time contains a provision on the freedom and pluralism in education, and the subjects of the Federation are

entitled to define and implement education policy that does not contradict the policy of the RF. They are administered by the development and implementation of national, regional education development programs, including international, taking into account national and regional socio-economic, environmental, cultural, demographic and other features. The development of regional education requires consideration of diversity in educational policy directions of a social nature in conjunction with the specific local experience and involves the creation of its models, programs in a single educational space. The principle of regionalization of education implies access to an even deeper level of vocational education, oriented towards the needs of the individual.

12. The principle of environmental conditionality involves the formation of key information technology competencies within cultural and educational space of educational institutions, which covers not only the educational process in the Polytechnic College, but also a broader scope that goes beyond just learning activities. This principle determines the ways of interaction of subjects of educational space of an educational institution with the environmental factors that allows predicting the nature of their influence and purposefully used in the process of training and education. The implementation of the principle of conditionality environmental involves the formation of knowledge about the possible approaches to the consideration of a variety of real-world situations and simulate such situations that students may encounter in life. It should be noted that there is no uniform environmental conditioning; different levels of media interpenetrate each other. For example, family learning environment are interrelated with foreign educational environment, and that in turn - a cultural and educational environment Polytechnic College. The cultural-educational environment can be many learning environments, however, in contrast to the educational environment, which may occur both organized and spontaneous, always learning environments specially organized.
13. The principle of tolerance implies respect for the other person, tolerance for the opinions of others, a way of thinking faith. Formation of tolerance of students is possible by isolation of the idea of corporate cooperation on different levels: The student group, the course, the faculty, the university as a whole. It is supposed to create a system of symbols, rituals, ceremonies, allowing combining and creating a corporate community in the framework of cultural and educational space. Pchelintseva believes that the education of tolerance is not just the sum of knowledge and behavioral skills, and personal position, value attitudes, so of all the conditions of the organization of the educational process should be allocated no methods or subjects of study, and the values and meanings that are actualized in a tolerant environment, and quality of relationships between teachers and students, and their own personal tolerance mature teachers (Pchelintseva, 2006). In the formation of tolerance of students plays a special role the personality of the teacher, it affects the character of the educational environment of high school at the same time, it must act equally, along with the students, a partner in the educational process.

Undoubtedly, in the process of implementation of the competence-based approach in the system during the formation of key competencies for expert can distinguish a broad range of principles. However, we proceeded from the objective reality of the degree of influence on the training and psychological preparation of the future leader of a variety of socio-cultural, psychological, psycho-pedagogical processes of the prevalence of competence paradigm of education, its adaptation to external conditions.

## 5. CONCLUSIONS

Psychological and economical aspects of the competency approach the paradigm of higher education require the development of methods aimed at teaching students the universal way of action to obtain new knowledge by means of the application of the above principles that may be necessary in solving problems unknown to him. The universality of knowledge related to its fundamental character, allowing to identify the most important laws of phenomena and processes occurring in nature and society. The current objective is currently training system proved existing paradigm of education, mental and physical capabilities of students and teachers, increasing differentiation of disciplines. But every division of the educational material should have its limits, going beyond the boundaries of which means a loss of quality. In addition, educational disciplines, as a rule, combine the knowledge from various scientific fields, allowing for intra-subjective synthesis of new knowledge, which cannot be attributed only to one particular branch of science.

Virtually all materials devoted to the justification of the competency approach, notably the desire to emphasize that it has radically-innovative. Competence approach is education that called modernity and competence model of education is related to the dynamic "open" society, in which the product of learning processes, general and pro-professional training to become responsible professionals ready to implement free, humanistic-oriented professional activity for the benefit of society.

## REFERENCES

- Andreev, A. (2005), Competence paradigm in education: Experience of philosophical and methodological analysis. *Pedagogy*, 4, 19-27.
- Branovsky, J. (1994), Information technology education in the training of teachers in pedagogical high school. *Continuous Teacher Training*. Stavropol: SKMII. p49-60.
- Brezgin, J. (2007), The relevance of managerial skills in training specialists in management of construction specialties of secondary vocational education. *Oryol: GTU*.
- Fundamentals of Management. (2015), *Modern Manager: Competence, Leadership Styles*. Available from: <http://www.bmanager.ru/articles/sovremennyj-menedzher-kompetencii-stili-rukovodstva.html>. [Last accessed 2015 Mar 16].
- Kostin, A. (2005), Regionalization of education - Strategic direction of education policy. *Pedagogy*, 8, 26-32.
- Krajewsky, V. (1977), Problems of teaching scientific justification. *Methodological Analysis*. Moscow: Pedagogy. p267.
- Medvedev, V. (2003), *Pedagogical Conditions of Optimization of the Culture of Polytechnic Education of Future Engineers*. Elets: Bunin Yelets State University. p251.
- Novikov, V., Klochko, E., Yarushkina, E., Zhukov, B., Dianova, V. (2015), On peculiarities of the virtual economy of modern Russia: Category, virtual relationships, educational constructs. *Mediterranean Journal of Social Sciences*, 6(3S6), 247-256.
- Pakhomov, N., Tuptalov, J. (1999), *Philosophy of Education for the XXI Century*. Moscow: Logos. p207.
- Pchelintseva, I. (2006), *Building a Tolerant Environment in the Educational Space of the Higher Education Institution*. Saint Petersburg: Institute of Adult Education of Russian Academy of Education. p47.
- Shkurkin, D., Novikov, V., Kobersy, I., Kobersy, I., Borisova, A. (2015), Investigation of the scope of intellectual services in the aspect of virtualization and information economy of modern Russia. *Mediterranean Journal of Social Sciences*, 6(5), 217-224.
- Smetannikov, A. (1998), The role of design methods in training in economics. *Collection of Scientific Works of the International Scientific and Practical Seminar. Trends in the Formation and Development of Information Business in Russia*. Tambov.
- Sperotto, A., Doyen, G., Latre, S., Charalambides, M., Famaey, J., Velan, P., Celeda, P. (2015), Report on the 8<sup>th</sup> International Conference on Autonomous Infrastructure, Management, and Security (AIMS 2014). *Journal of Network Systems Management*, 23(3), 794-802.
- Svetenko, T. (1999), *Theoretical Bases of Modeling of Innovative Educational Systems*. Saint Petersburg: Russian State Pedagogical University named after A.I. Herzen. p46.
- Tomakov, V. (1999), The humanization of technical education as a condition for the harmonization of relations in the system. *Nature - Society*. Kursk: KSTU. p47-51.
- Tomakov, V. (2007), *Theory and methods of formation of competence of the future engineer. The Monograph is in Two Parts. Part 1*. Kursk: Kursk State University. p236.
- Turbovich, L. (1970), *Information and Semantic Model of Learning*. Saint Petersburg: Leningrad State University. p177.