Materials of Conferences

KEY COMPETENCE AS THE BASIS OF RENEWAL OF THE CONTENTS OF EDUCATION

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The article studies key competence and the new model of education. It defines competence as a «joint» idea in world educational practice. Ideas of scientists regarding an integration of intellectual, physical, political, social, and aesthetic aspect of knowledge are given, since a person's competence must display itself in various aspects within the new education model. The work studies areas that develop a person's competence in its broad concept as well as instruments to form such competence.

Further we refer to ideas of key competence from points of view of different authors. Besides, its interpretation by State educational standards of graduates' specialties is given. When we speak of realization of pedagogic activity, key competence is necessary – intellectual, emotional, communicative, social, pedagogic, it stimulates professional self-development, self-perfection, realization of one's creative potential.

We also provide characteristics of all key competences and their structure. Ans, we think that the problem to select key competences is one of the central to renew the contents of education.

An idea of competence represents a central, key concept in the world educational practice. First of all, it combines intellectual and skill component of education, secondly, the idea of competence includes an interpretation of the education content that is formed «of a result» («output standard»); thirdly, key competence has an integrative nature as it absorbs a number of homogeneous or close skills and knowledge that refer to broad areas of culture and activity (informational, legislative, etc.) [1].

A new education model, according to scientists, must integrate intellectual, physical, political, social, and aesthetic aspects of knowledge, as a man's competence must reflect in its most various displays. Authors refer education, work, healthcare, culture, politics, environment, ecology, world to areas that develop a man's competence in its broad conception. As for instruments of forming such competence we can outline: general education, professional training, studying at a workplace, family upbringing, general development, mass media, cultural-enlightenment institutions, and all types of a man's activity that provide for carrying out an active civil role of an individual. A transfer to such broad concept of a man's competence opens a new perspective to develop new strategic ideas and actions. Replacing knowledge that is only needed to form practical actions and productive skills with knowledge and skills that are needed to reveal an overall human potential represents, as scientists think, the first step towards an integrated educational policy that is aimed to serve interests and an individual and society of the future. Such integration is crucial for independent and successful solution of a person's life situations, creating better conditions to interact constructively with other people in different situations, including conflicts [1].

The idea of «competence» comes from a Latin term competo – to coincide, correspond, fit, coordinate, suite, be able; compete – to know, be able to, achieve; competentia –

1) coordination, commensurateness of parts of a whole:

2) rightful belonging. According to a French interpretation, «competent» means authorized.

It also has a legal shade. In English personal features dominate in the term competence: it is interpreted as a capability [2].

S.E. Shilov studies key competence as an ability of a specialist to mobilize his skills and knowledge in his professional activity as well as general means of taking actions. Seeing a direct link between skills and knowledge, the author studies competence as an ability to find and reveal «a procedure, adequate to a problem» [3]. According to the scientist, key competence provides for a specialist's versality and allow him to: learn (be able to solve problems, educate personally, apply experience, interconnect his knowledge and ordinate it); search (request different databases, consult with experts, receive and process information); think (organize interconnection of the past and future events, take aspects of social development critically, be able to resist uncertainty and difficulty, take a position in discussions and form his own opinion, evaluate); get to down to work (enter a project, take responsibility, be able to organize his work); adapt (be able to master new technologies and communications find a solution) [3].

While studying professional activity, G.A. Larionova refers «intercultural and intersectoral knowledge, skills, abilities, needed to adapt and act efficiently in different professional societies» to key competence [4, p. 64]. According to her, key competence has an extra-functional character.

Kew competence is sometimes called instrumental, impersonal, systematic, general, universal, etc. [5]. It defines attributes that can construct a part or be general for any profession. In the structure of key competence some also outline transferrable skills that reflect an ability to reason on abstract terms, analyze and synthesize, solve problems

(make decisions), adapt, be a leader, work as a part of a team or individually [6].

Key competence base on a person's characteristics and reflect definite behavior means that stand on his psychological traits and include a wide practical context of high universality [7].

Generally, in State general education standards of graduates' specialties, a list of key competence is defined: having an integral idea of education as a special area of social-cultural practice that provides for cultural transmission between generations; having an integral idea of education as a special area of human science activity; knowing scientific basics of psychological-pedagogic, social-human science; knowing basics of business economy, marketing, management in educational institutions; being able to analyze social problems and processes and use modern methods of different fields of science in professional, pedagogic, social activity; being able to organize one's own work on scientific basis; being skilled: to use computer technic in an educational and professional activity, apply modern pedagogic technologies in educational-upbringing process.

In our opinion, developing key competence of future professional training pedagogues provides for an increase in their education level, is necessary for a successful life (self-competence, personal achievements, self-actualisation, self-development), ability and readiness to carry out a productive activity for the good of society.

Authors of an international project «Defining and selecting key competence» refer autonomous reflective act, interactive usage of means, participating in work of heterogeneous groups, critical thinking, solving problems to the key competence.

Key competence is characterized by the fact that it allow one to solve the most difficult and non-standard problems – different problems of the same area (polyfunctionality), problems of subject areas of a person's activity (inter-discipline and over-applicability), that require a high level of intellectual and cognitive skills development from a specialist (versality) – intellectual competence.

I. D. Frumin sees projective work and various individual education forms adequate to develop key competence.

Realization of pedagogic activity requires development of key competence – intellectual, emotional, communicative, social, pedagogic, it stimulates professional self-development, realization of one's creative potential [8].

A key competence has the following characteristics:

It is multi-functional. A competence refers to a key if its mastering allows one to solve different problems in everyday professional of social life. It is necessary master it to achieve important goals and solve different problems in various situation.

A key competence is not applied and is interdiscipline, it is used in different situations, not only in school, but also in work, family, political area, etc. Key competence require a significant intellectual development: abstract thinking, self-reflection, defining one's own position, self-evaluation, critical thinking, etc.

A key competence is multi-dimensional it includes various intellectual processes and skills (analytic, critical, communicative, etc), «know-how», and a common sense.

It is essential that a competence require different types of actions:

Act autonomously and reflectively;

Use different means interactively;

Enter social-heterogeneous groups and function within them.

In our opinion, the following aspects must be present in the structure of key competence:

- Competence in the area of independent cognitive activity that is based on mastering means and acquiring knowledge from different information sources, including non-scholar;
- Competence in the area of civil and social activity (carrying out role of a civilian, elector, consumer);
- Competence in field of social-labour activity (including an ability to analyze a situation in a labour market, evaluate one's own professional abilities, orient oneself in norms and ethics of labour relations, skills of self-organization);
- Competence in the household area (including aspects of personal health, family happiness, etc);
- Competence in field of culture-entertainment activity (including the selection of ways and means to use free time that enriches a person in a cultural and spiritual sense).

The suggested approach to defining key competence corresponds to the experience of countries that made a transition towards mastering key competence within education during the last decades (practically all developed counties). Besides, the described approach corresponds to the traditional values of Russian education (orientation to understand the scientific picture of the world, spirituality, social activity).

In this case we can conclude that the problem of selecting basic key competence is one of the central in modernization of education contents.

References

- 1. Djusunbayeva D.M. Theoretic basics in forming informational culture of students in terms of distant education. Almaty, 1997. 221 p.
- 2. Explanatory dictionary of Russian / Ed. D.I. Ushakov, In 4 $V.-V1.-M.,\,1935.$
- 3. Shishov S.E. Federal reference book «Education in Russia». Moscow, 2001.
- 3. Larionova G.A. Competence in professional training of an institute students: Monograph. Chelyabinsk, Monograph. Chelyabinsk, Monograph.
- 4. Koler Y. Providing quality, accreditation, and acknowledge of qualifications as control mechanisms of the European space of higher education // Higher education in Europe. $2003.-N_{\rm 2}3.-P.~127-139.$
- 5. Setting up educational structures in Europe // Education quality. Bibliographic guide. Bolognese process in documents / Comb. and Tr. E.V. Shevchenko. M., 2003.

6. Selevko G. Competence and its classification // Public education. -2004. $-N_{\odot}4$. -P. 138-143.

7. Frumin I.D. Competence approach as a natural stage in modernization of education contents // Problems of modernization of education system for a new economy of Russia – M., Preprint WP5/2002/04, series WP5 New economy – New society – New state.

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NEW INFORMATION TECHNOLOGIES AND THE REAL POSSIBILITIES OF CREATION OF THE OPEN EDUCATIONAL SYSTEM

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The article studies quite an urgent aspect of the modernization of education – usage of new information technologies and real possibilities to form an open education system.

It gives an idea on the necessity to use electronic training as a key direction in education development that provides for an improvement in education process. As the development and the perfection of methods and means of modern information technologies create real possibilities to use them within the education system in order to develop creative skills of a student during his training.

Joining of Kazakhstan to Bolognese process has actualized a transition from knowledge-enlight-enment paradigm of education towards its competence part. In terms of informatization of society, a new component of professional competence of professional education tutors arise – informational-technological competence (ITC) that must form within an institution of higher education.

These technologies create the premises for an intensification and openness of the education process: direct feedback, availability of the central data bank, automatization of the processes of calculative, information-search activity, and also processing results of an experiment; automatization of processes of training activity and management results control.

The era of new information and communication technologies has taken its changes into the area of production and education. The civilization steadily approaches the formation of new society that can be reasonably called the Information society, where the leading part belongs not to natural resources and energy, but to the information and scientific knowledge – factors that will define the overall strategic potential of the society, prospects of its further development.

President of the country, N.A. Nazarbayev has clearly outlined the priorities of the country's competitiveness though developing science-intensive and highly-technological enterprises and introduc-

tion of innovations. «...a universal introduction of modern information technologies into education processes must become the Central link of the education system» [8, p. 2].

A number of state documents, such as «Strategy of industrial-innovative development in Republic of Kazakhstan for 2003-2015» [5], the Law of RK «On Science» [4], «State Programme of forming and developing national informative infrastructure of Republic of Kazakhstan» [1], the law of Republic of Kazakhstan «On education» [9], the «State programme of education development up to 2015» [7], the «Concept of informatization of education system in Republic of Kazakhstan» [2], the «Programme of informatization of primary and secondary professional education» [3], the «Programme of informatization of education system» [6], and some others speak of the state of scientific-educational activity as a part of national innovative system.

We should outline that a shift towards electronic education is regarded as a key direction in education development nowadays that provides for an improvement in education process.

Processes of education integration provide for the fact that education becomes open and more effective for all countries. Information and communication technologies that base on the world informative resources, support the development of new education paradigm. Therefore, a purposeful education policy of organizing educational processes in the system of open education in order to learn and transfer experience on the foundations of global interactions in various networks is demanded.

It requires the principle of openness in education systems, decentralization of education. The openness of education systems implies:

- Realization of civil rights for education regarding the interests and free development of individuality;
- That a student himself chooses those educational institutions, forms and means of training that correspond to his interests and needs;
- That open education system provide a person with knowledge that becomes possible through usage of means of communication, such forms of it as electronic mail, network technologies that allow one to receive the required information in short terms of time.

The development of perfection of methods and means of modern information technologies create real possibilities to use them within an education system in order to develop creative skills of a student during his education. We relate real possibilities to construct an open education system that allow each student to choose his own training trajectory; dramatic change in the technology of receiving knowledge through an effective organization of a student's cognitive activity within the process of education due to such important didactic characteristic of a computer, as individualization of training process with preservation of its integrity