



Makarova E.A., Makarova E.L.

Development of experts professional competences system in high school

In the modern educational environment it is necessary to form system social, cultural, professional компетенций which will allow developing necessary corporate culture, social freedom, the attitude to the chosen trade at new generation of experts. The analysis of a developing situation brings to necessity of changes for the technology of the professional training sold in sphere of education, and changes in representations about the most educational system. Development of system professional competences should become a part of long-term policy of educational system. Psychologists, teachers and methodologists should unite efforts to direct to formation of the multifunctional didactic system directed on intellectual development of the individual which occurs on the basis of subject knowledge.

Keywords: professional the competence, the competence-focused approach, the activity approach, an educational paradigm, safe educational space, interaction of schemes and a background, a discourse, innovative technologies and strategy of training, joint cogitative activity.

Last decades in the domestic and foreign psychology-pedagogical literature the problem of change of an educational paradigm is widely discussed. The principal cause of necessity of such change consists that social and scientific and technical progress was included into the contradiction with the educational systems which have developed in last three centuries. The requirement of time is those, that there was a requirement for essentially new approach to definition of the purposes, problems and principles of education, and also necessity to reconsider the contents of education which is realized in subjects and subject matters, new forms, methods and means of training, textbooks and manuals of new type and innovative technologies of training are required. Now for the graduate of a vocational school of any level crucial importance gets not only mastering by the sum of concrete knowledge, skills but as an overall objective - their skill independently to get, systematize and use for decision-making. The well-known parable tells that to the fisherman the hungry boy has come and has asked to eat, however instead of meal the old man has given him a net and has shown how to fish. Others have been surprised and asked: « What for have you given him a net? He is hungry ». And the wise man has answered: « If today I give him



fish to eat, tomorrow he will be hungry again. I have given him a net and have shown how to fish, and now he will never be hungry again». If we look at education today it gives a daily portion of fish to those seeking knowledge instead of showing them how to obtain knowledge by themselves.

In this connection it is necessary to recognize a urgency and timeliness of the solution of the problem of competences formation at the graduate of the high school, caused as requirements of the Federal program of reforming of the high vocational training till 2010, the Federal target program of education development in 2006 - 2010 that assumes necessity of the further development of the theory and practice of the high vocational training which success significantly depends on conditions in which process of training of experts proceeds. Modern psychological theories should reveal components of uniform conceptual system cognition which can initiate cognitive activity of trainees.

The major requirement in such conditions at the present stage is reorganization of an education system, and reconstruction is possible, only putting forward qualitatively new ideas. Search for such ideas is extremely important, first problem which demands joint efforts of psychologists, teachers, methodologists and experts in various fields of knowledge. Moreover, marginal research is called to solve essential problems of today's education. Combined efforts should be directed to formation of multifunctional didactic system, intellectual development of the individual, development of intellectual resources on the basis of subject knowledge. The pedagogies of the cooperation, obtained quite deserved recognition, consists in resolute change of character of mutual relations between learning and initiating knowledge of real educational process, calls for replacement of existing, authoritative type of attitudes during training by attitudes of creative cooperation, to replacement becoming outdated, "monologue", forms of training by a constructive discourse, formation of non-threatening learning environment. Dialogue in a broad sense which can provide a situation of mutual understanding, and already is necessary as consequence of it, - overcoming of stereotypes of the thinking, the out-of-date representations and, thus, will affect becoming of the person of a trainee.

According to monitoring of South Federal University 20 % of subjects declared, that administrative decisions due to the limited information cannot be made, and 43 % are afraid of consequences of decision-making for different reasons. In this connection there is a question: what results of education are necessary for the person and demanded by a society? The answer to this question can be the idea of the competence focused education. One way of competence building is the increase in volume of independent work of the student that promotes discovering of the person's creative potential which is determined by a complex of skills, abilities to action and a measure of their realization in the certain field of activity or dialogue.

To form professional competence of experts in the higher school system it is necessary to substitute traditional forms of training with modeling of interactive situations that is a component of decision-making process, including models, methods, and tools of the information processing.



There is also a problem of development of psychological and pedagogical concepts of such education that can be reached by introduction of innovative methods of teaching and shift emphasis from training to self-development and self-training. XXI century is characterized by a prior role of self-education. In modern conditions there is a problem of orientation of the person formation, maintenance of the person's identity, constant creation of. A trainee is not an empty container, which teacher fills with the facts and data, and the active researcher independently "extracting" knowledge, creating itself and the environment. He moves ahead to true "trial and error method", and during not only is enriched with new knowledge, but also with methods, ways, and strategies of its acquiring. Requirements of time specify necessity of cardinal new approach to the definition of the purposes, problems and principles of education; revision of its contents which is realized in subjects and subject matters, that, in turn, dictates requirements for new forms, methods, means and strategy of training.

Today the special attention is paid to formation of skills of independent acquiring of the information and strategy of its processing. Training becomes procedure of awakening of internal forces and opportunities of a trainee, interactive joint creative activity of a trainee and a trainer as a result of which both of them are exposed to qualitative changes. As the ancestor of modern evolutionary epistemology Conrad Lorenz said, «life is knowledge. And to learn to live means to learn to study». [1]

Universality of the educated person consists today not in volume of knowledge kept in memory from different disciplinary areas, and in mastering by the general system of orientation in the information, in creation of rigid personal filters - precise ways of selection of the valuable information and cutting off minor, and also in formation of skill constantly to fill up and complete the personal system of knowledge schemes. The main thing - not the ability, and the ability to find out how to quickly obtain demanded knowledge in a modern variety of sources of information, to be able to find a way and strategy of searching decisions and to learn how to make first steps.

In modern theories of education training is interpreted as a discourse between a trainer and a trainee, working with separate cognitive schemes and entering personal semantic relations. As a result of these relations the psychological mechanism of interaction of schemes and a background is created and functions. Interaction of the scheme and a background, having intra- and interpersonal vectors, is defined by personal senses of a trainee. Development of human mentality by «psychological instruments» is characterized by that operation of the sign use, standing in the beginning of development of each of the supreme mental functions, first time always has the form of external activity. The tendency to formation professional competences of students is the important problem of high school teachers of at the present time. The analysis available and projected, key competence allows to define individual educational strategy, to choose adequate technologies of training, to determine mechanisms of internal and external evaluation of the student. By consideration of main principles of construction of innovative educational process which purpose is educational independence of the student, it is possible to offer the following positions:



- Transition to qualitatively new level of mutual relations between the teacher and the student, based on change of their personal positions therefore the partnership in educational space is formed;
- Pedagogical activity becomes a new version of activity of the manager on management of social system within the limits of educational process;
- The system of educational activity of the student becomes such in which the leading part is played with interactive forms of training.

The great value has inter-disciplinary of knowledge, demanding formation of active thinking, comprehension of a role of a trainee during the process of training, complete outlook; changes of system of estimations and the control. Students can make mistakes, but thus they develop the system approach to the analysis and algorithm of correction of these mistakes, i.e. conditions for self-management by process of the control of own knowledge are created.

To meet all these principles the competence focused approach is based on particular functions which the expert of a corresponding level should be able to carry out, or competences. Furthermore, it is expedient to present algorithm of the organization of process of students' key competences formation. Use of the competence-focused approach individualizes process of training within the limits of tutor program which is presented as set of pedagogical technologies, characteristic for model of the competence-focused education. The leading part in technologies play methods of interactive training - business games, discussions in small groups, brain storm, cases, role games, trainings which application is not limited only to internal forms. The tutor widely uses information technologies for the organization of interaction with trainees in distant education. Thus the tutor adapts methods of the open remote training for use during interaction in the Internet-space.

In general, administrative process of pedagogical activity of the tutor consists of four stages: designing, organizational activity, diagnostic, supporting.

Stages/phases - The Purposes of stage

Designing stage - Creation of pedagogical conditions for successful occurrence trained in educational process and their adequate self-determination.

Organizational-activity stage

Rough phase - Creation of conditions for construction by trainees of a full rough basis of educational activity.

Phase of development - Creation of conditions for becoming trained as subjects of educational activity.

Integrating phase - Creation of conditions for becoming trained as subjects of socially-professional work and activity on development of personal professional competence.

Diagnostic stage - The estimation of results of granting by a trainee of educational service and diagnostics of achievement of the purposes in the form of: development of model of professional competence according to the established standards; development of the individual program of competences.



Supporting stage - Creation of conditions for the further self-determination of trainees, support of motivation for their professional and personal development in the future.

The purpose of a diagnostic stage consists in an estimation of results of granting to a trainee of educational service and diagnostics of achievement of the purposes in the form of: development of model of professional competence according to network standards; development of the individual program of competences. Within the limits of a supporting stage the tutor creates conditions for the further self-determination trained.

In a general view the following components enter into the model of pedagogical activity of the tutor:

Applicability of the tutor - actualization and management of the supporting educational (socially-cultural-professional) environment allowing trainees in a mode convenient for them to achieve the goals of development of their own competence owing to realization of synthesis of pedagogical, information and organizational technologies, providing thus the uniform quality standards.

The purpose of the tutor - creation of conditions for becoming trained as subjects of educational activity on development of a desirable level of competence; as subjects of socially-professional work, developing professional competence.

The list of functions which the tutor should realize: the managing director, diagnostic, design, motivational, information-substantial, organizational activity, technological, consulting, reflective.

Also, organizational-pedagogical conditions which are necessary for effective realization of pedagogical activity of the tutor are the following:

1. Realization by the tutor of additional administrative functions which are provided in relation to pedagogical activity.
2. Presence of set of some subsystems: organizational-administrative support, methodical support, etc.
3. Development by the tutor of adjacent spheres of interdisciplinary activity and consecutive change of positions of the instructor, the methodologist, the instructor of tutors, the developer of programs, the researcher.
4. Presence of the socially-professional environment of tutors: the organization of intensive social communications, both formal, and informal; work of the tutor in structure of different teams, both distributed, and localized; formalization of results of work of these teams and translation to their other members of tutor societies; creation of the superfluous information environment: the same tutor can work in different teams, passing from one position in another, receiving thus new knowledge and the information from various sources.
5. Mastering by the tutor of skills for management of educational process: skill to organize group work, skill to organize productive group discussion, skill to create and support the atmosphere of trust in a group.

A standard situation when the teacher passes the cycle, since "creation" clockwise, and trained - with "studying of concepts and rules of work" in a counter-clockwise di-



rection. But the qualified tutor can and should “accustom” the student to skill to work, since any stage, including from a discourse. Skilled teachers receive good results, for example, at involving students in “creation” of interactive methods of training. It is important, that all stages took place in a full cycle of works.

The support on new psychology-pedagogical concepts promotes introduction in education of new ways of the organization of cognitive space, relations between trained and training, authoritative methods of teaching give a up the place of joint cogitative activity learning and initiating knowledge. In these conditions teachers and psychologists have a necessity for cooperation.

During such cooperation it is necessary to solve following questions:

1. What are the most actual problems which should be solved in common to psychologists, to teachers and methodologists in modern education?
2. What is the competence which the modern graduate of a higher educational institution should possess to find the place in quickly varying world?
3. How to connect fundamental science and practice?
4. What practical priorities should be in strategic planning of innovative activity by preparation of the expert?
5. What innovations in the field of vocational training will promote increase of conformity of released experts to modern requirements in various branches of practical activities?

Psychological and pedagogical problems of training are a search of ways of interaction in system of innovative education. The purpose of today’s education is the decision of those problems, to which combined efforts of psychologists and teachers on formation of professional competences in education and those innovations are directed, with which it is necessary to add educational programs to release the highly skilled experts meeting the highest modern requirements in various branches of a science, technical equipment and manufacture.

For creation of innovative technologies of training it is necessary to consider psychology-pedagogical features of development and application of these technologies in education, and also to create complex of psychological and pedagogical maintenance of training on the basis of use of such modern technologies. Integration of innovative approaches, modern receptions and methods of teaching, interactive techniques of training, and also an opportunity of application of these approaches, receptions and methods is necessary for maintenance of interaction into real student teaching. Introduction of innovations in education promotes increase of the academic mobility, expansion of inter-subject integration, increase of adaptability of curricula, programs and manuals, strengthening of competitiveness of the Russian high schools in the world market of education and the accelerated integration of the Russian education into the international educational space.

In the modern world many problems arise because of mistakes in the communications, because of impossibility of participants of dialogue «to find common language». Communicative interactions can be successful or can end with a full failure. It



depends on many factors, is new the first turn: from presence of cultural caused mutual communicative competence of participants of communicative event - that is, from presence or absence of the common language and cultural background knowledge and balance between the common and various in their processes of perception and symbolical systems. It is possible to tell, that the success of any communicative event is based upon «three elephants»: linguistic, communicative and cultural competence of participants of communicative interaction.

Ability to development of communicative competence is inherent in all people, however this or that realization of this ability is cultural caused. Besides it is caused also by unique individual experience of each person from what follows, that at the communications, being process of an exchange by messages, constantly there is a reconstruction of senses as they do not coincide even at the people who speaking in same language and have grown in same cultural environment. Needless to say, that at presence of different cultures and different languages the communications becomes complicated so, that about full understanding speech even does not go. Without special training to achieve such communications it is actually impossible.

Cultural background knowledge of participants of the communications represents a basis of any dialogue. Since a birth the person belongs to many groups, and in them its cultural competence is formed. Larger groups usually named by cultures, significantly defined cognitive and pragmatic bases of communicative activity in the given community.

The analysis of a developing situation brings to necessity changes of the technology of preparation of experts sold in sphere of education, and changes in representations about the education system. Development of system welfare competences should become a part of long-term policy of high school. Acceleration and increase in a stream of the information, new requirements of the market lead to that from the graduate of high school now is required not so much possession any special information, how many skill to be guided in information streams, to be mobile, to master new technologies, to search and use missing knowledge or other resources. The system of generated competences is called to help him with this.

The Literature

1. Lorenz K. Behind the Mirror. A search for a natural history of human knowledge. London. Methuen and Co. Ltd., 1977.
2. Practical guidance for the tutor of system of the Open education on the basis of remote technologies ", under ed. A.M. Dolgorukov, Moscow, the Center of intensive technologies of education, 2002, pp.21 - 44.