

The Higher School Teacher Matrix of Competences

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Abstract: In study, the changes in educational practice happening under the influence of introduction of the competence term in the pedagogics active thesaurus are considered. On the basis of the carried-out content analysis, it is offered to use integrated approach to determining competence and competency. Researchers definition of the higher school teacher professional competence is proved and introduced and the original structure (matrix) of this professional competence including basic (theory and methodology, research, psychology and pedagogical, methodical, subject) and key (innovative and commercial, information and technological, educational developing, projective and managerial, communicative and reflexive) competences are offered.

Key words: The higher school teacher, model of the HEI teacher, competence, professional competence, basic and core competencies

INTRODUCTION

So far conceptual aspects of competence-based approach to training specialists are designated rather clearly, the basic provisions are formulated. Competence-based approach passed from a theory stage into implementation phase when the general principles and methodological layouts declared are confirmed development by different application-oriented methods. And if for an assessment of expert training quality, bachelors and masters lists of the general and professional competences are used, then these are not yet developed for assessment of teachers and design of their preparation, this process is not realized. The researches which are the basis for this publication also belong to such application-oriented development.

Transformation of educational practice in connection with distribution of competence concept (Raven, 2002), deserves special attention as change of terminology in the sphere of professional training and activities of the higher school teacher, involves profound changes in high school pedagogical systems and their environment. Currently, it is possible to refer to the following changes.

First, this transformation emphasizes the term "competences" which has come to education from the world of the entities and jobs in which the most part of professions and positions is characterized by the list of competences and this list is used when hiring new employees, by intensive search of talents for job development in case of developing the list of "individual competences" for determining the advanced training need and also in case of positions and workers assessment. Therefore, not accidentally this perspective has come to training systems. However, uncertainty which reigns in assessment of professional and pedagogical activities now strengthens allocation and general competence definition expectations (Kharchenko, 2014).

Secondly, it is modernization of training content and reduction of high school training programs (including programs of postgraduate study as 3 steps of the higher education) in compliance with progress of knowledge (3 and subsequent generations of FGOS VPO). Dissatisfaction of the most part of scientific and pedagogical structures of higher education institutions with the training content that is caused by the fact that reforms, submitting to generally additional logic, not only

have accelerated depreciation of separate disciplines but also promoted loss from a type of the general programs organization. The discomfort felt by teachers is the result of ascertaining the fact that at the mode of fast obsolescence of knowledge the higher education maintenance reform is always incomplete. However it is urged to become continuous activity of training systems but can't infinitely feed a tendency to depreciation. It is necessary to define priorities (the central core of training which would allow to be realized as a matrix of competences) and they have to be higher than rivalry between subject matters (Mitino, 2003; Tomilin *et al.*, 2007).

In this connection, various concepts for designation of the central core of training were offered: "core curriculum", "the main general part", "base of competences", "fundamental forms of thought", "key competences", "basic competences", "universal competences", etc (Kharchenko, 2014a-c). Use of these terms in our opinion, reveals a tendency to defining knowledge which has to be added to definition of more general competences absorbing them.

Thirdly, emergence of the new accelerates and obsolescence of former knowledge promotes stronger conviction that future generations will have to study more, than now, if not for all life, the requirement that any training department made each person capable is amplified and the person is continuously interested in studying. There is a call to the higher school consisting that any professional activity assumes mastering ever more tools and technologies of various intellectual work which was once destiny of the few.

Fourthly, the changes concerning training process more and more become dependent on change of a method of high school educational systems management, first of all, dependent on model and mission which are chosen by higher education institution (Kharchenko, 2014a-c). In reality it is possible to see some contradiction between effective objectives and methods of management. So, researchers or developers of educational standards put the raised and important tasks before training systems and first of all, teachers of higher education institutions but they often have general character and are quite indistinct whereas they should be defined not only in terms of competences but also considering individual qualities of students their capabilities and training motives as well as those personal and professional qualities which students should acquire on leaving the system of higher education institution. In this case, from our point of view, the main contradiction of standards of education with realities of education is shown: the standard is expected of "the average student" who is simply absent in high school (and any other) education system.

The processes taking place have led to the fact that now the concepts "competence" and "competency" are the main categories, so-called, new approach in Russian education and these concepts are not only the main pedagogical categories but also objects of inter-disciplinary researches.

MATERIALS AND METHODS

Content of the questions discussed within this article is received by authors from diverse sources and are processed with use of the content analysis. Content-analysis was performed in the following logic: studying of various sources (scientific and publicistic literature, mass media, regulatory legal acts, programs of the top skills training, speech of Heads, opinion of the experts) containing data on the researched question condition, invariant on structure and content but externally occurring as the lacking system, disorderly organized text material; the quantitative and high-quality analysis of texts and text massifs, interview materials for the purpose of subsequent substantial interpretation of the revealed regularities; reflection, analysis and introspection of subjective scientific, pedagogical and organizational experience of authors regarding identification of contradictions between data on educational practice and its theoretical interpretation; ascension from variety of text and cogitative material to abstract model of the article text contents (the formulation of the conceptual and categorical means in the form of a matrix for basic and core competencies of the higher school teacher).

RESULTS AND DISCUSSION

Attention of researchers to questions of theoretical reasons for competences and their practical forming as it has been noted above is caused by requirements of economy to development them in an education system therefore research of professional competence of the higher education institution teacher is not an idle question. It should be noted that many domestic researchers were engaged in studying structure of professional competence of the teacher: B.G. Ananyev, Y.K. Babansky, V.P. Bespalko, E.V. Bondarevskaya, T.E. Isaeva, T.I. Shamova, etc. In researches of these researchers managerial, psychological and pedagogical aspects of pedagogical competence are opened. But, we, first of all have paid attention to results of those researches in which competences of the teacher are characterized systemically, integrative.

So, A.A. Derkach and N.V. Kopylova consider competence as an integrated capability of the person to

build the forward development in various spheres of activity with fixed complication of tasks and increase of achievements levels (Derkach, 2004; Kopylova, 2005). Vardanyan (1999) and Zeer (2005) also characterize competence as the integrative characteristic of the specialist reflecting the readiness and capability to make use of theoretical knowledge and practical experience for the solution of professional tasks at the level of functional requirements of the European standard.

It is possible to refer to researches by Efremova (2010) who adheres to synergy approach to defining this concept in number of such works in her representation, competences are generalized and deep, created qualities of the personality, the capability to use and apply the gained knowledge and skills most universally; set of knowledge, skills allowing the subject to adapt to the changing conditions in fact is its the capability to work and survive in these conditions.

Attempt of the available approaches integration is expressed by Simen-Seversky (2002)'s definition provided in the dissertation research where professional competence is understood as a new integrative personal and activity growth which represents the balanced combination of knowledge, abilities and the created professional outline allowing to carry out tasks of professional activity independently and qualitatively and which is in relations of dialectic dependence with a professional orientation of the personality.

From the stated above definitions of the considered concept becomes obvious that most of researchers include set of objectively necessary knowledge, skills, personal qualities of the specialist in structure of professional competence which allows to solve problems of professional activity (Mityaeva, 2007). And though such approach seems simplified, it, according to the author of work (Mityaeva, 2007), provides availability of experimental check of competence forming, determining the competence level of the specialist as practical confirmation of theoretical calculations. We agree with this interpretation of professional competence concept as we consider that professional and any other competence of the person is the characteristic more generalized, social.

In due time, some researchers (Bezrukova, 2010) estimate results of the education organization competence-based approach practice use a little skeptically. So, V.S. Bezrukova notes that the majority of domestic developments on competence-based approach return us in fact to the old times and to subject development of a profession, habitual for us. In the researcher opinion, the offered competences remind the same subject knowledge and abilities provided by practice and in other verbal means. Qualification training is based

according to the logic of subject and competence-based training should be based according to the logic of the activities, taking into account specifically post (Bezrukova, 2010).

Dulzon and Vasilyeva write that owing to low knowledge educational process by participants including the high school public, employers, students and society in general and also traditional scepticism in relation of the transformations imposed from above in our country did not become in case of feasibility discussion of of competence-based approach application with the analysis of strong and weak sides. Researchers pay attention that "fashion" on competence without analysis of real requirements of specific higher education institution leads to the fact that models are created for the sake of models, without their further use. Therefore, it is important to determine the purposes under which the model is developed from the very beginning of work on creating competences models.

In literature separate attempts to create model of the ideal teacher appear. According to researchers (T.S. Laskova, I.Yu. Soldatova), the "ideal" teacher, for example in system of a business education shall combine teaching experience and good psychology and pedagogical skills; experience of research work; experience of practical work in this subject domain; experience of organizational and managerial work; experience of consulting work.

It is obvious that to find such teachers in complete form is difficult, therefore, the problem of purposeful training of teachers and corporate training programs becomes more and more relevant (Soldatova and Laskova, 2008). It is in this connection pertinent to give one more example. More than a half of technical colleges of England in the structure have pedagogical divisions the faculties and departments setting the task of professional psychology and pedagogical and methodical training, first of all for teachers of higher education institution.

On this we will be limited to reasonings on competence but even the short analysis of scientific literature and regulating documents has shown that in scientific and pedagogical community so far there was no clear idea of essence of the higher school teacher professional competence phenomenon, there is no unity in understanding of this term. Many researchers of innovative processes in education use the concepts "core competency", "basic competence", "universal competence" as synonyms.

Etymologies of these concepts have led our researches to a bit different results. So, for example, the adjective "key" in the dictionary of Russian is interpreted

as “opening possibilities of mastering, managing something” and a noun “key” “what serves for a solution, understanding something, mastering as something” (in the same place). Further, the word “base” is “the basis, the main thing on which something is based, created”. From here an adjective “basic” being in the basis on which something is based.

The adjective means “universal” versatile, covering a lot of things with various use or various application. That is, in the context of our views, basic competences are such competences which allow to support the teacher of a professional field of activity in the functioning mode (they also serve for forming on their basis core competencies). If it is about forming the new professional qualities of the teacher in connection with change of professional activity conditions (especially during social and economic transformations), then the teacher needs to seize “core competencies” still.

“Universal”, we suggest to apply this adjective not in connection with competences but in connection with the professional characteristic of the teacher of higher education institution, for example, “the universal teacher”, “teacher versatile person”. This is the teacher of higher education institution owning many specific knowledge in a certain (one) scientific area. The last refining is important that there was no confusion with such characteristic of the teacher as “encyclopedic” that means comprehensively educated, having versatile knowledge.

The amendments which are stated above allow us to describe components of professional competence of the teacher and to formulate concept of “professional teacher competence” in general. In our understanding, it is the generalized professional and personal structurally functional characteristic of the higher education institution teacher including basic (theory and methodology, research, psychology and pedagogical, methodical, subject) and key (innovative and commercial, information and technological, educational developing, project and managerial, communicative and reflexive) competences providing readiness and capability of the teacher to perform professional-and-pedagogical and social-and-economic functions in the mode (developing) model of higher education institution, both traditional and diversified. From such etymological line in our research we represent the professional competence of the higher education institution teacher including two groups of the named competences provided in Table 1.

In this publication we will be limited only to referring to competences, each of them has the corresponding substantial and functional filling which description is given in some works of research collective (Kharchenko, 2014).

Table 1: Matrix of competences for the higher school teacher professional competence structure

Basic competences	Key competences
Higher school teacher professional competence	
Theory and methodology	Innovative and commercial
Research	Information and technological
Psychology and pedagogical	Project and managerial
Methodical	Educational developing
School subject	Communicative and reflexive

CONCLUSION

Thus, at the present stage of the higher education development, in higher education institutions of Russia two concepts of education-humanistic and pragmatismal (or competence-based) coexist which according to researchers, don't contradict each other and only, focus attention in the first case, on personal and in the second, on the professional part of the research and educational personnel formation.

The social and professional role of the teacher whose task now is not limited to transferring the amount of information and the basic subject knowledge, his professional abilities and competences received once, insufficient for the entire period of his multi-component pedagogical activities, change.

Content of the teacher core competencies providing not only professional functioning of the individual (as a contradiction to constantly changing social and economic conditions) but also the professional development and therefore, considerably raising competitiveness of the modern teacher also constantly changing higher education institution.

The matrix of basic and core competencies of the higher school teacher professional competence described by us show the main directions of the further professional formation in the conditions of optimization and increasing competition of high school systems.

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