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## **On the issue of professional competence and competency of the educational psychologist**

In this article the authors from scientific-methodological position define the content and structure of the professional competence of the educational psychologist. There is also pointed out that in today's pedagogy of education, the key concepts are understood as «competence» and «competency». Based on this offer there are different opinions of both as foreign and local scientists to understand these concepts. The study of scientific material on this problem, experience in the European projects, participation in scientific seminars allowed the authors to state that both competence and competency are based on knowledge, skills but competence includes attitude to the results, subject, object, process of activity and tools. When talking about competency-based approach there is a conception that expected results of learning will be the competencies and competence of students. In general, competence-based approach is an approach to the definition as goals, selection of content, organization of the educational process, the choice of educational technologies and evaluation of results. Taking into account this opinion the authors reveal the content of professional competence of the educational psychologist.

*Keywords:* professional training of the educational psychologist, types of professional activity of the educational psychologist, higher education, educational process of the university, bachelor's training, professional competencies, competence, professional competence, competence-based approach, professional activity

The new paradigm of education based on the competence approach, includes the concepts of «competence» and «competency» and their relationship to each other. The main reason for interpreting the result of education in terms of competency/competence according to the introduction of the competence-based approach is its dependence on the European and world trend of integration, globalization of the world economy and particularly the steadily increasing processes of harmonization is «the structure of the European higher education system» which is associated with Bologna process. It is significant that along with the universal transformation in the field of degrees, training cycles (undergraduate and graduate); degree level for incomplete higher education; ensuring student and teaching mobility; international recognition of degrees, educational loan system and their implementation, The Bologna process implies a certain terminological unification that applies to terms such as competency/competence [1].

Russian scientist A.A. Verbitsky notes that the introduction of the competence-based approach changes not only effective target basis of education conforming to its goals, criteria and procedures for diagnosing the level of their real achievement, but also changes the type of training with different content that is adequate to these goals, criteria and content of the procedures, forms, methods, facilities, organization of an appropriate educational environment and activities of students and trainees in it. The solution of this problem is connected with the modernization of the content of education, optimization of the methods and technologies of organizing the educational process, furthermore rethinking of the goal and result of education. The goal of education has become correlated with the formation of key competencies/competence.

The concept «competence» appeared in 60–70 years in the 20<sup>th</sup> century in the Western literature and in the late 1980s in Russian literature. At this time begins special direction as a competence-based approach to general and vocational education, possibilities of a competence-based approach to pedagogical activity are being studied, the difference between the concepts of «competency» and «competence» is revealed and attempts are being made to assess pedagogical activity on the basis of competencies.

According to the opinion of N.V. Kuzmina, L.M. Mitina that consider professional competencies of the educator as following:

- the ability to act in accordance with limitations and requirements;
- knowledge, abilities, skills, methods and techniques;
- effective use of knowledge and skills;
- valuable orientations, motive, relationships;
- knowledge and experience in a particular area;
- awareness in terms of issues;

- level of professionalism, creativity;
- qualities providing problems to solve [2, 3].

Competence is considered as a general readiness to establish a link between knowledge and a situation, to formulate a procedure for solving a problem. Some educators understand by competence a certain alienated, pre-set requirement for the student's educational preparation and by competence his personal quality (characteristic) that has already taken place.

I.G. Agapov and S.E. Shshov sees competence as «a general ability and willingness of an individual to work based on knowledge and experience that acquired through training which focuses on the independent participation of the individual in the learning and cognitive process. They are aimed at its successful integration into the activity» [4; 59].

I.A. Zimnya understands competence as «some internal, potential, hidden psychological neoplasm, representing knowledge, ideas, programs (algorithms) of actions, value systems and relationships which are then revealed in human competence» [1; 35].

G.K. Selevko notes that «competence focuses education on the creation of conditions for mastering the complex of competencies necessary for a graduate to survive and sustain life in modern conditions» [5; 26].

A.V. Hutorsky considers competence as «a pre-set requirement for the graduate's educational preparation, something that he must master after completing his education at a certain level» [6; 60].

According to U.V. Vardanyan competence is manifested in an individual person as «the willingness and ability of an individual to use theoretical knowledge and practical experience to solve certain tasks» [7; 36].

Kazakhstan scientist-educators Taubaeva Sh.N. and Laktionova S.N. through competence understand those personalities that characterize the willingness and ability to integrate the knowledge and skills acquired in life experience to achieve the goal in a specific context. *Competence* is the ability to carry out activities with quality providing professional tasks, the achievement of goals and results. But *competency* is the ability to carry out activities with quality of relevant standards and public expectations [8; 24–26].

Participation in the EDUCA-TEMPUS project allowed to be introduced with the opinion of professors of the Otto-fon-Gerike (Germany), University of Alicante (Spain), Lithuanian University of Pedagogical Sciences, University of Columbia (UK) on the concepts of competence and competence-based approach. Most of them believe that competencies in the frame of the Bologna process perform as:

- characterization of the ability of the individuality to realize their knowledge and experience in successful activity with a high degree of self-regulation, self-esteem and quick, flexible and adaptive response to the dynamics of circumstances and environment;
- one of the distinguishing features of qualifications (degrees, steps, levels);
- compliance with qualified requirements taking into account regional needs and demands of labor markets;
- the ability to perform specific kinds of activities and works depending on the tasks and situational problems.

In their opinion the development of competencies is the goal of educational programs, competencies are formed in different course units and evaluated at different stages. «Competencies can be subdivided into subject area (reflecting the specific areas of study)' and universal (common to all degrees). Competencies include knowledge and understanding, knowledge how to act, knowledge how to be. In the framework of Bologna process competencies act as one of the main reference points of the characteristics (descriptions) of qualifications (degrees, steps, levels» [9].

Competencies have positive meaning for:

- ensuring the further transparency of academic and professional degree profiles (educational programs) and strengthening the emphasis on results;
- the development of a new paradigm of student-centered education;
- increasing the employability of graduates and their civil culture;
- the formation of a more adequate language for consultation with stakeholders.

In the pan-European project TUNING were formulated the results of educating in subjects through competencies which ensures transparency and efficiency when comparing training. In the TUNING project the concept of competence includes knowledge and understanding (theoretical knowledge of an academic field, ability to know and understand), knowledge of how to understand (practical and operational application of knowledge to specific situations), knowledge of how to be (values as an internal part of the way of perception and life with others in a social context) [10].

Within the framework of the competence-based approach education and training become integrated, multifactorial. Educated students are transferred not only knowledge and skills and not all the knowledge and skills, but only those that are needed to develop the necessary competencies. Psychological preparation is also being developed, concrete algorithm of effective activity are being accumulated. A competence-based approach to learning and education is very targeted by nature. Not just a general practitioner is trained but a person who will be well able to perform a very specific circle of work.

This approach to the definition of core competencies is consistent with the understanding of the fundamental goals of education set forth in UNESCO documents:

- educate to gain knowledge (educate to learn);
- educate to work and earn (teaching for labor);
- educate to live (teaching for being);
- educate to live together (teaching for living together).

Analysis of the scientific literature has shown that:

1. Competence is a paradigm of practical activity.
2. Competence is the level of mastering productive activities.
3. Competence is the testing objects of individual qualification.
4. Competence is the specific strategy of successful activities that provide for solving problems, overcoming obstacles and achieving goals.

Professional competence is an integrated personal resource that ensures successful activity due to learned effective strategies. Professional competence consists of competency which is provided by competences and is found in competencies. In Table we showed the basic approaches to the definition of the term «professional competence of an educational psychologist» existing in pedagogical science and defined the components of professional competence, that is professional competency.

Table

Approaches of various authors to the definition of «professional competence of the educational psychologist»

Authors	Definition of concept 'professional competence'	Components of professional competence (professional competencies)
1	2	3
E.I. Rogova	Professionalism (connects the concepts of professionalism and competence) - is a set of psycho-physiological, psychological and personal changes occurring in the teacher's process of mastering and long-term performance of activities providing a qualitatively new, more effective level of solving complex professional problems in special conditions	<ul style="list-style-type: none"> <li>– cognitive;</li> <li>– emotional and valuable;</li> <li>– practical (activity)</li> </ul>
A.K. Markova	Professionally competent is such work of an educator in which pedagogical activity and pedagogical communication are carried out at a sufficient high level, the personality of a teacher of pre-school education is realized in which good results are achieved in the training and education of children. A.K.Markova identifies the dominant block of professional competence of the educator – the personality which highlights in the structure: 1) personality motivation (orientation of the personality and its types); 2) properties (pedagogical abilities, character and his features, psychological processes and state of the individual); 3) integral characteristics of the personality (pedagogical self-consciousness, individual style, creativity as a creative potential)	<ul style="list-style-type: none"> <li>– professional (objectively necessary) pedagogical knowledge (Gnostic component);</li> <li>– professional pedagogical positions, educator's installations required in his profession (valuable – semantic component);</li> <li>– professional (objectively necessary) pedagogical skills (activity component);</li> <li>– personal characteristics that ensure the mastery of professional knowledge and skills (personality component)</li> </ul>

1	2	3
L.M. Mitina	The concept «pedagogical competence» includes knowledge, skills, abilities as well as methods and techniques for their implementation in activities, communication, development (self-development) of personality	<ul style="list-style-type: none"> <li>– Activity</li> <li>– Communicative</li> <li>– Social</li> </ul>
N.V. Kuzmina	The ability of the educator is to transform the specialty into the means of forming a student's personality, taking into account the restrictions and prescriptions imposed on the educational process by the requirements of the pedagogical standard in which it is carried out	<p>Special and professional competence in the field of the educating discipline.</p> <p>Methodological competence in the field of methods forming student's knowledge and skills.</p> <p>Social-psychological competence in the field of communication processes.</p> <p>Auto psychological competence in the field of advantages of their own activities and personality</p>

The analysis of scientific literatures shows that scientists studying the problem of educator's competence use in their investigation the term «professional competence» (B.S. Gershunsky, T.V. Dobudko, A.K. Markova) or the term «pedagogical competence» (L.M. Mitina), or use both terms (N.N. Lobanova). Sometimes these terms are combined by analog with professional and pedagogical activity as «professional and pedagogical competence» (Yu.N. Kulyutkin, G.S. Sukhobskaya) [11].

In this way the main features of the competence-based approach to the training of specialists are:

- society general and personal significance of the formed knowledge, skills, abilities, qualities and ways of productive activity»;
- a clear definition of the goals of professional and personal development, expressed in behavioral and evaluative terms;
- identification of certain competencies, which are also the goals of personal development;
- the formation of competencies as a set of semantic orientations based on the comprehension of the national and universal culture;
- the presence of a clear system of measurement criteria that can be processed by statistical methods;
- offering pedagogical support to forming personality and creation for it «a zone of success»;
- individualization of the strategy selection program to achieve the goal;
- creating situations for complex testing the skills of practical use of knowledge and the acquisition of valuable life experience;
- integrative characteristics for manifestations of the personality, associated with its ability to improve existing knowledge, skills and ways of activity as socialization and accumulation of life experience .

In the State Compulsory Standard of Higher Professional Education it is noted that Bachelors in the specialty 5B010300 – Pedagogy and Psychology [12] can perform the following types of professional activities:

- organizational and technological;
- production and management;
- projecting;
- scientific research;
- educational.

Basing on these student should have professional competencies corresponding to the main types of professional activity as organization of the process of training and education based secondary institutions; in any type of scientific research organizations, modeling and implementation of scientific research projects, as well as teaching Pedagogy and Psychology, training and retraining of staff, interaction and ability to maintain a «subject-subject» relationship. Namely the content of the professional activity of an educator-psychologist includes the organization of psychological and pedagogical process at the level of the requirements of pedagogical science and practice, working with parents of students, communication with extracurricular educational institutions, scientific-methodological communication with extracurricular educational institutions,

scientific-methodological communication with colleges, implementation of the goal and objectives of the Concepts for the Development of Education of the Republic of Kazakhstan.

Basing on these student should have professional competencies corresponding to the main types of professional activity as organization of the process of training and education based on pedagogical technology; modeling of education in secondary schools and special secondary institutions; in any type of scientific research organizations, modeling and implementation of scientific research projects, as well as teaching Pedagogy and Psychology, training and retraining of staff, interaction and ability to maintain a «subject-subject» relationship. Namely the content of the professional activity of an educator-psychologist includes the organization of psychological and pedagogical process at the level of the requirements of pedagogical science and practice, working with parents of students, communication with extracurricular educational institutions, scientific-methodological communication with colleagues, implementation of the goal and objectives of the Concepts for the Development of Education of the Republic of Kazakhstan.

Based on the theoretical principles we can identify a number of professional competencies of the future educational psychologist allowing him to carry out the training and development of schoolchildren and students of secondary special institutions:

a) social competence: the ability of personality to exchange information, to express his needs and interests, to show tolerance to other people and their opinions, to have a certain emotional stability, to be able to provide various assistance to other people, to participate in a team work;

b) cognitive competencies: independently process information, concentrate on studies or work, transfer learned methods of learning to new situations, find sources of information, independently process and structure information etc;

operational competencies:

c) operational competencies: to determine goal and work procedures, to be able to deal with uncertainty and lack of assurance, to be able to make and implement decisions, summarize the results of work, determine the time for work;

d) special competencies are to plan methods for solving problems, to practice self-control, to have professional activity, to adapt flexibly in new situations, to evaluate and correct plans, to identify errors and to find adequate ways to eliminate them [13, 14].

Professional competencies are the basis for introduction of a competence-based approach into the pedagogical process, which allows the educational psychologist of an educational institution to integrate knowledge, skills, abilities and intellectual abilities in the implementation of innovative activities and practical application of modern education technologies [15].

The implementation of the competence-based approach in the system of advanced training allows considering the problem of the quality of training of specialists from a new approach. The basic criterion for assessing the quality of education is professional competence as «the integral characteristic of a specialist» which determines his ability to solve professional activity using knowledge and life experience, values and inclinations. Ability in this case is understood not as a predisposition but as a skill [16, 17].

Professional competencies are formed in activities and always manifest themselves in organic unity with human values, since only under the condition of a value attitude to activities and personal interest a high professional result is achieved [18, 19].

In this way the educating profession is both transformed and governing. In order to manage the development of personality everyone needs to be competent. The concept of professional competence and professional competency of an educational psychologist expresses the unity of his theoretical and practical readiness for pedagogical activity and characterizes his professionalism. The professional competencies of the future educational psychologist are a multi-factor phenomenon that includes the system of theoretical knowledge of a teacher and how they are used in specific pedagogical situations, teacher's value orientations as well as integrative indicators of his culture (speech, style of communication and relation towards themselves and their activities, knowledge with related area etc).

## References

1 Зимняя И.А. Ключевые компетенции — новая парадигма результата образования / И.А. Зимняя // Высшее образование сегодня. — 2003. — № 5. — С. 34–42.

2 Вербицкий А.А. Активное обучение в высшей школе: контекстный подход / А.А. Вербицкий. — М.: Высш. шк., 1991. — 207 с.

- 3 Кузьмина Н.В. Профессионализм педагогической деятельности / Н.В. Кузьмина, А.А. Реан. — СПб.: Знамя, 1993. — 154 с.
- 4 Шишов С.Е. Компетентностный подход к образованию: прихоть или необходимость? / С.Е. Шишов, И.Г. Агапов // Стандарты и мониторинг в образовании. — 2002. — № 2. — С. 58–62.
- 5 Селевко Г.К. Современные образовательные технологии: учеб. пос. / Г.К. Селевко. — М.: Народное образование, 1998. — 256 с.
- 6 Хуторский А.В. Ключевые компетенции как компонент личностно-ориентированной парадигмы образования / А.В. Хуторский // Народное образование. — № 2. — 2003. — С. 58–64
- 7 Варданян Ю.В. Становление и развитие профессиональной компетентности педагога и психолога / Ю.В. Варданян / под науч. ред. В.А. Сластенина. — М.: Изд-во МПГУ, 1998. — 180 с.
- 8 Таубаева Ш.Т. Педагогическая инноватика как теория и практика нововведений в системе образования / Ш.Т. Таубаева, С.Н. Лактионова. — Алматы, 2001. — С. 24–26.
- 9 20 лет программе TEMPUS // Альма-матер. — Спецвып. — 2010. — № 9. — С. 2–80.
- 10 Байденко В.И. Болонский процесс: поиск общности европейских систем высшего образования (проект TUNING) / В.И. Байденко. — М., 2009. — 217 с.
- 11 Компетентностный подход в педагогическом образовании: колл. моногр. / под ред. В.А. Козырева, Н.Ф. Радионовой, А.П. Тряпицной. — СПб., 2005. — 240.
- 12 Государственный общеобязательный стандарт высшего образования / утв. Постановлением Правительства Республики Казахстан от 23 августа 2012 года № 1080.
- 13 Заир-Бек Е. Подготовка специалистов в области образования к участию и использованию международных программ оценки качества образования для всех: национальное видение [Электронный ресурс] / Е. Заир-Бек, А. Тряпицына. — Режим доступа: [http://www.gumer.info/bibliotek\\_Buks/Pedagog/zair/](http://www.gumer.info/bibliotek_Buks/Pedagog/zair/).
- 14 Жакашов Н.Ж. Теория компетенции как основа достижения лучших результатов в образовательном процессе [Электронный ресурс] / Н.Ж. Жакашов, А.Е. Ержанова, Г.Ю. Пругло. — Режим доступа: [http://www.rusnauka.com/6\\_NITSHV\\_2011/Medecine/13\\_80738.doc.htm](http://www.rusnauka.com/6_NITSHV_2011/Medecine/13_80738.doc.htm)
- 15 Майгельдиева Ш.М. К вопросу о понятиях компетенции, компетентности и компетентностном подходе к обучению / Ш.М. Майгельдиева // Вестн. КазНПУ им. Абая. Сер. Педагогические науки. — 2016. — № 1. — С. 76–80.
- 16 Архабаева Д.А. Болашақ мамандардың кәсіби құзыреттілігін қалыптастырудың педагогикалық негіздері // Білім берудегі қазіргі зерттеулер: теория, әдіснама, практика: Халықарал. қашықтықтан өткізілетін ғыл.-практ. конф. материалдары. — Ақтөбе, 15 наурыз, 2017. — 214–216-б.
- 17 Omarov D. On the Problem of Formation of the Future Teacher's Willingness to the Museum Materials / D. Omarov, Sh. Maigeldiyeva, ets. // IJME MATHEMATICS EDUCATION. — 2016. — Vol. 11. — No. 6. — P. 1607–1620.
- 18 Тәжіғұлова Г.О. Жоғары оқу орнының білім беру үрдісі / Г.О. Тәжіғұлова, Г.С. Шрайманова, Д.Қ. Бәкей, Б.А. Нуркеева // Қарағанды ун-нің хабаршысы. Педагогика Сер. — 2017. — № 4(88). — С. 55–59.
- 19 Tran L.U. Teaching science in museums: The pedagogy and goals of museum educators / L.U. Tran // Science Education. — 2007. — No. 91(2). — P. 278–297.

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### Педагог-психологтың кәсіби құзыреттілігі мен құзыреті туралы

Мақала авторлары ғылыми-әдіснамалық тұрғыдан педагог-психологтың кәсіби құзыреттілігінің мазмұны мен құрылымын көрсетіп отыр. «Бүгінгі күні білім берудің педагогикасында негізгі ұғымдар — «құзырет» және «құзыреттілік», — деп пайымдайды авторлар. Сол себептен олар аталған ұғымдарды түсіну үшін шетелдік және отандық ғалымдардың әртүрлі пікірлерін сұрыптап беруде. Бұл мәселені жан-жақты зерттеуге авторлардың еуропалық жобаға, ғылыми семинарларға қатысуы үлкен көмек берді. Осыған орай, авторлар құзырет пен құзыреттілік білім мен дағдыға негізделгенін білдіретін пайымдады, бірақ құзыреттілік нәтижелерге, пәнге, объектіге, процеске және құралдарға сүйенетінін көрсетіп отыр. Құзыреттілік тәсілдері туралы айтқан кезде олар күтілетін оқу нәтижесі студенттердің құзыреті мен құзыреттілігі екенін ескереді. Жалпы алғанда, құзыреттілік тәсіл — бұл мақсаттарды анықтау, мазмұнды таңдау, оқу процесін ұйымдастыру, білім беру технологияларын таңдау және нәтижелерді бағалау тәсілі. Осы пікірді ескере отырып, авторлар педагог-психологтың кәсіби біліктілігінің мазмұнын анықтады.

*Кілт сөздер:* педагог-психологтың кәсіби даярлығы, педагог-психологтың кәсіби қызметінің түрлері, жоғары білім беру, жоғарғы оқу орнындағы оқу үдерісі, бакалаврды дайындау, кәсіби құзыреттілік, тұғыр, кәсіби қызмет.

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## К вопросу о профессиональной компетентности и компетенции педагога-психолога

В статье с научно-методологической позиции раскрыты содержание и структура профессиональной компетентности педагога-психолога. Авторы подчеркивают, что в педагогике образования ключевыми понятиями сегодня являются понятия «компетенция» и «компетентность». Исходя из этого, предлагают различные мнения как зарубежных, так и отечественных ученых на понимание этих понятий. Изучение научного материала по данной проблеме, опыт работы в европейских проектах, участие в научных семинарах позволили авторам статьи констатировать, что и компетенция, и компетентность основываются на знаниях, умениях, навыках, но компетентность включает и отношение к результатам, субъекту, объекту, процессу деятельности и орудиям труда. Когда говорят о компетентностном подходе, имеют в виду, что ожидаемыми результатами обучения будут компетенции и компетентность обучающихся. В целом, компетентностный подход — это подход к определению: целей, отбору содержания, организации образовательного процесса, выбору образовательных технологий и оценке результатов. С учетом данного мнения авторы раскрывают содержание профессиональной компетентности педагога-психолога.

*Ключевые слова:* профессиональная подготовка педагога-психолога, виды профессиональной деятельности педагога-психолога, высшее образование, учебный процесс вуза, подготовка бакалавра, профессиональная компетентность, компетентностный подход, профессиональная деятельность.

### References

- 1 Zimnya, I.A. (2003). *Kliuchevye kompetentsii — novaia paradihma rezultata obrazovaniia* [Key competencies — a new paradigm of the result of education]. *Vysshee obrazovanie sehdnia – Higher education today*, 5, 34–42 [in Russian].
- 2 Verbitsky, A.A. (1991). *Aktivnoe obuchenie v vysshei shkole: kontekstnyi podkhod* [Active higher education: a contextual approach]. Moscow: Vysshaia shkola [in Russian].
- 3 Kuzmina, N.V., & Rean, A.A. (1993). *Professionalizm pedahohicheskoi deiatel'nosti* [Professionalism of pedagogical activity]. Saint Petersburg: Znamia [in Russian].
- 4 Shishov S.E., & Agapov, I.G. (2002). *Kompetentnostnyi podkhod k obrazovaniiu: prikhot ili neobkhodimost?* [Competence-based approach to education: whim or necessity?]. *Standarty i monitorinh v obrazovanii – Standards and monitoring in education*, 2, 58–62 [in Russian].
- 5 Selevko, G.K. (1998). *Sovremennye obrazovatelnye tekhnologii* [Modern educational technology]. Moscow: Narodnoe obrazovanie [in Russian].
- 6 Khutorsky, A.V. (2003). *Kliuchevye kompetentsii kak komponent lichnostno-orientirovannoi paradihmy obrazovaniia* [Key competencies as a component of the personality-oriented education paradigm]. *Narodnoe obrazovanie – Public Education*, 2, 58–64 [in Russian].
- 7 Vardanyan, Yu.V (1998). *Stanovlenie i razvitie professionalnoi kompetentnosti pedahoha i psikholoha* [Formation and development of professional competence of a teacher and psychologist]. V.A. Slstenin (Ed.). Moscow: Izdatel'stvo MPHU [in Russian].
- 8 Taubaeva, Sh.T., & Laktionova, S.N. (2003). *Pedahohicheskaia innovatika kak teoriia i praktika novovvedenii v sisteme obrazovaniia* [Pedagogical innovation as a theory and practice of innovations in the education system]. Almaty [in Russian].
- 9 20 let prohramme TEMPUS [20 years for the program TEMPUS (2010)]. Alma-mater – Alma-Mater. Special edition, 9, 2–80 [in Russian].
- 10 Baydenko, V.I. (2009). *Bolonskii protsess: poisk obshchnosti evropeiskikh sistem vyssheho obrazovaniia (proekt TUNINH)* [The Bologna Process: the search for common European systems of higher education (project TUNING)]. Moscow [in Russian].
- 11 Kozyrev, V.A., Radionova, N.F., & Tryapitsyna, A.P. (Eds.). (2005). *Kompetentnostnyi podkhod v pedahohicheskom obrazovanii* [Competence approach in pedagogical education]. Saint Petersburg [in Russian].
- 12 Hosudarstvennyi obshcheobiazatelnyi standart vyssheho obrazovaniia [State obligatory standard of higher education]. *Uverzhden Postanovleniem Pravitel'stva Respubliki Kazakhstan ot 23 avhusta 2012 hoda No. 1080 – Approved by the Government of the Republic of Kazakhstan, 23 August 2012, No. 1080* [in Russian].
- 13 Zaire-Bek, E., & Tryapitsyna, A. *Podgotovka spetsialistov v oblasti obrazovaniia k uchastiiu i ispolzovaniiu mezhdunarodnykh prohramm otsenki kachestva obrazovaniia dlia vsekh: natsionalnoe videnie* [Preparation of specialists in the field of education for participation and use of international programs for assessing the quality of education for all: a national vision]. *gumer.info*. Retrieved from [http://www.gumer.info/bibliotek\\_Buks/Pedagog/zair/](http://www.gumer.info/bibliotek_Buks/Pedagog/zair/) [in Russian].
- 14 Zhakashov, N.Zh., Erzhanova, A.E., & Pruglo, G.Yu. *Teoriia kompetentsii kak osnova dostizheniia luchshikh rezultatov v obrazovatel'nom protsesse* [The theory of competence as the basis for achieving the best results in the educational process]. *rusnauka.com*. Retrieved from [http://www.rusnauka.com/6\\_NITSHB\\_2011/Medecine/13\\_80738.doc.htm](http://www.rusnauka.com/6_NITSHB_2011/Medecine/13_80738.doc.htm) [in Russian].
- 15 Maigeldieva Sh.M. (2016). *K voprosu o poniatiiakh kompetentsii, kompetentnosti i kompetentnostnom podkhode k obucheniiu* [On the issue of the concepts of competence, competence and competence-based approach to training]. *Vestnik KazNPU imeni Abaia. Seriya Pedahohicheskie nauki – Bulletin of KazNPU named after Abay. Series Pedagogical sciences*, 1, 76–80 [in Russian].

16 Arkabayeva, D.A. (2017). Bolashak mamandardyn kasibi kuzyrettilihin kalyptastyrudyn pedahohikalyk nehizderi [The pedagogical bases for formation of professional competence of experts]. Proceedings from Modern research in education: theory, methodology, practice: *Khalykaralyk kashykyktan otkiziletin hylimi-praktikalyk konferentsiia – International distance scientific and practical conference*. (pp. 214–216). Aktobe [in Kazakh].

17 Omarov, D., Maigeldiyeva, Sh., & ets. (2016). On the Problem of Formation of the Future Teacher's Willingness to the Museum Materials. *IEJME Mathematics Education, Vol. 11, No. 6*, 1607–1620.

18 Tazhigulova, G.O, Shraymanova, G.S, Bakey, D.K., & Nurkeeva, B.A (2017). Zhohary oku ornynyn bilim beru urdisi [Educational process of higher education]. *Karahandy universitetinin khabarshysy. Pedahohika Seriiasy – Bulletin of Karaganda University. Pedagogy Series, 4 (88)*, 55–59 [in Kazakh].

19 Tran, L.U. (2007). Teaching science in museums [The pedagogy and goals of museum educators]. *Science Education, 91(2)*, 278–297.

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