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Methodical competency as a basis of methodical activities of a teacher of the higher school in modern conditions

Competencia metodológica: base metodológica de la actividad del docente de educación superior en las condiciones actuales

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ABSTRACT:

The relevance of the researched problem is caused by the fact that in the conditions of multi-level education the value of methodical activities of teachers of the higher school increased in preparation of highly qualified, competitive personnel in the system of higher education. Implementation of competencebased approach as goal-setting approach to results of training has brought up a question of compliance of methodical competency of teachers of higher education institutions to innovative processes of education. The present article is directed to reasons for methodical competency as a basic component of methodical activities of a teacher of a higher education institution characterizing its level of professionalism, exerting direct impact on quality of education. The leading approach to the research of this problem is the modeling that allows us to consider this problem as a process of purposeful and conscious mastering by teachers some specific competences to perform methodical activities at a high professional level. The structural-functional model of methodical competency is demonstrated in

RESUMEN:

La importancia del tema tratado, se debe a que en las condiciones de la educación multinivel, ha aumentado la relevancia de la actividad metodológica de los docentes de educación superior en cuanto a la preparación de personal altamente calificado y competitivo dentro del sistema de edcucación superior. La introducción de un efoque de competencia en calidad de un enfoque basado en objetivos para los resultados del aprendizaje, planteó el cuestionamiento sobre la conformidad de la competencia metodológica de los docentes universitarios en relación a los procesos innovadores en educación. El artículo tiene como objetivo, fundamentar la competencia metodológica como un componente básico de la actividad metodológica del docente de la universitario, que caracteriza su nivel de profesionalismo, y que tiene un impacto directo en la calidad de la educación. El enfoque principal para el estudio de este problema es el modelado, que permite tratarlo como un proceso dirigido y de consciente dominio por parte de los profesores de competencias específicas para llevar a cabo una actividad

the article; the content of each component is revealed; the features of development of each element of methodical competency are determined. The materials of the study can be useful to specialists of rule-making and practical activities in the sphere of the higher education in case of development and refining of functional obligations of the teacher of the higher school; in case of development of a model of advanced training of teachers; administrations of higher educational institutions and secondary vocational education institutions interested in training improvement of quality, to teachers of the higher school, persons interested to increase their professional level.

Keywords: Competence-based approach, methodical activities, methodical competency, competence, didactic competence

metodológica de alto nivel profesional. El artículo presenta un modelo estructural y funcional de competencia metodológica; es revelado el contenido de cada componente; determinados los aspectos específicos del desarrollo de cada elemento de competencia metodológica. Los materiales pueden ser útiles para especialistas en el establecimiento de normas y actividades prácticas en el campo de la educación superior, en el desarrollo y perfeccionamiento de las funciones de un docente de educación superior; al desarrollar un modelo para la actualización del personal docente; en la administración de instituciones de educación superior e instituciones de educación profesional secundaria, interesadas en mejorar la calidad de la educación, con profesores de educación superior, que deseen mejorar su nivel profesional.

Palabras clave: Enfoque de competencia, actividad metodológica, competencia metodológica, competencia didáctica

1. Introduction

World globalization in education led to the next stage of upgrade of the higher school in Russia. Innovative processes in the Russian system of higher education are connected not only with the introduction of new Federal State Educational Standards of Higher Education (FSES HE), but also implementation of multistage training of specialists. Transition to new educational standards, their fixed updating, and, above all, multi-level training of students inevitably involved changes in the structure and content of high school education. At the same time, the step education system brought a number of features in training process. Firstly, in new conditions it is supposed to describe the results of training by means of competences (competence-based approach). Competence-based approach is strategically conceptual for FSES, a goal-setting paradigm of education; therefore, competence is one of the main characteristics of level assessment of professionalism as specialists working with university graduates, and specialists performing a labour activity (a teacher). The competence-based model reflects requirements as to qualification of the specialist in the field of direct professional activity, and cross-disciplinary requirements in the form of universal competences (Zimnjaja, 2006). Secondly, implementation of these innovations inevitably entailed a number of essential contradictions. On the one hand, competence is one the purposes of education; on the other hand, there is no singe opinion on the concept of competence which means uncertainty of these purposes (Pechnikov & Prenzov, 2017; Khuziakhmetov & Nasibullov, 2016; Kong, Kayumova & Zakirova, 2017; Gorbunova & Sabirova, 2017; Gorbunova & Mokeyeva, 2017). A. Stoof, R.L. Martens & J.G. van Merrienboer (2007) suppose that "it is impossible to give only the correct interpretation of the concept "competence" because concepts such are symbolical images and unlike analog images can not be correlated to real-life objects". There is an opinion that "directive planting of the concept "competence" of the categorical and methodological device to our pedagogics in the scales and meanings observed today is unproductive, and even harmful (Chapaev, 2016). The same story is with concept definition "competency". The concept "competency" has a set of definitions because of distinctions of scientific approaches: personal-activity, system-based, contextual, and competence-based (Pechnikov & Prenzov, 2017). From our point of view, the main problem of competence-based approach is a tendency to move attention to the question "how to teach and what competences" students should have, but the question "what competences the teacher should have" remains open.

One more problem is connected with creation of competences both among students and teachers. Forming of competences among students cannot be connected only with development of theoretical courses presented to the student in a lecture (classroom) form. As a rule, competences are worked out by a combination of various forms of technologies of training – work on practical and seminar training; solution of practical tasks and problem situations; accomplishment of term papers and final qualification work; writing scientific articles, papers and essays; participation in seminars, conferences; participation in scientific

projects, etc. which are carried out by students (Solovova, 2012; Yakovleva & Krasilova, 2015). The efficiency of the applied pedagogical technologies which implementation creates competences of students in many respects depends on methodical activities of the faculty of higher education institution (Yakovleva & Krasilova, 2015; Fedorov, Stepanov & Stepanova, 2015; Khuziakhmetov & Gabdrakhmanova, 2016; Masalimova et al., 2017). Methodical activities, integrating theoretical knowledge and practical experience of educational (educational) activities which result is expressed by introduction of new techniques of training, educational literature, determines the content of education and allows to realize various technologies of training (Zimnjaja, 2006). In our opinion, methodical activities of the teacher are one of types of professional and pedagogical activities of the teacher of a higher education institution and complete the system of interconnected actions based on the analysis of the happening pedagogical processes directed to the development and enhancement, creation and implementation of new conditions, forms and methods of effective organization of an educational process, increase of methodical competency of a teacher, staff and higher education institution in general. The essence of methodical activities of the teacher consists in a link between science, production and education, in identification, creation and implementation of new semantic structures of knowledge, and their transfer to the forms available to levels of development of a training material of students. The analysis of an educational process in modern higher education institutions allowed to reveal an essential contradiction: the developed system of methodical activities doesn't conform to the requirements of education at the higher school in the conditions of multi-level training of students as methodical competency of teachers of higher education institution is insufficiently developed. That is why buildup of methodical competency of teachers of the Russian higher education institutions (especially non-pedagogical higher education institutions) becomes one of the key moments of implementation of reforms of upgrade of the higher education of Russia; i.e. creation of methodical materials based on competence-based approach presented in a modular format (educational and methodical complexes, education guidances, methodical instructions for writing of final qualification works, term thasis, etc.). On the one hand, new methodical materials shall consider the requirements of the Russian international labour markets; on the other hand, they shall include the methodical practices of the requirement of a Common European Education area which are being created today. In our opinion, the need for the solution of these problems has "ripened"; the researches in the field of management, psychology, pedagogics of the higher school, pedagogics of secondary professional education provides an evidence of it (Zagvyazinsky, 2010; Zimnjaja, 2006; Zeer, 2007; Solovova, 2012; Hutorskoj, 2013; Chapaev, 2016; Shushara & Khuziakhmetov, 2017; Ke, Borakova & Valiullina, 2017).

2. Methodological Framework

Research methods

In the course of the research the following methods are used: theoretical (analysis; synthesis; specification; generalization; method of analogies; modeling; historical and logical, method of designing and social-prognostic modeling) and empirical (observation, description, studying of documents). The methodological basis of the research is constituted by anthropological approach – in the problem resolution of forming of the competent developed identity of the teacher of the higher school; activity approach promotes detection of value of methodical competency of professionalism of the teacher of higher education institution; system approach designates structural content of methodical competency of the teacher of the higher school.

Experimental and research base of the study

As the research has program and theoretical character, the approaches and concepts of various authors to the problem of improvement of methodical activity of teachers of higher education institutions is principally studied.

Research stages

The research of the problem was carried out in three stages:

The 1st stage, theoretical-search: the analysis of the existing methodological approaches in philosophical, managerial, pedagogical scientific literature was performed; the problem, the aim, research methods were allocated; refining of the conceptual and methodological framework of a research was performed.

The 2nd stage, theoretical-modeling: the structure of methodical competency of a teacher of the higher school in the conditions of multi-level education was developed.

The 3rd stage, theoretical-analytical: the generalization of data of the studied pedagogical material was completed; the structure of methodical competency of the teacher of higher education institution was developed.

3. Results

The introduction of the new purposes of education in the conditions of multi-level education, the shift of emphases from content of education on results of education, inevitably entailed an increase not only of the level of subject and industry competency of teachers of the higher school, but also sharply increased the value of their methodical activities in active development of new productive technologies of training. A modern high school teacher is expected to possess an ability to develop the competence-based oriented modular educational programs, to perform diversified preparation at the level of a bachelor degree and a magistracy, to use widely the active and interactive training methods creating competences of students, to apply modern procedures of their estimation, to leave to adjacent areas of scientific knowledge and to strengthen an intersubject component in education content (Igropulo, 2012). In other words, the teacher of higher education institution in modern conditions is required to have not only subject preparation, but broad system of specific knowledge, abilities, skills and readiness of the teacher for their implementation in professional pedagogical activity, i.e. everything that constitutes methodical activities of the teacher. Methodical work is an independent type of the teacher on designing, development and designing, research of the tutorials allowing to perform regulation of the training and educational activities for a separate subject or a cycle of educational subjects (Erganova, 1998). We suppose that methodical activities of the teacher are one of the directions of professional and pedagogical activities of the teacher, caused by personal qualities and experience of the teacher, reflecting the level of the teacher's readiness for implementation of innovative pedagogical technologies and implemented through creation of a methodical product. The teacher realizes values, structure, and content of educational process through methodical activities; determines the purposes of activities of students during training.

The analysis of the labour functions of the faculty staff in the sphere of the higher education listed in the professional standard "Teacher of Professional Training, Professional Education and Additional Professional Education" confirmed regulations that methodical activity of the teacher of higher education institution is one of main types of work of teaching activities, but at the same time a number of contradictions can be found:

- implementation of methodical work requires the specialist of "higher qualification"; at the same time, there is no specification what field (organizational, scientific, teaching, methodical) the specialist of "higher qualification" should belong to;
- amount of methodical work of different positions of teachers differ depending on the level of training of students;
- implementation of teaching activities is possible only if the teacher has special (pedagogical!) education or academic degree;
- performance of methodical activities is possible only with the created methodical competency of the specific teacher and teachers in general.

The system of professional qualification development of teachers has been recently created in practice of higher school; it assumes the development not only of the pedagogical level,

but automatic methodical knowledge development (and in certain cases acquiring of the knowledge!). Unfortunately, there is no system of an objective efficiency evaluation of methodical activities of teachers of higher education institutions. So, there is no answer to the question: how existing practice of methodical activities of teachers of higher education institutions meets the needs of modern educational process for implementation of innovative techniques of teaching reforms of the higher education necessary for implementation? We offer application of competence-based approach in assessment of methodical activities of the teacher of higher education institution through assessment of his/her methodical competency. The importance and need of forming of methodical competency of the teacher of higher education institutions are demonstrated. The theoretical analysis of scientific literature on problems of development of the higher education, professional and pedagogical activities of the teacher of higher education institution (Andryukhina et al., 2016; Dorozhkin et al., 2016; Zimnjaja, 2006; Zagvyazinsky, 2010; Solovova, 2012; Hutorskoj, 2013; Chapaev, 2016; Chupina, Pleshakova & Konovalova, 2016) shows that today there is no consensus concerning interpretation of methodical competency and methodical competence of the teacher of higher education institution. Theoretical reasons for content, structure of methodical competency of the teacher of higher education institution, identification of organizational and pedagogical and psychology and pedagogical conditions of its forming are an important scientific and applied pedagogical task (Igropulo, 2012). The similarity of definitions is that all researchers agree that competence is determined as an objective condition, the set of requirements, set of powers, the rights and obligations, the generalized conduct providing an effective solution of objectives, and competency is an integrated characteristic of a person which is developed today as the system of installations, internal new growths of the person allowing to realize those competences (Nepochatyh, 2013). Methodical competency of the teacher of higher education institution is a set of theoretical and practical abilities, skills creating a capability of the teacher to find, apply, create various pedagogical forms, methods, technologies of training for forming of common cultural, general-professional, and professional competences of students.

Considering methodical competency from the point of view of system, the competency is the structure consisting of elements; from the point of view of competent approach, methodical activities – a group of competences. The French researcher of J. Cardinet (1986) claims that competence is a result of forming at the generalized level with the participation of several capabilities in one situation. Any person can independently create the competence, proceeding from a certain resource pool. Internal resources consist from: abilities, i.e. intellectual opportunities of an individual; practical abilities, i.e. opportunities of implementation of activities of practical feature; individual qualities, i.e. the amounts of special qualities of an individual; motivations factors that force an individual to work and pursue particular purposes. Internal resources include knowledge, abilities, capabilities, skills and valuable relations (Cardinet, 1986).

From the point of view of accomplishment of productive activity, in our opinion, methodical competency of the teacher of higher education institution consists of five competences that are presented in the Figure 1.

Figure 1

The structure of methodical competence of a teacher of a higher institution

	Methodical competency				
COMPTENCES					
Subject	Didactic	Organizational	Scientific	Social- psychological	Technical- instrumental

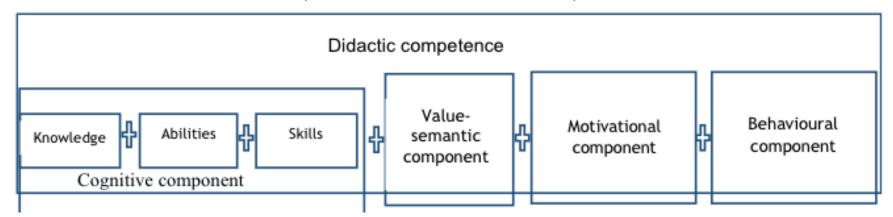
Following the Figure 1, it is obvious that methodical competency includes:

- *subject competence* reflects a set of special knowledge, abilities, skills and experience in area of the taught discipline, creating the information, substantial, structural content of an educational process;
- didactic competence characterizes a set of knowledge of common bases (laws) of pedagogics, forms, methods, technologies of training; mechanism, principles of the organization of an educational process: ownership of various forms, methods and acceptances of pedagogical activities taking into account the pedagogical capabilities, specifics of the taught discipline and the contingent of trainees, providing the high level of educational services;
- organizational competence reflects a capability of the teacher to organize own pedagogical activity, independent work of students and an educational process as the process of interaction of the teacher and student based on management knowledge, business communication; based on abilities to give laboratory researches, to direct degree and course designing, abilities to organize a work practice; to organize volunteer activities of students; to organize a discussion; to provide effective participation of students at lessons; to hold exams and pass-fail exams; skills of the organization and carrying out consultations and other forms of individual work of students;
- scientific competence characterizes the capability and readiness of the teacher for implementation of scientific work, activization of students for scientific activities; understanding and readiness of implementation of innovative processes in an educational process; knowledge of current trends of development of science in subject domain and in the field of pedagogics; ability to write scientific works (articles, theses, reports, etc.), skills of the publication of materials of scientific work; ownership of scientific written style, technologies of public speaking;
- social-psychological competence is focused on knowledge of bases of motivation, communication, psychology, laws of social communication, interaction with students: abilities to take wide active and various creative contacts concerning professional and pedagogical activity. This competence provides an effective interaction of educational process members;
- technical-instrumental competence reflects the created skills of the teacher to use modern technical means of training; knowledge of the software products used in training process, ability to draw up and use regulating documents.

We suppose that didactic competence is the basic competence determining "kernel", "base" of methodical competency; as through implementation of this competence, it is possible competence "to convey" necessary subject information to students in a correct and effective manner, to provide the maximum perception and assimilation of a training material. The analysis of the specific literature, comparison of structure and specifics of methodical

competence of different specialists-teachers of the higher school (Zimnjaja, 2006; Lyubotinsky, 2014; Solovova, 2012; Schedrovitsky, 2004) allowed us to allocate the main components (structural elements) of the competence. Substantially the structure of didactic competence consists of four components: cognitive, valuable- semantic, behavioural, and motivational (Figure 2).

Figure 2Component structure of the didactic competence



The cognitive component of didactic competence includes traditional knowledge model: knowledge of bases of methodological approach to the organization of an educational process taking into account various steps of training of students; main forms, methods, technologies of training; innovative technologies of training; techniques of development of control and estimative and control and measuring tutorials, etc.: the abilities including ability to choose the technologies appropriate for the purposes and tasks of training taking into account the level of training of students; creation of working programs for educational subjects due to the steps of students; organization of independent work of students with diagnostics of level of their proficiency; ability to solve problems, creative, suddenly arising pedagogical tasks, etc.: skills of ownership of a technique of the choice of optimum forms, methods, technologies and tutorials in specific conditions of an educational process; statements of new laboratory, practical works and their upgrade, taking into account different steps of training of students.

The cognitive component reflects the teacher's level as an educator, "powerful translator" of information; reflects degree of teacher's organizing abilities, abilities of oratory speaking, scientific letter; skills of establishment of interaction of the different subjects, groups having various sexual, age, intellectual, social characteristics. The valuable-semantic component reflects the personal attitude of the teacher towards didactic competence and includes professionally significant properties of the personality necessary for effective implementation of professional activity in the field of methodical activities and enables to work responsibly and independently The valuable-semantic component also involves responsibility, an orientation on acquisition of knowledge, aspiration to self-improvement, and a capability to introspection, to a self-assessment, self-checking, self-diagnostics; a possibility of the independent creative problem resolution, arising in the course of pedagogical activities; manifestation of an active creative position in implementation of methodical activities. The behavioural component is shown in the complex of methodical abilities, skills; and, above all, experience in use of various technologies, forms, methods of tutorials, respect for the principles of training in standard and unusual pedagogical situations, taking into account psychological-age-related, cultural, behavioural features of students. The motivational component means availability of motivation in the field of development, improvement of methodical competency of the teacher, an orientation and readiness for acquisition of new knowledge in the field of methodical activities; the aspiration to be engaged in different types of methodical activities.

The level of didactic competence as the base of methodical competency reflects degree of formation of a methodical component in professional pedagogical activity of the teacher of higher education institution.

Subject, organizational, social-psychological, technical and instrumental competences of methodical competency of the teacher are created or can be created in the course of practical activities, not necessarily pedagogical one. The main competence is didactic; it is the result of training in pedagogical higher education institution or can be obtained in the course of accumulating of pedagogical experience. Forming of primary bases (knowledge, abilities, and skills) of didactic competence in the course of implementation of professional pedagogical activity is the process that requires a long time, which is followed by the method of "tests and mistakes" and leads to education quality reduction.

Formation and/or improvement of didactic competence is preferably recommended to conduct on the basis of conscious motivation of a teacher to acquisition of this knowledge, readiness of the teacher to become a "pupil"; but the most important, availability of the "carrier" of methodical knowledge who is ready to transfer this information, in other words, "a tutor for teachers". Such "carriers", as a rule, are the most experienced teachers, but there are not so many of them in our pedagogical society. The problem of reducing the period of interiorization of a methodical component in professional activity of the teacher in a phase of exteriorization is possible by creation of a purposeful intra high school training system of teachers of methodical activities through creation special subdivision at university – methodical service.

4. Discussions

The studying of scientific works on problems of increase and formation of methodical competency as bases of methodical activities of a teacher of higher education institution allows to state the lack of the special researches devoted to the problem of formation, improvement of methodical competency of teachers of the higher school. However, in our research we relied on the works devoted to methodical activities of teachers in secondary (school) and secondary vocational education, the researches connected with questions of competency and competences, in particular, questions of methodical competency. It allowed us to consider the studied question at the level of the higher education. The questions of essence and specific features of methodical activities were considered by J.A. Komenský (1988), J.H. Pestalozzi (1990), P.F. Kapterev (1885/1989), K.D. Ushinskiy (1867) and J.F. Herbart (1835). These schoolmasters saw the tasks of these activities in creation of methods and techniques on the basis of knowledge of a subject and took into account age peculiarities of children, in improvement of training methods of a specific subject.

The content of methodical activity in the higher education was widely considered by N.E. Erganova (1998). In the studies she hasn't just formulated the definition of methodical activity of the teacher of higher education institution, but also has defined a subject, an object of methodical activity. In the work "A Phenomenon of Methodical Activity in the Conditions of Formation and Development of Technology of Training" N.E. Erganova (1998) has deeply analysed intrinsic, functional and morphological characteristics of methodical activity of the teacher of professional education (Chapaev, 2016).

At the end of the 20th century due to the using and development of competence-based approach in the Russian education, the terms "competence" and "competency" began to be applied to the assessment of result of training, and then were fixed in regulating documents of the state educational standards of the third generation. The detailed analysis of this problem can be observed in a number of researches in the field of pedagogics and psychology of education and professional activity (Zeer, 2007; Zagvyazinsky, 2010; Zimnjaja, 2006; Hutorskoj, 2013); those studies and publications allowed the authors to differentiate the concepts "competence" and "competency" and to fill them with the content answering new educational policy (Nepochatyh, 2013).

T.A. Zagrivnaya (2008), N.V. Kuzmina (1990), T.V. Syasina (2005), N.V. Solovova (2012), O.A. Plaksina & T.A Matveyeva (2012) dealt with issues of methodical competency and gave clear and logical reasons for the need of methodical work in the structure of professional and pedagogical activities of the teacher of higher education institution. In the scientific researches the specialists considered the types of methodical activities which are performed by a teacher of higher education institution; they allocated component elements of methodical competency of the teacher. The aim of identification of the main competences that form methodical competency of the teacher of higher education institution was set in this article on the basis of the available results of scientific research.

5. Conclusion

From our research it is possible to draw the following conclusions:

- A) Methodical activities as an important component of pedagogical activities of the teacher of the higher school act as a goal-setting factor of the training process in the conditions of competence-based approach. The teacher performing methodical activities determines the values of activities of students during training.
- B) Nowadays there is a contradiction between the labour functions performed by the faculty staff of higher education institution, stated in the professional standard "Teacher of Professional Training, Professional Education and Additional Professional Education" and availability of a "specialist of a higher qualification" on methodical activities.
- C) Implementation of competence-based approach in the system of higher education allowed to determine the purposes of education and to establish estimative performance indicators of training through assessment of the created competences among students. At the same time, there is no system of assessment of a level of efficiency of pedagogical activities of a teacher of the higher school, in particular assessment of methodical activities. The application of competence-based approach to assessment of methodical activities of the teacher of higher education institution by assessment of his/her methodical competence is supposed.
- D) Methodical competency is the integrated characteristic, set of the certain specific characteristics which are shown in implementation of competences; it consists of five main competences; didactic competence is the main one, which structural substantially includes four components: cognitive, valuable-semantic, motivational, and behavioural.
- E) Purposeful training of teachers of higher education institutions for conscious designing of the methodical activities isn't performed in higher schools; there is no system of improvement of methodical competency level of teachers of higher education institutions; so, it generates a contradiction between the needs of teachers for implementation of the methodical activities and ignorance, inability to perform such type of activity, and, above all, in assessment of such activities.

6. Recommendations

The materials of the present publication will be interesting to scientific and practical educators; administrations of educational institutions interested in professional development of the faculty; to the teachers desiring to increase the level of pedagogical professionalism.

Bibliographic references

Andryukhina, L. M., Dneprov, S. A., Sumina, T. G., Zimina, E. Y., Utkina, S. N. & Mantulenko, V. V. (2016). Vocational Pedagogical Competencies of a Professor in the Secondary Vocational Education System: Approbation of Monitoring Model. *International Journal of Environmental and Science Education*, 11(14), 7045-7065.

Cardinet, J. (1986). Evaluation scolaire et mesure. Bruxelles: De Boeck univ.

Chapaev, N. K. (2016). Activity-based principle implementation in the methodological concept of N. E. Jerganova. *The Education and science journal*, 7, 26-39.

Chupina, V. A., Pleshakova, A. Y. & Konovalova, M. E. (2016). Methodological and Pedagogical Potential of Reflection in Development of Contemporary Didactics. *International Journal of Environmental and Science Education*, 11(14), 6988-6998.

Dorozhkin, E. M., Tarasyuk, O. V., Sinkina, E. A., Deryabina, E. M. & Sisimbaeva, V. S. (2016). Professional Competencies Development of Competitive Bachelors in Machine Engineering. *International Journal of Environmental and Science Education*, 11(16), 9300-9312.

Erganova, N. E. (1998). A Phenomenon of Methodical Activities in the Conditions of Formation and Development of Technologies of Training. *Increase in the Academic Level of*

- Educational Institutions on the Basis of New Educational Technologies: Collection of Theses. Ekaterinburg: Publishing House of the Russian State Vocational Pedagogical University.
- Fedorov, V. A., Stepanov, A. V. & Stepanova, T. M. (2015). Composite pedagogical staff-clusters as a condition of department educational and methodical work development. *The Education and science journal*, 1(9), 36-50.
- Gorbunova, N. V. & Mokeyeva, E. V. (2017). Innovative Educational Environment of Higher Educational Institution. *Man In India*, 97(15), 21-40.
- Gorbunova, N. V. & Sabirova, E. G. (2017). Pedagogical Design of Future Teachers' Personal and Professional Route. *Man In India*, 97(14), 217-226.
- Herbart, J. F.(1835). Review of Pedagogical Lectures. Moscow: Publishing house Lenizdat Hutorskoj, A. V. (2013). Competence-based approach in education. Moscow: Jejdos.
- Igropulo, I. O. (2012). About structure of methodical competence of the teacher of higher education institution upon transition to educational standards of new generation. *Journal Global International Scientific*, 9, 33-37
- Kapterev, P. F. (1885/1989). Didactic Reviews. Moscow: Sense.
- Ke, Z., Borakova, N. U. & Valiullina, G. V. (2017). Peculiarities of Psychological Competence Formation of University Teachers in Inclusive Educational Environment. *EURASIA Journal of Mathematics, Science and Technology Education*, 13(8), 4701-4713.
- Khuziakhmetov, A. N. & Gabdrakhmanova, R. G. (2016). Creativity in Joint Activity of Teacher and Student in the Learning Process. *IEJME-Mathematics Education*, 11(4), 735-745.
- Khuziakhmetov, A. N. & Nasibullov, R. R. (2016). Dialectics of Correlation of the School Student Personality Socialization and Individualization in Pedagogical Theory and Practice. *IEJME-Mathematics Education*, 11(4), 475-487.
- Komenský, J. A. (1988). Didactica Magna. Moscow: Pedagogy
- Kong Y., Kayumova, L. R. & Zakirova, V. G. (2017). Simulation Technologies in Preparing Teachers to Deal with Risks. *EURASIA Journal of Mathematics, Science and Technology Education*, 13(8), 4753-4763.
- Kuzmina, N. V. (1990). Professionalism of the identity of the teacher and training officer. Moscow: Higher School.
- Lyubotinsky, A. A. (2014). Structurally Functional Model of Methodical Competence of Future Teachers of Foreign Language in the Conditions of the Innovative Educational Environment. *Young Scientist*, 8, 820-825.
- Masalimova, A. R., Levina, E. Y., Platonova, R. I., Yakubenko, K. Yu., Mamitova, N. V., Arzumanova, L. L., Grebennikov, V. V. & Marchuk, N. N. (2017). Cognitive Simulation as Integrated Innovative Technology in Teaching of Social and Humanitarian Disciplines. *EURASIA Journal of Mathematics, Science and Technology Education*, 13(8), 4915-4928.
- Nepochatyh, E. E. (2013). Development of Ideas of the Concepts "Competency" and "Competence". *Scientific Journal*, 20, 244-249.
- Pechnikov, A. N. & Prenzov, A. V. (2017). The approach to assessing the formation of special competences. *The Education and science journal*, 19(5), 28-54.
- Pestalozzi, J. H. (1990). Swan Song. Moscow: Sense.
- Plaksina, O. A. & Matveyeva, T. A. (2012). Organizing the methodology work at higher school. *The Education and science journal*, 4(2), 14-22.
- Schedrovitsky, G. P. (2004). Competences and competency. *Higher Education Today*, 8, 36-41.
- Shushara, T. V. & Khuziakhmetov, A. N. (2017). The Problem of Professional Orientation of Youth: Trends and Prospects. *Man in India*, *97*(14), 197-205.
- Solovova, N. V (2012). Management of methodical activities in sales terms of innovative methodical tasks (Doctoral thesis). Russia, Samara: Samara State University.

Stoof, A., Martens, R. L., van Merrienboer, J. G. (2007). What is a competence? Constructivist approach as an exit from confusion. Transl. from English by N. Orjol. Netherlands: Open University of the Netherlands.

Syasina, T. V. (2005). Forming of methodical competence of future teacher: PhD Thesis. Komsomolsk-on-Amur: State Pedagogical University.

Ushinskiy, K. D. (1867). Human Being as a Subject of Upbringing. Moscow: Sense.

Yakovleva, E. N. & Krasilova, I. Y. (2015). From the experience of teacher certification in foreign countries. *The Education and science journal*, *9*, 147-160.

Zagrivnaya, T. A. (2008). Formation of scientific and methodical competence of teachers in the course of formation of professional activity: PhD Thesis. Saint-Petersburg: Institute of Education of Adults of the Russian Academy of Education.

Zagvyazinsky, V. I. (2010). About competence-based approach and its role in improvement of higher education. Novosibirsk: Publishing Academy.

Zeer, E. F. (2007). Realization of competence-based approach in professional education. Ekaterinburg: Publishing House of the Russian State Vocational Pedagogical University.

Zimnjaja, I. A. (2006). Core Competencies - a New Paradigm of Result of Modern Education. *Scientific and Methodical Online Journal "Jejdos"*, 8, 1-8.

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