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## СБОРНИКИ КОНФЕРЕНЦИЙ

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#### ПОДРОБНЕЕ

#### ORGANIZATION OF INDEPENDENT WORK OF BACHELORS USING DISTANCE LEARNING ENVIRONMENT MOODLE

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**Summary.** In the article are considered theoretical aspects of organization the independent work of bachelors in the training Moodle environment. Also use of various elements and resources of an educational platform reveal is disclosed. Novelty of this work is to determine the specifics of training potential Moodle in the formation of self-competence bachelors by changing the approach to organization of independent work.

**Keywords:** independent work; competence-based approach; distance learning; the training Moodle environment; modules of an educational platform; interactive elements of a course; competence of self-education.

#### 1. Introduction.

The systemic changes that have occurred in the Russian system of higher professional education in connection with the implementation of the provisions of the Bologna Declaration have determined its new guidelines. The transition to a new generation of federal state educational standards (FSES) has led to an increase in the role and volume of independent work (SR) of students at all levels of higher education (HE), an increase in their responsibility for the results of educational and scientific activities. The basis for the implementation of the FGOS was the competence-based approach, which predetermined the need to search for innovative ways of organizing the SR of bachelors. In the practice of Russian higher education, the greatest preference in solving this issue is given to elearning and distance educational technologies. This is confirmed by numerous studies by scientists. A study conducted by Tuninga and Seinen (Tuninga R. S. and Seinen I. B.) identifies the advantages of Moodle in comparison with other existing models and options for distance learning in organizing the activities of foreign educational institutions [10].

The Moodle technology platform has gained particular popularity and distribution not only in many educational systems around the world, but also in Russia. The potential capabilities of the modular object-oriented dynamic learning environment Moodle make it possible to form the competencies of bachelors in the course of organizing their SR.

Within the framework of our study, the potential of the Moodle learning environment in the formation of the competence of self-education of bachelors in the course of organizing their independent work based on the competencebased approach is determined. The effectiveness of the research is substantiated through the developed author's courses in the Moodle distance learning system. In the study, we proceed from considering the general cultural competence of self-education as one of the most relevant at the bachelor's level, on the basis of the formation of which the successful development of the rest is ensured.

It is defined by us as key (over-professional) due to the need for its formation among bachelors in accordance with the FGOS VO, regardless of the specific direction and level of their training.

On the basis of the analysis of scientific and pedagogical literature, it was shown that the rethinking of the established forms and methods of SR implementation in higher education took place at each new stage of the scientific development of pedagogy in accordance with the changing socio-economic conditions [4; 8].

Familiarization with foreign experience in the implementation of educational programs in higher education, focused on learning outcomes in the form of competencies, made it possible to correlate the basic educational programs (OPPO) implemented in the system of Russian higher education and the requirements for their development at the bachelor's level, with a set of competencies developed in the methodology of the pan-European project TUNING [3].

Within the framework of our study, the correspondence of the designated competencies in the FGOS VO at the bachelor's level in various areas of training with competencies in the terminology of TUNING was carried out and the place of the competence of self-education was determined. Note that in the conditions of the dynamic development of modern society, the list of competencies indicated in the OPOP is periodically subject to revision and updating. At the same time, the competence of self-education (regardless of the formulation options) continues to remain relevant and its importance increases in the context of the redistribution of emphasis from educational activities of bachelors to self-education.

Generalization of the degree of elaboration of the problem of SR organization in modern domestic and foreign literature [1; 2; 9; 10], made it possible to conclude that, despite a significant amount of work devoted to its methodological and methodological aspects, it is necessary to deepen research into the possibilities of the Moodle learning environment in organizing bachelor's work, taking into account the requirements of the FGOS VO for the results of mastering basic educational programs (OPOP) in the form of competencies. Insufficient development in pedagogical science of the foundations of scientific and methodological support of bachelors in the formation of the competence of selfeducation using the technological elements and resources of the learning environment Moodle determined the relevance of the research.

#### 2. The purpose of the work.

The aim of the research is theoretical substantiation and experimental verification of the effectiveness of the formation of self-education competence in the course of organizing independent work of bachelors through the use of statistical resources and interactive elements of the Moodle learning environment. To achieve this goal, a number of research tasks were solved. Within the framework of this work, due to the limited volume, we briefly outline the results of the study that confirm the hypothesis put forward about the effectiveness of the formation of self-education competence in the Moodle learning environment.

#### 3. Materials and research methods.

Materials devoted to the prehistory of the development of the problem of SR organization based on the competence-based approach, in order to understand the main part of the work, were summarized in the Introduction section.

In the course of the study, in accordance with its objectives, a complex of various methods was used: theoretical – analysis of domestic and foreign scientific, methodological and psychological and pedagogical literature on the research problem, study and analysis of documents on vocational education, including the Federal State Educational Standard of Higher Education, theoretical generalization of the results research; empirical – the study, analysis and generalization of the pedagogical experience of foreign and domestic higher education, modeling the process of organizing SR in the Moodle environment, pedagogical experiment; statistical – statistical analysis and interpretation of research results, and their mathematical processing.

In the theoretical part of the study, on the basis of a comparative analysis, the existing discrepancies in the very interpretation of the concept of "competence" in the legislative educational documents of Russia and the European Union were revealed. In Russian documents, competencies are integral in nature, and their systemic effect is provided not by a separate discipline, but by a set of modules (disciplines), practice, high professional level of teachers and the educational environment of the university as a whole. The competences in the documents of the European Union are formulated taking into account the request of employers and reflect the interests of economic efficiency. As W. Hutmacher emphasizes, the concept of "competence" has not been precisely defined in terms of content today [10]. However, according to the scientist, most foreign researchers agree that the meaning of the concept of "competence" can be conveyed using the expressions "I know how" and "I know what" and further concludes that "use is competence in action" [10].

A short and capacious definition was proposed by K. Keen, who understands competence as "the ability to manage a situation, including an unforeseen one" [10]. Even this insignificant excursion into the materials devoted to the theoretical analysis of the concept of "competence" allows one to come to the conclusion that there is no common understanding of it by both domestic and foreign researchers. Along with this, at the same time, we can conclude that with regard to understanding the essence of this concept, there is a similarity in the works of various foreign and domestic scientists.

The concept of competence proposed in the European educational project TUNING is based on the requirements required in a specific field of professional activity [3]. Thus, within the framework of the study, the area of professional activity of graduates of the bachelor's program in the field of training 44.03.05 Pedagogical education includes education, social sphere and culture. In accordance with this, the lists of competencies indicated in the FGOS VO are significant for the implementation of pedagogical, project, research, cultural and educational activities for which they are preparing.

Based on the comparative analysis, similarities and differences were identified in relation to the classification of competencies. Comparison of the set of competencies specified in the documents of the European Union and indicated in the FGOS VO in the field of training 03/04/05 Pedagogical education showed their coincidence in the main parameters, but also a greater discrepancy in relation to the classification itself and stylistic, textual design. The wording in the documents of the European Union is of an enlarged and generalized character, while in the Russian version, a great deal of concretization is noticeable.

As part of the study, we were interested in the presence in the Russian and European variants of competencies related to the implementation of students' independent work. To this end, we focused on systemic competencies, which in the understanding of the European community are identified as the ability to work independently. This ability in the form of competence is considered as a mandatory requirement for the results of mastering the educational program by graduates.

Considering its importance, the Ministry of Education and Science of the Russian Federation for all FGOS VO proposed the term "general cultural competences" ("universal competences" for the third level of VO), the list of which includes competencies with an attitude to independent work, which makes it possible to state the fact that these legislative documents comply with European requirements in the framework of the Bologna Agreement. In the FGOS VO for the selected bachelor's programs, general cultural competence is indicated, included in the set of required results of mastering the bachelor's program, and formulated as the ability to self-organization and self-education (OK-6 / OK-7).

For the correct establishment of the levels of formation of the competence of self-education, its simple formulation is not enough and more complete information is required. To this end, it was necessary to develop a passport and a program for the formation of the competence of self-education. Such work allows us to identify the importance of the competence of self-education even at the design stage of OOP and rationally distribute temporary, material and technical, educational and methodological and human resources, taking into account the requirements of the FGOS VO for the conditions of its implementation.

Based on the analysis of the state of real university practice of organizing independent work and long-term practice of working with students, it was possible to reveal the inadequacy of self-education skills by bachelors. In this regard, there has been an increased interest in the use of e-learning and distance learning technologies in the course of the SR. As part of our research, it has been shown that among them, the Moodle learning environment has the greatest advantages in organizing the SR of bachelors. They are manifested in the provision of an opportunity, on the one hand, for students to actively complete various tasks in the course of mastering the modules of the discipline from any place and at a convenient time, and on the other hand, in creating conditions for the formation of general professional competence of self-education during the implementation of all types of disciplinary and interdisciplinary training. provided by OPOP.

The research was carried out in several stages on the basis of the Adyghe State University (Maikop) in the period from 2011 to 2014. In recent years, the active development and implementation of author's courses has been carried out at the Maikop State Technological University.

In the context of the orientation of universities to a competence-based approach to teaching and organization of SR, the capabilities of the corresponding LMS Moodle toolkit (LMS network learning management system – Learning Management System) were used. At the first stages of the study, in order to exclude the mechanical transfer of traditional teaching methods to distance education, a reassessment of the content of education was carried out in the direction of the required results of mastering OPOP VO.

The use of the Moodle technological toolkit in the organization of bachelors' teaching staff took place with a combination of full-time and distance learning of the university. The classrooms in which practical classes were conducted with full-time students were provided with all the material and technical resources necessary for organizing a classroom SR. Outside classroom

SR was carried out by bachelors in the Moodle remote system from any place and at a time convenient for them.

The competence of self-education in the study is considered by us as a process and result of the development of a bachelor's personality under the influence of objective external conditions and the Moodle learning environment. An important advantage of the Moodle learning environment in its formation is the possibility of motivated independent choice and building by bachelors of their individual educational trajectory. As shown by a comparative analysis of the organization of SWs on specialty and bachelor's degree in the course of many years of experience, the use of the Moodle learning environment in the organization of SR increases the level of students' motivation for self-organization of productive educational work and professional and personal self-education.

Within the framework of the research, in the course of organizing the SR of bachelors, static (course resources) and interactive (course elements) Moodle technological tools were used, each of which has certain possibilities for effective organization of SR and the formation of self-education competence.

To organize an effective SR for bachelors, such statistical resources of the Moodle learning environment as "Hyperlink", "Book", "Folder", "Explanation", "Page", "File" were used.

The great teaching potential of the opportunities for organizing communication and cooperation between bachelors and teachers during the implementation of SR had interactive elements that are saturated with the technological tools of the Moodle system. The methodological basis of the interactive elements of the Moodle system is the pedagogy of "social constructivism". The main idea of its representatives can be formulated as follows: "only learning, in which knowledge appears in the process of joint activities of students and teachers, can lead to maximum results."

Unlike static elements, which do not involve active interaction with bachelors, the Moodle learning environment has a variety of interactive elements that allow them to motivate and involve them in SR in the course of studying the course material and communicating with the teacher.

All the variety of interactive elements, depending on their purpose in the organization of bachelors, can be divided into two groups: elements of joint activities ("Forum", "Glossary", "Wiki") and elements of control over the level of mastering competencies, including self-education ("Assignment", "Seminar", "Test", "Lecture"). The main purpose of the interactive elements of the first group is to organize cooperation between bachelors and a teacher. The establishment of their communication contributes to a more effective development of competencies in the process of developing new knowledge. The main purpose of the interactive elements of the level of competencies acquired by bachelors, including self-education.

In the study, depending on the content of the topics studied by the bachelors of the modules of the developed author's courses of disciplines, interactive elements and Moodle statistical resources most suitable for SR were included. When using them in the course of SR, bachelors showed significant educational successes, which are reflected in positive dynamics in terms of indicators of the formation of the competence of self-education.

#### 4. Research results and their discussion.

The authors 'many years of experience in higher education and the results of the research carried out confirm the legitimacy of the initial position that the use of various elements and resources of the Moodle learning environment in the organization of bachelors' CPs allows them to effectively form their selfeducation competencies.

Experimental work was carried out within the framework of the author's courses "Pedagogy", "Methodology of pedagogical research", "Pedagogical technologies", "Bachelor's practice", "Technology of professional career planning" developed in the Moodle distance learning system. The experiment involved bachelors studying in various educational programs, but in which the competence of self-education was considered as a mandatory requirement for the results of their development.

Bachelor's programs were selected in the following areas of training: 03/44/05 Pedagogical education (with two training profiles), 03/44/01 Pedagogical education, 03/03/1 Physical culture, 03/45/01 Philology. In them, the competence of self-education is presented in the form of a complex structure, and its formation took place through the development of a number of disciplines (modules) and practices. A comprehensive result was achieved with the systematic organization of the SR of bachelors. Thus, in the Moodle learning environment, tasks in pedagogy were developed and carried out by bachelors during the period of their pedagogical practice.

It has been experimentally proved that the adequate use of the capabilities of static (course resources) and interactive (course elements) Moodle technological tools in the organization of SR contributes to the formation of self-education competence of bachelors, as well as their more responsible attitude towards the results of independent educational and scientific activities, and an increase in the level of motivation to the study of disciplines. The study substantiated an increase in the level of self-education competence formation in the course of performing SR according to various indicators, including: determination of the goal of self-education (58 %), calculation and rational organization of time for self-education (40 %), consistency, phasing and sequence of work on self-education (48 %), reflection on self-education work (24 %).

The effectiveness of using the Moodle environment in the organization of the SR is confirmed by the positive dynamics of the development of the competence of self-education and the improvement of the indicators of selforganization of the educational activities of bachelors in the selected areas of training. The competence-based approach to the organization of HR in the Moodle learning environment allows solving many professional problems facing modern higher education.

The results of the experimental work carried out on the basis of the Adyghe State University showed the high efficiency of the organization and implementation of SR in the Moodle educational environment. During the discussion of the results of the research at the Department of Service, Tourism and Public Relations of the Maikop State Technological University, an exchange of experience took place between teachers, which stimulated the continuation of further research.

The results of the study of the organization of the SR of bachelors in the Moodle learning environment made it possible to obtain rich material and determine as one of the promising areas of further research - building the trajectory of the professional career of students at different levels of higher education (bachelors, masters, postgraduate students) in the Moodle distance learning system.

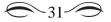
#### 5. Conclusion.

The results obtained in the course of the study allow us to conclude that the use of statistical resources and interactive elements of the Moodle learning environment contributes to the formation of self-education competence in the course of organizing the independent work of bachelors.

#### **Bibliography**

 Andreev A.V., Andreeva S.V., Bokareva T.A., Dotsenko I.B. New pedagogical technologies: MOODLE distance learning system // Open and distance education. - 2006. - No. 3. -S. 1-5.

- 2. Anisimov A.M. Work in the Moodle distance learning system: textbook. allowance. 2nd ed., Rev. and additional. Kharkov: Publishing house of KhNAGKh, 2009. 292 p.
- 3. Bologna process: search for commonality of European systems of higher education (TUN-ING project) / under scientific. ed. Dr. ped. Sciences, Professor V.I. Baidenko. - M .: Research Center for the Problems of the Quality of Training of Specialists, 2006. - 211 p.
- Vinnik V.K. Model of organization of independent work of students using the educational platform MOODLE // Modern problems of science and education. - 2013. - No. 3. -P. 223.
- 5. Zinchenko VP Distance education: to the formulation of the problem // Pedagogy. 2000. No. 2. S.23-34.
- 6. Kravchenko G.V. Using the MOODLE distance environment in the process of full-time students // Izvestia of the Altai State University. 2013. No. 2-1 (78). S. 23-25.
- 7. Ryapisov N.A. Competence-based approach the basis for the development of the educational sphere // Philosophy of Education. - 2007. - No. 3. - S. 274-282.
- 8. Theory and practice of distance learning: textbook. manual for stud. higher. ped. study. institutions / ed. E.S. Polat. M .: Academy, 2004 .-- 416 p.
- 9. Heba A. Information and Communication Technologies and E-Learning in the Opinion of Teachers and Students of Secondary Schools in Poland [in:] DIVAI 2010 Distance Learning in Applied Informatics. Conference Proceedings, Nitra, Slovakia, 2010.
- Hutmacher W. Key competencies for Europe // Report of the Symposium Berne, Switzerland 27-30 March, 1996. Council for Cultural Co-operation (CDCC) // Secondary Education for Europe Strasburg, 1997.



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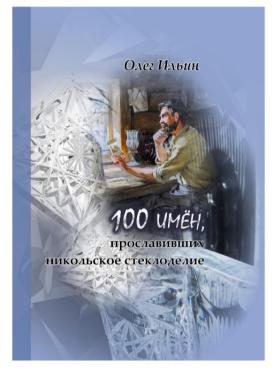
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