Preparation of Bachelors of Professional Training Using MOODLE

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Abstract. The object of the research in this article is Moodle – a system for distant learning. At the legislative level, the need to use this type of education in the educational activities of vocational schools is fixed. The electronic medium is used for blended learning, and is a tool with full set of resources for online courses. The electronic environment of Moodle is characterized by modularity, special flexibility in managing the learning process, easy publishing of training materials and their support in the format of international standards, management of user groups, the use of Web 2.0 services and the ability to integrate with other web applications. The article presents a study on the possibilities and the analysis of the experience of the use of distance learning for students in an electronic environment Moodle applied in the Pedagogical University. The experience of the implementation of e-learning courses on the example of "General and vocational pedagogy". The experience of creating electronic training courses for their implementation proves the promise of this direction. Its introduction of the educational process of professional educational institutions will improve the quality of training specialists. The dynamism of the platform management and the modular structure of the training makes it possible to create the organization of the educational process, taking into account the individual requirements of the students to contribute to improving the learning outcomes of students.

Keywords: E-learning · Bachelor of professional training
Information technology · E-learning · Mixed education · Distance learning
Educational technologies

1 Introduction

To improve the quality of the educational process in vocational schools e-learning is being promoted. Requirements for the use of various educational technologies, including e-learning, are enshrined in the Federal Law the Russian Federation dated by December 29, 2012 No. 2733-FZ "On Education in the Russian Federation." At the legislative level the need for such kind of educational facilities is fixed in vocational schools.

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Electronic training is an important component of the educational process in vocational schools, provides ample opportunities, access to educational resources and management to a new level; thus significantly increases the opportunities of the education system [6].

The urgency of e-Learning technologies usage is defined by the following factors: the introduction of new federal education standards that focus on the implementation of competence-based approach; increase of independent work of students; implementation of the principle of "learning throughout life"; Freedom in the choice of the place of study by the entrant; IT implementation in education; the rapid development of information and communication technologies; promoting new opportunities pits in the educational process.

2 Theoretical Bases of Research

E-learning research takes both domestic researchers (it is worth noting the work M.Y.U. Bukharkin, M. Moses, E.S. Polat [12] Robert I. [11]), and foreign (M. Barber [13], M. Rosenberg, E. Masie, T. Anderson, E. Hanushek [14]). The study of the practice of using Moodle environment in the educational process is presented in D.S. Kostylev and [5] E.K. Samerkhanova, W. Rice, H. Foster, J. Cole, R. Jirmann. The implementation of the requirements of the competency approach to the preparation of teachers is, presented in the works O.V. Akulovoh, V.A. Adolf, V.A. Bodrov. I.S. Batrakovoh, G.A. Bordovsk, E.V. Baranovoh A.K. Markovoh, N.F. Radionovoh N.N. Surtaevohoh A.P. Tryapitsyn, Z.I. Kolychev and N.V. Chekalev and etc.

3 Research Methodology

Methodological basis of research supports the competence and modular approach to studies. The approach focuses attention on educational results, requires the ability to solve professional problematic and non-standard situations [15]. The world educational practice separated educational practices and highlights the concept of "competence" as the concept of competence that allows combining intellectual skills and single formation. Secondly, it reflects the idea of designing the content of education, based on learning outcomes. Thirdly, the key competences integrate closely related skills and knowledge [1]. The electronic environment Moodle allows realizing in practice the principles of content-competence and practice-oriented preparing when creating electronic educational complex discipline [9].

Moodle is characterized by modularity, increased flexibility in the management of the educational process, easiness of training materials and publications of their support in international standards format, management of user groups, the use of Web 2.0 services, and the ability to integrate with other web - applications. All of these factors determine its effectiveness [8].

It should be noted that the main objective of the project on creation of Moodle is to provide effective tools for managing learning process. In this case, Moodle has the ability to scale, that is, may increase the number of students to a few hundred or a

thousand, and can be used in elementary school or for individual self-study. Most often Moodle is used as a platform for online courses – to provide blended learning [2].

4 Analysis of the Research Results

Now let us consider the aspects of the vocational training (on branches) on the subject "General and vocational pedagogy". The course is available for registered users, such as university students, or other users who passed a special registration.

E-learning course "General and vocational pedagogy" is designed to provide vocational training to bachelors. The educational material is presented in to be studied at an individual pace, a sufficient number of internal and external links have been created that allow you to create efficient and quick access to necessary information. The content of the course implements the requirements of a rating system and activity-oriented, personal-oriented approach to bachelor's education. The course is located in the official website Minin University in the section "Distance Courses" http://moodle.mininuniver.ru/course/view.php?id=898.

This course is a combination of a clear logic of the discipline, a balanced theoretical material and practical-oriented jobs that allow you to identify the level of formation of professional knowledge and students' skills. The course contains necessary examples of material to support theoretical material.

The distance learning course "General and professional pedagogy" was developed on the basis of the principle of interaction at a remote distance between a student and a tutor (teacher). The educational material is presented in the course fully and clearly presented on the course for the convenience of self-study at an individual pace, a sufficient number of internal and external links have been created that allow you to create efficient and quick access to the necessary information.

Electronic content of "General and vocational pedagogy" is built on a modular basis, each module is a complete system, complete fragment having its didactic tasks and direction in the formation of students' professional competencies and their applications. Practical activities are included [3]. A student is provided with a set of electronic theoretical training and reference material such as instructions and etc.

The structure of the developed course of "General and vocational pedagogy" includes 5 modules

Introductory module (news forum; abstract; Instructions for students to study the discipline; Educational and methodological support of the discipline; Glossary);

Module 1. Professional pedagogy as a branch of pedagogical knowledge;
Module 2. Theoretical bases of vocational training of workers;
Module 3. Characteristics of a holistic education process in a vocational school;
Module 4. Subjects of educational process; Materials for certification.

Each module is filled with information resources and interactive elements - theoretical materials, lectures, presentations to lectures, practical tasks and tasks, tests, links to Internet resources.

Reflection planning on the learning procedure of the discipline includes the training sessions of all types and control measures [15].

The course provides guidance on the types and forms of activity that are in the e-course - for practical work, for self-study. They include instruction organization of learning and assessment criteria. Recommendations in the key are: advice on planning and organization of independent work of the student: types of work and the description of the workflow, the implementation rules, criteria and evaluation indicators; instructions for the implementation of practical and coursework; advice on working with scientific or special text; tips for working with literature and etc.

The course has training materials that are provided in various file formats supported by Moodle such as text and web-pages and links to files.

Element "lecture" allows you to divide the lecture into pieces, add to the text of the lecture quizzes, links to external sources and illustration [6]. The lecture material is presented in the "Glossary" on each item. The important thing is respect of the copyright, so the lectures are links to copyrighted material borrowed in the form of pictures, charts and tables [9].

In the description of task type, name and purpose, a task or a group of level assignments, order fulfillment and recommendations for implementation of these tasks are provided. Algorithms and examples of assignments or solutions of typical tasks, indicators and criteria for evaluating all work according to the student's rating plan are given.

With the help of interactive elements "chat" and "forum" individual consultations are held, organized by the judgment of the course work, each participant may speak about any topic. The possibilities of interactive elements (different types of jobs, glossaries, forums, tests) emphasize students' individual fragments of the studied material, ability to check their level of knowledge, the organization of interaction of participants with each other and with the teacher [1].

Educational outcomes of students in e-learning system are considered as an integrated single procedure implemented via plurality of means and methods of assessment. Using the evaluation procedures determined in formation of educational results, general cultural and professional competences are enrolled. Estimates are presented as assignments and tests containing questions for the input control, helping to master course content better; job training and tests containing questions for self-control, finding the correct answers with explanations, tips, technique; quizzes and tests are designed to replicate, consolidate and control the protection of the reports on the practical and independent work, to prepare for other accreditation procedures, essays and case assignment.

In tests organization control is provided with the help of questions of various types, for example, "in Selecting the missing words", "random question for compliance", "image choice", "multiple choice", "n and the correspondence" "in false answers," "true/false", "in calculations", "diagram relations", "short answer", "numeric answer" [7].

Using an essay evaluation means evaluating higher levels of productive development of educational results, the ability to analyze selected for reflection subject. Solution case assignments allow you to simulate a professional situation, to form students' professional position, to choose their own way of solving professional problems. The development of directional control system takes into account the time

frame, the logics of the construction of the educational material, the level of training, the complexity of the previous assignments.

Distance learning course "General and vocational pedagogy" has been tested in the learning process in Minin University to teach bachelors 44.03.04 Vocational training (on branches). The course was taught as a mixed training, involving the combination of classroom training with the elements of e-learning.

5 Conclusions

Experience in creating e-learning courses proves the efficiency of this trend. Its introduction into educational process in vocational schools will improve the quality of training. Moodle is a powerful tool for establishing effective rates with the possibility of the adaptation to any student, whether full-time, part-time or distance learners. Moodle provides interaction and implementation of ongoing communication between students and teachers. Moodle is a flexible and effective tool in the educational process. The dynamism of the platform management and the modular structure of the training make it possible to create the organization of the educational process, taking into account the individual requirements of the students, to contribute to improving the learning outcomes of students.

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