

USE OF MODERN EDUCATIONAL TECHNOLOGIES IN THE FIELD OF MILITARY EDUCATION. DISTANCE LEARNING - PROBLEMS AND DECISION

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Abstract. *The article describes the main development directions of distance learning in the military education, shows the difference between distance learning and traditional one. The conclusion is that the distance learning can be considered as an independent form of education, because it has key differences, which cannot be implemented in the traditional form. Nevertheless, it cannot replace traditional learning completely that military training has.*

Keywords: *distance learning, military education, information technologies, electronic teaching materials.*

Introduction

Relevance of the research.

One of the creations of the new Armed Forces of the Republic of Belarus image are military professionals –educated, highly qualified specialists who have a good command of several adjusted military qualifications.

This level of military leaders training has based on the basic education, regular retraining and advanced training courses.

The use of innovative existing technologies and optimization could significantly reduce efforts and costs of retraining and advanced training courses of military leaders and specialists of different levels.

The features of the realization of the distance learning technologies has identified as the subject of the study in the military activity conditions.

The practical importance of the study is in developing of recommendations and suggestions on the implementation of the distance learning technologies for professional retraining and advanced training courses of military leaders and specialists in additional educational programs in the everyday activity conditions in higher military educational institutions.

One of the methods to increase the efficiency of the educational process in modern conditions by increased requirements for the quality of training is distance learning. In the system of military education of the Republic of Belarus, much attention has been given improving the ability of students to work independently on the command, Staff and other positions

in the interests of Government bodies for the military security and the defense of the State.

Introducing information technologies impact on teaching methods and quality and functioning of methodological literature.

Another use of information technologies is the development and enforcement of innovation multimedia programs, virtual lectures and libraries, tests and auxiliary educational materials, as well distance learning.

Active use of computer programs allow military personnel more clearly and accurately treat the object of study.

One of the most progressive forms of innovation is the use of training systems as the effective participation in any process. This can include various simulators for driving different military equipment, training devices for shooting any weapon, imitation of the automated work places of various information systems.

All of these methods allow you to eliminate the possibility of improper management with weapons and military equipment and any accident. In the short term, it is planned to unite all innovative forms of learning under the common platform DL system.

Distance learning is widely developed in the West. However, it begins gaining in popularity only now in our country.

Distance education is an opportunity to study individually, regardless the time and place, the opportunity of life-wide learning. There is growth in the number of students in the world, enrolled in the DE technologies, as well as universities using this form of education in the learning process. There is also an increasing number of international educational institutions.

Informatization of military education

A key indicator of training effectiveness of any educational technology (as in educational system as a whole) is a degree of interactivity. Due to the fact that during distance education a student`s contact with a teacher is limited, there have to be more possibilities for the interactive e-educational materials. The software LMS institution should support high interactivity.

The share of e-learning technologies in the system of military education may come closer to one-half the academic period for studying of specific disciplines of the course, although this statement requires some research.

Military education strategy is to use the achievements in education and new information technologies for the modernization of teaching and militant training.

Nowadays some activities are carried out to integrate distributed educational resources with private information networks to unify the highly intellectually teachers, experts in subject military areas as well as traditional teaching to support ongoing training on a "student - Educational Center" scheme.

When teaching the military-technical and special disciplines the domination of the distance learning method is deleted, as a number of practical skills required to have the trainee can be obtained only by working on real weapons and military equipment.

No any virtual simulation of practical actions results cannot fully replace the field training and live-fire artillery exercises. Therefore, e-training of future specialists in such disciplines is seen only in the basic theory of the subject. Along with electronic textbooks and different learning systems, it is advisable to use situational interactive computer programs and exercise equipment for practical training of students.

Modern information technology education are not excluding alternative to traditional education, but rather should be integrated into the existing education system. It is also clear that the use of distance learning significantly expands the possibilities in the military education (retraining) the military personnel.

In this regard, we can talk about the use of combined forms of education in which the traditional classroom training combined with the use of distance learning technologies.

Distance learning in Belarus

Ministry of Education of the Republic of Belarus developed the Concept of Informatization of the Education System in the Republic of Belarus for the period up to 2020, which defines the main goals and objectives of education informatization, building a unified educational space throughout the country, shows the main ways to improve the quality of educational services (Concept,2015).

Establishment of a national information environment education system will allow information interaction of all stakeholders of the education system and the formation of a national system of electronic educational resources (The program activities, 2011).

Possibility of DL correspondence enshrined in the Code of the Republic of Belarus on Education. Many universities use DL technologies. Today, 19 out of 59 higher educational institutions, in Belarus, offer training in remote form.

Based on the accumulated experience, we can say that the introduction of electronic DL requires three essential components:

1. Technical - availability of the necessary infrastructure and software (software platform).
2. Teaching - availability of educational content (lectures, guidelines, etc.).
3. Organizational and methodical - availability of training plans and programs of work techniques with students in distance format etc.

Technical Component

Today, every university has regularly updated PC park, as a rule, connected to the corporate local area network and with access to Internet. This raises the question of choosing a platform or an online DL technology.

In 2013, an analysis of platforms used for distance learning was conducted. 10 leading systems in the field of DL allocated were: Twitter, Google Drive / Docs, YouTube, Google Search, PowerPoint, Evernote, Dropbox, WordPress, Facebook, Google + / Hangouts.

This list does not include a platform specially designed for DL. Social networks are used in training more actively than "internal" systems, that is explained by the simplicity and convenience of free communication between teacher and students. But the learning process is not only the communication but the process and the organization of learning activities of students with tracking time schedule, independent work, which results are assessed and taken into account when putting the final grade. And the above-platform leaders are not suitable for the organization of educational process in high school.

Distance learning in the university system should include:

1. Tools for creating e-learning courses.
2. Training courses management tools.
3. Learning management tools.

Tools for creating e-learning courses - is a software platform or part, allowing you to create DL courses that can meet certain standards, for example, SCORM.

Training courses management tools - allow to demonstrate an e-course to students.

Learning management tools - allow the teacher to interact with students and receive feedback: to control training activities, performance, evaluate the performance of tasks.

All these listed funds are integrated into the learning management system content, implemented in the form of software and hardware platforms of DL systems.

Training Component

In distance learning, the following types of electronic publications (classification) are used:

Software - service of general purpose; for control and measuring the level of knowledge and skills; Electronic training devices; for mathematical modeling and simulation; for remote access to laboratory equipment or virtual laboratories.

Training systems - automated; expert training systems; intelligent tutoring systems; information and referral system.

Automation of professional activity - industrial software and training analog.

Electronic publications - textbooks, teaching materials, etc.

It should be noted that the DL course as opposed to "static" electronic textbook has feedback mechanisms, is constantly changed and evolved. If not, that is, not to interact with the students, do not check the job, not to answer the students' questions, etc., e-course will turn into an electronic textbook, and in 2-3 years it will lose its significance.

Currently, all high schools form the electronic repository of teaching materials on disciplines designed in the form of electronic teaching materials (ETM), with regulated structure and content. Availability of ETM is necessary condition, without which DL is impossible.

Preparation of teaching and program documentation

Over the last 5 years in accordance with the Strategic Development Plan for 2011-2016 in the Border Institute there has been settled a number of tasks necessary for the implementation of distance learning:

1. There is a corporate educational portal of the University «ips-portal.by» with authorized employees access to the information resources of the Institute.
2. Allocated to registered users e-mail address and Internet traffic.
3. Developed electronic educational-methodical complexes (ETM), covering 70% of subjects studied at Institute.
4. Systematic work on ETM transformation into interactive online courses that are placed on the educational portal of the Institute, which is a learning process and content management system constructed on the basis of Moodle software platform, its interactive elements and resources.

Moodle - is a courses management system (Course Management System - CMS) with open source software, also known as a Learning Management System (Learning Management System - LMS) or a Virtual Learning Environment (Virtual Learning Environments - VLE). It has

become very popular among educators around the world (in the previously mentioned ranking in DL systems, ranks 11th) as a means to create dynamic web sites for students and centralized aims to present students with educational content. (Brezgunova, 2010)

Among the advantages of Moodle system are the following:

international recognition - the system is widespread in the world, It is used in 223 countries, 95 languages interface;

simplicity - easy and intuitive e-learning format display, content and all settings can be edited directly in the system interface, without third-party software;

scalability - mobile system, low system requirements, no licensing restrictions, performance limited only by the hardware resources.

In 2016, the University Council took a decision on the transition to the training employees in part-time DL.

In accordance with this decision the Action Plan for starting training in remote form has been prepared. That includes the following activities:

1. To study the experience of universities of the Republic of Belarus, and some of the leading Russian and European universities.
2. To develop a Regulation on DL.
3. To develop a training plan for employees.
4. To conduct training courses "Preparing the remote e-learning courses in the LMS Moodle and their use in training" to improve skills of work with DL systems.

Conclusions and suggestions

Fast development of computer, telecommunications and network technologies blurs the distinction between a training and available systems, leads to a more holistic concept of military training and education. As computers become more sophisticated, they applied not only for training and education, but also for implementation and support combat missions.

Thus, almost all universities of the Republic of Belarus are actively implementing this concept, developing their infrastructure, creating an electronic repository and implementing an DL technology. But, when it is necessary to highlight some of the problems associated with the introduction of distance learning:

1. Lack of regulatory law regulations at the national level-documents regulating the organization of educational process, preparation of curricula, standards of time for distance learning. Universities independently develop the necessary local regulations on the basis of the existing instruments of the Ministry of Education of Belarus, regulating the organization and

teaching and planning documents for distance learning, adapting them to distance learning.

2. Absence of unique requirements to the educational process in the remote form - whether all curriculum subjects should be taught in distance format, if "no", then what the proportion, is what the requirements for technical and methodological support of distance learning and others are.

3. The lack of methodological and pedagogical recommendations developed for organization of educational process in a remote form, for example, to conduct lectures, practical and laboratory studies, the organization of the course design, etc.

More specifically on the existing system of military education includes the following weaknesses and omissions. Miss: centralized management of the entire DL system; centralized procedure of standardization for all the DL systems; standards for course developers and teachers; lack of information and communications environment; standardized data storage for all DL system.

However, it is clear that the introduction into the educational process of professional retraining of the military personnel with the use of distance learning technologies allows not only achieve greater efficiency of any educational process, and improve the quality of subsequent self-study students' pre and in-service training, which is very important in the military affairs.

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