Балаченков Дмитрий Анатольевич

аспирант

Рабина Екатерина Игоревна

канд. пед. наук, доцент

ФГБОУ ВО «Магнитогорский государственный технический университет им. Г.И. Носова»

г. Магнитогорск, Челябинская область

Dmitriy A. Balachenkov

postgraduate student

Ekaterina I. Rabina

candidate of pedagogic sciences, associate professor

FSBEI HE «Nosov Magnitogorsk State Technical University»

Magnitogorsk, Chelyabinsk Region

PRINCIPLES FOR THE CREATION OF AN INFORMATION AND EDUCATION ENVIRONMENT IN HIGHER EDUCATION

Abstract: *according to the model of the basic educational programme of higher education, an important condition on which the modernization process depends is the formation of the IEE (information and education environment) in higher education. The information and educational environment is defined as a set of information systems containing different types of support: technical and software, methodological, organizational and mathematical. These types of support are used in the educational process with the aim of effective training of specialists. Compliance with all the principles of construction ensures the effective functioning of the IT, which, in turn, ensures the quality training of a competitive specialist able to navigate in extreme situations and make adequate and timely management decisions.*

Keywords: *information and education environment, information culture, education process, content component of the information and education environment, principles of IEE.*

ПРИНЦИПЫ СОЗДАНИЯ ИНФОРМАЦИОННО-ОБРАЗОВАТЕЛЬНОЙ СРЕДЫ В ВУЗЕ

Аннотация: согласно модели основной образовательной программы высшего образования, важным условием, от которого зависит процесс модернизации, является формирование ИОС (информационно-образовательной среды) в вузе. Информационно-образовательную среду определяют как совокупность информационных систем, содержащих разные виды обеспечения: техническое и программное, методическое, организационное и математическое. Данные виды обеспечения используются в образовательном процессе с целью эффективной подготовки специалистов. Соблюдение всех принципов построения обеспечивают эффективное функционирование ИОС, что, в свою очередь, гарантирует качественную подготовку конкурентоспособного специалиста, способного ориентироваться в экстремальных ситуациях и своевременно принимать адекватные управленческие решения.

Ключевые слова: информационно-образовательная среда, информационная культура, образовательный процесс, содержательный компонент информационно-образовательной среды, принципы построения ИОС.

Creation of an information and education environment (IEE) is one of the main vectors of development of modernization and informatization of the Russian educational system. Such an environment is becoming an integral attribute of a new quality education, in which students get an opportunity to develop their abilities and unlock their creative potential [1]. According to FSES, IEE is a tool to implement this standard and the main information and methodological condition for the implementation of the basic educational programme of higher professional education [2].

The construction of an information and education environment in higher education institutions is based on interrelated and conditional principles. Having analyzed the advantages and disadvantages of the existing information and educational environment, the peculiarities of Russian education didactics, the current state of NIT and

telecommunication resources, let us dwell on the principles formulated by M.N. Gusarova [2] used for the construction of the designed IEE:

– multi-component (this principle is ensured by many interrelated components: teaching aids and methodological materials, software and mathematical support, system used for knowledge control, technical resources, databases, information and reference systems, etc.)

– integrity (the content component of the information and education environment includes the necessary basic knowledge in different fields of science and technology due to a variety of specialty profiles, allowing to build links between disciplines on the basis of information and reference information);

– distributiveness (the information component of the information and education environment is uniquely distributed across servers (data warehouses), meeting the requirements of modern technical means and the constraints of cost-effectiveness);

– adaptability (the information and education environment should be accepted by a modern educational system while maintaining the principles of its creation).

These principles allow to analyze the peculiarities of the structure of the IEE as a component of the traditional system of Russian education, as well as an independent system focused on the development of active self-organization of undergraduate students' activities using new information technologies [3].

Information environment surrounds a modern person since childhood in the form of TV, radio, books, computer games, etc. Personal information culture becomes very important when choosing a profession, work activity, recreation [1]. Undoubtedly, information plays an increasing role in human life, accompanies various kinds of its activities. Modern reality forms an informational way of life [1] with its notions of information environment.

The world of human information activity is the information environment. Such concepts as «information field», «information space» are considered in scientific literature as synonyms [3]. Information environment can be internal and external, when a person is inside a certain room and outside it (macro environment). The external in-

formation environment tends to influence the internal environment, e.g. with the creation of the Internet, libraries are equipped with media libraries, etc [3].

The development vector of modern society requires education to train competitive specialists successfully navigating in the electronic environment. One of the key trends in the development of education is transformation in the organization of learning activities. The educational process is moving from a centralized model to a horizontal network model. In this organization of the educational process, learning is understood as a collaborative activity that requires the participation of interested people working in a given field of knowledge or similar areas [5]. Learning takes place in the process of the student's interaction with the society. In order to plunge into the world of modern information culture, students need not so much control and monitoring from a centre as an accessible world of communication. Students should be able to create and share digital objects independently and to analyze the results of their activities in terms of their usefulness for other students and educators [4].

Thus, the information and educational environment of a higher school is an open educational space that promotes unification of information and communication technologies and electronic educational resources, corresponding to the level of development of modern education system in higher education and providing information interaction in the process of self-education and education.

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