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BLENDED LEARNING MODEL IN SYSTEM OF HIGHER EDUCATION

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The article deals with the introduction of blended learning in system of higher education. The basic tendencies in usage of blended learning system are analyzed, which in different proportions combines elements of traditional and distance learning. The organization of the online learning course, components of blended learning are characterized in detail. The author provides a definition of the term "blended learning". The possibilities and advantages of blended learning usage in the studying process, which lie in the combination of traditional or face-to-face and independent or distance learning, are reviewed. The emphasis is put on the use of distance learning in combination with traditional full-time training. In the article, in detail, the tasks, the teacher faces are defined and various, existing blended learning models and the ways of their adaptation are considered. It is shown that the use of different forms of online learning with a combination of traditional learning makes it possible to achieve high efficiency in the studying process but the transition from traditional forms of training into the area of free educational space is not easy and requires a lot of effort.

Key words: *blended learning, online learning, elements of distance learning, blended learning model, remote technologies, computer-mediate activity, electronic resources.*

Introduction. In modern conditions, the role of education and knowledge in the world plays a dominant role. This role is of great importance for the development of the whole society and personal development of each person. Higher education creates the potential of personality and development of his/her knowledge and skills, contributing to the development of both the individual and society as a whole. The key factor of production at this stage is to obtain the necessary knowledge, which is also a major advantage for the development of society and the country as a whole.

There are several factors that influence the development of education in general nowadays. They are a fast fleeting development of technologies, the development of research area, and the daily increase of scientific, technical information.

During the last century, there have been significant changes in the definition of the purposes and methods of modern education. While previous goal was to prepare graduates who possess basic skills, recent attention is drawn to the high level of

knowledge and understanding of problems in the field and in the technologies that are studied, the ability to adapt to the needs of modern life. Besides, each institution of higher education is facing the problem of the growing number of students, and decrease of assignations for training; most students try to combine the learning process and to obtain experience in the specialty by their workplace.

These challenges are pushing the majority of higher education institutions to devise new approaches to delivering elements of learning to students. With the introduction of online training that enables anywhere and at any time to do learning process the first step to meet the needs of higher education with today's needs was made. The next step is the introduction of blended learning model that combines the advantages of online learning with stationary training. [2]

The purpose of this article is to consider the introduction of blended learning model in higher education.

Definition, structure and advantages of blended learning.

Blended learning is an educational course, in which students can gain knowledge on their own, and in person with the lecturer. This approach makes it possible to control the time, place, pace and ways of learning the material. Students attend classes face-to-face in the class, but it is also Computer-Mediate Activities are widely used, that is the mediator of educational activity are the computer, on-line regime, mobile devices and special educational programs or platforms. This system has several advantages:

- students can master the essential new knowledge by using electronic resources, and solidify learned material in the classes;
- blended form of learning helps balance the knowledge of students in the group through self-study materials and tasks proposed for studying and doing by a lecturer. There is an opportunity for students with a better level of training, to study material of higher complexity. Thus, the principle of individual approach to the student is realized

- ability to take into account the individual characteristics of students in relation to the perception of information (for example, if one of the students needs more time mastering new material);
- blended form of making diversity training at the choice of the educational process (using electronic resources);
- blended form of learning also stimulates the production in students the skills of self training and search of information. This especially may be relevant while implementing group projects.
- saving time in the classes by passing certain topics for self study;
- mutual control of learning process from teacher's side and through student's self-control;
- permanent access to the necessary training materials and therefore the opportunity for the student constantly improve his/her knowledge and repeat the learned material;
- improvement of communication between student and teacher. Communication takes the form of mentoring and allows the teacher to coordinate the activities of the student and the student receives recommendations how to improve his/her knowledge.

Such synonyms as Blended learning or Hybrid Learning, Technology-Mediated Instruction, Web-Enhanced Instruction and Mixed-Model Instruction are often used.

Basically blended learning consists of three parts:
- the personal contact of students and teachers in the form of the traditional in-class training;
- independent work of students, which includes various activities without the help of a teacher;
- online training that involves different tasks online, participation in online competitions and conferences; [1]

Widespread growing of online courses is increasing among universities abroad. According to statistics, currently, 62.4% of overseas institutes of higher education are

implementing online learning courses and programs compared to 2002 where the figure was much lower - 34.5%. Besides, it should be noted that most lecturers in higher education institutions in general positively support the concept of blended learning and many of them use blended learning in varying forms. In a recent study at the Center of Digital Education (CDE) 90 % of the surveyed teachers use creative approaches in teaching subjects through blended learning technologies. When in the interview the topic of blended learning benefits was raised 92 % of respondents agreed on 3 key points.

1. The ability to offer an alternative model of learning

2. The ability to offer distance learning model.

3. Enhancing the role of the student in the learning process.

More than half of the respondents also emphasized the improving of performance, better use of audience and reducing the cost of education as the benefits of this type of study. Regarding the role of technologies in the process of blended learning support, polled respondents indicated such advantages as, the ability of teachers to communicate with students at any time and opportunity for the teacher to assess how students use materials of blended learning. [5]

The main task of the teacher – compose course in clear and understandable manner and to distribute the training material. It is necessary to decide what to study in the classes, what you can learn, train and solve at home which tasks are suitable for individual classes and which are good for group work on the project. It is assumed that the basic course is taught in face-to-face classes, and the extended and deepened is learned in the distance or online learning. It is important that lessons Face-to-Face took formats of projects defense, presentations or discussions between students and teachers. Remote unit may include group projects, creative tasks, practical tasks, reference materials with links to online reference materials, intermediate and verification tests, and also high complexity tasks for successful students. Basic knowledge assessment can be made in classes. [6]

The organization of the online learning course

Great importance is given the online learning course.

The structure of the online course includes the organization of the course content and structure of the online course. Course structure for online learning is especially important for students because the loss of consistency in the performance of tasks is the most common cause of failure in online learning:

- training of students in online environment requires students to be self-motivated, self-disciplined, self-directed. That is in online environment, students have to take an active role in learning, they can easily lose interest in learning if they are not familiar with the structure, content and methodology of performing the online course exercises;

- as students have many questions to performance of online course, the great emphasis is focused on supporting communication between teacher and student throughout the whole execution time course;

- course structure must be logical and consistent. In other words, it should reflect the natural order within the content;

- where possible, the objectives of the course are to be structured in groups of tasks, such as discussions, projects, tasks for reading or video;

- students should be familiar with the materials that are on the course site. Sixthly. Students should be provided with a detailed description of the structure of the course.

Online course may consist of sections; each section is divided into topics that are in hierarchical order.

There are several models of blended learning considering material submission.

1. Model 1. - «Unit by Unit" Material is divided into Units, which in turn are divided into Chapters, which contain Topics;

2. Model 2. - "Module by Module (Chapter by Chapter). The material is divided into modules. Each module consists of theory, exercises and tests. The theoretical material can include a variety of video materials and *PowerPoint* slides. Exercises can also include online discussions and performance of various tasks.

3. Model 3 - "Week by week" – The familiarization with the tasks and performance of tasks have limited time period. Each week consists of material presentation, various tasks that must be performed during weeks and tests in the end of each week.

4. Model 4 - "Project by Project" - The course content is divided into projects, which in turn are divided into weeks. During each week specific objectives are carried out. [3]

There is also a blended learning model with different accents, needs and volumes costs.

1. Face-to-Face Driver. This model involves the study of most of the studying program in class regime. Student personally gives bulk of the studying curriculum when necessary introducing online learning as auxiliary. This model often includes classical and laboratory work on computers.

2. Rotation Model. There is a rotation schedule of the traditional face-to-face class studies and self-study online in private mode (e.g. via the Internet by references plan that is made by a teacher, in blended program; on a special website).

3. Flex Model. This model involves learning of most part of educational material in case of online learning. Usually, when online platform is used, teacher supports students as needed, from time to time working with small groups or one student. The teacher acts as a coordinator who organizes consultations to train topics hard for understanding.

4. Online lab. This model involves the learning of educational programs in terms of online learning on a special website of the educational institution. Online platform is used to transfer the whole course in the full-time classes. Such training is supervised by a teacher. This program can be combined as part of regular schedule.

5. Self-Blend Model. This model makes it possible to choose additional courses for basic training. The student decides which course he needs to supplement with remote online sessions. As educational services providers can serve

various educational institutions. To be effective, this model of blended learning presupposes a high degree of motivation of student to learn;

6. Online Driver Model. This model provides the opportunity to study these or that courses for students who have a need for bigger flexibility and in spare time. Basically, this model provides online training - through the platform and remote contact with the teacher. However, optional or on demand can be added full-time test classes and meetings with the teacher.

It should be noted that the aforementioned models are not often used in pure form, as a rule, it depends on the situation and the learning environment, the target group, knowledge level and goals. Therefore, each of the models involves the development of an applied scenario of roles, functionality, didactic goals and resources.

There are traditionally four scenarios:

• combination of models "Face-to-Face" and "Rotation". For example, students have 2 classes per week, one of which is full-time with the teacher, other is remote in studying electronic environment;

• combination of models "Face-to-Face" and "Flex" can be used with regular classes 2-3 times a week, with the recommended time online at least 20%;

• Model "Online driver" can be used when the studying course is optimized for a year of study, students meet with a teacher once a month, and the rest of the academic work is in the electronic environment;

• Model "Face-to-Face" is used in intensive training [4].

Conclusions. The fact of importance of the transition to e-learning resources in terms of university education does not require additional arguments. This is dictated not only by learning objectives, but also the formation of important qualities in students' such as motivation to learn, the ability to consciously choose the direction and course of learning, the ability to distribute and manage your own academic freedoms. The transition from traditional forms of training into the area of free educational space is not easy and requires a lot of effort to find the best methods and mechanisms of managing this process.

The use of blended learning method should lead to quality change in education. The variety of resources of blended learning electronic component opens up new possibilities for the presentation of educational material in an accessible and interesting way.

The introduction of online learning is connected with the development and widespread introduction of communicative technologies. Although the situation in higher education is changing, there are still a lot of questions how one can better use technologies to achieve the learning objectives in terms of inclusion of students in the process of critical thinking and discourse.

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К.А. Лісецький. Модель змішаного навчання в системі вищої освіти
У статті розглядається запровадження моделі змішаного навчання в системі вищої освіти. Аналізуються основні тенденції в використанні системи змішаного навчання, яке в різних пропорціях поєднує елементи традиційного і дистанційного навчання. Детально характеризується організація курсу он-лайн навчання, складові змішаного навчання. Автор дає визначення терміну «змішане навчання». Розглянуто можливості і переваги

використання змішаного навчання в навчальному процесі. В статті ретельно визначені завдання, які стоять перед викладачем та розглядаються різні моделі змішаного навчання. Показано, що використання різних форм он-лайн навчання з поєднанням з традиційною формою навчання дає можливість досягти високої ефективності в навчальному процесі.

Ключові слова: електронне навчання, змішане навчання, онлайн навчання, елементи дистанційного навчання, модель змішаного навчання, дистанційні технології, інформаційно-комунікативні технології, комунікація.

К.А. Лисецкий. Модель смешанного обучения в системе высшего образования

В статье рассматривается внедрение модели смешанного обучения в системе высшего образования. Анализируются основные тенденции в использовании системы смешанного обучения, которое в разных пропорциях сочетает элементы традиционного и дистанционного обучения. Подробно характеризуется организация курса онлайн обучения, составляющие смешанного обучения. Автор дает определение термина «смешанное обучение». Рассмотрены возможности и преимущества использования смешанного обучения в учебном процессе. В статье тщательно определены задачи, стоящие перед преподавателем и рассматриваются различные модели смешанного обучения. Показано, что использование различных форм онлайн обучения с сочетанием с традиционной формой обучения позволяет достичь высокой эффективности в учебном процессе.

Ключевые слова: электронное обучение, смешанное обучение, онлайн обучение, элементы дистанционного обучения, модель смешанного обучения, дистанционные технологии, информационно-коммуникативные технологии, коммуникация.

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