

USE OF BLENDED EDUCATIONAL TECHNOLOGY IN DEVELOPING
STUDENTS' COMPETENCE IN NATURAL GEOGRAPHY

G.R.Shodiyeva,

Doctoral student of Samarkand State University

Abstract. This article presents suggestions and recommendations regarding the possibilities of mixed education technology and their use in the development of students' competence in natural geography.

Key words: mixed education, model, virtual education, distance education, electronic education, competence, creativity.

The technology of mixed education is important for independent education of students in subjects, improvement of creative ability and development of competence [1].

Blended education has been widely used since 1990 to improve the education of students and teaching methods of professors and teachers. Currently, the Clayton Christensen Institute can be cited as a center that is conducting effective scientific research on mixed education. According to the researchers of this institute, blended learning is a combination of traditional and online learning with the participation of faculty and students, in which the way, time, place and pace of learning is controlled by students. It takes into account the elements of self-management and provides the teaching experience and online integration of the professor-teacher [2].

In this regard, researchers and scientists have given different definitions of mixed education technology. In particular, according to I.A. Nagayeva, mixed education technology is a technology intended for teaching in an electronic and online format. In this case, students will have the opportunity to partially independent education [3].

According to Mijares Illiana [4], Richards Griff [5], mixed education is an innovative pedagogical technology aimed at organizing classes and independent education of students based on the integration of electronic and traditional education. According to B. Means, Y. Toyama, R. Murphy, M. Bakia, K. Jones, blended learning is a combination of various resources, in particular, face-to-face training and e-learning elements. is a method of learning based on mutual integration [6].

According to T.I. Krasnova, the main task of mixed educational technology is to teach using various information-educational environments, educational platforms and educational websites located at the addresses of the global network, and it is a wide range of distance education. provides opportunities [7]. It also combines classroom teaching and learning in an electronic environment and allows students to independently test their knowledge of science [8].

Some researchers associate blended learning with various distance learning. Live communication between professor and student is mandatory [9]. The introduction of this technology into the educational environment, together with the emotional component of communication, provides opportunities for electronic education such as interactivity and flexibility in the mutual formation of associative ideas. Also, blended learning technology combines the advantages of asynchronous and synchronous learning.

Indeed, e-learning allows for individualization of learning trajectories for students (starting with the speed of mastering learning material and ending with a set of completed tasks) and automates monitoring and diagnosis of their learning activities [1]. Blended education is one of the most popular forms of education today. In the course of this form of education, the student receives independent education using information-educational environments, educational

platforms, and Google services, in case of incomprehensible questions, the group consults online and offline, and the professor-teacher help will be provided. Due to the use of blended learning during group sessions, each student learns communication skills, demonstrating positive changes in his/her learning. repeats the learned information and prepares for learning a new topic. Blended education in many cases relies on tasks and is organized on the basis of basic, important information, and additional information is distributed to the student through online platforms, information-educational environments. While learning independently using these environments, the student collaborates with group members by participating in online discussions. Also, distance and independent education are effectively combined at different stages of education.

It should be remembered that the success of mixed education is determined by the correct selection of educational tools [2]. The advantage of this form of education is that the student himself determines the speed of assimilation of educational information and the intensity of the educational process. This mixed education includes the following European education models [2]: distance learning; audience education (face-to-face learning); internet education (online learning); continuous education (lifelong learning).

This form of education is extremely important for the following persons: employees of industries where working hours are not strictly regulated; employees of enterprises, organizations and firms who must receive education without separation from production; For those who want to study in a "live communication-based learning" environment.

Such models combine the integration of tools, that is, the traditional "live" presentation of educational material with online lectures, and include [10]: learning by observing processes and events; study of a subject with the help of a professor-teacher giving recommendations to students; combining traditional and new technologies: presentations, audio media, interactive whiteboards, use of the Internet (forums, conferences, e-mail, chat rooms, online surveys), personal computers, social networks.

According to the results of our research, communication between the professor and the student outside the classroom is considered important. Therefore, the method of organizing the educational process (face-to-face) cannot be combined in a simple way without digital technologies - it is necessary to take a complex approach to this process, to create a system of interrelated methods of teaching. Using digital technologies, the audience leads to the full disclosure of the possibilities of blended learning. When using mixed educational technology, it is necessary to choose the right and comprehensive selection of educational materials in accordance with the goals and tasks of teaching. In this case, the educational process using mixed learning technology requires the support of the professor-teacher for students in each combination of the selected material [10].

In this regard, that is, the issues of applying mixed education technology to the educational process are detailed in the scientific research of D. L. Matukhini [11]. In his research, he paid special attention to working with electronic resources as a supplement to classroom training. It shows that part of the training can be done through digital technologies, but it is believed that it is necessary to have a live dialogue on complex topics.

In some scientific studies, the professor-teacher is considered as an "educator", a necessary mediator between the educational material and students, he manages the educational activity "at a distance", supports the independent work of the student.

According to I.I.Osadchenko, YE.Y.Konovalova, S.D.Sirotyuk, management, planning and self-monitoring, evaluation and regulation of one's own education with the help of mixed educational technology - critical thinking, time management, power distribution is achieved [12]. These are important components of blended learning technology. Therefore, mixed education technology is important in the development of students' competence in natural geography. It provides the following opportunities: each student will have the opportunity to acquire the necessary knowledge and skills related to the science of natural geography in a convenient format; classes on natural geography are organized on the basis of innovative pedagogical technologies; geography provides tools for effective management of education; teaching time is reduced without losing the advantages of the traditional approach to natural geography; technology and teaching enrich each other; active social interaction of professor-teacher and students occurs; implements effective learning of educational information on natural geography regardless of time and place; a variety of didactic approaches to the science of natural geography is provided; natural geography improves the quality of education (including effective teaching tools through greater use); individual control over classes related to natural geography is provided; students develop modern work, organization of communication tools; the priority of students' independent activities increases; provides individual support for each student's educational activities related to natural geography; ensures the organization of collective educational activities in mastering the science of natural geography; the flexibility of geography education trajectory is ensured; re-usable online and offline learning and teaching content will be integrated.

Summarizing the above, it can be noted that the main features and technologies of mixed educational technology include the use of new communication tools, time saving, and innovative diagnostic and control programs. There are the following models for using blended learning technology:

1. Face-to-Face Driver model: an important part of the curriculum is studied in direct cooperation with professors and students in higher education institutions; E-learning is used as an addition to the main program;

2. Rotational model: changing the methods of working with materials during the transition of the curriculum; study time is divided between individual e-learning and e-learning distance support training and classroom learning:

2.1. Class exchange: exchange of learning methods according to the established schedule or according to the wishes of the professor-teacher, use of electronic education, participation of a group of students or individually;

2.2. Feedback classes (Flipped Classroom): presence of a confirmed schedule of daytime educational activities, including work on projects; effective use of e-learning with some control over learning; the ability to choose a place for e-learning, to organize independent educational activities;

2.3. Individual: availability of an individual schedule for studying the subject, mandatory online phase of education.

3. Flex model (Flexible model): effective use of e-learning; providing online, offline and face-to-face support to listeners; availability of an individual schedule; work in small groups; organization of group projects; - individual training;

4. Self-interfaced model: study one or more e-learning courses completely online; teaching at the same time in different educational institutions;

5. Enriched virtual education model: model of the entire educational institution; voluntary attendance at the educational institution every day; a combination of face-to-face and distance learning.

Each model is characterized by the dominance of one of the three components of blended learning technology:

1. Direct personal interaction of educational participants is a process;
2. Interactive interaction of computer technologies and electronic information as a means of education;
3. Self-education.

The results of our research showed that using the presented models of mixed educational technology, it is possible to acquire geographical knowledge and use it in further professional activities outside the educational institution.

Blended learning technology helps to master the skills of skillful planning of their activities, supports the automation of learning and ensures the use of real learning materials.

In conclusion, in order to apply mixed educational technology to the geography education and training process, it is necessary to develop the ability to automate education, increase independence, personal responsibility for the results of one's work, and organize the educational process. Therefore, the need to speed up the process of transferring knowledge from a teacher to a student, the technology of mixed education is of great importance. Its use means the improvement of the effectiveness of geography education and the development of students' geographical competence, as well as the improvement of the organization of the educational system, the need to comply with new educational standards. Blended learning technology provides a wide range of learning opportunities by combining traditional presentation and information with online lectures and forum meetings.

References:

1. Блинов В.И. Модели смешанного обучения: организационно-дидактическая типология / В.И. Блинов, Е.Ю. Есенина, И.С. Сергеев // Высшее образование в России. 2021. – Т. 30. – № 5. – С. 44-64.
2. Норбеков А.О. Педагогика олий таълим муассасаларида компьютер таъминоти фанини ўқитиш самарадорлигини ошириш методикаси // Педагогика фанлари бўйича фалсафа доктори (PhD) илмий даражасини олиш учун тайёрланган Диссертация. – Қарши, 2021. –171 б.
3. Нагаева И.А. Смешанное обучение в современном образовательном процессе: необходимость и возможности / И.А. Нагаева // Отечественная и зарубежная педагогика. – 2016. – № 6. – С. 56-67.
4. Mijares Iliana. Blended learning: Are we getting the best from both worlds? Literature Review for EDST 561 [Электронный ресурс]. URL: <http://elk.library.ubc.ca/bitstream/handle/2429/44087/EDST561-LRfinal-1.doc.docx?sequence=1> (дата обращения: 03.09.2023).
5. Richards Griff. Athabasca University. Learning Analytics: On the Way to Smart Education [Электронный ресурс]. URL: http://distant.ioso.ru/seminar_2012/conf.htm (дата обращения: 02.09.2023)
6. Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010, September). Evaluation of EvidenceBased Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies.
7. Краснова Т. И. Смешанное обучение как новая форма организации языкового образования в неязыковом вузе / Т. И. Краснова, Т. В. Сидоренко // Образовательные технологии и общество. – 2014. – Т.17. – № 2. – С. 403-413.
8. Никитина М. С. Преподаватель как субъект образовательного процесса в системе смешанного обучения / М. С. Никитина // Политематический сетевой электрон. науч. журн. Кубанского гос. аграрного ун-та. – 2013. – № 86. – С. 1-10.
9. Малинина И. А. Применение технологий смешанного обучения иностранному языку в высшей школе / И. А. Малинина // Современные научные исследования и инновации. 2013. – № 10. – С. 234-238.
10. Полухина О.П. Формирование профессионально-личностной позиции бакалавра-психолога на основе технологии смешанного обучения // Диссертация на соискание ученой степени кандидата педагогических наук. – Курск 2020. – 178 с.
11. Матухин Д. Л. Технология организации смешанного обучения иностранному языку в высшем учебном заведении / Д. Л. Матухин // Междунар. журн. Прикладных и фундаментальных исследований. 2015. – № 5-4. – С. 592-596.
12. Осадченко И.И., Коновалова Е.Ю., Сыротюк С.Д. Классификация ситуационных заданий в контексте из-учения курса «Основы педагогического мастерства» // Вектор науки Тольяттинского государственного универ-ситета. 2013. № 3 (25). С. 446-450.