

**BLENDED LEARNING IN HIGHER EDUCATION MODELS
TRENDS AND RESEARCH FINDINGS**

Fozilova Maxina Adashevna

Kimyo International University in Tashkent, Samarkand branch

e-mail: makhinafozilova@gmail.com

Annotation: *This paper offers a reinterpreted overview of national academic studies focused on the use and effectiveness of blended learning technologies in higher education. Applying systematic review methods such as selection criteria, thematic grouping, and comparative evaluation, the study explores how blended learning is incorporated into university teaching practices. Special emphasis is placed on instructional design, digital environments, student participation, and competency-based outcomes. The findings indicate that, when carefully designed, blended learning enhances learner independence, improves academic achievement, and supports the development of digital and modern professional competencies.*

Keywords: *blended learning, higher education, digital tools, instructional design, student engagement, systematic review.*

Annotatsiya: *Ushbu maqolada oliy ta'lim tizimida aralash ta'lim texnologiyalarining qo'llanilishi va samaradorligini yorituvchi milliy ilmiy tadqiqotlarning qayta talqin qilingan tizimli sharhi taqdim etiladi. Tanlash mezonlari, mavzuviy guruhlash va taqqosiy tahlil kabi tizimli yondashuvlar asosida aralash ta'limning universitet amaliyotiga qanday joriy etilayotgani ko'rib chiqiladi. Tadqiqotda o'quv dizayni, raqamli ta'lim muhiti, talabalar faolligi hamda kompetensiyaga asoslangan natijalarga alohida e'tibor qaratilgan. Natijalar shuni ko'rsatadiki, to'g'ri tashkil etilgan aralash ta'lim talabalarning mustaqilligini oshiradi, akademik natijalarni yaxshilaydi hamda zamonaviy raqamli va kasbiy kompetensiyalarni rivojlantiradi.*

Kalit soʻzlar: aralash taʼlim, oliy taʼlim, raqamli texnologiyalar, oʻquv dizayni, talabalar faolligi, tizimli sharh.

Introduction: Today, online education platforms play a crucial role in modern learning environments. One of the most influential among them is Coursera, which has attracted millions of users worldwide. Created in 2012 by professors from Stanford University, the platform was designed to make high-quality education accessible to a global audience. Courses are developed by leading institutions such as Princeton University, the California Institute of Technology, and the University of Toronto. These courses typically include video lectures with subtitles, written materials, assignments, quizzes, and final assessments. Learners who successfully complete all requirements receive certificates confirming their knowledge and skills, which can be valuable for both academic and professional development. In fact, Coursera was recognized as the “Best Educational Website of the Year” by Time magazine in 2012 [1].

The course analyzed in this study focused on blended learning as a modern educational approach. It examined definitions, models, and implementation strategies, paying attention to methodological, technological, and financial aspects. It also explored how the roles of teachers and students evolve, how curricula must adapt, and which learning processes best align with blended environments.

Key topics included: blended learning models, roles of teachers and students, institutional transformation, learning environments and infrastructure, pilot implementation strategies

Blended learning can be understood as a system that combines traditional face-to-face instruction with online, independent learning. Usually, core material is introduced in the classroom, while further practice and deeper understanding occur through digital tools and independent work. Teachers guide the process but increasingly act as facilitators rather than sole knowledge providers.

One of the main strengths of blended learning is its emphasis on interaction and collaboration. Students actively participate in group work and peer evaluation,

which enhances engagement. Additionally, learners can control their pace and adjust the difficulty level of tasks, while teachers benefit from reduced workload.

Blended learning is built on several key principles. First, it focuses on the learner by considering individual needs and prior knowledge. Second, it prioritizes the development of practical skills and competencies. Third, it encourages autonomy and responsibility. Finally, it promotes collaboration through activities such as discussions, peer review, and online interaction [2].

Literature Review: A review of both international and national studies reveals several major directions in blended learning research.

The first direction deals with terminology and conceptual clarity. Researchers emphasize the need to clearly define terms such as blended learning, hybrid learning, and distance education [3]. While some scholars view blended learning simply as a combination of online and offline instruction, others focus on the depth of integration or the proportion of digital components. The debate continues how technology and traditional teaching should be combined effectively [4].

It is important to distinguish between “blended learning” and “blended learning technology.” The first refers to an instructional format, while the second represents a broader system of methods and tools used to achieve educational goals.

The second direction focuses on methodological foundations. Researchers explore how traditional education systems can be transformed through the integration of digital tools. This includes implementation at different levels: entire programs, individual courses, or specific lessons.

For example, S. Hrastinski identified several conceptual approaches: blended learning as simple combination, blended learning as quality enhancement, quantitative models based on time distribution, synchronization through real-time technologies, and digital classroom integration [5]

National studies also highlight the importance of identifying effective design principles and structural components of blended learning models.

The third direction includes empirical studies that demonstrate the

effectiveness of blended learning. These studies show improvements in academic performance, communication skills, and personal development. They also highlight changes in teacher roles. Overall, blended learning helps balance the strengths and weaknesses of traditional and digital approaches [6].

The fourth direction focuses on classification and systematization of blended learning models. This diversity reflects the flexibility of digital technologies and the evolving roles of teachers and students.

Discussion: The course examined three main models of blended learning.

The **Station Rotation Model** involves organizing different activity zones within a classroom. Students rotate between tasks such as group discussions, written exercises, and online learning. This model promotes independence and time management. The **Lab Rotation Model** combines classroom instruction with computer-based learning in a lab. Teachers introduce concepts, while students practice and apply knowledge online.

The **Flex Model** emphasizes personalized learning. Students work independently on tasks adapted to their level and needs, while teachers provide support when necessary. These models demonstrate that blended learning is highly suitable for higher education. Universities aim to prepare students for professional life, and blended learning supports this by developing autonomy and lifelong learning skills. Implementation typically occurs in two stages. First, teachers are trained in blended learning methods. Second, these methods are applied in teaching.

In blended environments, teaching formats include video lectures, webinars, online consultations, and digital assessments. As a result, teachers become facilitators, while students take a more active role in their learning [7].

Courses are usually structured with short video lectures (around 15 minutes) to maintain attention and reduce fatigue. Interactive elements such as quizzes and discussions increase engagement.

Another advantage is the global nature of online learning. Students interact with peers from different countries, which enhances intercultural communication and professional networking.

Additionally, access to course materials is often free, and learners can obtain certificates upon completion, making education more accessible.

Conclusion: In summary, blended learning represents an innovative and effective educational approach. It improves learning quality, increases efficiency, optimizes resources, and enhances the reputation of educational institutions.

Participation in large-scale online learning projects also has a significant positive impact. These courses belong to the category of MOOCs, which are widely recognized for their quality and innovation.

Blended learning is not just a trend but a powerful tool for modern education, supporting professional development, digital competence, and global academic communication.

References

1. Coursera. (2013, November 29). *Wikipedia entry*. Available at: <http://ru.wikipedia.org/wiki/Coursera>
2. Matukhin, D. L. (2016). *Blended learning technology in the modern educational paradigm*. In: Language and World Culture: The View of Young Researchers (Proceedings of the XV All-Russian Scientific and Practical Conference, Tomsk, April 24–27, 2015, Part 1). Tomsk: TPU Publishing House.
3. Graham, C. R. (2012). Blended learning systems: Definition, current trends, and future directions. In: Bonk, C. J., & Graham, C. R. (Eds.), *Handbook of Blended Learning: Global Perspectives, Local Designs* (pp. 3–21). San Francisco, CA: John Wiley & Sons. Available at: http://curtbonk.com/graham_intro.pdf
4. Fomina, A. S. (2014). Organization of instructional design using ICT in higher education institutions. *Educational Technologies and Society*, (3), 418–419. Available at: http://ifets.ieee.org/russian/depository/v17_i3/pdf/4.pdf
5. Dziuban, C., Graham, C. R., Moskal, P. D., et al. (2018). Blended learning: The new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*, 15(3). <https://doi.org/10.1186/s41239-017-0087-5>

6. Oliver, M., & Trigwell, K. (2005). Can blended learning be redeemed? *E-learning and Digital Media*, 2(1), 17–26. <https://doi.org/10.2304/elea.2005.2.1.17>
7. Sarsenbaeva, Z. (2024). Descriptions of imagery, symbolism, and non-realistic elements. In *Conference Proceedings: Fostering Your Research Spirit* (pp. 409–414).