Editorial

Blended Learning: A Hybrid Approach to Medical Education

*Nurunnabi M

Introduction

Over the past decade, technology has enhanced face-to-face and distance education course content. Learning technology falls into three categories: information technologies for content delivery, interactive technologies for user engagement, and social software for group activities and higher-order learning.[1,2] Communication technologies, initially developed for synchronous and asynchronous interactions, have merged into learning platforms like learning management systems or virtual learning environments. Web tools and social media software enable two-way communication, knowledge sharing, and social connections. These technologies facilitate interactive, group-based learning for distance learners through video conferencing, chat, and virtual classrooms, replicating face-to-face experiences.[3] The rise of online learning introduces new tools, data, and dynamics with transformative potential. However, traditional e-learning, while expanding access, often lacks engagement and interactivity, resulting in passive learning. The focal intent is to improve learning efficacy, convenience, and accessibility and optimize cost-effectiveness.

Blended learning, emerging in the early 2000s, aimed to integrate play and work to foster blended activities.[4] It combines face-to-face and online approaches, attempting to optimize the benefits of both beyond just displaying a website in the classroom.[5] Hybrid learning is a teaching method that combines in-person classroom instruction with online learning simultaneously. It bridges the gap between physical and virtual spaces, creating a more integrated and comprehensive educational experience.[6] Hybrid and blended learning models enhance traditional classrooms by integrating interactive online elements, creating a more dynamic learning environment.[7] As learners' demands change as multimedia and learning research develop, we must adapt our approach to education and training.

The COVID-19 pandemic has affected medical students' perspectives, discerning a reform in educational approaches because it offered considerable hurdles for clinical study and examinations.[8] The assessment strategies include using comprehensive, applicatory, and analytical questions; time-bound SAQs and MCQs; shuffling techniques in e-assessments; applicatory questions in oral exams; illustrative assignments for formative assessment; and monitoring progress to refine assessments. Blended teaching incorporates online learning with in-person interactions to solve boredom and topic diversity. Replacing summative evaluation with formative assessment promotes self-directed learning and active classroom engagement.[9] Clinical training traditionally integrates theoretical knowledge with practical learning through patient interactions and simulated scenarios. This approach is vital for students transitioning from pre-clinical studies to clinical practice, helping them develop essential skills for patient care and hospital placements.[10]

Blended learning can help medical students and professionals learn more effectively and interact socially online. Students have highlighted the value of in-person interactions, which are crucial for enhancing academic and clinical performance. Adding blended learning to the undergraduate curriculum is considered an incredible move

Address of Correspondence

*Dr. Mohammad Nurunnabi, Assistant Professor, Department of Community Medicine and Public Health, Sylhet Women's Medical College, Sylhet 3100, Bangladesh.

Email: nur.somch@gmail.com https://orcid.org/0000-0001-9472-9369

for students. Despite constraints, this strategy is effective for comprehensive medical education in the future.

Competing Interests: The author declares no competing interests.

References

1. Joksimovic S, Jovanovic V, Skrypnyk O, Gasevic D, Dawson S, Siemens G. The history and state of blended learning. Preparing for the digital university: A review of the history and current state of distance, blended, and online learning. 2015:55-92.
2. Anderson T. Social software technologies in distance education: Maximizing learning freedoms. International Handbook of distance education. 2008:167-84.
3. Helms SA. Blended or hybrid courses: A literature review and recommendations for instructional designers and educators. Interactive Learning Environments. 2014;22(6):804-10.
4. Cooney MH, Gupton P, O'Laughlin M. Blurring the lines of play and work to create blended classroom learning experiences. Early Childhood Education Journal. 2000;27:165-71.
5. Graham CR. Blended learning systems: Definitions, current trends, and future directions. In: Bonk CJ, Graham CR, editors. The Handbook of blended learning: Global perspectives, local designs. San Francisco: Pfeiffer. 2006;1:3-21
6. Hybrid Learning Approach In Education. Available on: https://globalindianschool.org/my/blog-details/hybrid-learning-approach-in-education/ (Retrieved on January 12, 2025)
7. Hybrid Learning vs Blended Learning: What is the Difference? Available on: https://claned.com/hybrid-learning-vs-blended-learning/ (Retrieved on January 12, 2025)
8. Dus-Ilnicka I, Paradowska-Stolarz A, Mazur M, Radwan-Oczko M, Perra A, Paula VS, Ward LS, Valente NA, Firkova E, Karteva T, Jorda LM. Blended intensive program's implementation in dental education: post-pandemic evolution of learning. BMC Medical Education. 2024;24(1):352.
9. Chen M, Ye L, Weng Y. Blended teaching of medical ethics during COVID-19: practice and reflection. BMC Medical Education. 2022;22(1):361.
10. McGee RG, Wark S, Mwangi F, Drovandi A, Alele F, Malau-Aduli BS, ACHIEVE Collaboration. Digital learning of clinical skills and its impact on medical students' academic performance: a systematic review. BMC Medical Education. 2024;24(1):1477.