

Contemporary Blended Learning and the Future Scope

Matthew Visage and William Crole

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

Contemporary Blended Learning and the Future Scope

Matthew Visage¹, William Crole² ICN Business School, France¹, ECAM Lyon, France²

Abstract

Blended learning is an approach to education that combines traditional classroom-based instruction with technology-enhanced instruction. In recent years, blended learning has become increasingly popular in schools and universities as a way to personalize learning and take advantage of the many benefits of technology. The gap between traditional face-to-face learning and dispersed learning environments was, however, addressed during the last ten years by the advent of new technological breakthroughs. This essay focuses on blended learning in traditional disciplinary contexts, with challenges and impacts that need to be considered.

Keywords- Blended Learning, e-Learning, Synchronous Learning, Asynchronous Learning

Introduction

Beginning in 2000, blended learning became one of the most well-liked pedagogical ideas. Since blended learning took off, many studies have discussed it. The integration of traditional face-to-face learning with dispersed learning environments was not possible due to a lack of technology resources. Since the idea of online learning gave rise to the notion of blended learning in the early 1990s, the 21st century has seen an enormous amount of research into this approach [2][4]. Blended learning has been the subject of extensive research in the twenty-first century. The basic type of blended learning was thought to be a combination of in-person classroom activities and learning activities supported by online technologies, which later evolved into the incorporation of learning activities, students, and instructors [1]. Numerous studies have lauded the benefits of blended learning, which include learning process facilitation via online or classroom technologies, bridging the gap between learning and working, online collaborative learning promotion, higher education benefit, effectiveness among large and diverse student cohorts, and adaptability in many institutions including higher education, business, K–12 schools, the military, and many other sectors.

Components of the Blended Learning Model

A blended learning model can be utilized as a reference for assessing and incorporating distinct elements to produce learning scenarios that are instructionally sound.

• Learning environment component - There are two learning environments: synchronous and asynchronous. Each learning environment has its own unique combination of benefits and drawbacks. Achieving the instructional goal and learning objectives through blended learning means making the most of the unique beneficial aspects of each environment [3].

- Media Channels that deliver content are referred to as media. Asynchronous or synchronous learning environments may benefit more from some instructional media than others, but no one medium is fundamentally better or worse than any other. The chosen delivery method might not change the intended content, but it may impact how you design it to make the most of that particular medium's special features. Despite this, when the best media are chosen, learning outcomes won't be impacted.[7][10]
 - Media used in blended learning are
 - Stand-alone, asynchronous, or synchronous online learning / training
 - Performance support tools (knowledge management tools)
 - Traditional classroom, labs, or other "hands-on" experiences
 - Reading assignments, CD-ROMs or other self-paced learning.
 - Internet, World wide web
 - Mobile, Tab, Laptop
 - Instructional component
- Synchronous instructional methods: Live classroom,
- Asynchronous instructional methods: e-Learning, Virtual classroom

Table 1 Media used in Blended Learning

Live face-to-face (formal)	Live face-to-face (informal)
Instructor-led classroom	Collegial connections
Workshops	Work teams
Coaching/mentoring	Role modelling
On-the-job (OTJ) training	
Virtual collaboration/synchronous	Virtual collaboration/asynchronous
Live e-learning classes	E-mail
E-mentoring	Online bulletin boards
	Online communities
Self-paced learning	Performance support
Web learning modules	Help systems
Online resource links	Print job aids
Simulations	Knowledge databases
Scenarios	Documentation
Video and audio CDs/DVDs	Performance/decision support tools
Online self-assessment	
Workbooks	

Impact of Blended Learning

Personalized Learning: One of the biggest benefits of blended learning is the ability to personalize the learning experience for each student. With technology-enhanced instruction, students can work at their own pace and on the topics that they need the most help with. This can lead to a more engaging and meaningful learning experience and can help to close the achievement gap between students [7-9].

Improved Student Engagement: Blended learning also has the potential to improve student engagement. By incorporating technology into the learning process, students are able to experience new and interactive ways of learning that can be more engaging and fun than traditional classroom-based instruction.

Increased Access to Resources: Technology has the ability to provide students with access to a wealth of educational resources that might not otherwise be available. This includes online tutorials, videos, simulations, and interactive learning tools.

Better Outcomes: Research has shown that blended learning can result in better learning outcomes for students. A meta-analysis of over 300 studies found that students in blended learning environments outperformed their peers in traditional classroom-based instruction.

Challenges of Blended Learning

- Teacher Training: One of the major challenges of blended learning is the need for teacher training. Teachers need to be trained in the use of technology, online learning platforms, and blended learning methodologies. This can be a time-consuming and expensive process, and many teachers may be resistant to change.
- Access to Technology: Another challenge of blended learning is access to technology. Not all students have access to the technology needed for online learning, such as a computer and internet access. This can create a digital divide, where some students have access to the resources they need to succeed, while others do not.
- Ensuring Quality: Blended learning also presents challenges in ensuring the quality of online content. With so many online resources available, it can be difficult to determine which ones are credible and relevant. This requires teachers to have a good understanding of the content they are using, and to be able to evaluate its quality and relevance.
- Managing Student Behaviour: Finally, blended learning can also present challenges in managing student behavior. Online learning can provide students with greater flexibility, but it also requires them to be more self-directed and responsible. Teachers need to provide clear expectations and consequences, and ensure that students are using the online resources appropriately.

Future of the blended learning

The concept of "blended learning" is regarded as beneficial, engaging, encouraging, adaptable, and motivating for students. These elements, however, are insufficient to foster an environment conducive to learning. In other words, teachers adopting blended learning environments should encourage students to participate more in the environment and should look for ways to foster social contact through increased collaboration in order to create a good learning environment.

Furthermore, in order to maximize the benefits of this strategy, the merging of in-person and online learning environments should be carefully managed. Tablets, smart phones, and touch screen devices will be among the next topics to be covered in blended learning courses in the near future. New blends will emerge as technological advancements proliferate, fusing education with various technologies.

Conclusion

In conclusion, blended learning has had a significant impact on the education sector, but it has also brought its share of challenges. To address these challenges, teachers need to be trained in the use of technology and blended learning methodologies, and access to technology needs to be improved. The quality of online content needs to be ensured. With these challenges addressed, blended learning has the potential to transform the education sector and provide students with a more personalized, engaging, and effective learning experience. Both students and teachers can engage flexibly with blended learning. Both teachers and students can connect through the integration of the virtual and physical worlds, but this is most effective when there is institutional support through the provision of professional learning and the ability to create courses for the best combination.

References

- [1] Güzer, B., & Caner, H. (2014). The past, present and future of blended learning: an in depth analysis of literature. *Procedia-social and behavioral sciences*, 116, 4596-4603.
- [2] Alebaikan, R. A. (2012). The future of blended learning. *International Journal of Educational and Pedagogical Sciences*, 6(3), 321-325.
- [3] Datta, S., & Sengupta, S. (2018). A Review on the Adaptive Features of E-Learning. *International Journal of Learning and Teaching*, 4 (4), 277-284.
- [4] Kaur, M. (2013). Blended learning-its challenges and future. *Procedia-social and behavioral sciences*, *93*, 612-617.
- [5] Sengupta, S., & Dasgupta, R. (2010). A Data Mining Approach to Determine an Efficient Learning Path. In *EEE 2010: proceedings of the 2010 international conference on elearning, e-business, enterprise information systems, & e-government (Las Vegas NV, July 12-15, 2010)* (pp. 59-62).
- [6] Sengupta, S., Sahu, S., & Dasgupta, R. (2012). Construction of learning path using ant colony optimization from a frequent pattern graph. *arXiv* preprint arXiv:1201.3976.09
- [7] Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International journal of educational technology in Higher education*, 15, 1-16.
- [8] Sengupta, S., Mukherjee, B., & Bhattacharya, S. (2012). Designing a scaffolding for supporting personalized synchronous e-learning. *Department of Computer Science & Information Technology, Bengal Institute of Technology, Kolkata-150, India*

- [9] Sengupta, S. (2022). Possibilities and challenges of online education in India during the COVID-19 pandemic. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*, 17(4), 1-11.
- [10] Zhonggen, Y. (2016). Blended learning over two decades. *Professional Development and Workplace Learning: Concepts, Methodologies, Tools, and Applications*, 1248-1267.