

A Study On Student Adaptation to Blended Learning in Higher Education

Ms. Farsana Abdul Azees

Assistant Professor, MES AIMAT, Marampally, Kerala, India

ABSTRACT

The COVID-19 pandemic has forced many educational institutions to transition to blended learning, a mode of instruction that combines traditional classroom teaching with online learning activities. This study aimed to explore student perceptions of blended learning in the post-pandemic period, as well as to evaluate the extent to which factors such as ease of use, scope of better communication, and facilitating better content clarity lead to the adoption of blended learning. Data were collected from 71 higher education students to evaluate their perceptions of blended learning as a modern method that facilitates learning. Results indicated that students generally had positive perceptions of blended learning, with ease of use, better communication, and improved content clarity being identified as key factors that contributed to the adoption of this approach. These findings suggest that blended learning may be an effective way to enhance the learning experience in the post-pandemic period, providing students with a flexible and personalized approach to education that can better meet their individual needs. However, further research is needed to fully understand the impact of blended learning on student learning outcomes and to identify best practices for its implementation in higher education. **KEY WORDS:** Blended learning, communication, learning effectiveness

I. INTRODUCTION

The study intended to see how blended learning overcome the pedagogical challenges and deficiencies currently challenging the quality of the classroom experience. It also explores the impact of blended learning in achieving more meaningful learning experiences. (Nuruzzaman, 2016) said that the term "blended learning" refers to the variety of options made possible by fusing the Internet and digital media with traditional classroom structures that need the actual presence of both the teacher and the pupils.In this era of digitalization where world has witnessed a huge data unlock and exponential increase in mobile phone users blended learning has opened its new avenues to young talents to facilitate learning both from the conventional face to face lectures, videos, and also through various learning platforms.

The unlimited access to data, cheaply available digital gadgets along with the emergence of free blended learning platforms like google classroom has facilitated this approach to be a trend setter of the decade. The most unexpected attack made by the of Covid 19 pandemic, which has taken humans apart in social distancing and the most unusual social distancing has created a great hinder to the entire system of education at the end of last decade. This has enabled blended learning approach to gain more acceptance and adaptation in the education system.

Copyright: O the author(s), publisher and licensee Technoscience Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited



II. OBJECTIVES OF THE STUDY:

- 1. To study how far blended learning ensure learner engagement, learning and retention.
- 2. To study the relevance of the online activities/resources to complement face-to-face learning.
- 3. To study the role blended learning in facilitating better teacher- student communication.

III. LITERATURE REVIEW

Blended learning has become a common educational phenomenon over the past ten years thanks to rising demand and acceptance in higher education. It is becoming more and more clear that blended learning can get around some of the problems that online learning and in-person training have.(Stanek, 1997) Academic support and growth that fosters comprehension and the adoption of transformative blended learning are desperately needed.(Torrisi-Steele & Drew, 2013)

Blended learning and how it facilitates teacher- student communication

(Heinze & Procter, 2004) said that learning that is enabled by the successful blending of various delivery methods, instructional models, and learning philosophies is known as blended learning. It is also built on open communication between all parties involved in a course. (Castro, 2019)had the view that one of the most extensively researched topics in the literature on blended learning is the ability of human-to-human interaction, which enables online collaborative activities, peer review, and synchronous or asynchronous communication. It mostly relates to online discussion boards, social networking platforms, tools for online conferences, instant messaging, chat rooms, and other technologies like email tools. Although modern technologies enable independent communication and collaboration across location and time, no research have found that existing practices have undergone significant change. However, Implementations that combine technology-enabled human-to-human interactions with additional capabilities, including datafication, and certain design considerations result in some degree of transformation.

Blended learning ensure learner engagement, learning and retention

(Han & Ellis, 2020) viewed that In tertiary education across the globe, learning in blended environments is becoming a standard feature of the student experience. Although the way that students perceive their learning settings is an important part of the learning process. (Morton et al., 2016)Because they involved students and allowed for immediate question clarification, tutorials were considered to be the most important element.(Hughes, 2007)Demonstrated that proactive support and encouragement for "at risk" learners, along with well-designed and supported blended learning, can increase coursework submission and, consequently, module retention without adding more instructional time.

Relevance of the online activities/resources to complement face-to-face learning

(Morton et al., 2016)Students believed that rather than replacing in-person instruction, the e-learning component should make sure that students were prepared for a subject covered in the tutorial and thus ready to participate in in-person instruction more effectively. Tutorials were considered to be the most important element because they involved students and provided for quick question clarification. It was deemed crucial that tutorials could be readily modified to meet the learning requirements of students.



All students believed that tutorials helped them create ideas and interact with more difficult procedures that required higher level thinking. They also thought that e-learning was well suited to offer fundamental knowledge.

IV. DATA ANALYSIS

Data were entered into Excel Spreadsheet for statistical analysis

Research design:

Research design executed here is descriptive design and the data was collected through convenient sampling method.

Sample size:

Data was collected from 71 PG students who have undergone blended learning process

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	245.4437	70	3.506338	5.878394	2.93E-40	1.307071
Columns	50.75968	15	3.383979	5.673259	2.61E-11	1.675915
Error	626.3028	1050	0.596479			
Total	922.5062	1135				

In order to find the reliability of the data Cronbach Alpha reliability test has been conducted which is shown in the table below

Count	Cronbach Alpha value
17	0.83

A value of 0.83 suggests that the items in the survey are highly consistent with each other and measure the same underlying construct with a high degree of accuracy. This suggests that the survey is likely to produce reliable and valid results.

	Learner	Relevance of the online	Role blended	Learning
	engagement,	activities/resources to	learning in	effectiveness
	learning and	complement face-to-	facilitating better	
	retention	face learning	teacher- student	
			communication	
Learner engagement,	1			
learning and retention				
Relevance of the online	0.60	1		
activities/resources to				
complement face-to-				
face learning				

Role blended learning in	0.22	0.30	1	
facilitating better				
teacher- student				
communication				
Learning effectiveness	0.83	0.83	0.67	1

The table appears to represent a correlation matrix showing the relationship between four variables related to learning: learner engagement, learning and retention, relevance of online activities/resources to complement face-to-face learning, and the role of blended learning in facilitating better teacher-student communication, as well as the overall learning effectiveness.

The values in the diagonal represent a perfect correlation between each variable with itself, which is always equal to 1.

The value of 0.60 in the second row and second column suggests a moderate positive correlation between the relevance of online activities/resources and their ability to complement face-to-face learning. This indicates that online activities and resources are perceived as valuable tools for enhancing and complementing in-person learning experiences.

The value of 0.22 in the third row and third column suggests a weak positive correlation between the role of blended learning and its ability to facilitate better teacher-student communication. This indicates that while blended learning may have some positive impact on communication between teachers and students, it is not a major contributing factor.

The value of 0.83 in the fourth row and fourth column suggests a strong positive correlation between overall learning effectiveness and each of the other three variables. This indicates that learner engagement, the relevance of online activities/resources, and the role of blended learning in facilitating better teacher-student communication are all important factors in determining the overall effectiveness of the learning experience.

V. CONCLUSION

Overall, blended learning represents an innovative approach to education that seeks to take advantage of the strengths of both traditional classroom instruction and online learning. When well-designed and effectively implemented, it can offer a flexible and personalized learning experience that can better meet the needs of individual students. The above suggests that online activities/resources can complement face-to-face learning, and that blended learning can have some positive impact on teacher-student communication, both of which contribute to the overall effectiveness of the learning experience. Additionally, learner engagement appears to be a critical factor in learning effectiveness, which is positively influenced by the other three variables.

VI. REFERENCES

- Castro, R. (2019). Blended learning in higher education: Trends and capabilities. Education and Information Technologies, 24(4), 2523–2546. https://doi.org/10.1007/s10639-019-09886-3
- [2]. Han, F., & Ellis, R. A. (2020). Initial Development and Validation of the Perceptions of the Blended Learning Environment Questionnaire. Journal of Psychoeducational Assessment, 38(2), 168–181. https://doi.org/10.1177/0734282919834091



- [3]. Heinze, A., & Procter, C. (2004). Reflections On The Use Of Blended Learning, In: Education In A Changing Environment.
- [4]. Hughes, G. (2007). Using blended learning to increase learner support and improve retention. Teaching in Higher Education, 12(3), 349–363. https://doi.org/10.1080/13562510701278690
- [5]. Morton, C. E., Saleh, S. N., Smith, S. F., Hemani, A., Ameen, A., Bennie, T. D., & Toro-Troconis, M. (2016).
 Blended learning: How can we optimise undergraduate student engagement? BMC Medical Education, 16(1), 1–8. https://doi.org/10.1186/s12909-016-0716-z
- [6]. Nuruzzaman, A. (2016). The Pedagogy of Blended Learning: A Brief Review. IRA International Journal of Education and Multidisciplinary Studies (ISSN 2455–2526), 4(1), 125–134. https://doi.org/10.21013/jems.v4.n1.p14
- [7]. Stanek, W. (1997). PPS-strategien nach dem prinzip der verteilten intelligenz. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 92(12), 643–646. https://doi.org/10.1515/zwf-1997-921217
- [8]. Torrisi-Steele, G., & Drew, S. (2013). The literature landscape of blended learning in higher education: the need for better understanding of academic blended practice. International Journal for Academic Development, 18(4), 371–383. https://doi.org/10.1080/1360144X.2013.786720