



RESEARCH PAPER

A Qualitative Investigation of Blended Learning Practices in Higher Education Sector: Challenges and Future Prospects

¹Dr. Samina Akhtar*, ²Dr. Romina Ali and ³Syeda Tehmina Naz Bukhari

1. Assistant Professor, Department of Education, The Women University, Multan, Punjab, Pakistan
2. Assistant Professor, Department of Education, Emerson University Multan, Punjab, Pakistan
3. Assistant Professor Department of Education, The Islamia University of Bahawalpur, Punjab, Pakistan

Corresponding Author samabdullah33@hotmail.com

ABSTRACT

This qualitative research study aimed to examine the viewpoints of departmental chairpersons about the implementation of blended learning at public sector universities. The study focused on identifying both the difficulties and potential benefits associated with its implementation. A convenient sample selection approach was used to select a total of twenty (20) chairpersons, consisting of (9) males and (11) females, from three public sector institutions in the Multan area of Punjab, Pakistan. The data was analyzed using NVivo software to do theme analysis on qualitative data. The findings revealed a multitude of obstacles, including insufficient infrastructure and network-related problems. On the other hand, the research also emphasized positive possibilities such as improved availability of educational materials and chances for individualized learning experiences. The research suggested that promoting a culture of cooperation and creativity might help public-sector universities embrace blended learning more effectively.

Keywords: Blended Learning, Higher Education Sector Challenges, Opportunities, Practices

Introduction

Universities worldwide have grown more concerned with implementing new teaching strategies in higher education in recent years (Smith et al., 2020). Blended learning (BL) has evolved as a notable trend that combines many learning methodologies and is recognized for its important educational contributions (Ramakrishnan et al., 2012). In addition to this, Mustapa et al. (2015) highlighted the several benefits of Blended Learning, such as increased pedagogical productivity, improved information accessibility, greater cooperation, personal growth, and cost-effectiveness. Moreover, it streamlines the process of making adjustments and resolves attendance-related concerns. According to Wai and Seng (2015) and Nguyen (2017), BL(Blendid learning) is more efficient than conventional learning.

Blended learning has also cultivated a cooperative and encouraging learning atmosphere that diminishes students' apprehension and trepidation of committing errors (Wong et al., 2014). Blended Learning, which stands for blended learning, was adopted by universities in the late 1990s (Edward et al., 2018). It gained even greater favor in the 2000s, with an increase in the number of courses given in a mixed format (Graham et al., 2013). Kaur (2013) emphasizes that integrating online and face-to-face training enables instructors to improve students' algorithmic and constructive thinking

abilities. Bowyer and Chambers (2017) contend that the use of technology in education facilitates learning by fostering discovery, enhancing engagement and motivation, and enhancing feedback, social connections, and the efficient utilization of course content (Sun & Qiu, 2017).

The rapid growth of blended learning has brought forth both prospects and difficulties, notably the need for inventive methods to address the evolving requirements of students. Furthermore, Naveed et al. (2019) highlight that Blended Learning has become a viable educational strategy in Pakistani institutions. The integration of face-to-face teaching with online components presents possible remedies for issues such as overpopulated classrooms, constrained resources, and the growing need for adaptable learning alternatives (Kamran et al., 2023). Similarly, Awan et al. (2020) emphasized that in nations with various geographical landscapes like Pakistan, BL may serve as a means to connect urban and rural areas, hence increasing the accessibility of education for students residing in distant places.

Pakistani universities have seen a significant transformation in information transmission and acquisition due to the incorporation of technology into education (Hussain & Khan, 2017). The implementation of blended learning (BL) in Pakistan is a relatively new occurrence, motivated by the need to accommodate the increasing number of students and enhance the quality of education (Haque, 2017). Nevertheless, Khan and Hasan (2020) emphasize that cultural inclinations towards conventional teaching approaches pose obstacles to the adoption of blended learning, while Mahmood (2019) underscores the substantial connection limitations in rural areas that further complicate its execution.

This research aims to investigate the many complex features of blended learning and its consequences for higher education in Pakistan. The objective of this investigation is to shed light on how blended learning might improve higher education in the nation by examining its advantages and obstacles. Moreover, the study provides significant observations and suggestions for educators, policymakers, and institutions as they negotiate the intricacies of updating teaching and learning approaches (Rafiq et al., 2022).

Literature Review

Within this context, Garrison and Kanuka (2004) observed that blended learning creates complexity as a result of the multitude and heterogeneity of learning settings, instructional designs, and student learning preferences. The intricate nature of blended learning, along with the presence of several cultures and technologies, presents distinct obstacles to its effectiveness (Stacey & Gerbic, 2008). In the same vein, Bliuc et al. (2007) highlighted the need to examine the connections between various modalities of learning, such as conventional and online methods. The research conducted by Meyer, Wohlers, and Marshall (2014) revealed that students typically find blended learning to be satisfactory because of its flexibility. However, they also identified difficulties associated with technology and voiced a need for better-qualified tutors. While studies have discovered several benefits of blended learning (Dziuban et al., 2004; Ellis et al., 2016; Kuo et al., 2014), LaBanca et al. (2013) warn that the use of inadequate pedagogical practices in mixed learning might impede the development of critical thinking abilities. Additionally, they emphasize the difficulties related to teacher readiness, classroom atmosphere, and instructional strategizing. Furthermore, Geiter (2015) discovered problems with keeping students engaged and encountered difficulty in implementing effective teaching strategies in online learning. Similarly, Futch (2005) found that

younger students expressed lower levels of satisfaction owing to technical hurdles, struggles with managing their time, and concerns with the arrangement of their courses.

Material and Methods

This study used a qualitative research methodology. This methodology enabled the researcher to get a more profound comprehension of the participants' viewpoints and discernment about the phenomena of how chairpersons/heads of departments evaluate the execution of blended learning in public sector institutions. The study sample consisted of 31 chairpersons selected from three public sector institutions in the South Punjab area of Pakistan: The Women University Multan, Bahaudin Zakriya University, Multan, and Emerson University Multan. The study's sample included male and female chairpersons from different departments within the faculty of arts and social sciences at public sector institutions. Hence, the researchers used the method of convenient sampling to choose chairperson from each department, representing a total of 20 heads, including 9 males and 11 females. The researchers used this methodology to systematically gather data, with a specific aim that the sample precisely reflected the population being investigated. The selection of participants was based on certain criteria: (a) deliberate selection of both male and female chairpersons; (b) preference for chairpersons with about one year of experience; and (c) exclusive inclusion of chairpersons who routinely worked in public sector institutions. Furthermore, the semi-structured interviews were specifically created to get detailed accounts of heads' perspectives, encounters, and methods concerning fostering reflective practice. After performing extensive literature research on the main topics and areas of attention of blended learning, we principally formulated three interview questions. The questions were vetted by experts on the subject to remove any possible biases and verify that they were relevant and acceptable. This process improved the overall validity of the interview. To gather information, the chairpersons of each department were contacted at their leisure. The purpose was to create a comfortable and open environment that would encourage participants to freely express themselves and deliver more candid comments. The researcher used a planned series of inquiries while also possessing the adaptability to provide more queries in response to the participants' answers. This facilitated a harmonious equilibrium between standardization and individualization in the interview process. Moreover, each interview session had a duration of around 25 minutes. The interviews were taped for data analysis. The research was done with meticulous regard for the rights and dignity of the participants, and all necessary precautions were implemented to safeguard their safety and well-being. The ethical requirements were rigorously driven throughout the whole study procedure.

Results and Discussion

NVIVO 11 was used for the analysis of the qualitative data as it makes it easy for researchers to interpret the data effectively. The tool's comprehensive capabilities, including coding, labeling, and theme extraction, make it very suitable for undertaking thorough analysis. To achieve this objective, the interviews that were recorded were transcribed and examined to find recurring themes and patterns. The participants were notified about the main topics that were discovered and requested to provide clarification to confirm the accuracy of their replies. The transcriptions were subsequently analyzed, and the themes were identified and classified based on three key aspects: (1) the perspective of the heads regarding the implementation of blended learning, (2) the obstacles encountered in implementing blended learning, and (3) the

potential opportunities for implementing blended learning that were raised during the interview session.

Word Cloud indicating Head's Attitudes towards Implementation of Blended Learning



Figure 1 Perspectives regarding the implementation of blended learning

This Figure 1 cloud map query shows the main theme of the Head's perspective on blended learning. The more frequently used words in bold that make a cloud around learning are; Interaction, skills, immediate, management support, accessibility, Head, and collaboration. Most of the chairpersons expressed a positive attitude toward the implementation of blended learning. However, the heads emphasized that implementation of blended learning skills requires immediate management support, as well as interaction and cooperation among heads.

Word Tree Map indicating Head's Attitudes towards Implementation of Blended Learning

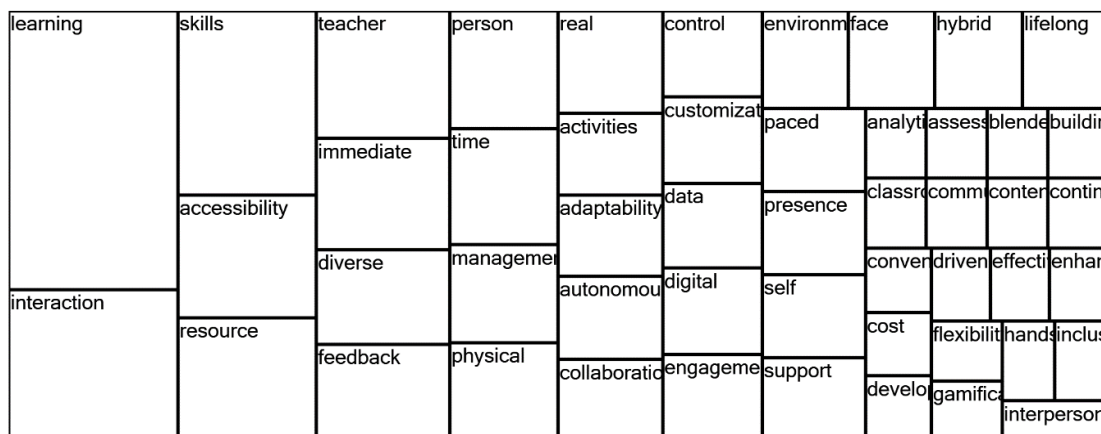


Figure 2 Word Tree Map Attitudes Towards Blended Learning

The word tree map Figure 2 represents chairpersons' perspectives on blended learning. The word hierarchy emphasizes that blended learning fosters interaction provides several methods of online training skills, and allows heads to participate and receive feedback immediately. Blended learning provides an opportunity to interact both online and in person.

Word Cloud indicating issues in the implementation of blended learning

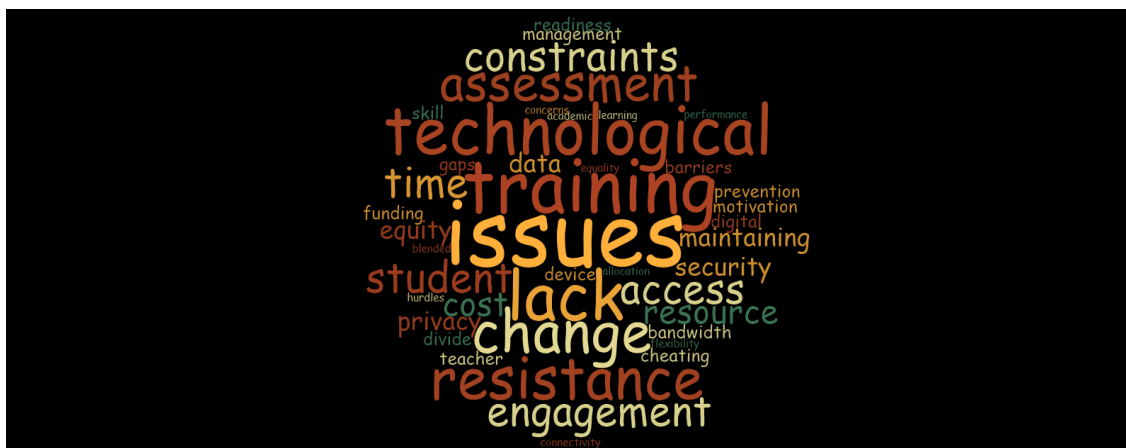


Figure 3 Issues in the implementation of blended learning.

Figure 3 shows the main Idea about the issues in the implementation of blended learning. The more frequently used words are also in bold and make a cloud around issues are; training, technology, assessment, lack, access, and resources. This cloud map query explored the heads' opinions regarding the issues of implementing blended learning. Most of the interviewees claimed that lack of resources, training, technology, and assessment are issues with blended learning implementation

Word Tree Map indicating issues in the implementation of blended learning

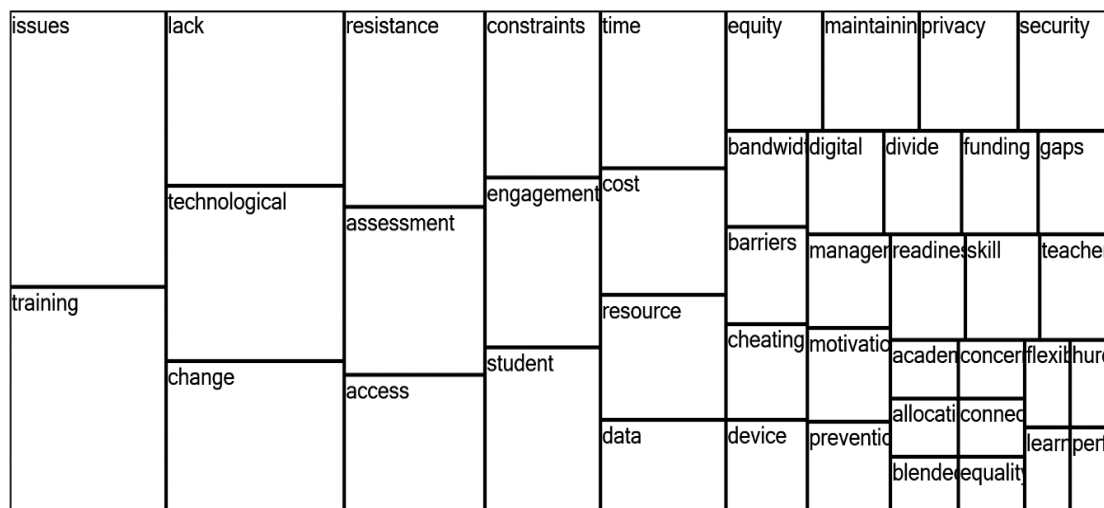


Figure 4 Blended learning issues

The word tree map Figure 4 depicted the views of chairpersons on blended learning issues that make its delivery inadequate. The order of the following supplied terms emphasized the concerns: lack of technology facilities, student engagement, time spent in classes, and the cost, privacy, and security of data are the main challenges encountered in blended learning.

The results of heads' perspectives about blended learning issues also were shown in the word ranking table 1 as under:

Table 1
Word Ranking and Percentages of Issues

| Word | Length | Count | Weighted Percentage (%) | Similar Words |
|---------------|--------|-------|-------------------------|------------------------------|
| Issues | 6 | 11 | 7.75 | effectiveness, issue, issues |
| Training | 8 | 9 | 6.34 | educational, training |
| Lack | 4 | 8 | 5.63 | Lack |
| technological | 13 | 8 | 5.63 | Technological |
| Change | 6 | 7 | 4.93 | Change |
| Resistance | 10 | 7 | 4.93 | Resistance |
| Assessment | 10 | 6 | 4.23 | assessment, evaluation |
| Access | 6 | 5 | 3.52 | access, availability |
| Constraints | 11 | 5 | 3.52 | Constraints |
| engagement | 10 | 5 | 3.52 | Engagement |
| Student | 7 | 5 | 3.52 | Student |
| Time | 4 | 5 | 3.52 | Time |
| Cost | 4 | 4 | 2.82 | Cost |
| Resource | 8 | 4 | 2.82 | Resource |
| Data | 4 | 3 | 2.11 | Data |
| Equity | 6 | 3 | 2.11 | Equity |
| Maintaining | 11 | 3 | 2.11 | Maintaining |
| Privacy | 7 | 3 | 2.11 | Privacy |
| Security | 8 | 3 | 2.11 | Security |
| Bandwidth | 9 | 2 | 1.41 | Bandwidth |
| Barriers | 8 | 2 | 1.41 | Barriers |
| Cheating | 8 | 2 | 1.41 | Cheating |
| Device | 6 | 2 | 1.41 | Device |
| Digital | 7 | 2 | 1.41 | Digital |
| Divide | 6 | 2 | 1.41 | Divide |
| Funding | 7 | 2 | 1.41 | Funding |
| Gaps | 4 | 2 | 1.41 | Gaps |
| management | 10 | 2 | 1.41 | Management |
| Motivation | 10 | 2 | 1.41 | Motivation |
| Prevention | 10 | 2 | 1.41 | Prevention |
| Readiness | 9 | 2 | 1.41 | Readiness |
| Skill | 5 | 2 | 1.41 | Skill |
| Teacher | 7 | 2 | 1.41 | Teacher |
| Academic | 8 | 1 | 0.70 | Academic |
| Allocation | 10 | 1 | 0.70 | Allocation |
| Blended | 7 | 1 | 0.70 | Blended |
| Concerns | 8 | 1 | 0.70 | Concerns |
| Connectivity | 12 | 1 | 0.70 | Connectivity |
| Equality | 8 | 1 | 0.70 | Equality |
| Flexibility | 11 | 1 | 0.70 | Flexibility |
| Hurdles | 7 | 1 | 0.70 | Hurdles |
| Learning | 8 | 1 | 0.70 | Learning |
| performance | 11 | 1 | 0.70 | Performance |

In this Table, the respondent's responses are mentioned in the word ranking and percentage summary order. Most chairpersons reported challenges in blended learning due to a lack of educational training and technological changes.

Future Prospects

Word Cloud indicating prospects of blended learning

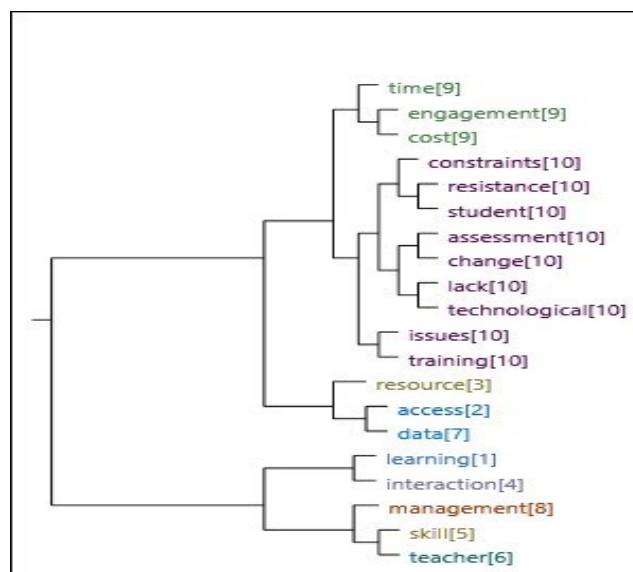


Figure 8 Future potential of blended learning

Figure 8 shows the context similarities with relative words and how they are combined into clusters. A cluster analysis using word trees was constructed to demonstrate a structure of similarities between codes and sub-codes. Respondent reviews were examined cluster-wise based on word similarity under the classification of three various (objectives) codes (Perspective issues and future potential of blended learning.).

Discussions

The main goal of this research was to depict the viewpoints of chairpersons on the deployment of blended learning in public sector universities. The research results indicated that the leaders encountered many obstacles, such as constraints in infrastructure, network difficulties, and power interruptions when carrying out the implementation. The study's results align with the findings of Ashraf et al. (2022). Highlighting the ineffectiveness and lack of accessibility of LMS.

The primary challenges in implementing blended learning are the insufficient availability of necessary resources, such as specific devices and internet access, and the absence of supporting infrastructure. The study results align with the research conducted by Saleem et al. (2023), which identified insufficient infrastructure as the primary obstacle to the effective implementation of blended learning. Furthermore, according to the findings, school administrators held the belief that blended learning was advantageous and efficient in facilitating a good teaching and learning experience. The results are consistent with the findings of Burhan-Jan et al. (2020), which revealed that blended learning provides a more conducive learning environment in educational institutions.

Conclusions

The main focus of this research is to investigate the implementation of blended learning in higher education institutions in Pakistan. The findings indicated that a majority of the university educators expressed support for the use of blended learning. Blended learning partially addresses the challenges that endanger our educational

ecosystem. If implemented with meticulous planning, a well-organized framework, and the necessary mindset, it can revolutionize our educational system. It is very advantageous for us to expedite the integration of blended learning. Blended Learning is an approach that combines traditional classroom teaching with mobile learning and online experiences to provide innovative educational solutions for instructors, coaches, and students. For blended learning to be effective, educational institutions must address the problems and obstacles and ensure that there are enough resources for its successful implementation.

Recommendations

- The electric power supply must be continually stable to provide optimal efficiency for successful implementation of blended learning.
- Educational institutions should have advanced computer libraries to facilitate blended learning in educational institutions.
- The effective deployment of blended learning necessitates the development of effective policies at the institutional level .
- It is necessary to build technology-based resource centers to provide training for Heads on the proper usage of blended learning in the Higher Education Institutions .

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