

Role of Administrators in Blended learning in Higher Education Institutions

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Abstract

As higher education institutions adopt blended learning, administrators play a crucial role in implementing and supporting blended learning, ensuring its success (Lomonosova & Valentinovna, 2018). The study investigates administrators' perceptions of blended learning as a teaching strategy, using a proportionate sampling sample and a content validity instrument modified by an expert. The study involved 27 administrators respondents who were selected from the universities in Islamabad. The interview guide was created to assess administrators' readiness for blended learning, focusing on their awareness of facilities, finances, capacity-building initiatives, challenges, and technology capabilities. The reliability of the results was ensured by consistent patterns and plausible reasons for differences. Data analysis involved analyzing administrative attitudes through interviews, coding the data, and identifying recurring themes. The study concluded that despite the availability of resources and support, the study emphasises the difficulties administrators encounter when implementing blended learning in higher education institutions. For blended learning to be successfully implemented, infrastructure facilities including well-equipped classrooms and high-speed internet connection are crucial.

Keywords: *Blended learning, Higher education institutions, Administrators, Perception, Readiness*

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Introduction

Higher education institutions are increasingly using blended learning, a technique that mixes traditional classroom instruction with online learning activities (Denysenko et al., 2020). This method has many advantages, including better access to educational resources, more flexibility for students, and personalised learning experiences (Dolgova et al., 2019). The role of administrators in putting this instructional strategy into practice and supporting it becomes increasingly important as higher education institutions adopt blended learning. According to Lomonosova and Valentinovna (2018), administrators are essential to the success of blended learning in higher education institutions. They help faculty members develop and deliver blended learning courses while assisting them in meeting the institution's pedagogical objectives. Making sure the teaching staff is knowledgeable about and trained in the right blended learning paradigm is one of the issues administrators confront (Klimova et al., 2018). Administrators could offer faculty members opportunities for professional development so they may learn about the various blended learning models and tactics to address this problem (Mirny et al., 2017). According to Sullivan et al. (2019), these possibilities ought to include instruction on how to create and deliver online courses, incorporate technology into the classroom, and use learning management systems efficiently.

To create blended learning activities for various content areas and instructional levels, administrators should work with faculty to identify best practices. To address the difficulties and resource needs of institutionalizing blended learning, administrators must also enable collaborations with other institutions (Lim & Wang, n.d.). An extensive number of financial resources, technological infrastructure, and pedagogical and technical assistance are needed for the integration of blended learning at a higher education institution (Phua et al., 2022). Administrators can actively look for relationships with other institutions to exchange knowledge, work together to solve problems and obtain funding for blended learning programs (Romero-Hall & Ripine, 2021). Administrators should also set up clear administration structures and policies to facilitate the adoption of blended learning. The adoption of blended learning in Pakistan's higher education institutions depends heavily on administrators. For faculty members to create and deliver blended learning events, they must give them the assistance and resources they require. To facilitate online learning, it is necessary to guarantee the availability of the technological infrastructure (such as computers and networks). The development of best practices for creating interesting and

effective blended learning events should involve administrators working with professors from various subject areas. To implement blended learning, Pakistan can benefit from the experiences of other institutions and form alliances to share resources and knowledge.

This study emphasizes the significance of administrators in higher education institutions' successful use of blended learning. Blended learning methods mix offline and online instruction to give students more freedom, better resource access, and chances for individualized learning. Implementing this method requires the assistance of administrators, especially in Pakistani institutions. The study emphasizes the significance of stakeholder collaboration, including the elements affecting institutional acceptance and educational staff, management organizations, and information institutions. Administrators' assistance and direction of teaching personnel is necessary for successful implementation, filling a research need in this field, particularly in developing countries like Pakistan.

Literature Review

For blended learning to be successful in higher education institutions, administrators must play a crucial role in its implementation (Sankar et al., 2022). By providing the required administrative assistance, administrators play a critical role in ensuring the successful integration of blended learning. They oversee managing resources, supervising the implementation process, and making sure that faculty members and students get the assistance and instruction they need to use blended learning tools and approaches (Ibrahim & Nat, 2019). To build proper regulations and procedures for the adoption of blended learning, administrators must also work with faculty members and instructional designers (Soomro et al., 2018). These rules and regulations ought to cover things like curriculum development, technological infrastructure, testing procedures, workload for teachers, and student support services. Additionally, administrators need to actively advocate for blended learning within the organisation (Sugianto, 2022). By doing this, they may instil a culture of enthusiasm and support for blended learning among educators, learners, and other stakeholders (Chang-ming, 2022). To effectively handle these issues, administrators must also be aware of the special requirements and difficulties associated with blended learning. Their decision-making should be influenced by their understanding of the most recent trends and best practises in blended learning (Puttasem, 2022).

Administrators must adopt a proactive attitude towards blended learning if they want to effectively oversee higher education organisations

(Asghar and coworkers, 2022). This involves actively soliciting staff and student feedback, keeping track of the development and results of blended learning efforts, and making the required adjustments to increase their efficacy (Alyoussef, 2023).

In conclusion, administrators' involvement and support are essential to the success of blended learning in institutions of higher learning (Sugianto, 2022). They must offer the required tools, training, and support, cooperate with academics and instructional designers, foster a culture of blended learning, attend to issues and needs, and continuously assess and enhance the way that blended learning is being used (Sugianto, 2021).

Perception of University Administrators of Blended Learning

The effectiveness of blended learning's implementation in higher education institutions depends heavily on how university officials feel about it (Makena et al., 2022). According to research, administrators are essential to the success of blended learning programmes. It is crucial for administrators to comprehend the advantages of blended learning and to actively promote its implementation within the institution (Neupane, 2018). Higher Education Policy and Leadership Studies (Shavaran et al., 2022) state that this can be accomplished through good communication and teamwork with academic staff, instructional designers, and other stakeholders.

According to Linnes et al. (2022), administrators must be aware of any difficulties and issues faculty members may have about blended learning. They must handle these issues in a helpful and proactive way. In addition to addressing any potential technological or logistical problems, this entails offering the tools and resources that faculty members need to advance their expertise in blended learning. Lestari and Naimah (2022), recommend that administrators evaluate how prepared their institution is to undertake blended learning. To make sure that blended learning projects can be supported, they should assess the technical infrastructure (Cadorna et al., 2022).

Administrators should consider variables including academic engagement, awareness and support, learners' readiness for self-directed learning, and motivation towards blended learning to produce positive perceptions and effective implementation of blended learning (Kumarasamy et al., 2020). Administrators can improve the general standard of education and student learning outcomes by taking these aspects into account. Administrators must support faculty members in the implementation of blended learning in addition to playing a supportive role (Schindel et al., 2013). This entails giving faculty members the tools,

resources, and professional development opportunities they need to feel comfortable integrating blended learning into their teaching methods.

Administrators should also consider changes in faculty evaluation methods to align with the goals and outcomes of blended learning (Narpila et al., 2022). In conclusion, effective governance of higher education institutions in the implementation of blended learning requires active advocacy from administrators (Ziggah et al., 2023). Administrators play a crucial role in promoting the benefits of blended learning and addressing any concerns or challenges that may arise (Neupane, 2018). They need to provide support and resources for faculty members, assess the readiness of their institution for blended learning, and consider factors such as academic engagement and learners' readiness (Schindel et al., 2013).

Facilities for Implementing Blended Learning

Institutions must provide the required resources and facilities for blended learning to do so successfully (Zia et al., 2022). According to Muassomah et al. (2023), this entails making sure that both teachers and students have access to an acceptable technology infrastructure and assistance. Institutions should also spend money on good learning management systems and other pertinent technologies to enable the deployment of blended learning (Sukadarma et al., 2022).

Successful implementation of blended learning depends on infrastructure facilities including well-equipped classrooms and easy access to high-speed internet (Wong, 2019). Institutions must also give faculty members enough training and assistance for them to use these resources and technologies efficiently (Choi et al., 2022). Additionally, they must make sure that the physical learning environments have the essential tools, including adequate seating arrangements, video equipment, and other resources, to support blended learning (Nafisah, 2022). According to Narpila et al. (2022), the environment has a significant impact on the effectiveness of blended learning. Students' active learning will be promoted by a supportive environment, sufficient resources, and qualified teaching staff.

A strong institutional direction and policy for blended learning must also be in place for institutions to be effective (Abu et al., 2021). It entails articulating the roles and duties of faculty members and administrators, defining the goals and objectives of blended learning, and creating guidelines for the choice and application of blended learning practises (Ali et al., 2023). According to Ziggah et al. (2023) effective governance in higher education institutions is essential for the adoption of blended learning to be successful.

Support and collaboration

Institutions must offer faculty members and instructional designers' chances for collaboration and continuing assistance in addition to facilities and resources (Assali, 2023). This can be accomplished by faculty members sharing best practises in blended learning and learning from one another through professional development programmes, workshops, and communities of practise (Rice, 2023). Institutions should also give the adoption of blended learning top priority when allocating resources.

To help professors and students effectively use blended learning technology, this includes spending money on technical support staff recruitment and training (Kovtoniuk et al., 2022). To ensure that students have a pleasant experience with blended learning and can get past any technological challenges they might run into, these technical support teams are essential (Alrashdi et al., 2021).

Challenges for Adopting Blended Learning at Higher Education Institutions

Although blended learning has several potential advantages, higher education institutions still encounter several obstacles when implementing this teaching method (David et al., 2023). One difficulty is changing reluctance on the part of academic staff, who could be wary of utilizing new technologies and instructional approaches. The availability of proper resources and support for faculty members, as well as good leadership, can overcome this opposition (Salah, 2022). The requirement for appropriate training and chances for professional growth for faculty members is another problem. Giving faculty the right training and professional development opportunities will give them the knowledge and abilities to successfully implement blended learning strategies in their teaching practise and get past any technological or pedagogical barriers they may run into (Schindel et al., 2013). A successful implementation of blended learning also requires that teachers increase their technological skills (Bozkurt, 2022). This can be accomplished by including technology training programmes into teacher education curricula and giving students first-hand exposure to blended learning tools and platforms while they are in pre-service training.

Lack of organisational support is yet another difficulty in putting blended learning into practise (Ismail & Edi, 2023). The implementation of blended learning requires resources and assistance from higher education institutions, according to Schindel et al. (2013). This includes offering faculty development resources, such as workshops and training sessions, to aid in their acquisition of the skills and information required to successfully implement blended learning methodologies in their

teaching (Abumandour, 2021). Institutions should also provide technical support teams to aid in the adoption of blended learning technology by professors and students. These support groups may take care of any potential technological issues and make sure that blended learning is implemented smoothly.

Higher Education Commission of Pakistan actively supports programmes for blended learning in higher education institutions (Irum, 2020). To encourage blended learning in institutions, HEC has funded initiatives like the Directorate of Distance Education Programme (Ikram & Kenayathulla, 2023). To facilitate the successful adoption of blended learning in teacher education programmes, these monies can be used to offer the necessary resources, such as computers and technical support. In conclusion, managing blended learning effectively in higher education institutions requires resolving several issues. These difficulties include the lack of a technical infrastructure, the need for organisational assistance, and insufficient teacher preparation and support.

Objective of the Study

The objective of the study was to explore the awareness of blended learning among university administrators, explore available facilities, assess practices, identify associated factors to address challenges and prevent reluctance to adopt this approach.

Methodology

Research Design

An expert looked over the research tool for a study and offered comments and recommendations to improve the quality of the interview guide items. The instrument was modified and had suggestions removed after being validated by a blended learning specialist. By a specialist in blended learning, the structured interview guide's construct validity and content validity were verified. Using online interviews, synchronous meetings, and in-person visits to the institution, the instrument was disseminated for the purpose of collecting the final data.

Population and Sample

This study used a proportionate sampling sample to examine administrators' perceptions of blended learning as a teaching strategy. In this qualitative research study, an in-depth phenomenon is examined using the proportionate sample method. According to Patton (2015),

researchers use smaller sample sizes in qualitative research to conduct in-depth analyses of certain phenomena. The population of the study was consisted of administrators from International Islamic university, National University of Modern Languages, Comsats university and Bahria university Islamabad.

For interviews with the study to assess administrators' readiness of implementing blended learning, at Higher education the researchers created an interview guide. The sample of the study consisted of 27 administrators, from each interview lasted between 20 and 30 minutes and was scheduled for the participant at a time and place that worked for them. The open-ended interview questionnaire was used by every interviewee. Some of them were approached directly by the researcher, and some respondents were interviewed via Microsoft Teams, Google Meet, Google Docs, and Zoom.

Research Instrument

The interview guide was developed to assess administrators' readiness for blended learning. For their institution to adopt blended learning, administrators should be aware of its facilities, finances, capacity-building initiatives, challenges, and technology capabilities.

Quantitative Data Collection

The reliability of the results of this investigation was aided by the consistency of patterns that emerged from the various data sources and by plausible reasons for differences when they did (Patton, 2015). To study the data for the respondents' typical life experiences, a coding method was used after the initial responses were recorded. To identify recurring themes in the qualitative data, preliminary codes were gathered into groups.

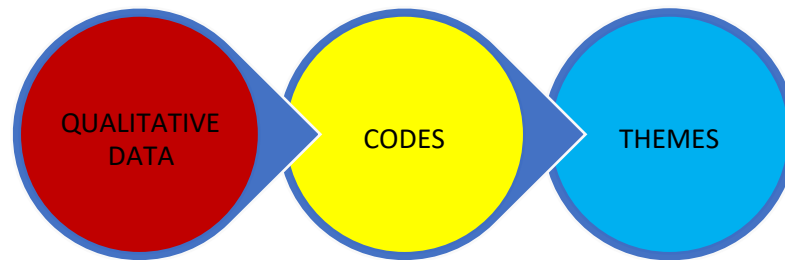


Figure 01. Thematic Analysis

Data Analysis and Findings

Administrator attitudes were analysed through interviews to find out recurring themes in the data. Each interview was transcription to start the coding process. From the data, the researcher created codes, and using those codes in the analysis that followed, the researcher created themes. Information was gathered from 27 interviews with university administrators. The respondents' responses to an open-ended questionnaire were used to gather information on how they felt about implementing blended learning in pieces.

Perception of University Administrators of Blended Learning

The open-ended survey that university officials filled out. The following topics were developed from the data: a) Facilities, b) Funding, c) BL implementation, and d) Administrators' perceptions of blended learning. The codes developed from these themes are shown in the figure below.

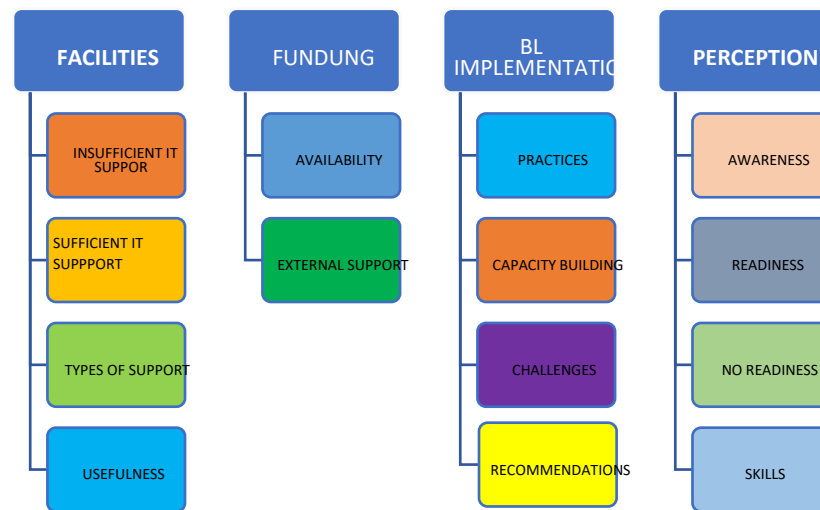


Figure 02. Perception of University Administrators for adopting blended learning

Theme 1 Facilities

Code 1: Sufficient Support. Most administrators believe their institutions have sufficient facilities for blended learning, including Microsoft Teams, Google Classroom, Zoom, Campus Management System, WhatsApp, Vivo, and Google Suite communication tools. Teachers mainly use Zoom and Google Classroom for blended learning

classes, but other software/technologies may also be used. Live classes and learning exercises are successful, and Google Classroom, Microsoft Teams, and Zoom is the best for blended learning. A mix of different technologies is viable for successfully implementing blended learning, with Zoom being the most successful for flipped classrooms, virtual models, and individual rotation. Indigenously developed LMS and Google Classroom is also considered an essential for blended learning implementation.

Theme 2 Funding

Administrators expressed their availability of financial resources for blended learning programs, with most stating that they have sufficient IT infrastructure. However, they acknowledge that the cost of these tools is partly due to limited university resources. LMS has been developed, and sufficient infrastructural support has been ensured. However, IT backup is weak in their area. Financial constraints are always an issue, but administrators are working to ensure successful resource utilization. Practical resources are available, but not sufficient. Most administrators agree that support from HEC is required for full implementation. Access to the internet is limited due to limited network connectivity. Financial providers, such as HEC, are willing to arrange and adopt blended learning, with HEC providing funds for Covid-19 transition.

Code 1: Availability of Funds. The study also found that funding availability in universities for implementing blended learning facilities is not a major challenge in Pakistan. The Higher Education Commission of Pakistan is actively supporting initiatives for blended learning in higher education institutions, providing funds for projects such as the Directorate of Distance Education Program. These funds can be utilized to provide necessary resources, such as computers and technical support, to ensure the effective implementation of blended learning in teacher education programs.

Theme 3 Implementation

Code1: Practices. The implementation of blended learning in higher education institutions has been a topic of discussion among administrators. During the COVID-19 pandemic, all classes were conducted online, but now all classes are face-to-face. Most administrators believe that their entire system is through Learning Management Systems (LMS), and technology is the fundamental aspect of teaching. However, some administrators feel that the use of blended learning is just average due to insufficient resources.

In terms of capacity building, most administrators provide sufficient training for faculty members concerning blended learning through the

cascade model. They also suggest that institutions initiate multi-layered training and capacity-building mechanisms once a year to enhance the skills of a blended teaching model. However, some administrators feel that their faculty members receive very little training, with most training focusing on face-to-face teaching and rarely addressing blended learning. *Code 2: Challenges.* Challenges faced by faculty members during the implementation of blended learning include inadequate infrastructure, lack of learning material, and inadequate professional training. Access to the internet is limited, and mobile network coverage is not available in more than 90% of the area. Additionally, there is a need for budgetary support from the HEC/Government to establish required educational infrastructure and a nationwide plan of transitioning from on-campus to online/blended learning in policy implementation.

Code 3: Capacity Building. Some administrators suggest creating videos on LMS or Zoom Recorded videos for training faculty and providing advanced technologies and equipment, including software for faculty and students. Training programs must be offered for continuous motivation and encouragement to boost students' willingness and preparedness. Proper training programs for teachers, support of tools, up-gradation of infrastructures, online exam proctorial systems, special tools and apps for math-intensive courses, infrastructure, professional training, and model institutions with at least five years of BL experiment & related research are also suggested.

Code 4: Recommendations. High-speed internet facilities should be provided to students at affordable rates, and the effectiveness and utility of blended learning should be publicized. New technology infrastructure is not required and cannot achieve the same results. Teaching faculty need specific training, such as providing undisturbed internet and higher broadband for the internet. A blended learning education program can only be successful if teachers and students are proficient in computer technologies and infrastructure, and training needs are fulfilled. However, the lack of funds for the establishment of blended learning institutions may not be a significant issue in Pakistan.

Theme 4 Perception

Code 1: Awareness. The study aimed to understand administrators' perceptions of blended learning in higher education institutions (HEIs) during the COVID-19 pandemic. Most respondents expressed positive attitudes towards blended learning, believing it is the need of the hour and should continue even after the pandemic. However, some administrators felt that blended learning is better than pure online systems but not an alternative to face-to-face learning.

Code 2: Readiness. The study also found that many administrators are ready to adopt blended learning, with nonmedical faculty being more prepared than medical and health sector faculty. However, there is a lack of knowledge and willingness among senior faculty members to change behavior, especially among senior faculty members.

Administrators also discussed the skills required for conducting blended learning at their institutions. They reported that they had been trained during the pandemic and after with more coaching and capacity building. However, more emphasis is given to teaching faculty capacity building, which needs training to update their skills. Some administrators believe that blended learning is just a slight change in teaching mode, while others believe that teachers need more training to understand the challenges associated with online teaching and the best practices to overcome them.

In conclusion, effective governance of higher education institutions in implementing blended learning requires addressing various challenges, including the lack of technological infrastructure, inadequate training and support for instructors, and the need for organizational support. By integrating technology training programs, providing resources and support for faculty members, and ensuring funding availability, higher education institutions can effectively implement blended learning. some of the view and perception of administrators for the implementation of blended learning in Higher Education institutions

Table 01

Opinions of administrators for blended learning problems, facilities, challenges, funding

Administrators	Views
Administrator (1)	"Based on our experience, pre-recorded lectures/sessions are unsuccessful. Therefore, live classes and learning exercises are successful, and Google Classroom, Microsoft Teams, and Zoom are the best for blended learning".
Administrator (2)	"LMS, Zoom, I think zoom is most successful mean for implementation. flipped classrooms, virtual model, and individual rotation".
Administrator (3)	<i>"During the Pandemic, 100% majority of the staff members effectively used and tried this approach during the pandemic. Many say that the three is</i>

	<i>maximum utilization of blended learning, but now with face-to-face interaction, it might have reduced”.</i>
Administrator (4)	<i>“We have maximum utilization of the technologies at our university.”</i>
Administrator (5)	<i>“Since covid 19 blended approach has been adopted, they have been provided with training frequently”</i>
Administrator (6)	<i>“Seven collective and many other departmental pieces of training have been conducted in the last two years.” Another administrator shared that “teachers have almost always been provided with first-class teaching aids and facilities for online teaching.”</i>
Administrator (7)	<i>“None - most training focuses on face-to-face teaching and rarely addresses the blended learning approach.”</i>
Administrator (8)	<i>“a) Infrastructural support, lack of proper infrastructure in terms of educational technologies, e-classrooms and Recording rooms (b) Lack of learning material for blended learning.”</i>
Administrator (9)	<i>suggested “a) Budgetary support from HEC/Government to establish required educational infrastructure. b) Nationwide plan of transitioning from On-campus to Online/Blended learning in policy implementation”.</i>
Administrator (10)	<i>“I strongly believe in its effectiveness & utility, especially for low-income students, provided that HEIs meet minimum technological and infrastructure requirements. Seems feasible and better for smooth provision of quality education”.</i>
Administrator (11)	<i>“Blended Learning approach is very beneficial after Covid-19 and BL has great potential, keeping in view the emergencies like Covid-19. In a COVID</i>

	environment, it's good, but I think face-to-face education impartation has considerably more impact than online”.
Administrator (12)	“NUML has already adopted a blended learning approach. All classrooms are equipped with HD CAMs with a sound system. 50% of students attend while sittings in classrooms whereas others sit at remote locations to attend lectures”.
Administrator (13)	<i>“IIUI University faculty is already trained and adopted a blended learning approach. Faculty at our institution is ready to adopt this approach”.</i>
Administrator (14)	<i>“While there is the capacity for most of the part, teachers will need the training to understand the challenges associated with online teaching and the best practices to overcome the challenges. Improving competence is already needed”.</i>

The administrator reported that faculty receive top-tier training aids and facilities for online classes frequently. However, transitioning to online teaching requires proper training in advanced teaching methodology, pedagogy, and designing curriculum that is easy for students to understand. Administrators express full support, and HEC has provided funds for blended learning. Most faculty members use communication tools like Microsoft Teams, Google Classroom, Zoom, Campus Management System, WhatsApp, Vivo, and Google Suite.

Blended learning methods are increasingly popular in Islamabad universities, combining online and face-to-face instruction to improve learning. However, challenges such as lack of communication, funding, security issues, and current digital infrastructure hinder effective implementation. Slow internet connectivity is the biggest problem, and factors affecting blended learning positively include student engagement, achievement, and perception. Teachers often lack the proper teaching capacity to effectively implement this approach, highlighting the need for effective training for both teachers and students.

Blended learning requires effective training for teachers and students. Challenges include communication issues, funding issues, security issues, and outdated digital infrastructure. Slow internet connectivity is the biggest issue. Positive factors for blended learning include student engagement, achievement, and perception. However, teachers lack the necessary capacity to effectively implement this approach.

Discussion

The study reveals that administrators at Higher Education institutions have sufficient funds from HEC and other sources, but they must make strategies to utilize these funds effectively. In a similar vein, Irum, 2020 stated that The Higher Education Commission of Pakistan actively encourages courses for blended learning in higher education institutions. HEC has financed programmes like the Directorate of Distance Education Programme to promote blended learning in educational settings. Moreover, according to Ikram & Kenayathulla (2023), these funds can be utilized to purchase the tools needed—such as computers and technical assistance—to encourage the successful implementation of blended learning in teacher preparation programs.

Likewise, according to Neupane, (2018), administrators are important components of the institutions in promoting the advantages of blended learning and resolving any issues or problems that may occur. As stated by Schindel et al. (2013), they must examine elements like academic engagement and learner preparation, assess their institution's readiness for blended learning, and provide resources and support for faculty members. From the work of David et al., (2023), it is seen that Higher education institutions still face several challenges when implementing blended learning, even though it has a number of potential benefits to academic personnel may be reluctant to adopt new technologies and teaching methods, which presents a challenge.

According to Salah (2022), this opposition can be overcome with the provision of adequate resources and support for faculty members. Another issue is the need for faculty members to have the proper training and have opportunities for professional advancement. Giving faculty the appropriate training and professional development opportunities will provide them with the knowledge and skills to successfully apply blended learning methodologies in their teaching practices and overcome any technological or pedagogical challenges they may encounter (Schindel).

Study finding revealed that most faculty members use Microsoft Teams, Google Classroom, Zoom, Campus Management System, WhatsApp, Vivo, and Google Suite communication tools. Despite the availability of top-of-line training aids and facilities for online classes, administrators face challenges in adopting a blended learning program effectively. These include infrastructural support, lack of proper infrastructure, and lack of learning material for blended learning. Administrators believe that perceptions are an excellent approach for efficient, effective, and result-oriented teaching, learning, and research. Similarly, Assali (2023), stated that in addition to facilities and resources,

institutions must provide opportunities for collaboration and ongoing support for academic staff and instructional designers. This can be achieved by faculty members exchanging best practises for blended learning and learning from one another through professional development programmes, workshops, and communities of practice. Rice, (2023) suggest that when allocating resources, institutions ought to prioritize the adoption of blended learning. Also, Wong (2019), stated that infrastructure facilities including well-equipped classrooms and convenient access to high-speed internet are necessary for the successful deployment of blended learning.

The study found that teachers must develop their technology proficiency to implement blended learning, and they also need administrative support from higher education institutions. To encourage active learning and effective implementation, institutions ought to provide tools, technical support groups, infrastructure facilities, and a positive environment. Likewise, according to Choi et al., (2022) institutions must also provide faculty members with adequate training and support to use these resources and technologies effectively. Additionally, Abumandour (2021), ensure that the physical learning locations have the necessary resources to facilitate blended learning, including adequate seating, video equipment, and other resources (Nafisah, 2022).

Kovtoniuk et al., 2022 also indicated that this includes spending money on hiring and training technical support people to enable professors and students to utilize blended learning technology. These technical support teams are crucial to making sure that students enjoy blended learning and can overcome any technological obstacles they may encounter said by (Alrashdi et al., 2021). Despite these challenges, administrators show a positive awareness of blended learning and believe that it encourages student-centered learning. They have full support from HEC and have provided funds for Covid-19 to transition to blended learning.

Conclusion

In conclusion, managing blended learning efficiently in higher education institutions necessitates finding solutions to several problems. These challenges include the lack of a technology infrastructure, the requirement for organizational support, and insufficient teacher preparation and support. The study concluded that despite the availability of resources and support, the study emphasizes the difficulties administrators encounter when implementing blended learning in higher education institutions. The Directorate of Distance Education Programme

is one of the initiatives that the Higher Education Commission of Pakistan has funded, and it also actively supports blended learning courses. Administrators are responsible for determining if the institution is prepared for blended learning and for providing faculty with tools and support. Notwithstanding the possible advantages, problems including inadequate infrastructure, a lack of learning resources, and a lack of support from the system continue. Administrators must offer sufficient funding, faculty assistance, and collaborative possibilities to overcome obstacles.

For blended learning to be successfully implemented, infrastructure facilities including well-equipped classrooms and high-speed internet connection are crucial. Higher education institutions need to provide administrative support and help teachers become more proficient with technology. Institutions should assist effective implementation and active learning by offering resources, infrastructure, technical support groups, and a pleasant atmosphere. Institutions should also make sure that physical learning spaces have all the tools needed to support blended learning. To allow instructors and students to use blended learning technology, technical support teams are essential. Administrators are supportive of blended learning and think it promotes student-centered learning despite these obstacles.

The study was based on qualitative research method, whereas for future research on blended learning in higher education institutions should use a mixed-methods approach, conduct longitudinal studies, and incorporate quantitative outcome measures, technology integration, and stakeholder perspectives.

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