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## Difficulties Encountered in the Adoption of Blended Learning in Higher Education

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### ABSTRACT

Blended learning (BL), defined as the deliberate integration of online and traditional face-to-face instruction, has become a central teaching model in higher education. It offers flexibility, learner-centered approaches, and improved accessibility. However, combining digital and traditional methods continues to present several challenges that affect its success and long-term sustainability. This paper aims to identify the major barriers to the effective implementation of blended learning in higher education. Based on findings from various empirical studies and recent systematic reviews drawn from secondary sources such as peer-reviewed journals, books, and doctoral theses, it is evident that although blended learning provides many benefits, major challenges persist. These include limited digital competence in teachers, lack of time for course redesign, and inadequate institutional and technical support. In addition, the shortage of reliable equipment and technical assistance further complicates adoption. Although many universities have upgraded their digital facilities, there are still gaps in access to fast internet and digital devices, particularly in rural or less developed areas of countries such as India. Since blended learning relies heavily on technology, reducing the digital divide and ensuring equal access to resources are essential. The analysis suggests that these issues are interlinked, where a weakness in



one area often intensifies others. Therefore, successful blended learning requires a comprehensive institutional strategy involving infrastructure improvement, continuous teacher training, effective course design support, and policies that promote workload balance and mental well-being. Thus, this paper reviews recent research on the challenges of using blended learning in higher education. It highlights the related problems faced by teachers, students, and institutions, and provides practical suggestions to support effective, inclusive, and long-term blended learning in the post-pandemic period.

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## Introduction

Blended learning (BL) is an educational approach that combines the strengths of traditional classroom teaching with the flexibility and interactivity of online learning (Graham, 2013). It has become increasingly important in higher education as institutions look for ways to make learning more engaging, accessible, and effective in a technology-driven world. The COVID-19 pandemic accelerated this shift, forcing universities across the globe to rapidly adopt digital and hybrid teaching models (Bond et al., 2021). Although this transition helped to maintain academic continuity. It also revealed several ongoing challenges—technical, pedagogical, and organizational—that continue to affect the success of blended learning (Rasheed et al., 2020).

The true power of blended learning is in its capacity to encourage active participation, offer flexibility, and provide learner centered experiences. It allows students to learn at their own pace and convenience while still benefiting from face-to-face interaction with teachers and peers (Porter et al., 2016). However, research shows that these benefits do not happen automatically. For blended learning to work well, teachers need good digital skills, flexible teaching methods, and strong support from their institutions to create interesting and meaningful lessons (Mishra & Koehler, 2006). When these elements are missing or poorly aligned, blended learning can turn uncoordinated and increase teachers' workload and stress (Bond et al., 2021; Shah et al., 2024).

## Objective of the Study

To identify the major barriers to the effective implementation of blended learning in higher education.



## **Research Methodology**

This review paper is based on empirical studies from peer reviewed journals. Only studies related to blended learning in higher education and published in English language were included. Studies on primary or secondary education, or opinion articles, were excluded. Information from the selected studies, such as objectives, methods, challenges, and recommendations, was grouped into main topics to make it easier to understand and discuss. The review focused on challenges related to infrastructure, teachers' digital skills, teaching methods, institutional support, and student engagement.

Although this study relies on published research and English-language sources, which may limit its scope, it provides a clear overview of the main challenges and useful insights for improving blended learning in higher education.

## **Findings of the Study**

### **Key Challenges in Blended Learning:**

#### **Technological Infrastructure and Usability**

A strong technological foundation is essential for implementing blended learning effectively. However, many institutions still struggle with poor internet connectivity, outdated hardware, and unreliable learning management systems (LMS), which often disrupt the teaching–learning process (Rasheed et al., 2020). Even in well-equipped universities, the usability of digital platforms can be a challenge. Complicated LMS interfaces, frequent technical issues, and poor integration among tools can frustrate both teachers and students (Porter et al., 2016). When platforms are difficult to navigate or poorly designed, learners often lose motivation and participation decreases (Rasheed et al., 2020). Moreover, students from rural or economically weaker backgrounds frequently face digital access barriers, raising serious equity concerns (Bond et al., 2021).

#### **Faculty Digital and Pedagogical Competence**

Teachers play a central role in the success of blended learning. Yet, many still lack the digital and pedagogical skills needed to integrate technology effectively into their teaching (Mishra & Koehler, 2006). Research shows that educators often depend on uploading lecture slides instead of creating interactive online learning experiences (Porter et al., 2016). Tondeur et al. (2017) note that most teachers receive limited training in online course design and facilitation. Redecker (2017) further emphasized that successful blended teaching requires confidence, creativity, and a clear understanding of how technology



supports student-centered learning. If these abilities are lacking, blended learning cannot achieve its maximum benefits.

### **Professional Development and Institutional Support**

Support from the institution is often limited or unorganized, leaving teachers without enough time, training, or motivation to update their courses (Porter et al., 2016). Traditional professional development programs are usually short-term and focus mainly on tool usage rather than innovative pedagogy (Redecker, 2017). Ultimately, practical programs like peer mentoring, hands-on workshops, and working with instructional designers are needed to help teachers develop useful skills (Bond et al., 2021). According to Shah et al. (2024), educators, especially in health-related fields, experience burnout due to limited institutional support, which hampers the success of blended teaching.

### **Instructor Workload and Technostress**

Developing and maintaining blended courses requires significant time and effort. Teachers often spend additional hours creating online materials, moderating discussions, and providing continuous feedback. The rapid technological changes brought on by the pandemic have also contributed to “technostress”—a feeling of anxiety and fatigue resulting from the constant adaptation to new digital tools (Bond et al., 2021). When institutions fail to recognize this added workload or provide incentives and workload adjustments, teachers’ motivation to sustain blended learning tends to decline (Shah et al., 2024).

### **Student Self-Regulation and Digital Literacy**

Blended learning demands that students must be active and responsible for updating their own learning. However, many lack the self-regulation skills and digital literacy needed to manage their time and stay engaged with online content (Rasheed et al., 2020). Poor time management, lack of motivation, and difficulty using online tools can lead to disengagement and lower academic performance. Studies show that students value clear communication, interactive lessons, and supportive online environments to stay motivated (Bond et al., 2021). Teachers can address these challenges by designing structured online activities and providing regular feedback to support learners in being responsible and independent.

### **Assessment, Quality Assurance, and Academic Integrity**

Assessment remains one of the most complex elements of blended learning. Instructors often find it difficult to create authentic, meaningful assessments that align both online and offline components. The risk of cheating and plagiarism also increases in online assessments when institutions lack proper



monitoring or e-proctoring systems (Porter et al., 2016). Many universities have not yet fully established clear rules to maintain consistent quality in blended courses. As a result, students may experience differences in grades and learning outcomes depending on the course or instructor. (Bond et al., 2021)

### **Institutional Policy, Leadership, and Strategic Planning**

Strong leadership and clear policies are crucial for sustaining blended learning initiatives. However, fragmented governance, limited funding, and weak strategic planning often hinder progress (Porter et al., 2016). Many universities continue to treat blended learning as an optional or temporary solution rather than a permanent part of academic policy. Effective leadership should create a common vision, provide enough resources, and include blended learning goals in the institution's plans (Bond et al., 2021). Having clear rules and policies helps make teaching workloads fair, rewards teachers for their efforts, and ensures that every student has equal access to the digital tools needed for learning.

### **Equity and Accessibility**

Ensuring equity and accessibility is a persistent challenge in blended learning. Students with disabilities often face difficulties accessing online materials when content is not designed inclusively or lacks alternative formats (Rasheed et al., 2020). Similarly, those from low-income or rural backgrounds may be excluded due to poor connectivity or lack of digital devices. Such disparities widen the educational divide and challenge the inclusive mission of higher education (Bond et al., 2021). Institutions can reduce these inequalities by offering device loans, internet subsidies, and ensuring that all courses are designed with accessibility in mind.

### **Discussion**

The reviewed studies clearly show that the challenges in blended learning are closely connected and often reinforce each other. According to Rasheed et al. (2020), problems with technology can make teaching more difficult, and when institutions provide little support, teachers experience higher stress due to increased workloads. Similarly, Porter et al. (2016) highlights that how a university or college behaves and is managed—including its values and leadership—has a big impact on whether blended learning programs succeeds or not. Without supportive policies, recognition, or incentives, many faculty members perceive blended learning as an additional burden instead of an opportunity to innovate their teaching practices.



Bond et al. (2021) explained well in his study that the COVID-19 pandemic revealed how many universities were not fully ready for digital teaching. Institutions that already had good technology, proper teacher training, and clear plans were able to move to blended learning more easily. On the other hand, those without such preparation faced many problems. This shows that the universities should focus on regular and long-term investment in digital learning instead of acting only during emergencies. This highlights the need for proactive and long-term investment in blended learning rather than short-term, reactive responses to crises.

According to Mishra and Koehler (2006), successful blended teaching depends on the integration of three forms of knowledge—technological, pedagogical, and content-related. While most teachers are confident in their subject matter, many lack the digital and pedagogical skills to integrate technology effectively into their teaching. Therefore, continuous professional development programs must focus increasingly on enhancing both competence and confidence in using technology for meaningful learning experiences in higher education.

Students' readiness also plays a crucial role but is often underestimated. As Rasheed et al. (2020) aptly pointed out, even the most well-designed blended courses can fail if students are not digitally literate or lack self-regulation skills. Institutions need to provide proper orientation sessions, learning support, and digital mentorship to help students adapt to hybrid modes of study and remain motivated.

Moreover, studies by Bond et al. (2021) and Shah et al. (2024) stress that issues of equity, mental health, and well-being cannot be ignored. The success of blended learning is not limited to technology or pedagogy—it is also deeply social and psychological. Institutions must adopt flexible, supportive and human-centered approaches as also designing systems that are inclusive, supportive, and mindful of diverse, learner and teacher needs.

## **Conclusion**

Blended learning has the potential to transform higher education by combining the strengths of face-to-face interaction with the flexibility of online learning. However, realizing this potential depends on addressing a wide range of interrelated challenges involving technology, pedagogy, policy, and human resources. The reviewed literature consistently points to weaknesses in areas such as infrastructure, teacher digital competence, professional development, workload balance, student-readiness, and institutional leadership.



To overcome these barriers, universities must take a systemic and holistic approach. This involves investing not only in digital tools and platforms but also in the professional growth and well-being of teachers and students. Strong institutional policies, leadership commitment, and continuous evaluation mechanisms are crucial to ensure that blended learning evolves as a sustainable practice rather than a temporary response to external pressures.

Ultimately, the success of blended learning lies in human-centered design—creating learning environments that are accessible, equitable, and engaging for all. With proper support from institutions and inclusive planning, blended learning can move beyond temporary use and become a key part of high-quality, future-oriented education.

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