Exploring Blended Learning:
Benefits and Challenges of Integrating Face-to-face and Online Teaching

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Abstract— **This paper explores the integration of face-to-face and online teaching modalities to develop blended learning within higher education at Lund University.**

By examining the advantages and challenges of both approaches through a comprehensive literature review and semi-structured interviews with experienced educators, we aim to identify strategies that maximize student engagement and learning outcomes.

Our findings highlight the need for cohesive course structures, flexible learning opportunities, and continuous feedback mechanisms. The results emphasize how combining the social and interactive benefits of face-to-face teaching with the flexibility of online learning can create a more effective and engaging blended learning experience for students and teachers alike.

Index Terms— **Face-to-face, online learning, blended learning, student engagement, motivation, higher education.**

I. INTRODUCTION

RESEARCH suggests that teaching should be adapted to the objectives at hand (Biggs, 2012). University courses often entail multiple objectives that may vary according to the phases by which they are implemented. At the outset, teachers usually aim to clarify and rationalize the purpose, objectives, and curriculum of the course, as well as how participants' learning will be assessed. Moreover, instructors commonly seek to facilitate student interaction through activities such as self-introductions and ice-breakers, fostering engagement and alleviating tensions among learners, thereby promoting a conducive learning environment (Chlup & Collins, 2010). Following this introductory phase, the real work of developing student knowledge begins. The activities and methods employed should ensure that students remain engaged and motivated by their learning experiences. Ideally, this will lead to deeper learning (Biggs & Collis, 1982; Bloom et al., 1956), which can be verified by assessments toward the end of the courses.

Technological advancements and external pressures, notably those brought about by the recent Covid-19 pandemic, have accelerated the adoption of online teaching. A significant body of research has examined the advantages and challenges of online teaching compared to traditional face-to-face instruction (Biwer et al., 2021; Sadeghi, 2019; Shu & Gu, 2018; Thai, De Wever & Valcke, 2020). Additionally, the integration of these two teaching modalities, known as blended learning, has gained traction in recent years and offers students a varied learning experience that spans physical interactions and digital engagement (Chilton, Hanks & Watson, 2024; Conrad &

Openo, 2018; Nasution et al., 2021; Zaghloul & Bednar, 2022).

The purpose of this paper is to examine the benefits and challenges of blended learning in higher education and to identify strategies that maintain high motivation and engagement among students, thereby improving their learning outcomes.

II. METHOD

To create an overview of existing knowledge on blended learning, a comprehensive literature review and a series of interviews with experienced teachers were conducted.

The *literature search* employed the Lund University LUBsearch engine to identify peer-reviewed articles combining keywords related to different learning modalities (e.g., face-to-face, blended, online) and learning outcomes (e.g., motivation, engagement, benefits, challenges). To reflect recent technological developments such as video conferencing software and improved learning platforms, the search focused primarily on publications from 2020 onwards, although a few earlier but highly relevant studies were also included. The most pertinent articles were screened and compiled into a shared database.

In parallel, *semi-structured interviews* were carried out with university teachers to gain deeper insights into their experiences with blended learning. The interviews explored themes such as perceived benefits and drawbacks, student engagement, adaptation to new teaching formats, and evaluation of changes. The transcripts were analysed thematically, and recurring patterns were compared with the literature findings. The synthesis of both sources provided a foundation for identifying strategies that enhance motivation, engagement, and learning outcomes in blended higher education environments.

III. RESULTS

The analysis of literature and interviews highlights both the opportunities and challenges of integrating face-to-face and online teaching.

A. Fostering community and interaction.

Face-to-face learning enhances social connection and engagement, creating a supportive atmosphere where students can collaborate and discuss ideas (Shu & Gu, 2018; Thai, De Wever & Valcke, 2020). One teacher noted that in-person settings make it easier for "*students to get to know each other and the teachers*," resulting in more open discussions. Conversely, online environments may foster isolation and reduce belonging (Li & Che, 2022; Sadeghi, 2019), especially when students have limited informal contact.

B. Feedback and immediacy.

A strong advantage of in-person teaching is the possibility of immediate feedback and clarification (Shu & Gu, 2018). Teachers highlighted that "*there is better engagement and connection with students as both can see each other*," which allows instructors to sense the class pace and adjust content accordingly. In contrast, the lack of visual cues online was described as "*like talking straight out to the air*," reflecting the difficulty of maintaining interaction when cameras are off.

C. Flexibility and accessibility.

Online teaching offers flexibility in time and place (Biwer et al., 2021; Chilton et al., 2024), reduces commuting, and allows participation from distant students or guest lecturers. As one teacher explained, "*a guest researcher that doesn't need to be here on campus provides flexibility—and helps with budget and economics.*" The flipped-classroom model, where students review materials in advance and use class time for practical exercises, was seen as a promising way to combine flexibility with deeper learning (Ashraf, 2021; Conrad & Openo, 2018).

D. Technology and digital tools.

Online teaching depends heavily on technology, which can cause frustration when connections or software malfunction (Biwer et al., 2021). Nevertheless, digital tools such as breakout rooms, quizzes, and applications like Mentimeter were described as valuable for "*breaking the ice*" and sustaining motivation (Pratama, Maduretno & Yusro, 2021).

E. Motivation, self-regulation, and assessment.

Online learning requires high levels of self-discipline and self-efficacy (Umar et al., 2022). Teachers noted that while maintaining motivation online can be challenging, integrating humour and interactivity helps. Using a bit of humour reduces anxiety and increases participation. Online assessment also raises questions of academic integrity. Suggested strategies include open-book or reflective exams, randomized questions, and oral or recorded presentations to verify authenticity (Lyyra & Waselius, 2022).

Overall, the findings indicate that blended learning can combine the community and feedback advantages of face-to-face education with the flexibility and inclusiveness of online formats—provided both modalities are carefully integrated and supported by thoughtful design and active communication.

IV. EVALUATION AND CONCLUSIONS

Evaluating the impact of pedagogical changes is essential to ensure that new approaches lead to meaningful learning improvements. Feedback from students, gathered through anonymous surveys, course evaluations, and group discussions, provides valuable insights into what works well and what can be improved. Complementary plenary reflections at the end of a course allow participants and teachers to identify practical solutions together, fostering a shared sense of responsibility for course development.

Digital tools such as Mentimeter can further support this process by collecting feedback in engaging formats, for example through word clouds or "start–stop–continue" reflections. Such methods encourage participation from all students, including those who might be less comfortable speaking in open discussions.

Teachers also reported that informal feedback during a course, along with observations of student progress, is often more useful than formal evaluations alone. Comparing cohorts over time or discussing impressions with student representatives can reveal trends that quantitative surveys might miss.

Ultimately, continuous evaluation supports an iterative process of reflection and refinement. Following Kolb's (1984) experiential learning cycle, course development benefits from a loop of planning, implementing, observing, and improving teaching practices.

In conclusion, the study highlights that well-designed blended learning can combine the immediacy and community of face-to-face settings with the flexibility and inclusiveness of online formats. Success depends on coherent course design, appropriate use of technology, and ongoing feedback mechanisms that keep students engaged and motivated. When effectively integrated, blended learning can enhance teaching quality, foster active participation, and contribute to more equitable and accessible higher education.

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