

Flipped Classroom and Student Readiness in Blended Learning

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Abstract: Blended learning has become increasingly popular in recent years as a form of education that combines both online and traditional in-person learning. This approach allows for a more flexible and personalized learning experience, as students can work on online materials at their own pace while still having access to face-to-face interactions with instructors and peers. However, the effectiveness of blended learning in terms of student engagement and learning outcomes is still a topic of debate.

Keywords: Blended learning, Flipped classroom.

1. Introduction

Blended learning is an educational approach that combines online and traditional in-person learning to create a more flexible and personalized learning experience. Blended learning can take many forms, such as rotating between online and in-person classes, using online resources to supplement in-person instruction, or offering online discussions and activities to complement in-person lectures. The literature suggests that blended learning can be a highly effective teaching approach that offers a range of benefits to students and teachers. Blended learning provides students with increased flexibility to access and engage with learning materials at their own pace and convenience, allowing for more personalized learning experiences. It also provides teachers with the opportunity to create more interactive and engaging learning experiences, incorporating a variety of teaching methods and resources. Blended learning has been found to improve student engagement, motivation, and learning outcomes. However, there are also challenges associated with blended learning. Technical difficulties, such as poor internet connectivity and software malfunctions, can disrupt the learning process and cause frustration. Additionally, effective communication and collaboration between students and teachers can be challenging in online environments, which may negatively impact student engagement and learning outcomes. Therefore, it is important for educators to be aware of the potential benefits and challenges of blended learning and to implement strategies to address these challenges effectively.

2. Literature References

2.1. Blended Learning

Blended learning is an approach to education that goes beyond simply combining traditional classroom instruction and distance education tools. Instead, it involves delivering content through multiple modes to complement each other and enhance learning outcomes, as noted by Singh (2003). A successful blended classroom requires the strategic combination and integration of important elements from both traditional and online education, creating a new instructional approach that can be highly effective, as highlighted by Bigatel et al. (2012).

The literature review indicates growing attention to

blended learning courses in higher education, with studies conducted by Campbell, Duckworth, Gebara, Gonzalez-Castillo, Munson, and Smith (2010) revealing the potential benefits of this approach. However, research on blended learning has primarily focused on the university level, even in more recent studies (Campbell, Duckworth, Gebara, Munson, and Smith, 2010).

Nevertheless, there has been a recent surge in the use of blended learning courses in community colleges, leading to a new area of research examining the need for effective instruction, course quality, and learner persistence in this setting, as explored by Gonzalez-Castillo (2008) and Manning (2010). Overall, blended learning has the potential to offer numerous benefits to learners and educators, but careful planning and implementation are essential to ensure its effectiveness and success.

Dangwal and Lalima (2017) suggest that blended learning is an innovative approach that combines the benefits of traditional classroom teaching with technology-supported learning, including both offline and online modes. Blended learning offers opportunities for collaborative, constructive, and computer-assisted learning, allowing learners to engage with course material in a variety of ways.

Hrastinski (2019) found that blended learning is a loosely defined concept, leading to confusion in its application. Researchers and practitioners need to provide clear definitions of blended learning to avoid misunderstandings. The term 'blended learning' is also used to describe other combinations of instructional methods, pedagogical approaches, or technologies that may not align with the traditional definition.

2.2. Student Readiness for Blended Learning

Readiness refers to the mindset of students who are well-prepared to engage in activities with full awareness in order to achieve outcomes that result in changes in their comprehension of subject matter, as well as their abilities to apply that information, understanding, skills, habits, values, and attitudes (Shakeel et al., 2023). The study conducted by Yasin et al. (2020) indicate that increasing the average levels of technical access and technical usage self-efficacy will also increase the average levels of online communication self-efficacy, attitude, and online media, leading to an increase in the average level of readiness. It was found that changes in the average level of technology usage self-efficacy do not

have a direct effect on the average level of readiness, but changes in the average level of technology access have a direct effect on the average level of readiness.

While previous studies have highlighted the benefits of blended learning (Vaughan, 2007; Wakefield et al., 2008; Doiron & Asselin, 2011), institutions of higher learning need to be aware of potential concerns when implementing this approach. The added responsibility of taking initiative in the learning process may be challenging for certain students (Vaughan, 2007). While others may find it challenging to adapt to the online course structure and manage their time effectively, leading to a lack of motivation (Fong et al., 2005). The challenges students face in the online environment can negatively impact their learning experiences and result in disenchantment. (Tang & Chaw, 2013).

MacKeogh's (2003) research on student attitudes towards technology revealed that approximately 20% of students preferred traditional learning methods with no technology, while 12% preferred e-learning. This suggests that some students value face-to-face learning experiences even though they appreciate the benefits of technology. Howard's (2009) study also found that over 50% of online students missed the interaction with classmates and lecturers in a face-to-face setting. Starenko et al. (2007) state that institutions of higher learning may face one more challenge of students finding it difficult to collaborate with others in an online environment.

2.3. Flipped Classroom

Long et al. (2017) discuss the flipped classroom approach, where students learn outside of class and return for active learning activities. This approach improves higher-order thinking and collaborative learning, but little research has focused on instructors' perspectives. The study involved interviews with eight faculty members on their experiences with the model, revealing their definitions, improvements, benefits, challenges, and effective approaches. Peer support was recommended for successful implementation.

The flipped classroom approach has been gaining popularity in recent years as a pedagogical model that seeks to enhance student engagement, motivation, and learning outcomes. Aşıksoy and Özdamlı (2016) conducted a study to examine the effectiveness of the flipped classroom approach in a physics course based on the ARCS motivation model developed by Keller. The study involved 66 students divided into two classrooms, with one using the traditional lecture format and the other using the flipped classroom model. The flipped classroom model involved students watching videos and completing quizzes before class, which allowed for more interactive and engaging in-class activities. Data was collected through exams, questionnaires, and semi-structured interviews to compare the performance and views of the two groups. The results showed that the experimental group outperformed the control group, with increased motivation and self-sufficiency. The students in the experimental group also had a positive view of the flipped classroom technique, reporting that it was more engaging and effective than the traditional lecture format. The study suggests that the flipped classroom approach, when implemented effectively, can enhance student learning and motivation in physics courses.

McCarthy (2016) studied the effectiveness of a flipped classroom model for teaching 3D animation to first-year students. The study compared traditional in-class tutorials with flipped classroom tutorials, where students completed tasks before class and engaged in group discussions during

class. An online survey was used to assess both models, and course personnel evaluated the formats. Results were discussed in the context of student-centered teaching metrics, and benefits and drawbacks were outlined.

3. Conclusion

In conclusion, this thesis explores the concept of blended learning through three main perspectives: Flipped Classroom, Student Readiness, and Blended Learning. The study investigates the effectiveness of Flipped Classroom in enhancing student learning, assesses Student Readiness for blended learning, and designs and implements a Blended Learning model in higher education. The findings of this study suggest that Flipped Classroom is an effective approach to enhance student learning and can be integrated into a Blended Learning model. The study also highlights the importance of assessing Student Readiness for blended learning, which can help to identify potential barriers and facilitate the adoption of Blended Learning.

Overall, this references provides valuable insights into the implementation of Blended Learning in higher education and highlights the potential benefits of using Flipped Classroom and Student Readiness factors to design effective blended learning models. The results of this study can help educators and institutions to develop and implement more effective Blended Learning models that can enhance student learning and improve educational outcomes.

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