

ENHANCING HYBRID LEARNING EXPERIENCES IN MALAYSIAN PUBLIC UNIVERSITIES: A FOCUS ON E- LEARNING PLATFORM QUALITY AND STUDENT SATISFACTION

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Abstract: Hybrid learning, which combines traditional face-to-face teaching with online instruction, has become increasingly prevalent in Malaysian public universities. This study examines the balance between e-learning platform quality and student satisfaction in the hybrid learning environment, focusing on factors that influence students' engagement and overall learning experience. Using a mixed-methods approach, a survey was conducted with 250 students from three Malaysian public universities, supplemented by in-depth interviews with 50 participants. The findings reveal that usability, content quality, interactivity, and technical support are the key components that influence students' perceptions of e-learning platform quality. Higher satisfaction levels were reported by students who found the platform user-friendly, engaging, and reliable, while technical issues and limited instructor-student interaction negatively affected satisfaction. The study highlights the importance of improving platform usability, enriching online content, and fostering better communication between instructors and students. The results provide actionable insights for universities to enhance the hybrid learning experience, ensuring that both e-learning platform quality and student satisfaction are optimized.

Keywords: Hybrid learning, e-learning platforms, student satisfaction, Malaysian public universities, online learning, educational technology, platform quality.

INTRODUCTION

The educational landscape has been undergoing significant transformations in recent years, with digital learning emerging as a critical component in modern education. In particular, hybrid learning—which combines traditional face-to-face classroom instruction with online learning—has become an increasingly popular model in higher education globally. Hybrid learning offers flexibility, convenience, and personalized learning experiences, making it an attractive option for both institutions and students. In the

context of Malaysian public universities, hybrid learning has gained momentum, particularly in response to the challenges posed by the COVID-19 pandemic. However, the effectiveness of hybrid learning is largely dependent on the quality of the e-learning platform used and the degree to which it meets student expectations, needs, and satisfaction.

In Malaysia, public universities have been integrating hybrid learning to enhance learning experiences and increase accessibility. With a growing emphasis on digital education, there is a need to balance e-learning platform quality with student satisfaction to ensure that hybrid learning is effective and meets the expectations of students. While e-learning platforms offer several advantages such as accessibility, flexibility, and the ability to engage with various multimedia resources, there are also challenges regarding platform usability, content quality, student engagement, and technical support. These factors ultimately influence students' satisfaction and their willingness to embrace hybrid learning environments.

This article explores the balancing act between e-learning platform quality and student satisfaction in Malaysian public universities. It investigates the factors that contribute to the successful implementation of hybrid learning, examines the relationship between e-learning platform quality and student satisfaction, and provides recommendations for improving the hybrid learning experience for both students and educators.

Research Questions

1. What are the key elements that determine the quality of e-learning platforms in Malaysian public universities?
2. How does the quality of e-learning platforms influence student satisfaction in hybrid learning environments?
3. What strategies can Malaysian universities adopt to enhance both e-learning platform quality and student satisfaction?

Literature Review

The integration of hybrid learning in higher education has been widely studied, particularly with respect to its impact on teaching and learning outcomes. The effectiveness of hybrid learning is contingent on various factors, including the quality of the e-learning platform, which encompasses aspects like usability, content accessibility, interactivity, and support services. Scholars have suggested that a well-designed e-learning platform can significantly enhance learning experiences by providing students with flexible access to learning materials and allowing for various modes of interaction, including synchronous and asynchronous communication.

E-Learning Platform Quality

E-learning platform quality is determined by several factors. Usability is one of the key determinants of a good platform. A user-friendly interface, fast loading times, and easy navigation contribute to a positive user experience. Content quality is another crucial factor, as well-designed, engaging, and relevant content that meets the needs of students can greatly enhance their learning experiences. Interactive features such as discussion forums, quizzes, and collaborative tools are essential in keeping students engaged and motivated in a hybrid learning environment.

Furthermore, technical support is essential to ensure that students can resolve any issues they encounter while using the platform. Institutions that provide readily accessible technical support, including tutorials and help desks, foster a positive learning experience. The availability of mobile-friendly platforms also enhances accessibility, ensuring that students can learn anytime, anywhere, without being restricted to a desktop computer.

Student Satisfaction

Student satisfaction is a critical measure of the success of hybrid learning environments. Satisfaction is influenced by a variety of factors, including the quality of course content, interaction with instructors, peer engagement, and the learning experience facilitated by the e-learning platform. Research has shown that students who are satisfied with their e-learning experiences are more likely to remain engaged, achieve better academic outcomes, and feel a stronger connection to their institution.

Studies on student satisfaction in hybrid learning environments suggest that when students perceive the e-learning platform as effective, engaging, and easy to use, they report higher satisfaction levels. On the other hand, if students face technical issues, difficulty navigating the platform, or lack of engaging content, their satisfaction with hybrid learning diminishes.

Hybrid Learning in Malaysian Public Universities

In Malaysia, public universities have been adopting hybrid learning in response to the growing demand for flexible education models. The Malaysian Ministry of Higher Education has supported the integration of e-learning platforms into university curricula, particularly during the COVID-19 pandemic. Universities like Universiti Malaya (UM) and Universiti Kebangsaan Malaysia (UKM) have incorporated hybrid learning approaches, aiming to deliver quality education while ensuring accessibility for students from diverse backgrounds.

However, while there has been significant progress in the implementation of hybrid learning, challenges remain. These include disparities in students' access to technology, issues related to digital literacy, and the need for continuous improvement of e-learning platforms to better align with student expectations and satisfaction.

METHODOLOGY

This study adopts a mixed-methods approach to investigate the relationship between e-learning platform quality and student satisfaction in the context of hybrid learning at Malaysian public universities. Both quantitative and qualitative data collection methods were used to gather comprehensive insights.

Sampling

The study targeted students from three Malaysian public universities: Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM), and Universiti Teknologi Malaysia (UTM). A total of 300 students were selected using stratified random sampling, ensuring a diverse sample in terms of academic programs, year of study, and prior experience with hybrid learning.

Data Collection

1. **Quantitative Data:** A structured survey was administered to 250 students to assess their perceptions of e-learning platform quality and their overall satisfaction with hybrid learning. The survey included questions on platform usability, content quality, interactivity, and technical support. A 5-point Likert scale was used to capture responses, ranging from 1 (strongly disagree) to 5 (strongly agree).
2. **Qualitative Data:** In-depth interviews were conducted with 50 students to gain more detailed insights into their experiences with hybrid learning. The interviews focused on students' satisfaction with the e-learning platform, the challenges they faced, and suggestions for improvement.

Data Analysis

Quantitative data was analyzed using descriptive statistics and regression analysis to identify patterns and correlations between e-learning platform quality and student satisfaction. Qualitative data from the interviews was analyzed through thematic analysis, with key themes and patterns identified regarding students' experiences and perceptions.

RESULTS

The analysis of the survey data reveals several important findings regarding the quality of e-learning platforms and its impact on student satisfaction.

E-Learning Platform Quality

The majority of students reported positive experiences with the e-learning platforms used in their hybrid learning programs. However, some key issues emerged:

- **Usability:** While most students found the platforms easy to navigate, a significant number mentioned technical glitches and slow loading times as major obstacles to effective learning.

- **Content Quality:** Students expressed satisfaction with the variety of learning materials, including videos, quizzes, and reading materials. However, many students felt that the quality of online lectures and multimedia content could be improved to enhance engagement.
- **Interactivity:** The presence of interactive features such as discussion forums and quizzes was highly appreciated by students, though some noted that the level of interaction between students and instructors could be increased.
- **Technical Support:** Although most students acknowledged the availability of technical support, some reported delays in receiving assistance, which negatively impacted their learning experience.

Student Satisfaction

The findings indicate that student satisfaction was positively correlated with the quality of the e-learning platform. Students who reported a higher level of satisfaction with platform usability, content quality, and interactivity were more likely to express overall satisfaction with the hybrid learning model. Conversely, students who faced technical difficulties, experienced delays in support, or found the platform difficult to navigate reported lower levels of satisfaction.

The interviews revealed that students appreciated the flexibility offered by hybrid learning but also emphasized the need for better integration between online and face-to-face components. Many students suggested that more interactive and engaging online content, along with improved communication from instructors, could further enhance their learning experience.

DISCUSSION

The results of this study highlight the significant role of e-learning platform quality in shaping student satisfaction within hybrid learning environments in Malaysian public universities. The positive aspects of the e-learning platforms, such as content quality and interactive features, are crucial for enhancing student engagement and satisfaction. However, challenges such as technical glitches, slow loading times, and limited interaction with instructors indicate areas where improvements are necessary.

To ensure that hybrid learning meets students' expectations, universities must prioritize the improvement of platform usability, content delivery, and technical support. Moreover, fostering greater interaction between students and instructors can create a more engaging and supportive learning environment. Addressing these issues will not only improve the overall hybrid learning experience but also contribute to higher student retention and academic success.

Recommendations

1. **Enhance Platform Usability:** Universities should invest in improving the user interface and ensuring that e-learning platforms are reliable, mobile-friendly, and free from technical issues.

2. **Content Improvement:** Educators should design high-quality, engaging, and interactive online content that aligns with students' learning needs and preferences.
3. **Strengthen Interaction:** Universities should encourage more active communication between students and instructors through synchronous sessions, discussion forums, and peer collaboration tools.
4. **Provide Robust Technical Support:** Institutions should offer timely and accessible technical support to address student issues and ensure smooth learning experiences.

CONCLUSION

Hybrid learning in Malaysian public universities holds significant potential for enhancing educational experiences, offering flexibility, and increasing access to learning materials. However, the success of this model is dependent on the quality of the e-learning platform and its alignment with student expectations. By addressing issues related to platform usability, content quality, and interactivity, universities can enhance student satisfaction and create a more effective hybrid learning environment.

Hybrid learning has emerged as a pivotal educational model, especially in the context of Malaysian public universities, where its integration has been accelerated in response to the growing demand for flexible, accessible, and diverse learning opportunities. This study underscores the importance of balancing e-learning platform quality and student satisfaction to ensure that hybrid learning is effective and contributes positively to students' academic success and overall learning experiences. By examining the key elements that impact both the quality of e-learning platforms and students' perceptions, this research provides valuable insights into the strengths and challenges of hybrid learning in the Malaysian higher education context.

Key Findings

The results of this study clearly illustrate that e-learning platform quality is a crucial factor in determining students' overall satisfaction with hybrid learning. Several specific factors emerged as influential in shaping students' perceptions:

1. **Usability:** A user-friendly interface with intuitive navigation is essential for students to engage fully with hybrid learning materials. The ease of access to resources and the minimal technical difficulties encountered directly influenced student satisfaction. Platforms that experienced technical glitches, slow loading times, and accessibility issues were particularly frustrating for students, undermining their ability to learn effectively.
2. **Content Quality:** Students expressed a high level of satisfaction when e-learning platforms provided rich, engaging, and interactive content. Multimedia elements, including videos, quizzes, and interactive simulations, were appreciated as they enhanced the learning experience. However, students also noted that the quality and relevance of online lecture materials could be further improved. Engaging

content that connects well with in-person sessions was seen as a key element for maintaining student engagement in the hybrid format.

3. **Interactivity and Communication:** Effective communication and the level of interaction between students and instructors significantly contributed to satisfaction. While platforms that incorporated discussion forums, quizzes, and group activities helped promote engagement, students also emphasized the need for more direct interactions with instructors, such as live sessions and timely feedback. These interactions fostered a sense of connection, making the learning process more personalized and supportive.

4. **Technical Support:** Reliable technical support played an essential role in ensuring that students had a smooth and uninterrupted learning experience. Students reported higher satisfaction when they had access to prompt and effective assistance whenever they faced technical challenges. However, delays in response time or inadequate technical support services led to frustration, highlighting the importance of having dedicated technical teams and clear support channels.

Implications for Practice

Based on these findings, there are several implications for practice, particularly for universities and institutions aiming to optimize their hybrid learning systems:

1. **Investment in Platform Usability:** Universities should prioritize the enhancement of the e-learning platforms' user interface and technical reliability. This includes ensuring that the platforms are mobile-friendly, responsive, and easy to navigate. It is essential to perform regular technical checks to minimize disruptions and provide a seamless learning experience for students.

2. **Improvement of Content Delivery:** While content quality was generally appreciated, it is crucial that institutions invest in creating high-quality, engaging, and interactive learning materials. Offering more diverse content, such as videos, infographics, interactive assessments, and live-streamed sessions, can enhance students' engagement. Additionally, aligning online content with in-person activities will create a more cohesive and enriching learning experience.

3. **Fostering Greater Interaction:** One of the major findings of this study is the importance of instructor-student interaction in hybrid learning environments. Universities should encourage more real-time communication, such as live lectures, Q&A sessions, and virtual office hours. These opportunities for direct interaction not only enhance learning but also foster a sense of community and engagement among students and faculty.

4. **Strengthening Technical Support:** The availability of efficient technical support services is critical to student satisfaction in hybrid learning environments. Universities should ensure that there are clear avenues for technical assistance and that issues are resolved in a timely manner. This could include

providing tutorials, a robust helpdesk, and quick-response support teams to assist students with any challenges they encounter.

Recommendations for Future Research

While this study provides important insights, it also opens avenues for further research. Future studies could explore the longitudinal impact of hybrid learning on student outcomes, such as academic performance, retention rates, and engagement over time. Additionally, comparative studies between institutions with different e-learning platforms could provide more nuanced insights into the specific features that contribute to student satisfaction. Research could also focus on the perspectives of instructors, as their engagement and experience with hybrid learning platforms are crucial to the success of this educational model.

Furthermore, examining the role of institutional policies, such as those related to funding, teacher training, and digital literacy programs, would shed light on the broader organizational factors that influence hybrid learning success. A focus on inclusive learning—ensuring that hybrid models are accessible to all students, regardless of their socio-economic background or technological resources—would be a valuable area for exploration.

Conclusion: Moving Forward with Hybrid Learning

In conclusion, the shift toward hybrid learning in Malaysian public universities presents significant opportunities for expanding access to education, increasing flexibility, and promoting innovative pedagogical approaches. However, the success of hybrid learning hinges on the quality of the e-learning platforms used and the ability to meet student expectations. By addressing the challenges identified in this study, universities can enhance their hybrid learning environments, leading to greater student satisfaction, engagement, and academic success.

Hybrid learning, when implemented thoughtfully and strategically, can serve as an effective educational model that meets the needs of both students and institutions. The ongoing development of e-learning technologies and the careful balancing of platform quality and student engagement will be essential as universities continue to adapt to the ever-changing landscape of education in the digital age.

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