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International Teaching Aid
Competition 2023
Reconnoitering Innovative Ideas in Postnormal Times

iTAC

2023

iTAC 2023
INTERNATIONAL TEACHING AID COMPETITION
E-PROCEEDINGS

PREFACE

iTAC or International Teaching Aid Competition 2023 was a venue for academicians, researchers, industries, junior and young inventors to showcase their innovative ideas not only in the teaching and learning sphere but also in other numerous disciplines of study. This competition was organised by the Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch, Malaysia. Its main aim was to promote the production of innovative ideas among academicians, students and also the public at large.

In accordance with the theme "Reconnoitering Innovative Ideas in Post-normal Times", the development of novel ideas from the perspectives of interdisciplinary innovations is more compelling today, especially in the post-covid 19 times. Post-pandemic initiatives are the most relevant in the current world to adapt to new ways of doing things and all these surely require networking and collaboration. Rising to the occasion, iTAC 2023 has managed to attract more than 267 participations for all categories. The staggering number of submissions has proven the relevance of this competition to the academic world and beyond in urging the culture of innovating ideas.

iTAC 2023 committee would like to thank all creative participants for showcasing their innovative ideas with us. As expected in any competition, there will be those who win and those who lose. Congratulations to all the award recipients (Diamond, Gold, Silver and Bronze) for their winning entries. Those who did not make the cut this year can always improve and join us again later.

It is hoped that iTAC 2023 has been a worthy platform for all participating innovators who have shown ingenious efforts in their products and ideas. This compilation of extended abstracts published as iTAC 2023 E-Proceedings contains insights into what current researchers, both experienced and novice, find important and relevant in the post-normal times.

Best regards,

iTAC 2023 Committee
Special Interest Group, Public Interest Centre of Excellence (SIG PICE)
UiTM Kedah Branch
Malaysia

TRANSFORMING EDUCATION WITH INNOVATIVE E-LEARNING TOOLS IN BLENDED LEARNING

Nurulashikin Romli
Faculty of Business and Management,
Universiti Teknologi MARA Cawangan Johor Kampus Segamat,
85000, Segamat
Johor Darul Ta'zim, Malaysia.
nurulashikin@uitm.edu.my

Suhana Mohamed
Faculty of Business and Management,
Universiti Teknologi MARA Cawangan Johor Kampus Pasir Gudang,
81750, Masai
Johor Darul Ta'zim, Malaysia.
suhan291@uitm.edu.my

Azianti Ismail
College of Engineering, Universiti Teknologi MARA Selangor,
40450 Shah Alam,
Selangor, Malaysia
azianti106@uitm.edu.my

Sharazad Haris
Faculty of Business and Management,
Universiti Teknologi MARA Cawangan Johor Kampus Segamat,
85000, Segamat
Johor Darul Ta'zim, Malaysia.
sharazad@uitm.edu.my

Mohamad Azwan Md Isa
Faculty of Business and Management,
Universiti Teknologi MARA Cawangan Johor Kampus Segamat,
85000, Segamat
Johor Darul Ta'zim, Malaysia.
moham821@uitm.edu.my

ABSTRACT
Blended learning has revolutionized education by combining traditional classroom and online learning, creating flexible and accessible learning environments. It aims to provide a customized and efficient

learning experience, preparing students for the digital era. Integrating e-learning tools enhances education quality and promotes engagement, motivation and lifelong learning. Blended learning and integrating e-learning tools have positively impacted student flexibility, accessibility, global learning, and equal learning opportunities in the Regulatory Framework in the Capital Market (INV537). The interactive tools have increased student enthusiasm and deepened understanding, while the flexibility of blended learning has accommodated diverse needs.

Keywords: Blended learning, e-Learning, Digital, Innovation

INTRODUCTION

Blended learning, which combines traditional classroom instruction with online learning, has transformed education by creating flexible and accessible learning environments. Recent research by Nikolopoulou and Zacharis (2023) indicates that students hold positive perceptions of blended learning, particularly recognizing the role of online audio-visual resources in facilitating independent learning and boosting their motivation. This highlights the effectiveness of blended learning in engaging and motivating students through online resources.

The impetus for this innovation stemmed from declining student engagement and motivation in traditional online courses. Sudibjo (2023) identifies monotonous activities and a lack of motivation in virtual class discussions, leading to low engagement in synchronous online lectures. With this innovation in teaching and learning, the instructors have integrated various e-learning tools into the blended learning approach to counter these challenges. As a result, blended learning hope promotes interactive and engaging learning experiences that address student disengagement and promote active participation.

The research conducted by Bizami et al. (2023) supports the integration of technological learning tools in blended learning, as they enhance collaboration and interactivity among students. However, further exploration is needed to establish effective methods for creating immersive learning environments and ensuring educational accessibility within the blended learning framework.

Strategic planning and incorporating practical technological tools are crucial to ensure the success of blended learning. Chen (2016) suggests that focusing on instructional design significantly attracts younger students to blended learning. By carefully planning and integrating appropriate tools, educators can create a supportive and structured online learning environment that fosters meaningful learning experiences, empowers student autonomy, and promotes their overall success.

IMPLEMENTATION OF INNOVATION

In the current semester, the Regulatory Framework in the Capital Market (INV537) course was

delivered in a blended learning format from October 2022 to January 2023. This marked the second implementation of blended learning for the course, with an equal distribution of 50% online instruction and 50% traditional classroom sessions.

During the previous semester, the instructor successfully introduced a blended learning approach and utilized Padlet as the primary e-learning tool for delivering course materials, including notes, videos, games, and other relevant teaching and learning activities. The feedback received from students regarding the use of Padlet was positive, which supports the findings of Albarqi (2023) and Arouri et al. (2023), who highlighted the effectiveness of Padlet in enhancing student engagement and learning outcomes.

Building upon the success of the previous semester, the instructor has further diversified the teaching and learning activities in the current semester. This decision was influenced by the findings of Sudibjo (2023), which emphasized the importance of avoiding monotonous activities to promote student engagement. The instructor has incorporated various e-learning tools such as Google Sites, Jamboard, Flip, Spotify, TikTok, Cap Cut, YouTube, Mentimeter, Heyzine, and Canva to achieve this. These tools offer a range of interactive features and multimedia elements that create an interactive and dynamic learning environment. By leveraging these e-learning tools, the instructor aims to keep students involved and motivated throughout the course, promoting engagement and facilitating a more enriched learning experience.

RESULTS

Data analyzed in this teaching and learning innovation came from a voluntary survey conducted among 38 students enrolled in the blended learning course of Regulatory Framework in the Capital Market (INV537). The survey provided insights into the students' experiences with the blended learning approach and the e-learning tools' effectiveness. This feedback informs improvements to the course and helps evaluate instructional strategies and tools for future cohorts.
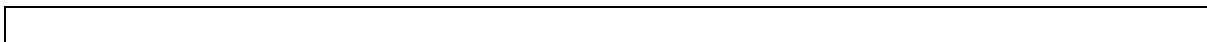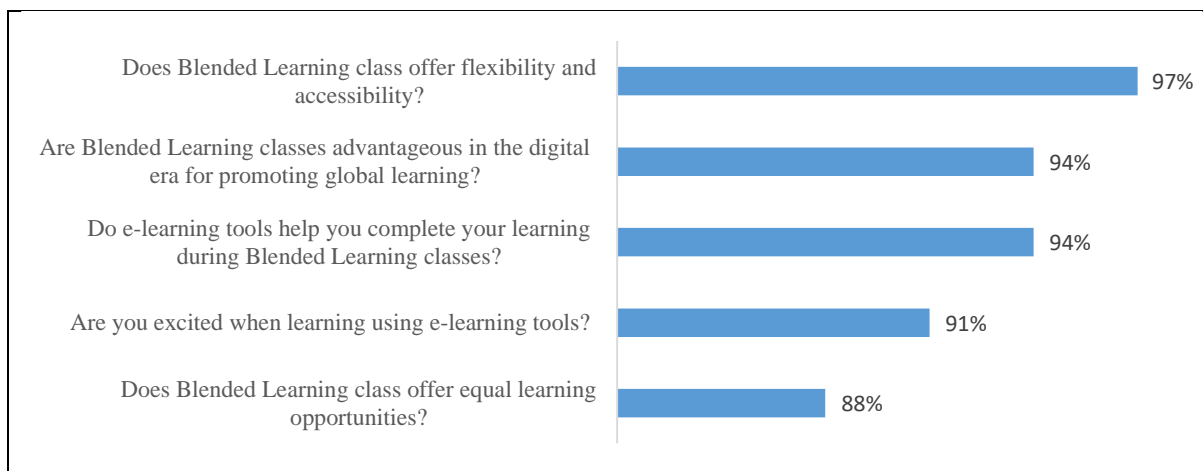
Figure 1. Results of survey

The survey data reveals that the blended learning class received a high rating (97%) from students regarding flexibility and accessibility. This aligns with the findings of Müller and Mildenberger (2021), who emphasize the significance of flexibility in higher education to make it more accessible for a diverse range of individuals. Additionally, Garrison and Vaughan (2008) highlight the advantages of blended learning, including flexible learning options and convenient access to course materials. These findings highlight the positive impact of blended learning in creating flexible and accessible learning environments.

According to the survey data, most students (94%) recognized the advantages of blended learning classes in promoting global learning in the digital era. This finding aligns with the research by Peimani and Kamalipour (2022) and Dziuban et al. (2018), which highlight the significance of blended learning in preparing students for global challenges, including health crises like COVID-19. Blended learning integrates digital resources, online collaboration, and global perspectives, equipping students with the necessary skills to navigate a rapidly changing world. The high agreement among students further supports the effectiveness of blended learning in fostering global awareness and preparing students for the demands of the digital age.

Next, the survey results indicate that a significant percentage of students (94%) agreed that e-learning tools played a valuable role in their learning during the blended learning classes. This finding aligns with the research by Bizami et al. (2023), which emphasizes the benefits of integrating technological learning tools in blended learning to enhance collaboration and interactivity among students. Moreover, previous studies, such as the one conducted by Means et al. (2009), have also demonstrated the positive impact of e-learning tools on student learning outcomes.

The survey results revealed high excitement among students (91%) when utilizing e-learning tools, such as Padlet, in their learning. This finding is consistent with the research conducted

by Albarqi (2023), Arouri et al. (2023), and Sudibjo (2023), which emphasize the positive impact of e-learning tools on student engagement and motivation. Previous studies by Fredricks et al. (2004) also highlight the significance of student engagement and motivation in the learning process. Students' high level of excitement indicates that these tools effectively enhance the overall learning experience within the blended learning class. This positive response underscores the effectiveness of blended learning in meeting students' needs and creating a dynamic and engaging learning environment.

Furthermore, the survey results indicate that most students (88%) agreed that the blended learning class provides equal learning opportunities. This finding aligns with the research conducted by Nikolopoulou and Zacharis (2023), which highlights students' positive perceptions of blended learning. It is also consistent with previous studies, such as the one by Graham (2006), which emphasize the potential of blended learning to address diverse learning needs and promote inclusivity. The high agreement among students regarding the equal learning opportunities provided by the blended learning class underscores its effectiveness in catering to the diverse needs of learners and promoting educational equity.

CONCLUSION

Implementing blended learning and integrating e-learning tools have had a significant impact on student learning, as supported by the positive perceptions of students in the study by Nikolopoulou and Zacharis (2023). Blended learning has brought about significant improvements in student learning experiences. One notable aspect is the ability of students to learn independently and access course materials at their convenience, regardless of time and location. This flexibility caters to student's diverse needs and schedules, creating a personalized learning experience. Additionally, blended learning has greatly enhanced the accessibility of education. Students now have convenient access to various resources, including online materials, interactive modules, and multimedia content. This improved accessibility eliminates geographical barriers and ensures that all students, regardless of location, have equal opportunities to access educational materials and actively engage in learning activities.

Furthermore, blended learning has played a crucial role in promoting global learning. By incorporating digital resources, online collaboration, and global perspectives, students are exposed to diverse perspectives and cultural contexts. This prepares them to navigate the complexities of the globalized world and equips them with the necessary skills to address global challenges effectively. As a recommendation, instructors must continue refining and expanding the implementation of blended learning, considering students' specific needs and preferences. Additionally, ongoing professional development for instructors can ensure the effective utilization of e-learning tools and the continuous improvement of instructional strategies in blended learning environments.

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