

Higher Education & e-learning in ASEAN







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Utilization of Online Platforms for e-learning in Brunei Universities

#E-learning #Online Education #LMS

Jiyeon Moon / Hanyang University



The primary focus of the research articles is to examine the impact of the COVID-19 pandemic on the adoption of e-learning in Brunei Darussalam. The articles provide an analysis of the utilization of Learning Management Systems (LMS) in higher education institutions in Brunei Darussalam, with an emphasis on the advantages of e-learning and the various online platforms used by different institutions.

01

Transformation of Education Systems in Brunei Darussalam

- The utilization of e-learning systems in education has been introduced since the early days of the information age, and with the development of the internet, most e-learning activities now take place in web environments. This trend has been further accelerated by the global COVID-19 pandemic, which has greatly expanded the scope of online learning. Educational institutions worldwide have implemented online learning to mitigate face-to-face contact, and universities in Brunei Darussalam have followed suit.
- education institutions in Brunei Darussalam have traditionally relied on classroom-based interactions between students and teachers as the core of their learning systems. However, amidst the global upheaval caused by the COVID-19 pandemic, concerns over the spread of the disease grew as Brunei reported its first COVID-19 case on March 9, 2020 (Ministry of Health, Brunei Darussalam, 2020). Although the country did not enforce nationwide lockdown, the government and Ministry of Health implemented social distancing measures, which required educational institutions to adopt alternative methods of education different from the conventional approach (Abdullah et al., 2021). As a result, the utilization of online platforms for e-learning was accelerated in Brunei Darussalam.



E-learning Platforms Used in Brunei Darussalam Universities

E-learning, also known as 'online learning' or 'virtual learning', has become a prominent trend in education institutions worldwide. One of the key tools used in e-learning, particularly in higher education institutions such as universities globally, is the Learning Management System (LMS). LMS is a technological system designed to build online curricula and monitor students' learning processes. Its greatest strength lies in its ability to go beyond the limitations of traditional offline lectures, allowing easy sharing and access to information online. Students can access the platform without being constrained by time or location, and freely exchange feedback, communicate, and interact. Thus, LMS serves as a framework that handles all aspects of the learning process in e-learning (Setiana et al., 2023).

Several universities in Brunei are currently utilizing Learning Management System (LMS) systems for their e-learning initiatives. Among the government institutions, the University of Technology Brunei employs Moodle, while the University of Brunei Darussalam utilizes Canvas. Brunei Polytechnic uses an Official Learning Management System called PBLMS (Politeknik Brunei Official Learning Management System). In the private institutions, Kemuda Institute employs Moodle, and International Graduate Studies College utilizes KIGS LMS.

Universities use online platforms to provide necessary announcements, syllabus, assignment instructions, class materials, and video lectures, among other course-related resources, which are uploaded for students to access at any time. Additionally, students can submit completed assignments at their convenience without having to directly contact their professors. Many scholars highlight the advantages of e-learning, such as its convenience in terms of time and location (1), customization of the learning process according to learners' needs (2), combination of audio, video, and text-based lectures (3), and instant feedback exchange (4).

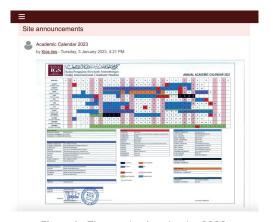


Figure 1. The academic calendar 2023 announced on KIGS LMS



Figure 2. The Course syllabus provided by UBD on Canvas

As the COVID-19 pandemic comes to an end, the world is gradually returning to the mask-free lifestyle. Face-to-face interactions are becoming more natural, and offline activities are picking up pace. However, the field of e-learning continues to leverage the powerful advantages of internetbased education and maintains various online platforms for educational systems. With the rapid development of e-learning systems after the pandemic, schools need to establish education strategies that achieve appropriate synergy between online and offline systems for the postpandemic era.



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<Figure 1> http://lms.kolejigs.com/ <Figure 2> https://ubd.instructure.com/courses/682

Unlocking the Potential of e-Learning: Exploring Flipped Learning for Enhanced Education in Brunei

#FlippedLearning

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This article explores the use of e-learning platforms in Brunei's education system, with a focus on Flipped Learning. It discusses the effectiveness of Flipped Learning through two case studies with Bruneian students and emphasizes the role of instructors in promoting active student participation. The article concludes by acknowledging the benefits of e-learning while highlighting the need for educators to address the challenges posed by the lack of face-to-face interaction.

01

The utilization of e-learning platforms in various educational environments has become increasingly prevalent across different age groups. In Brunei's universities, widely known platforms such as LMS, Moodle, Canvas, or even self-developed official platforms have been adopted. Over the years of implementing these platforms, students have personally experienced the convenience of e-learning. Particularly, the digital generation, accustomed to consuming video content on platforms like YouTube and Instagram, quickly adapted to the concept of e-learning, which allows them to learn at their desired time and location, as well as control the pace of their learning by pausing or accelerating the playback. Considering the convenience in terms of physical and temporal aspects, what methods can be employed to enhance the utilization of online courses from an educational perspective?

▶ What is the Flipped Learning?



I present the concept of 'Flipped Learning.' Flipped Learning, introduced by Eric Mazur, a professor at Harvard University, has been recognized for its effectiveness through experiments in various educational fields since 1991. This approach flips the conventional order of learning, where students review the material after attending lectures. In traditional learning, professors deliver information during class, and students understand that information during or outside of class. In contrast, Professor Eric instructed students to read materials such as textbooks and lecture notes before attending the lecture. During class time, he posed questions and guided them to fully comprehend the content they had read (taught).

▶ The Two Sides of the Flipped Learning

Flipped learning does not solely pertain to offline environments. It encompasses the concept of learning sequence and approach, and in recent educational settings, it can be conducted in an online-to-online or online-to-offline manner.

CASE #1

Sangran (2022) conducted an experiment on online flipped learning, focusing on Bruneian students in their early to mid-20s who were studying Korean. The students approached the given online lectures in various ways, taking into account their individual abilities and learning styles, prior to the class. More than 90% of the students agreed that they were able to understand the lecture content more easily after engaging in this method.

The most critical aspect emphasized in the aforementioned learning method is the importance of motivating students to autonomously inspire themselves. This refers to having the power to take control of their actions and actively engage in the learning process. Throughout the experiment, students were able to experience a sense of accomplishment by achieving self-established learning goals and engaging in new challenges, which facilitated their personal growth. However, it is important to consider that students with lower self-regulated learning competence may feel inadequate and become more disheartened in such situations, as they struggle to take initiative and actively engage. Furthermore, students who perceive their own skills to be low tend to participate passively in online classes and may encounter difficulties in their learning process.

On the other hand, when utilizing individually uploaded video presentations, students were able to replay specific segments as needed and actively provide feedback through comments. However, there were instances of technical issues such as Wi-Fi or microphone problems, which occasionally hindered the learning process. Furthermore, some students expressed negative reactions due to the inability to receive sufficient assistance from the instructor during times of difficulty in their learning.

• CASE #2

In a study conducted by Ali et al. (2022), 9th-grade students in Brunei were assigned to watch pre-recorded video math lessons before engaging in offline activities. The experiment revealed that participants held a positive perception of flipped learning, stating that watching the videos prior to the face-to-face classes enhanced their preparedness. Students with lower comprehension levels found it beneficial as they could supplement their learning at home, while simultaneously having the opportunity to receive additional explanations for their questions during the in-person sessions.

On the contrary, there was a negative perception towards group activities during offline sessions, and students expressed dissatisfaction with the inability to address immediate questions that arose while watching the pre-recorded videos. However, when considering the overall improvement in student performance, it can be concluded that the lessons yielded successful results if the objective of the classes was always focused on learning outcomes.

Considerations for Instructors Implementing Flipped Learning

When it comes to leading Flipped Learning, the most crucial aspect for instructors to consider is that their role in the classroom should go beyond one-sided knowledge delivery and instead focus on facilitating active student participation. In other words, it is essential to remember that the center of learning shifts from the instructor to the students, emphasizing the activities through which they engage in learning within the classroom (Kim & Lee, 2016).



In the e-learning environment, professors and students do not have face-to-face interactions as they would in a physical setting. However, it is essential for professors to establish a sense of presence, even though they are not physically present in front of the students. According to the studies conducted by Kim & Lee (2016) and Kim et al. (2015), this teacher presence fosters positive interactions between the professor and students in both e-learning and offline flipped classroom environments, ultimately leading to improvements in students' academic achievement. Therefore, professors should actively engage in online communication and interaction with students to enhance the effectiveness of learning. It is particularly important to pay attention to students with lower self-regulated learning competence by providing assistance in determining learning methods and goals, analyzing individual learning patterns based on data recorded on online platforms, and tailoring personalized approaches accordingly (Heo & Jo, 2020).

Students who are familiar with chat and video content tend to be more engaged in online classes compared to face-to-face classes. Even students who didn't speak up in the classroom are now freely expressing their opinions and emotions through text messages and emoticons, despite not using anonymous IDs. As demonstrated by Bruneian students in various experiments, e-learning can provide a better learning environment, albeit in a different way from previous generations. However, there are differences in how individuals adapt to the new learning environment based on their personal tendencies and capabilities, and there is clearly a gap resulting from the absence of face-to-face interaction. This highlights the need for educators to explore strategies to maximize students' learning outcomes in this non-traditional learning setting.

Implications

In line with the global trends, Brunei is continuously evolving and progressing towards the Fourth Industrial Revolution. Particularly, the e-learning education environment has quickly established itself, revealing numerous advantages and drawbacks. Now, it is time for further development and advancements. Moving forward, it is crucial to focus not only on the abundance of technological resources but also on how to effectively utilize them. This is a critical juncture where guidelines are needed to empower the digitally adept generation to leverage technology in impactful ways.

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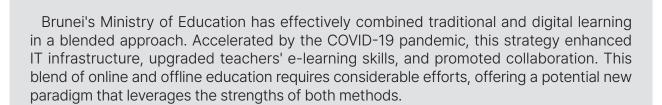
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Embracing the Future of Education: A Blended Approach in Brunei

#Blended Learning #Government Efforts

Jiyeon Moon / Hanyang University



01

Brunei's Approach to Blended Learning

In May 2023, I had the opportunity to attend a dialogue session between the leader of higher education in the North of Vietnam and students. To prepare for this dialogue, the university conducted a survey of nearly 16,000 students, belonging to 202 academic classes (27 classes of high-quality systems, 175 classes of the regular system) and collected 383 questions, feedback, suggestions of students to the school.

The survey results are aggregated into 15 main groups of issues related to students (Table 1). In each problem group, the university determines what the student's issues.

Backgrounds

The traditional methods of education and learning, once conducted through books and chalkboards in classrooms, have undergone a profound transformation over the past several decades. Their previous semblances are almost indiscernible, a testament to the total evolution they have experienced. The present era is characterized by the progressive utilization of online platforms across the spectrum, from primary to higher education institutions, thereby conducting learning amidst the wave of digitization.

In our previous issue, we discussed the concept and advantages of 'flipped learning,' where learning is initially facilitated through video lectures, followed by corresponding lectures in the classroom. Now, we intend to take a step further based on this concept. We aim to delve into the strategy of blended learning, which synthesizes the benefits of both face-to-face and internet-based learning, and explore how Brunei is promoting such an approach.

Main contents

What is Blended Learning?

The concept of 'blended learning' is variously defined depending on the scholar. Two of the most frequently cited definitions in the field are worth mentioning. Firstly, Graham(2006) asserted that "Blended learning systems combine face-to-face instruction with computer-mediated instruction." Additionally, Garrison & Kanuka(2004) defined blended learning as "The thoughtful integration of classroom face-to-face learning experiences with online learning experiences." Both interpretations consider face-to-face education and online learning as essential elements. Some researchers have debated the required proportions of face-to-face and online education in a curriculum to classify it as blended learning, with some arguing that about 50% of the total educational time must consist of online education.

The application of blended learning in modern education is gaining a firm foothold. Educators around the world are mixing internet-based e-learning with traditional learning methods to provide a diverse array of learning experiences and environments. Students are utilizing various learning resources available online, such as video lectures and real-time classes. Conversely, in offline settings, they internalize the subject matter through substantial face-to-face classes, discussions, experiments, and other activities.

Direction of Education in Brunei

Several years ago, the Ministry of Education in Brunei announced its e-learning strategy through the 'Ministry of Education's e-Learning Strategy 2018-2022'. This strategy aimed to enhance students' learning experiences and ultimately improve learning outcomes by actively utilizing e-learning in Brunei's education system. The strategies for education and learning to achieve this goal, along with their applications, are as follows:

1. Adoption of Information Technology and Communication(ITC)

ITC was actively introduced and utilized for e-learning, allowing students to access and learn from educational materials through digital devices and an internet connection. The impact of COVID-19 accelerated this change, showcasing active usage of platforms such as LMS and Moodle in Brunei's universities. After COVID-19, it is reported that about 75% of households were equipped with high-speed internet (Broadband).

2. Strengthening Teachers' Ability to Use e-Learning

Educational resources were provided to enhance the ability of teachers to utilize the e-learning system appropriately when conducting education. With this, teachers were able to produce learning materials or deliver lectures online, providing appropriate guidance and instruction to students.

3. Improving School and University Infrastructure

There was a desire to strengthen the infrastructure of schools and higher education institutions to effectively implement the e-learning system. Particularly during the COVID-19 pandemic, the Ministry of Education and UNN (Unified National Networks), the national communication infrastructure provider in Brunei, cooperated to implement an e-education solution to ensure that students could actively participate in online classes from home. UNN upgraded its broadband network to address the issues of increased traffic and data volume due to augmented home internet usage. Additionally, they provided access to mobile networks so that teachers and students could use data and traffic related to specific educational websites and applications. Through this, teachers were able to provide online classes, and students from economically disadvantaged families were assisted in participating in online classes and e-learning. In support of this, over 15,000 laptops and more than 1,700 mobile devices enabling internet access for educational tools like Zoom were purchased and distributed.

4. Strengthening Collaboration and Communication

The government's learning strategy emphasized collaboration and communication between educators and students, both of which are crucial in e-learning. Supported by the government initiatives mentioned earlier, students were able to communicate with their peers, undertake projects, and share opinions through discussions on online platforms and social media.

All of these strategies and practices were grounded in blended learning, the integration of e-learning and offline studies. Notably, this integrated approach to learning continues to be actively utilized even after the termination of face-to-face encounters due to the pandemic.

Conclusions

The global trend of substituting traditional face-to-face classes with online classes has allowed many students, schools, and teachers to experience the advantages of both face-to-face and online learning. The acceleration of such experiences in Brunei, particularly under the COVID-19-induced acceleration of e-Learning, is likely due to the efforts of the Brunei Ministry of Education to enhance students' educational experiences. This case of Brunei demonstrates the necessity of government support in the transition process towards a paradigm of blended learning experiences. Although various opinions exist on the balance between online and offline education, educators and institutions need to carefully consider their curricula to prevent gaps in students' learning experiences resulting from the combination of the two.

Implications

In the wake of the pandemic, the global educational landscape, which had transitioned to online learning, is now progressing towards a new paradigm that harmonizes online and offline learning. Experiencing both online and offline education has allowed us to understand the advantages and disadvantages of each, and now we are set to evolve into a new educational experience that leverages these strengths and addresses the weaknesses. However, just as we experienced during the switch to online education, a successful transition to this new educational paradigm will require significant effort spanning governments and educational institutions.

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The Future of Education in Brunei Darussalam

#FutureGoal #Wawasan2035 #2023-2027

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The Government and Ministry of Education of Brunei Darussalam have stated their ambition to provide a proactive and innovative educational environment for all levels of education, including higher education. In particular, the future directions for innovative education and talent development that will be implemented over the next five years will play an important role in the government's vision of Brunei becoming one of the top 10 developed countries in the world.

01

The Direction of Education

Backgrounds

The education sector is heavily influenced by the direction of a country. Brunei Darussalam has been able to quickly adopt and embed digital education thanks to the proactive moves of the Ministry of Education. Thanks to the e-learning strategy released several years ago, digital devices and high-speed internet have been made available, teachers have been trained for the new learning system, and e-learning systems have been put in place. This year, the ministry's new strategic plan for the future looks at how the country's education system will change in the future.

Main contents

The start of 'Wawasan Brunei 2035'

In 2007, the government of Brunei launched a long-term national development project. Wawasan 2035 is an economic diversification plan to invest heavily in eight areas, including infrastructure, national security, SME development, environment and education, within three broad goals. Brunei's goal is to improve the income(GDP) and quality of life of its people to become one of the world's top 10 developed economies in terms of both quantity and quality by 2035. The government's goals are grouped into three main areas.

- (1) Goal 1: Educated, Highly Skilled and Accomplished People
- (2) Goal 2: High Quality of Life
- (3) Goal 3: A Dynamic and Sustainable Economy

The first goal, Education, focuses on ensuring that Bruneians are educated, highly skilled and fulfilled. It aims to have a first class education system to ensure that students at all levels, including primary, secondary, technical and vocational, as well as higher education, are equipped with knowledge and skills for the 21st century. High quality teachers and schools will enable students to achieve. It is expected that such quality education and human resource development through lifelong learning will enable all citizens to develop their potential to become part of the productive workforce and meet the country's manpower needs.

Launch of 'The Ministry of Education Strategic Plan 2023-2027'

With the mission "To provide quality and holistic education for a purposeful life of learners", the Ministry of Education of Brunei Darussalam has expressed its intention to realize the goals of Wawasan 2035. Reflecting the government's plan to achieve national development based on quality education, it has set out a roadmap for the next five years to deliver quality education, strengthen the capacity of the education system and prepare the workforce for the changing face of education. The strategic goals presented by the Ministry of Education are as follows.

(1) Goal 1: Nurture Future-Ready Learners

It focuses on cultivating technical and innovative talent for the future, equipping them to contribute as active members of society. The basis of the Ministry's major projects over the next five years are aimed at achieving seven strategies, including improving students' learning outcomes, enhancing future-ready skills, strengthening basic education, fostering learners' entrepreneurship, and creating a culture of lifelong learning.

(2) Goal 2: Enhance Innovative Education Ecosystem

Build an innovative education system that is responsive to the rapidly changing education landscape. Deliver valuable education to learners through robust educational practices and processes. Adopt a more flexible approach to assessing and updating learning programs and curricula, including streamlining assessment reviews and updates. The ministry of education aim to achieve our four-pronged strategy, which includes improving and innovating teaching, learning and research environments, and increasing research and innovation.

(3) Goal 3: Build Up Human Resources

Support human resources at all levels, including higher education. To provide learners with the highest quality professional education and educators with the ability to deliver quality academic programs while maintaining high ethical standards, public responsibility, and sustainability. It aims to achieve two strategies: strengthening the competencies of the workforce and strengthening human resource management.

Conclusions

The future direction and goals of education in Brunei Darussalam, as announced by the government and the Ministry of Education, will also affect research institutions such as departments, schools and universities under the Ministry. With the digital education environment already established and the detailed strategic goals of the Ministry of Education announced this year, educators and learners in Brunei will have a higher quality educational experience. In line with the government's efforts to build a great online and offline education environment and national aspirations for the future, students are also expected to work hard to improve their studies and contribute to the future economic and technological development of the country.



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