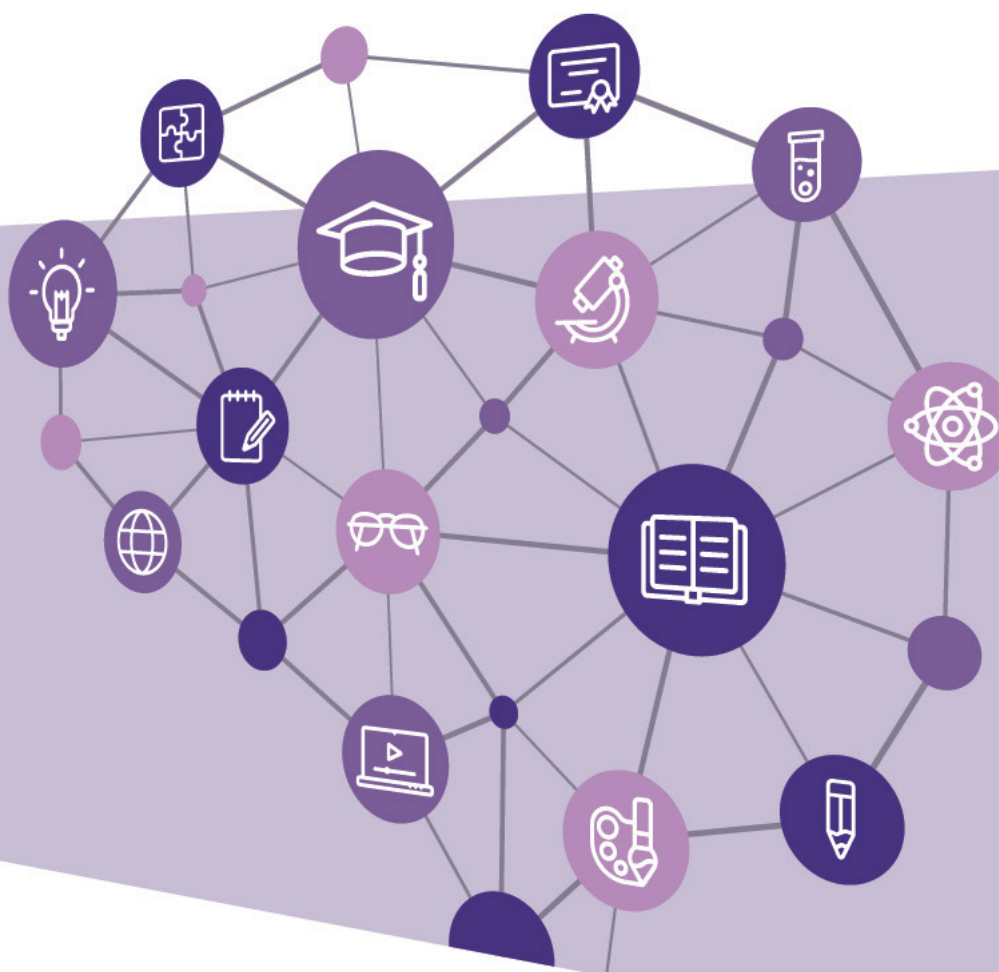


2023 Trend Report

# Higher Education & e-learning in ASEAN

Vol. 4



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# 01

## Education strategies for the digital age in ASEAN countries

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# The Future of Education in Brunei Darussalam

#FutureGoal #Wawasan2035 #2023-2027

Jiyeon Moon / Hanyang University



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.



## References

Ministry of Education Brunei Darussalam, [www.moe.gov.bn](http://www.moe.gov.bn)

Wawasan Brunei 2035, [www.wawasanbrunei.gov.bn](http://www.wawasanbrunei.gov.bn)

NEWS (2023.09.23). The Launching of The Ministry of Education Strategic Plan Book 2023-2027. Ministry of Education Brunei Darussalam. <https://www.moe.gov.bn/SitePages/NewsArticle.aspx?AID=1187>

# 12-Module Teacher Training Program at Public Universities of Laos

Dr. Khamkeo HANSANA / Higher Education Department, Ministry of education and Sports, Lao PDR.



Teacher Training programs play an important part in upgrading teaching knowledge and competence of teachers in order to help learners learn effectively. There have a number of Teacher Training Programs and academic workshops provided for teachers of public Universities in each year. One example of domestic Teacher Training Program is called a 12-Module Teacher Training Program. It was supported by Second Strengthening Higher Education Project (SSHEP) under Higher Education Department, the Ministry of Education and Sports. This program has been providing trainings on teaching implementation for teachers especially; the ones did not study the pedagogy but they have been teaching in several faculties of the public universities. for instance, teachers of faculty of law and political science, faculty of environment and so on. It is 3-week Training program which trainees were trained a variety of new teaching skills and knowledge. Basically, the Faculty of Education, National University of Laos, is the one which is leading the idea of 12-Module Teacher Training program for university of Champasak, University of Savanakheth and University of Souphanouvong. The training was conducted by the experienced teachers in the field of teaching and learning.

In 2022, there were two training programs which were held at the Faculty of Education, National University of Laos. There were around 24 trainees who were dominated from different faculties of National University of Laos to attend the Trainings. The training program provided subjects that were related directly to teaching and learning implementation. These include learning assessment and evaluation, learning environment, learner development, different types of learners, teachers' development, professional teachers, cultural and social study, teaching technology, teaching design, presentation and facilitation, and learning participation respectively.

In addition to this, University of Savannakhet held 12-Module Teacher Training Program in 2019 and it took 09 days for training with Second Strengthening Higher Education Project (SSHEP). There were 30 trainees dominated from different faculty especially; the ones did not take the course of pedagogy. The subjects provided were similar to the Faculty of Education, National University of Laos. However, there was an additional subject which is different. It was a basic knowledge of research.

A further example of this program training was organized by the University of Champasak and University of Souphanouvong. The Program was held in 2022 with the support of the Second Strengthening Higher Education Project (SSHEP). It took 11 days for training. There were 30 trainees who were dominated from different faculties especially; the ones did not take the course of pedagogy. The subjects provided were similar to the Faculty of Education, National University of Laos.

Through attending the training. It was found fruitful for teachers. This is because a number of teachers who attended the training had a better understanding, for example, of teaching, assessment of learning as well as helping students with different levels and types of learning learn effectively. This became the factor that contributed to better learning and teaching practice.



## References

University of Savannakhet (2019). A report on a Training Program for teachers without taking a pedagogy.

National University of Laos (2022). A report on a Training Program for teachers without taking a pedagogy.

University of Champasak (2022). A report on a Training Program for teachers without taking a pedagogy.



# Korean Universities Transform International Admissions While Taejae University Launches Global Leadership Program

#KoreanHigherEd #InternationalAdmissions  
#GlobalLeadership #TaejaeUniversity

Mr. Wooyong Shin / Yonsei University



Korean universities are revamping international student admissions, emphasizing fairness by eliminating personal statements and study plans. Instead, they focus on academic records and test scores while offering flexibility in Korean proficiency requirements. Meanwhile, Taejae University has inaugurated its first class with a mission to nurture top-tier global leaders through innovative, English-based education rooted in Environmental, Social, and Governance (ESG) principles, gaining recognition as a pioneering institution in global leadership development.

## 01

### Transformations in Korean University International Admissions for 2024: Fostering Inclusivity and Academic Excellence

Korean universities have made substantial changes to their international student application processes for the 2024 spring semester. Notably, personal statements and study plans are no longer required, a move aimed at promoting fairness in admissions. Instead, the focus has shifted to evaluating students based on academic records, awards, and standardized test scores. Some universities have also altered their Korean proficiency requirements, accepting a broader range of language certifications and scores.

Yonsei University, for instance, revamped its grading system for specific programs. Academic records now carry more weight, accounting for up to 60 percent of an applicant's score. Performance-based tests, like music auditions or tryouts, make up the remaining 40 percent. This shift away from performance-based tests is seen in other fields as well.

In addition, some majors and programs are exclusively open for spring admissions, expanding opportunities for international students. Hanyang University has adjusted its Korean proficiency requirements, widening the range of accepted certifications. Scholarships have been updated accordingly, making them accessible to more students.

However, online Korean language tests have been discontinued at several universities as they rely more on official scores. Sungkyunkwan University and Ewha Womans University have streamlined their application processes, transitioning to online submission. Hankuk University of Korean Studies (HUFS) has eased language skill requirements for different tracks, offering more flexibility to applicants.

These changes reflect Korean universities' commitment to attracting a diverse pool of international students. The Glocal University 30 project further supports this goal by providing funding to universities seeking innovative education systems. Universities like Jeonbuk National University and Pusan National University have embraced these changes to make Korean higher education more appealing to international students.

## Implications

Korean universities' admissions eliminating personal statements and emphasizing academic records promote fairness and reduce the influence of socioeconomic factors. Accepting a wider range of language certifications and discontinuing online Korean language tests enhances accessibility. This aligns with global trends in creating inclusive and equitable education systems.

## 02

### Taejae University Inaugurates First Class, Pioneering Global Leadership Education

Taejae University, South Korea's pioneering four-year accredited institution dedicated to nurturing future leaders, celebrated its inaugural class of 32 students in an entrance ceremony on August 30, 2023, ahead of its official opening in September. The selection process for this first cohort was rigorous, aimed at identifying exceptionally talented students with the potential to become innovative and empathetic leaders.

The university's core mission is to groom its students to be among the top 1% of global leaders, equipped not only with academic excellence but also with qualities like empathy and critical thinking. This vision is realized through an innovative curriculum that promotes international cooperation between the East and West, using English as the primary language of instruction and emphasizing advanced digital tools and an educational program rooted in Environmental, Social, and Governance (ESG) principles.

During their four years at Taejae University, students will experience a unique learning journey, residing in various global cities as part of the Global Engagement Program. Classes, held in English with small class sizes, foster interactive and discussion-based learning.



## Implications

The establishment of Taejae University and its unique approach to education signifies a growing recognition of the need for innovative and globally oriented leadership in today's interconnected world. By focusing on nurturing students to become empathetic and critical-thinking leaders with a strong emphasis on Environmental, Social, and Governance (ESG) principles, the university sets a precedent for redefining higher education.

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Lee, T. H. (2023, September 5). Korean universities drop personal statement in applications, change Korean proficiency requirements. <https://koreajoongangdaily.joins.com/news/2023-09-05/national/kcampus/Korean-universities-drop-personal-statement-in-applications-change-Korean-proficiency-requirements/1862211>

South Korea's Taejae University admits first class of future leaders ahead of official university opening in September. South Korea's Taejae University Admits First Class of Future Leaders Ahead of Official University Opening in September. (2023, August 30). <https://www.prnewswire.com/news-releases/south-koreas-taejae-university-admits-first-class-of-future-leaders-ahead-of-official-university-opening-in-september-301913530.html>

# Singapore's MOE Empowering Tomorrow's Leaders: Education's Evolution in the Digital Age

#EdTech2030 # DigitalLiteracy

#21stCenturySkills #EducationTransformation

Mr. Wooyong Shin / Yonsei University



Singapore's Minister for Education, Chan Chun Sing, introduced initiatives at the Schools Work Plan Seminar to prepare students for a changing world. These include technology integration, better learning environments, and 21st-century skill development. The event tackled global challenges, emphasized adapting to uncertainty, and introduced the EdTech Masterplan 2030, focusing on digital literacy and teacher support. Efforts to address tech-related mental health concerns and enhance school spaces were highlighted, along with updates to the 21st Century Competencies framework.

## 01

### Revolutionizing Education: Preparing Students for a Rapidly Changing World

Singapore's Minister for Education Chan Chun Sing unveiled a series of initiatives aimed at preparing students for the swiftly evolving world of today. Speaking at the Ministry of Education's Schools Work Plan Seminar held at the Singapore Expo, he outlined measures that included the integration of technology into education, the revitalization of school environments to enhance students' learning experiences, and the development of 21st-century skills.

The event, which brings together over 1,600 school leaders and educators, was centered on the theme "Shaping The Future Of Learning" and addressed key challenges like a changing global landscape, economic disruptions, and the rapid advancements in generative artificial intelligence (AI).

Mr. Chan expressed concerns about the growing uncertainty students may face in the future, emphasizing the need to adapt to these changes. The Ministry of Education introduced the Transforming Education Through Technology (EdTech) Masterplan 2030, scheduled for gradual implementation in schools from 2024. This plan aims to harness education technology to cater to diverse learning needs while assisting teachers in managing the pace of change.

He stressed the importance of using technology to enhance teaching and learning, aiming for a breakthrough in education. To support this mission, the Ministry will strengthen students' digital literacy, particularly in the realm of AI, educating them on its strengths and limitations and how to effectively utilize it for learning and work.

Aaron Loh, divisional director of MOE's educational technology division, highlighted the significance of students staying informed about emerging technologies, given AI's increasing influence in various aspects of their lives.

The Ministry will offer resources, including self-paced lessons on the Singapore Student Learning Space (SLS), and enhance the SLS with more AI features to personalize learning experiences and complement teacher guidance. Starting December 2023, two tools, the Language Feedback Assistant for English (LangFA-EL) and the Short Answer Feedback Assistant (ShortAnsFA), will be available on the SLS, aiding teachers in providing timely feedback and focusing on higher-level skills.

To provide tailored support, two EdTech officers will be assigned to each school cluster, and professional development opportunities will be offered to equip teachers for effective e-pedagogy.

Addressing concerns about the potential mental health risks associated with technology and social media, MOE will reinforce students' cyber wellness through the Character and Citizenship Education curriculum, promoting healthy digital habits and respectful online interactions.

Additionally, a \$64 million School White Area and Canteen Grant was introduced to enable schools to adapt physical spaces to evolving educational needs. Schools can use the grant for various enhancements, including makerspaces and indoor farms, to create multi-functional learning environments.

From January onwards, MOE will provide additional funding for schools to adopt new furniture and equipment, further enhancing the functionality of learning spaces and supporting a broader range of learning approaches and programs.

Another significant announcement was the enhancement of the 21st Century Competencies (21CC) framework, which now places greater emphasis on adaptive and inventive thinking, communication, and civic literacy. Minister Chan emphasized the importance of developing values and competencies critical for students to navigate a world characterized by information overload and rapid change, highlighting how AI literacy aligns with 21CC, specifically in fostering inventive thinking.

## Implications

Minister Chan Chun Sing's initiatives signify a crucial shift in education, focusing on technology integration, enhanced learning environments, and 21st-century skills. These efforts recognize the urgency of adapting to an evolving world, emphasizing digital literacy and AI education to prepare students for uncertainty and rapid change. Additionally, the initiatives prioritize teacher support and mental health awareness while investing in flexible learning spaces and an upgraded competency framework. Singapore's approach serves as a noteworthy example for global education systems, underscoring the need to evolve in response to the dynamic challenges of the 21st century.

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Tushara, E. (2023, September 20). Moe prepares students for fast-changing world through Tech, updating learning spaces. The Straits Times. <https://www.straitstimes.com/singapore/edtech-masterplan-and-enhancing-school-environments-moe-announces-moves-to-prepare-students-for-fast-changing-world>

# 02

## Efforts to expand higher education systems in ASEAN countries

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# GIC Summer Online Training 2022

## # GIC Summer Training 2022

Ms. CHOM Sreylam / ITC



The summer training program is conducted for about 4 weeks, and it starts on 18th August 2022 on two main courses, such as basic Programming C/C++ and Basic Web Development by our Department of Information and Communication Engineering (DICE or GIC in French) at the Institute of Technology of Cambodia (ITC). The program aims to share knowledge from seniors to juniors and improve communication between students in the same department. The training is conducted online using Microsoft Team. Most participants are from the new I3 GIC year 1, year 2 at ITC and everyone who is interested in the above-mentioned courses. It is free of charge.

## 01

### Summer training at Department of Information and Communication Engineering, Institute of Technology of Cambodia 2022

Department of Information and Communication Engineering at the Institute of Technology of Cambodia, our programs are built based on a very solid curriculum that covers fundamental theories in computer science and information technologies. Upon completion of the programs, students will be able to gain technical expertise consisting of critical thinking and problem-solving skills involving analysis, design, implementation, and evaluation of computer-based systems. The programs also give an introduction to research in advanced domains, such as image processing, natural language processing, artificial intelligence, machine learning, and distributed systems. In addition to the technical competency, our programs are enhanced with soft skill development through teamwork tasks in class and obligatory internships to a real working environment for the readiness of the students for their professional lives. Also, GIC organizes a summer training program for two main courses: basic Programming C/C++ and basic web development. By practicing the knowledge-sharing culture in our department from year to year, we have volunteered trainers who have just finished their year 3 and will start their year 4 program in the next academic. For the summer program this year, we got around 10 volunteers to train in the above-mentioned two courses to our juniors. The training is conducted online on a Microsoft team. The training schedule is attached below.





Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	
8:00-9:30am	Basic Programming C/C++ -Theory: 40mn -Practice: 50mn	Basic Programming C/C++ -Theory: 40mn -Practice: 50mn	Free and research/ Review time	Basic Programming C/C++ -Theory: 40mn -Practice: 50mn	Basic Programming C/C++ -Theory: 40mn -Practice: 50mn	
10:00-11:30am	Basic Web Development Theory: 40mn -Practice: 50mn	Basic Web Development Theory: 40mn -Practice: 50mn		Basic Web Development Theory: 40mn -Practice: 50mn	Basic Web Development Theory: 40mn -Practice: 50mn	
1:00-2:00pm	Student practise, review and do homework (self study)	Student practise, review and do homework (self study)		Student practise, review and do homework (self study)	Student practise, review and do homework (self study)	
2:00-5:00pm						
Remark: Training will start from 18th August - 8th September 2022						

Figure 1. Summer training schedule:

This program runs for 3 hours a day, 4 days a week, for approximately 4 weeks, and began on August 18, 2022. In addition, for two main courses, such as basic Programming C/C++ and basic web development. The first course, basic Programming C/C++, C++ is an object-oriented programming (OOP) language that is viewed by many as the best language for creating large-scale applications. C++ is a superset of the C language. A related programming language, Java, is based on C++ but optimized for distributing program objects in a network such as the Internet. Also, we have two main points about theory and practice: Learning how to solve problems step-by-step and Coding with C/C++. The Second course, Basic Web Development, also has theories and practices such as learning basic web programming (HTML, CSS, JS, Bootstrap...) and practicing and solving real problems. The training poster is attached below.

## GIC Summer Online Training 2022

4 weeks (online training)  
 Start: 18th, August 2022  
 Teaching tool: Microsoft Teams  
 Target participants: New I3 GIC and other students are also welcomed

Join free via our Telegram Group:

<https://t.me/y3n2v1kky>

Register Free via Google Form:

<https://bit.ly/395ED2H>

TRAINING COURSES

Basic Programming C/C++

- Learn how to solve problems step-by-step
- Coding with C/C++ programming

Basic Web Development

- Learn about basic web programming (HTML, CSS, JS, Bootstrap...)
- Practice in real problems

Train by: Senior Year-4 GIC, ITC

CHHORN KAKADA

HANG SONMITH

KAO VISAL

DIN SEANGMENG

KHY MENGHUOT

SOK PAGNAVATH

Organized by:

Département de Génie Informatique et Communication  
Department of Information and Communication Engineering

Find us more on:

GIC Official Facebook Page: @dept.dice.itc

GIC Website: <https://gic.itc.edu.kh>

Figure 2. Poster for the summer training program 2022

Figure 2 shows the poster of the program. Before the training program, the information is publicly shared with our students on our website (<https://gic.itc.edu.kh/events/150>) and our official Facebook page(<https://www.facebook.com/dept.dice.itc>). There are six volunteered senior students. They will be in year 4 in the upcoming academic year program.



In conclusion, all classes are operated online in the context of the pandemic. This year's summer training program, organized by the Department of Information and Communication and Engineering of the Institute of Technology of Cambodia, was conducted online using Microsoft Teams. Six senior students volunteered and provided two training courses, such as two main courses, basic Programming C/C++ and basic web development. We have seen the culture of knowledge sharing in our department is fruitfully distributed. Seniors and juniors now know each other well, especially experience sharing from seniors is necessary and valuable for their future development.

## References

GIC Website, Summer training program 2022, <https://gic.itc.edu.kh/events/152>

### 01 Introduction CSS

#### Content

- What is CSS?
- Ways to include CSS
- CSS syntax
- CSS selector
- CSS color
- CSS background
- CSS Specificity

Prepare by: KHY MENGHUOT

2

### What is HTML, CSS and JS ?

- **HTML (Hyper Text Markup Language)** : is the standard markup language for create web pages and describes the structure of a Web page, consists of a series of elements.



- **CSS (Cascading Style Sheets)** : is the language we use to style a Web page or is a language of style rules that we use to apply styling to our HTML elements, for example setting background colors and fonts, and laying out our content in multiple columns.
- **JS (Java Script)** : it is a high level language that can allow us use to make web page interactive and add behavior to web page.

Prepare by: KHY MENGHUOT

# Development of Open Educational Resources (OER) University System at YTU Using Specific Logic Model

#Open Education Resource (OER), #Engineering Education, #Specific Logic Model, Impacts on OER Implementation

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Yangon Technological University (YTU) developed the Open Education Resources (OER) university system in Engineering Education with a Specific Logic Model, which was reported in the last volume. During the implementation of the Specific Logic Model at YTU, there are several challenging issues to accomplish in the OER university system based on the Networking between Local and International Institutions, Relationship and Engagement between Scientists from the University and Non-Scientists from the Public Community, and Open Access to ICT facilities from University. YTU could solve the important, challenging issue for sustainable development of the OER university system. The participating institutions and the specifically developed programme are key players in the OER university system that benefited students in Myanmar. The enhancement of the OER university system at YTU was presented in this report.

## 01

### Answers for Questions and Challenges for OER University System at YTU:

Yangon Technological University could solve some issues regarding the development of all engineering course materials for all learners internally by doing the benchmarking processes with collaborative universities. The main collaborative universities are Chulalongkorn University (CU) and Sirindhorn International Institute of Technology (SIIT) in Thailand, Singapore University of Technology and Design (SUTD) in Singapore, Chiba University, Kumamoto University, Kanazawa University, Okayama University, Niigata University, Nagasaki University and Kyoto University in Japan, and University of Oulu in Finland. Currently, the Learning Management System (LMS) implementation at YTU is for all learners with open file formats in some courses that are equally accessible. The last question is to be efficiently creative. Start without thinking about current systems and engineering courses. It is necessary to rethink the components of learning. In order to implement the intended specific logic model for the OER university system of YTU, the engagement of the public community and university people is a very crucial role for future services.



## Ideologies for Specific Logic Model of YTU:

The intended specific logic model for the OER university system of YTU was reported in Volume 3 of the 2023 Trend Report of Higher Education and e-learning in ASEAN. The first component is open collaboration and networking between OER universities, the second component is services for engineering educational institutions, and the third component is support infrastructure for OER.

Firstly, the open curriculum design was carried out at Yangon Technological University and at Mandalay Technological University in May and November of every year from 2014 to 2019. The Six Universities in Japan were supported to enhance the engineering higher education project under the JICA scheme. The curriculum benchmarking processes were accomplished to accredited by the Myanmar Engineering Council (MEngC) in 2019. The continual quality improvement (CQI) processes for open curriculum design are sustained. In 2018, the international postgraduate diploma programme in Telecommunication Engineering was initiated at YTU in official collaboration with the University of Oulu in Finland. During that collaboration, the eleven modules were offered by international experts, and the digital course materials were provided for all Telecommunication Engineering Students at YTU.

Secondly, the open design and implementation program for all undergraduate and postgraduate students for their education. The integrated design projects and graduate research for undergraduate courses and research project implementations for postgraduate courses are compulsory at YTU. The internship and students' exchange programme between YTU and collaborative universities in the world were completed based on the open design and implementation for outstanding achievement for education and research purposes.

Thirdly, the open pedagogical systems were also implemented at YTU based on the research works. The Research-Based Education (RBE) system is the main idea for implementing the open pedagogical systems. The researchers did their research work, and they observed their research outcomes from their collaborative research works with Japanese Universities. After that, they got new ideas and knowledge from the research experience, and they could publish their research outcomes and transfer their knowledge to industries by tech-transfer process. And then, the researchers shall have to transform their course materials from their research outcomes for their classes by modifying their old pedagogy.

Fourthly, the open student support systems were developed by a unique RBE system with a triangle shape model, reported in Volume 1 of the 2023 Trend Report of Higher Education and e-learning in ASEAN. The idea and way of thinking of undergraduate and postgraduate students always work together with the course facilitators to achieve the best education system at YTU by research group' activities.



The second component is services for engineering educational institutions by open assessment and evaluation services, open micro-credential, open community services, and open science literacy services. The open assessment and evaluation services are essential services for international degree programme. Based on the experience of the international postgraduate diploma programme in Telecommunication Engineering at YTU, the assessment and evaluation services are done by the course facilitators from Finish University. Also, the assessment and evaluations are conducted by external evaluators from MEngC for the programme accreditation purposes. In connection with the assessment services, open micro-credential services are also important. At present, YTU is now emphasizing to accomplish those services.

## Experience of Science Battle at YTU 2023



Figure 1. Science Battle Experience at YTU in 2023

## Experience on Small Science Museum at YTU



Figure 2. Small Museum Establishment at YTU in 2023

The more important one is open community services. YTU has formulated to engage community services by organizing an open campus system for everyone. Generally, YTU invites all fresh students and the public community to engage in scientific thinking and experience non-scientists from the public for implementing citizen science. At that time, all laboratories of YTU were open to the public for participating in research activities and experimental works based on their fundamental understanding of science and scientific popularizations.

The most important thing is open science literacy services. In this phase, there are three concepts of

1. Science Museums, Science Park, Centre and Science Battle configuring the new entrepreneurial ecosystem in the physical area,
2. Science Museums, Science Park, Centre and Science Battle enabling the entrepreneurial ecosystem's platform, and
3. Science Museums, Science Park, Centre and Science Battle integrating additional connections beyond the entrepreneurial ecosystem in the physical area

are very important to enhance the Improvement of Public Scientific Literacy through the establishment of Science Museums, Science Park and Science Battle in Universities.

The third component is support infrastructure for OER through an open business system, open ICT facilities, and an open student administration process. The important one is the open business system for all, and YTU always hosts the business areas on the campus for exchanging knowledge and experience with people in industries based on a co-creation program. The ICT facilities could be utilized by anyone for fulfilling the programme educational objectives after graduation of all students. The open student administration process is obligatory at YTU to enhance the education purposes for all.

That is the ideology for free OER learning approaches to free services to all.

## Implications

The critical outcome of the OER university system implementation depends upon the Ideologies for the Specific Logic Model of YTU. The success story of the OER university system is based on the three components of open collaboration and networking between OER universities, services for engineering educational institutions, and support infrastructure for OER. The collaboration and networking between YTU and collaborative institutes are essential for implementing the OER university system successfully.

## 03

### Implementation, Outcomes and Impacts:

YTU always actively participates in implementing the specific logic model for the OER university system by collaborating with international institutions. YTU created the unique LMS model for engineering education and sustainable university establishment. The successful percentage of the OER university system implementation is about 75% for the whole university. There are twelve engineering degree offering departments, and the course materials of about 600 files have already been uploaded in the YTU LMS platform. The outcomes of the implementation of the OER university system could be analyzed after establishing and monitoring the system completely.

The direct positive impacts of the OER university system are not only to the undergraduate and graduate students of YTU but also to the other students from local institutions and collaborative institutions. In addition, the other indirect positive impact body is the public community with non-scientists knowledge for their life-long learning processes.



## Implications

The effective implementation of the OER university system at YTU depends upon the collaboration, cooperation, and networking processes according to the sustainable development of education and research purposes between YTU and international institutions. The direct and indirect impacts to all people could be measured based on the full implementation of the OER university system at YTU.

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# Revitalizing Thai MOOC brand: A Journey to Launch a line extension of Thai MOOC Academy with Distinctive Brand Positioning and Integrated Communications in Thailand

#ThaiMOOCAcademy, #ThaiMOOC, #ThailandCyberUniversity, #DistinctiveBrandPositioning, #IntegratedBrandCommunication

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This report unveils the rigorous process behind the development of brand positioning and communications behind the massive launch of Thai MOOC Academy, under the purview of Thailand Cyber University (TCU), Ministry of Higher Education, Science, Research and Innovation (MHESI) in Thailand. The discussion focuses on 3 key steps of brand communication development: 1) situation analysis, 2) positioning development, and 3) communication planning. The situation analysis starts with a focus group discussion with key internal stakeholders to develop a SWOT analysis of Thai MOOC. The output from the analysis then feeds into brand positioning development by leveraging a well-recognized Brand key model as the lighthouse to guide the brand in the right direction. The communication plan is consequently crafted based on aligning the objectives and brand positioning to maximize effectiveness.

## 01

### Thai MOOC expands to Thai MOOC Academy

Thai MOOC was established in 2017 under the purview of Thailand Cyber University (TCU), Ministry of Higher Education, Science, Research and Innovation (MHESI) in Thailand as a massive open online learning platform to promote lifelong learning for Thai people. The main goals are to 1) be the leading international standard learning platform to enable Thai people to learn everywhere and anywhere free of charge and 2) intrigue the lifelong learning mindset among the Thai community.



This opens up limitless and borderless learning opportunities for Thai people around the world to access to more than 600 high-quality online courses, developed by academic and professional experts from 120 leading academic institutions from both private and public affiliations. (ThaiMOOC, 2023; Ministry of Higher Education, Science, Research and Innovation, 2021; Theeraroungchaisri & Khlaisang, 2019) In 2023, Thai MOOC is determined to expand the learning platform to Thai MOOC Academy as a brand extension with enhanced learning experiences and superior features to cater the development needs of the 21st century skillsets and align with 20-year Thailand national strategy to provide the opportunity for lifelong learning for Thai people. Firstly, Thai MOOC Academy will be the first platform in Thailand that allow learners to earn, collect, and deposit credits into central credit bank system.

This would allow the future transfer of credits to become a student of the accreditation institutions. Secondly, the learners who pass the testing requirement of each subject will receive a digital certificate of achievement to further their studies in the preferred institutions or increase competency to support their career progression. Thirdly, all learning achievements of learners are consolidated in the e-profile, allowing learners to export or share to prospective employers and universities. Fourthly, Thai MOOC academy upgraded the system security with the policy of one person, one account that requires learners to authenticate with an identification number from an ID Card. Finally, learners of Thai MOOC Academy will obtain a Google Suite account, consisting of educational cloud-based services from Google like other university students.

## Implications

### Thai MOOC Academy Expands Learning Opportunities for Thai People

- Provide Thai people with more opportunities to learn and upskill, regardless of their location or background.
- Help to develop the 21st-century skillsets that are in demand by employers.
- Align with the 20-year Thailand national strategy to provide the opportunity for lifelong learning for Thai people.

## 02

## Branding Positioning for Image Creation

The brand image of either product or service is derived from the perception of the target group. The brand image can be influenced by the creation of a brand positioning and communication plan. (Keller & Swaminathan, 2020) Most previous studies confirmed that the perception of the brand image towards higher academic institutions has a direct effect on the intention to apply to become a student. Therefore, many academic institutions place a strong emphasis on delivering powerful brand communication to communicate their unique positioning versus other institutions. This can effectively attract the target group of learners to enroll in universities. (Khanna, Jacob, & Yadav, 2014) Therefore, Thai MOOC initiated a project to develop the brand positioning for Thai MOOC Academy to occupy a suitable space and create a favorable intended image in the target learner's mind to drive awareness preferences and ultimately persuade learners to enroll in Thai MOOC Academy courses.



## Implications

### Thai MOOC Academy Launches Brand Positioning Project to Attract Learners

- Thai MOOC Academy has launched a project to develop its brand positioning in order to attract learners. The project is based on the research finding that the perception of the brand image towards higher academic institutions has a direct effect on the intention to apply to become a student.
- The project will focus on creating a favorable intended image of Thai MOOC Academy in the minds of target learners. This will be done through a variety of communication channels, including advertising, social media, and public relations.
- The goal of the project is to drive awareness, preferences, and ultimately persuade learners to enroll in Thai MOOC Academy courses.

Here are some of the implications of the branding positioning project:

- Help Thai MOOC Academy to stand out from other online learning platforms.
- Make Thai MOOC Academy more attractive to learners who are looking for a high-quality, affordable, and convenient way to learn.
- Help Thai MOOC Academy to achieve its goal of becoming the leading online learning platform in Thailand.

## 03

### Three Steps of Thai MOOC Academy Brand Communication Development

#### ► Situation Analysis

Thai MOOC Academy brand communication has gone through 3 steps of development: situation analysis, positioning development, and communication planning. The initiative phase is current situation analysis via conducting the online focus group interview with internal key stakeholders from the different units within the Thai Cyber University Project to come up with a SWOT analysis. This main purpose is to understand the strengths, weaknesses, opportunities, and threats before building the brand positioning for Thai MOOC Academy. The outcome of the SWOT analysis can be summarized as follows. The main strength is that Thai MOOC is the most trusted official online learning platform supported by the Ministry of Higher Education, Science, Research and Innovation (MHESI), with the largest network of worldwide MOOC platforms, local and international academic institutions, as well as public and private enterprise

Learners have positive perceptions of high-quality online courses, the ubiquitous nature of learning, and free of charge. The weakness lies in some of the emerging needs on the user interface, system security, and lack of credit bank system. The opportunity is familiarity and popularity of online learning post-COVID-19, shifting towards a lifelong learning mindset, and upskilling and reskilling demand in the workplace; however, the threats can potentially be internet connectivity and emerging of new players in online learning. This demonstrated that Thai MOOC has more strengths than weaknesses and opportunities than threats.

### ► Positioning Development through Brand Key

The second phase is to leverage the SWOT analysis to build up the brand positioning before crafting the communication plan. Brand positioning refers to the occupied space of the brand in the target consumer's mind when compared with other players or competitors in the market. Brand positioning is directly connected with perceived benefits in consumer's perception. (Kosteljik & Alsem, 2020; Kotler & Keller, 2016) There are various tools to help create a brand positioning strategy, from positioning statement perceptual map to the most popular tool in creating a corporate brand image called Brand Key. Brand Key was created by Unilever, one of the largest multinational corporations in the world. Brand Key, the key to a successful brand, has 8 elements: target group, competitive environment, consumer insight, value (brand personality), benefits, reason to believe, discriminator (the unique competitive strength), and brand essence (heart and soul of the brand linked with benefits) as shown in Figure 1.

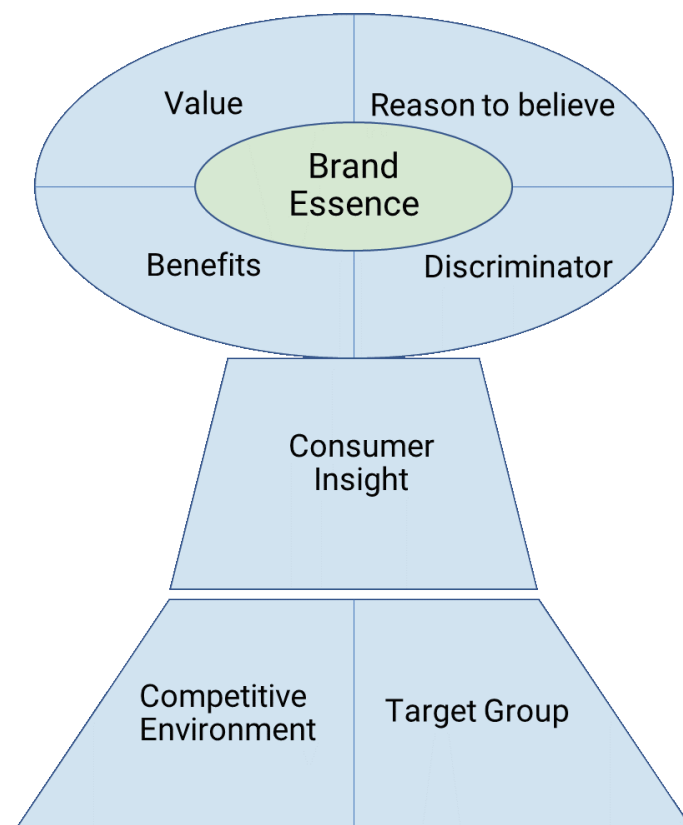


Figure 1. Brand Key (Kosteljik & Alsem, 2020 : P150)

From the situational analysis, work-in-progress Thai MOOC Academy Brand Key is drafted to build on the unique strengths and leverage on key opportunities as shown in Figure 2.

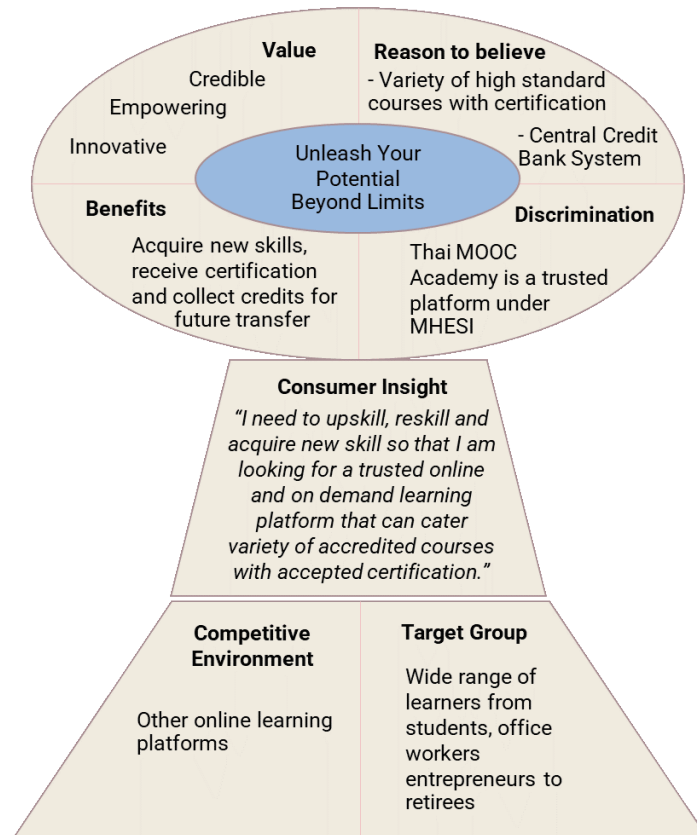


Figure 2. Work-in-progress Thai MOOC Academy Brand Key

This draft Brand Key may serve as the lighthouse to guide the brand safely to the target direction. Figure 2 demonstrates 8 elements and. The target group includes a wide range of learners, from students, office workers, and entrepreneurs to retirees, given the objective of MOOC to be a massive open online course to everyone to promote lifelong learning among Thai people. The broad insight of the target group is to enhance their knowledge and skills to adapt to the ever-changing environment and be competitive in the job market. They are looking for a trustworthy learning platform that can fulfill their needs to learn online anytime and anywhere with the right variety of accredited courses and certifications. The benefits that Thai MOOC Academy is committed to providing are a strong assortment of courses, well-recognized certification of achievement, and credit collection for future transfer to continue education with partnered higher education institutions. This is supported by the reason to believe in newly developed features of the credit bank system, certification of achievement, and, of course, the ever-increasing and updating of online courses. The communication mood and tone reflect the value/ personality of the brand on 3 dimensions; credible, empowerment, and innovative to position the Thai MOOC Academy platform as the platform that empowers learners to be successful with state-of-the-art and innovative learning experiences. This first draft of Brand Key is a dynamic tool that is subject to further adjustment based on the management point of view, post-tracking of the communication campaign, and the learner's brand perception. As a result of the brand key, the Thai MOOC Academy logo is created building on the Thai MOOC credential with the "Academy" sign-off underneath to signify the superior and integrated learning experiences to promote lifelong learning for Thai people, as shown in Figure 3.



Figure 3. Thai MOOC Academy Logo

## ► Communication Plan

The communication plan for the Thai MOOC Academy launch is divided into 3 phases: pre-launch, launch, and amplification. The pre-launch objective is to intrigue the interests of the target group/learners with online media featuring Thai MOOC success stories and interviews of current and prospective learners on what's working and what's required in the future to prepare for the launch of Thai MOOC Academy, as depicted in figure 4. The pre-launch phase will take approximately 2-3 weeks.



Figure 4. Current & Prospective Learners' Interviews

The launch phase unveils the launch of Thai MOOC Academy with 2 online videos to stimulate interest among the target group. The first one is the talk from the management team of Thai MOOC on key features and benefits. The second video portrays the pilot test of the Thai MOOC Academy with the employees of the Ministry of Higher Education, Science, Research and Innovation as the show and tells the story of real users who will elaborate their impressions towards the platform. The official launch event is at the IEC 2023 conference on August 31st at Berkeley Hotel with onsite, online, and on metaverse.

The amplification has the important role of maintaining the campaign as well as persuading prospective learners to enroll in Thai MOOC Academy with the how-to-apply for Thai MOOC Academy as well as activation activities to maintain the launch momentum such as highlighted of new courses, learners' success story, and expanded partnership with regional and global MOOCs.

## Implications

### Thai MOOC Academy Launches Brand Communication Campaign to Position as Leading Online Learning Platform

Thai MOOC Academy has launched a brand communication campaign to position itself as the leading online learning platform in Thailand. The campaign will focus on three key areas:

- Building awareness of Thai MOOC Academy's new features and benefits, such as its credit bank system and certification of achievement.
- Persuading learners to enroll in Thai MOOC Academy courses by highlighting the platform's credibility, empowerment, and innovation.
- Maintaining the momentum of the launch campaign with activation activities such as highlighting new course learners' success stories and expanding partnerships with regional and global MOOCs.

The implications of the brand communication campaign are:

- Help Thai MOOC Academy to reach a wider audience of learners.
- Position Thai MOOC Academy as a credible and innovative online learning platform.
- Help Thai MOOC Academy to achieve its goal of becoming the leading online learning platform in Thailand.

Here is a link to the Thai MOOC Academy website where you can learn more about the platform and the brand communication campaign: <https://www.thaimooc.org/>

## 04

### Summary

The development of a communication plan for Thai MOOC Academy has gone through 3 steps: situation analysis, positioning development and communication plan. Even though brand positioning is a crucial prerequisite to the communication plan, it is dynamic and can be adjusted to align with the evolving needs of learners, post campaign tracking results, as well as management directions.



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# 03

## Traditional online education is still emphasized in ASEAN countries

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# Using Collaborative Tools to Support E-learning for student collaboration in online learning

## #collaborative tools #e-learning

Valentino Aris & Rahmatullah / Universitas Negeri Makassar  
Arini Lestari / Universitas Andi Djemma



The use of e-learning certainly has a positive impact on learning, such as learning can be done virtually and accessed easily, costs are cheaper in implementing learning, and makes it easier to share learning content and references. However, despite all these advantages, e-learning is also not free from its opposing sides, one of which is the emergence of individualistic attitudes among students (Sunu IGKA, 2021). The lack of direct interaction between students and lecturers has been suggested as one of the causes of this condition (Amarulloh et al., 2019; Handarini & Wulandari, 2020).

Another issue that needs to be considered in using e-learning is the diversity in the classroom. This diversity is an obstacle because class participants come not only from one region but from various regions with different attitudes and cultures. Educators must be able to manage and accommodate a wide variety of class participants so that learning objectives can be achieved. Some of the differences between students in e-learning classes can be cultural differences, differences in economic conditions, physical and mental disabilities, and differences in knowledge of using technology. Diversity related to economic conditions and differences in knowledge of using technology certainly greatly influence the use of e-learning. So, it must be understood that when students with such diversity study in a virtual space without interaction, there will be differences in the quality of learning output if it is not managed well.

This is also an obstacle to using e-learning in the Digital Business Study Program at Makassar State University. The low level of student participation and collaboration causes students to have difficulty working together in a team. This especially happens if one uses the Case Method Learning and Project Based Learning methods. In this learning method, students are expected to be able to work as a team to solve a given case or project. To anticipate this problem, we use applications or software tools that allow them to collaborate online, combined with the use of SYAM-Ok, an e-learning platform at Makassar State University.

The following are several application references or software tools that students can use to collaborate online:





### (1) Figma

This collaborative web-based application is used to create user interface designs available in desktop applications for Windows and macOS. This application makes it easier for designers to create collaborative designs online. Generally, this application is used to create prototypes or user interface workflows for web or mobile-based applications. However, Figma is also mighty for use in creating business model blueprints, flowcharts, and other diagrams. This application also provides a live chat feature so that participants can communicate directly during the design process. This application can be used for free with limited features, but users who use it for educational purposes can use its features for free by registering with an educational account.



### (2) Canva

Canva is a platform for creating graphic design and publication content that is easier and faster than other graphic software. In the classroom learning process, Canva is very useful for building more attractive presentation files because there are various templates available. Apart from that, components to beautify presentation files are also available in full, such as border elements, charts, animation elements, and software that can be installed to make it easier to design presentation materials. Users can collaborate in creating a presentation file, making it very interesting to collaborate online. Users can also communicate in real time using the chat feature. Apart from presentations, Canva can also be used to design other content such as posters, infographics, banners, websites, learning videos, and other content. Artificial intelligence features are also available to make it easier for users to design their content.



### (3) Miro

Miro is a virtual whiteboard application where users can connect and collaborate to develop ideas. Virtual whiteboards can be a canvas to accommodate and communicate users' ideas with the team. This application can be used for free according to the user's needs. In this application, users can use sticky notes to collaborate on developing ideas. Miro can also load images, PDFs, Office files, videos, documents from Google Drive, and much more. The advantage of this application is that the whiteboard is unlimited, so it can open many files at once on the whiteboard. Because it is a collaboration tool, all changes that occur in Miro are displayed in real-time. After a project is completed and approved, Miro users can immediately export the whiteboard in PDF or image format to upload anywhere, for example, to social media or websites.



### (4) Microsoft Teams

Microsoft Teams is a product that allows users to collaborate online. The advantage of this application is that the information available here will be immediately available to all team members. This application allows users to post tasks, collect tasks, schedule activities, and create meetings more efficiently. In this application, we can create channels that are categorized per team (for example, Marketing team, IT, HR, and so on), so that communication within the team becomes easier and more focused. Another advantage of Microsoft Teams is that there are more than 450 integrated applications, so the collaboration process on several of the applications mentioned above can be done directly through Microsoft Teams. Not only that, you can also integrate Teams with your Office Outlook so that all meeting schedules and activities can be directly accessed through one application. This application can be used for free with limited features, but users who use it for educational purposes can use its features for free by registering with an educational account.

The following are examples of our students' work using these online collaboration applications in conjunction with SYAM-OK for online learning:



Figure 1. Prototype Design using collaboration applications combined with e-learning

## Implications

Collaboration is a very important element in online learning, especially nowadays, where universities are encouraged to apply Case Method Learning and Project Based Learning. Several e-learning platforms currently do not have this facility, making it difficult to carry out this collaboration. One solution that can be used is to use software tools or applications that support collaboration, such as Figma, Canva, Miro, and Microsoft Teams. This application has been used in several courses in the Makassar State University Digital Business study program, which has proven to be successful as a medium for students to collaborate, especially for developing business ideas, creating business models, prototyping, and creating flowcharts.

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# Global Initiatives Promote Accessible Tech-Centric Education in Malaysia

#EducationAccess #TechLearning #OnlineCourses  
#DigitalSkills #5GInitiative

Mr. Wooyong Shin / Yonsei University



Two significant educational initiatives showcase the global shift towards accessible, tech-focused learning. First, a partnership between the Seychelles government and SEGi University in Malaysia will grant Seychellois students access to diverse online courses, particularly benefiting working adults. Government educational loans ensure affordability, emphasizing inclusivity. Second, Digital Nasional Berhad (DNB) and Ericsson have launched the 'MY5G Ericsson Malaysia Pioneers Programme', targeting college students to boost digital literacy and emerging tech awareness. With 42 hours of content, it readies students for a digital future, aligning with Malaysia's digital economy goals. These initiatives highlight the growing importance of accessible, tech-driven education in today's evolving digital landscape.

## 01

### Celebrating Educational Collaboration: Seychellois Gain Access to Online Courses through Malaysian Partnership

The Seychelles government and a prominent university in Malaysia have entered into an agreement, signed on Tuesday, that will enable Seychellois students to access online courses by the end of this year.

The agreement was formally established through a signing ceremony at the Ministry of Education's headquarters in Mont Fleuri, where Stella Lau Kah Wai, the Managing Director of SEGi University and Colleges in Malaysia, and John Lesperance, the Principal Secretary in the Ministry of Education, executed the cooperation pact for higher education.

This recent accord is expected to provide an affordable opportunity for Seychellois individuals interested in pursuing further education. SEGi University and Colleges will create course content accessible on the [africaopenlearning.com](https://africaopenlearning.com) platform.

SEGi University, which initially originated as Systematic College in 1977 within Kuala Lumpur's higher education landscape, currently boasts 20,000 students across its five major campuses in Malaysia. Since 2016, Seychellois students have been pursuing advanced studies there.

In March 2023, SEGi also conducted a school leadership program for primary and secondary school educators in Seychelles. Stella Lau Kah Wai expressed the institution's objective, stating, "Our primary aim is to expand accessibility, making education available to people from all backgrounds."

The available courses encompass a wide range of disciplines, ranging from mass communications diplomas to a Ph.D. in information technology. These courses are offered online, allowing students to learn at their own pace, especially catering to working adults who cannot put their lives on hold to attend a university full-time.

Course prices vary, ranging from SCR7,832 (\$594) to SCR118,792 (\$9,023), depending on the selected subjects. Minister for Education, Justin Valentin, emphasized that with the government's newly introduced educational loans, these courses are now affordable.

## Implications

The partnership between Seychelles and SEGi University in Malaysia, offering affordable online courses, has the potential to significantly enhance the skills and education levels of Seychellois citizens. This, in turn, may lead to a more qualified and competitive workforce, benefiting both individuals and the Seychellois economy as a whole.

## 02

### DNB and Ericsson launch Online Academic Program for College Students in Malaysia

Digital Nasional Berhad (DNB) and Ericsson have introduced the 'MY5G Ericsson Malaysia Pioneers Program,' a free online educational initiative for college students nationwide, beginning earlier this year. This initiative aligns with Malaysia's digital economy goals and focuses on fostering tech talent to support the country's 5G-enabled technology ecosystem.

The program, offered by Ericsson, is the first of its kind at a national level, delivering 42 hours of content designed to enhance digital skills and awareness of emerging technologies. Comprising three modules, practical problem-solving, and AI-powered digital solutions, students will also have the opportunity to creatively address real-world challenges in various industries. Successful completion of the program leads to an Ericsson digital badge, equipping students with skills for the increasingly digital world.

As 5G drives socioeconomic transformation, this program ensures that the next generation of leaders is well-prepared for the digital future while contributing to Malaysia's digital literacy and economic growth.

## Implications

The launch of the 'MY5G Ericsson Malaysia Pioneers Program' reflects a strategic response to the pivotal role that 5G technology plays in reshaping Malaysia's digital landscape. By offering a comprehensive and free online educational initiative to college students, the initiative addresses the growing need for skilled individuals in the digital age. This underscores the importance of nurturing tech talent on a national scale, aligning with Malaysia's long-term digital economy ambitions.

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# Integrating Project-Oriented Learning Activities into Online Learning

## #Online Learning #POL Activities

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It is necessary to create learning environments that can incorporate modern learning methodologies that use IT in the best possible ways for online learning. Project-Oriented Learning (POL) is an increasingly popular pedagogical practice centered on learners working collaboratively on projects while the instructor facilitates learning activities and progression. POL embodies several factors considered central to motivation in online learning. Instructors design authentic activities focused on real-world issues using real-world tools and products. The lesson is designed in such a way to promote inquiry versus instruction: learners learn information through research and investigation and by carrying out the project. The activity promotes learner choice, autonomy, and decision-making. In their project, learners use many tools that professionals use (technology, surveys, etc.). In particular, technology is a critical tool in project-oriented learning that can help learners develop entrepreneurial skills. In project-oriented learning, assessment is not a test or exam. It is authentic—it directly assesses learner performance based on completing real tasks: designing an app, solving a problem, building a model, etc.

## 01

### What is Project-Oriented Learning?

Project-oriented learning is an instructional method in which learners gain knowledge and skills by working for an extended period to investigate and respond to an engaging and complex question, problem, or challenge. Project-oriented learning calls for real-life application of both technical and work readiness skills to solve a problem.

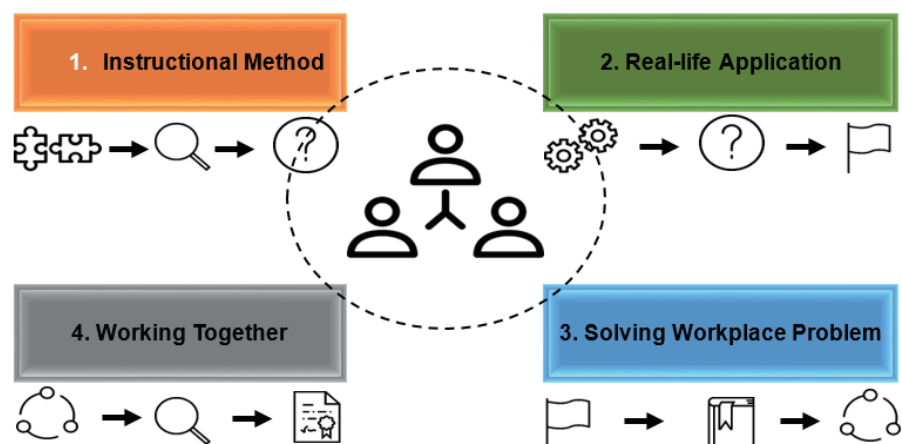


Figure 1. Project-Oriented Learning Activities

## 02

### Why Project-Oriented Learning?

When implemented well, POL can increase learners' retention of content, improve learners' attitudes towards learning, and help learners develop important work-readiness skills: adaptability, collaboration/teamwork, communication, critical thinking, diligence, and time management. POL helps learners develop skills to work in a knowledge-based, highly technological world. Bringing real-life context and technology to the curriculum through a POL approach encourages learners to become independent workers, critical thinkers, and lifelong learners. POL lends itself to authentic assessment:

- It allows learners to demonstrate their capabilities while working independently.
- It helps learners apply important skills such as doing research and problem solving skills.
- It develops the learner's ability to work with his/her peers and build teamwork skills.

## 03

### Designing a Project-Oriented Learning

The process of Project-Oriented Learning is organized into three phases: issue or challenge (prompting action), organizing statement (telling learners how to address issues), and solution process (finding a solution).



Figure 2. Steps of Project-Oriented Learning

What elements must be parts of the POL activity? As an instructional designer, the instructor designs an open-ended project that allows learners to learn in multiple ways, cultivate work-readiness skills, and develop learners' solutions. The POL activity must contain the elements in the list below.

Element to Include	Description
Essential question	Design a project <ul style="list-style-type: none"><li>▶ Look at the curriculum and see where it intersects with real-world issues.</li><li>▶ Analyze and address essential questions focusing on the big organizing issues that are the heart of POL.</li></ul>
Learning outcomes	Use specific outcomes for this POL activity
Learner-centered assessment	Use specific assessment methods for this POL activity
Sequence of activities	Use activity planning template for instruction and assessment of POL activity
Work experience task	Integrate work-based learning
Collaboration technique	Collaborate checklist and rationale for grouping (how to group learners, define numbers of participants and their roles; how this technique promotes real collaboration—not just cooperation)



Element to Include	Description
Technology	Some uses of technology: assessment, content, or support instruction
Higher-level thinking	Include as part of activity design
Analytic rubric	Assess the learners' final product

## Implications

POL aims to help learners seek solutions and display behaviors that set them on the road to lifelong learning. Instructors use project-oriented learning techniques in the physical classroom/online learning to help learners develop deeper content knowledge and promote the development of work readiness skills. By using POL, instructors can design authentic activities focused on a real-world issue, using real-world tools and a real-world product. Project-oriented learning is like learner-centered instruction, focusing on learner activities. The design of the project-oriented activity and the way learners work together to address the issue can deepen content knowledge and develop learners' work readiness skills. In project-oriented learning, the learner can engage in various activities—investigating an issue, planning, researching, gathering data, analyzing data, working in a team, looking for additional information, making decisions, and presenting findings.

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# 04

## Various online education strategies are also being implemented in ASEAN countries

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Philippines

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# Student Responses to the Implementation of Gamification in Blended Learning at Universitas Negeri Makassar

#blended\_learning #gamification\_in\_higher\_education

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This study highlights the implementation of gamification principles in online and face-to-face learning at Universitas Negeri Makassar, especially in the blended learning model. The application of gamification is discussed in detail in the cases of online learning (synchronous and asynchronous) and face-to-face learning (with and without learning applications). The application of gamification is assessed through student responses during lectures for half a semester (July - September 2023), while the assessment indicators consist of aspects of the usefulness of gamification, engagement skills, and interaction involvement.

## 01

### Application of Gamification in Mixed Learning

One of the trends in implementing learning in the 21st century is the application of gamification, which is expected to be able to increase students' learning enthusiasm and motivation significantly. This concept combines game elements into the learning environment to increase student motivation, involvement, and achievement or learning outcomes. Kapp (2012) defines gamification as using game-based mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems. Gamification leverages the inherent human desire for competition, achievement, and rewards to motivate students and make learning more enjoyable. This gamification has been implemented in the learning process at Universitas Negeri Makassar. Since the post-COVID-19 pandemic, many educational institutions have carried out blended learning and learning processes. Blended learning, which embraces various combinations of classroom presence and online study, is now considered a mainstream approach to learning in most educational organizations (Ossiannilsson, 2017). The learning process at Universitas Negeri Makassar is currently carried out more in blended learning, namely combining the use of video conference platforms, the Learning Management System (<https://syam-ok.unm.ac.id/>), and face-to-face learning in class. Gamification is implemented as an effort to implement fun learning that can increase student enthusiasm for learning in mixed learning patterns.

This article will review how gamification has been used at Universitas Negeri Makassar in the context of synchronous and asynchronous online learning, as well as in face-to-face learning, both with and without the use of learning applications. Apart from that, we will also present the results of the student response questionnaire regarding their experiences in learning that adopted the gamification concept after running for half a semester (between July – September 2023).

## ► Gamification in Online Learning

Online learning held at Universitas Negeri Makassar can be categorized into synchronous and asynchronous online learning types. Synchronous online learning refers to a learning pattern that is carried out in real-time or at the same time between lecturers and students. At Universitas Negeri Makassar, the majority of synchronous online learning is carried out using video conferencing applications such as Zoom Meetings and Google Meet. The implementation of asynchronous online learning is able to provide better flexibility in study time because it cannot be accessed at the same time by lecturers and students. Asynchronous e-learning, commonly facilitated by media such as e-mail and discussion boards, supports work relations among learners and teachers, even when participants cannot be online at the same time (Hrastinski, 2008). At Universitas Negeri Makassar, a Learning Management System platform called SYAM-OK supports this asynchronous online learning pattern. We can see the practice of implementing gamification in these two online learning patterns in the explanation below.

## ► Gamification in Synchronous Online Learning

Online learning that takes place via Zoom Meeting and Google Meet often shows minimal student involvement during learning. This is generally caused by a lack of interaction and feeling connected with friends or lecturers in a virtual (online) environment; one example is when lectures are held online via video conference applications, some students choose to turn off the camera while students who turn on the camera are not necessarily present. ' cognitively in learning. Gamification can be chosen to solve this problem with the assumption that fun and challenging learning can trigger the urge to actively participate in learning voluntarily. Some practices for implementing gamification in synchronous lectures at Universitas Negeri Makassar include polling and immersive view features in Zoom Meetings. In the example below, a poll was conducted to gather student opinions regarding the best group ranking combined with an immersive display from Zoom. The immersive display is used so students are more focused and can create a simulated atmosphere in a real classroom.

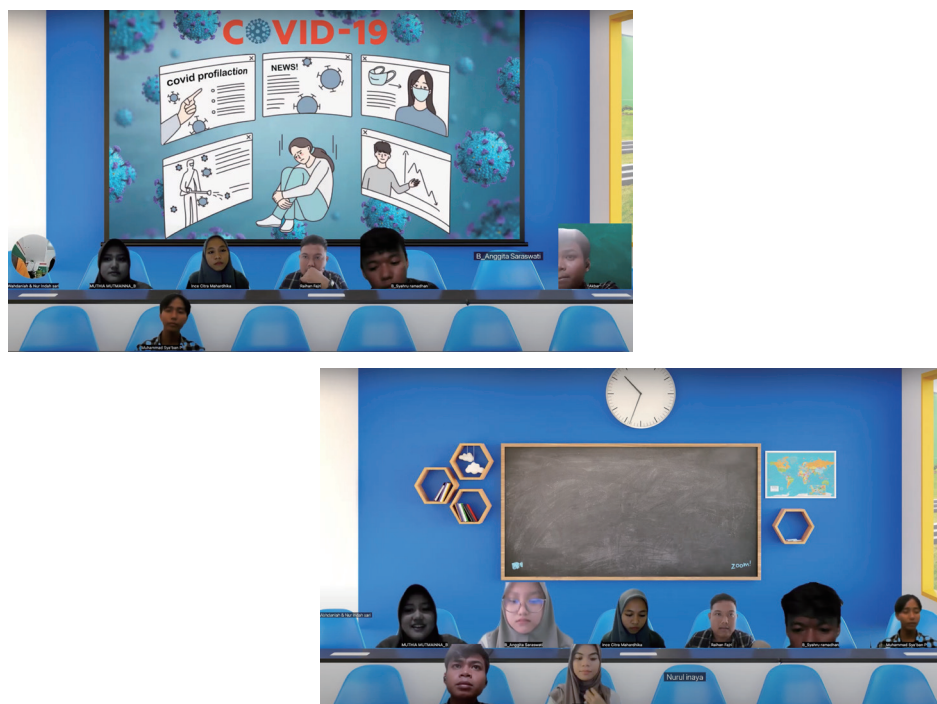


Figure 1. Immersive Zoom Meetings display

## ► Gamification in Asynchronous Online Learning

In the asynchronous online learning pattern, student study time becomes more flexible and varied depending on the conditions of each student. This flexibility in terms of time and place needs to be supported by good self-regulation of learning, but sometimes, in practice, quite a few students tend to be 'negligent' in their learning assignments in the Learning Management System. Materials and assignments in the LMS are sometimes 'less interesting' to access. The LMS platform used at Universitas Negeri Makassar is Moodle-based. This LMS is used by lecturers as a form of fulfilling independent assignments to fulfill the number of credits according to curriculum demands, as well as an alternative if real-time lectures are not possible. The role of the LMS, as crucial as in-person lectures, should be enhanced by fully leveraging its gamification elements. In the example below, we use the levels feature. The ranking is based on students' activities in accessing the LMS, so the more diligent they are in accessing the material and completing all activities, the higher their level will be.

### Ladder

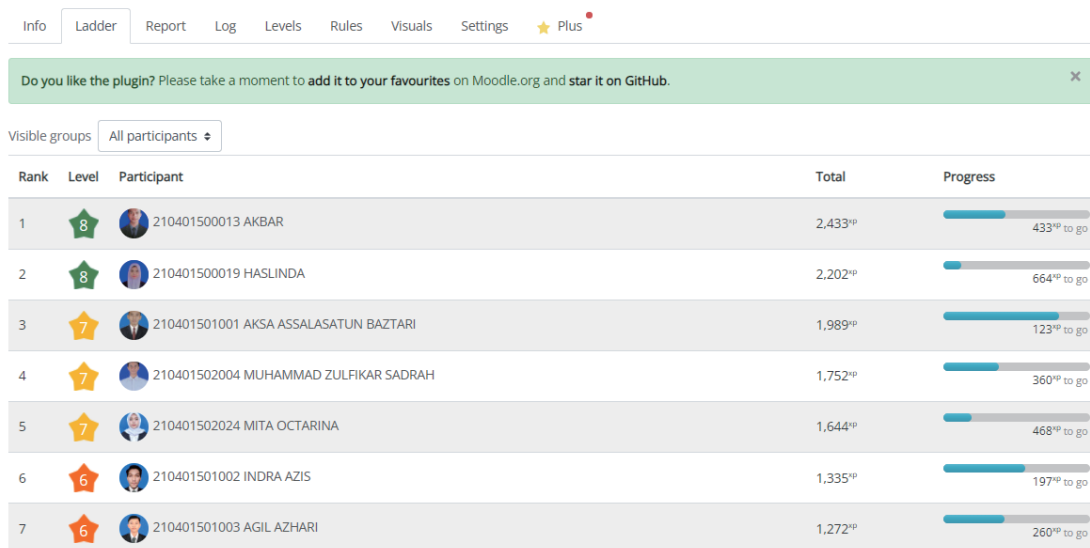


Figure 2. Level features in LMS SYAM-OK Universitas Negeri Makassar

## ► Gamification in Face-to-Face Learning

Blended learning certainly cannot be separated from face-to-face (on-site) learning patterns. Gamification can also be applied in the context of face-to-face learning. Based on the use of technology (learning applications), the discussion of gamification in face-to-face learning is divided into two, namely, learning with technology and without technology. The technology in question uses gamification-based learning applications such as Quizziz, Mentimeter, Padlet, Wordwall, and Kahoot (Mawarni & Hartoto, 2023).

### ► Gamification in Face-to-Face Learning using Learning applications

Implementing learning that integrates technology applications provides space for the application of these applications to facilitate the implementation of gamification in the classroom. Several applications that have been applied in lectures at Universitas Negeri Makassar, especially in the Educational Technology study program, are the Quizizz, Kahoot, and Padlet applications. For example, in the Learning Models & Strategies lecture, a hybrid learning pattern is applied (some students are online and some are in class) with a discussion learning method, followed by a presentation, and at the end of the session, closed with an understanding test using the Quizizz application. This comprehension test is carried out to assess students' understanding of listening to the material. Quizizz is done classically so that students compete to get the highest score in class. Motivation for taking quizzes also makes students volunteer to always focus during discussions and presentations. The use of learning applications can make it easier for lecturers to implement gamification in class because, through this platform or application, points, scores, levels, and leader boards are calculated automatically by the system. Lecturers can strengthen the gamification effect by implementing reward and punishment rules if there are students who have low scores. In the case of the Learning Models & Strategies course, students who had low scores (could not answer the questions) received additional assignments, namely making a summary of the material in the form of an infographic.

### ► Gamification in Face-to-Face Learning that does not use learning applications

Gamification without using an application can be implemented simply, but still fulfills game elements so that its implementation will still be fun and increase student engagement. In the case that occurred at Universitas Negeri Makassar, especially in the Educational Technology study program, the practice of gamification in face-to-face learning patterns without using applications was carried out by applying narrative elements, points, and challenges. In the Message Design course, for example, the narrative presented to students is in the form of rules of the game that are mutually agreed upon. The rules of the game are made; for example, at the beginning of each lecture session, students must read the material at home before attending class, then there will be a quiz at the beginning of the lecture with 3 questions to be answered by 3 randomly selected students. An additional rule is that students who cannot answer the questions will be subject to additional assignments. This narrative was implemented as support for the flipped classroom learning model implemented in the Message Design class. Points are given to students who are able to answer questions and to those who provide opinions in class. Points are recorded manually and recapitulated as a value for student activity during lectures (contributing 20% of the final grade). Based on observations during lectures, students appear to be trying to learn so they can answer questions, and on the other hand, some students are pursuing activity points to get the maximum final score.



## Implications

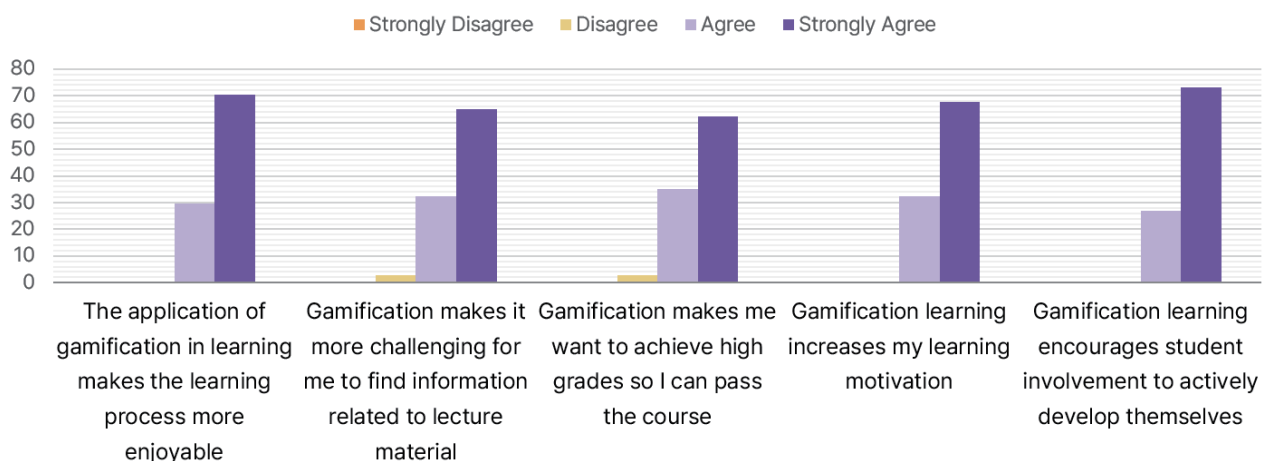
The implementation of blended learning at Universitas Negeri Makassar has implemented the principles of gamification in online and face-to-face learning. The lack of interaction in synchronous online learning causes students to be less involved in the learning process, but using the polling and immersive view features in Zoom Meetings can be an easy alternative to increase student involvement. On the other hand, the flexibility offered by asynchronous online learning often faces the problem of a lack of interest in accessing material on the Learning Management System platform. Therefore, LMS SYAM-OK Universitas Negeri Makassar uses the level feature to increase student enthusiasm. The use of gamification applications, such as Quizizz, Kahoot, and Padlet, is able to encourage student engagement through comprehension tests and automatic point systems in face-to-face learning sessions in class. The use of gamification in face-to-face learning can also be implemented without learning applications, for example, by using game narratives, giving activity points, and challenges to encourage active student participation.

## 02

### Student Response to the Implementation of Gamification

The application of gamification in learning needs to be evaluated as a continuous evaluation of quality learning. Gamification must be able to increase student engagement and provide a fun learning impact, which is a key indicator in its implementation. To evaluate the implementation of learning gamification at Universitas Negeri Makassar, especially in the Educational Technology study program, we distributed a survey in the form of a questionnaire. Students are asked to reflect on the learning process that has been going on for half a semester (8 meetings). The aspects assessed are related to assessing the usefulness of gamification (5 question items), engagement skills (2 items), and interaction involvement (4 items).

#### The Use of Gamification Responses

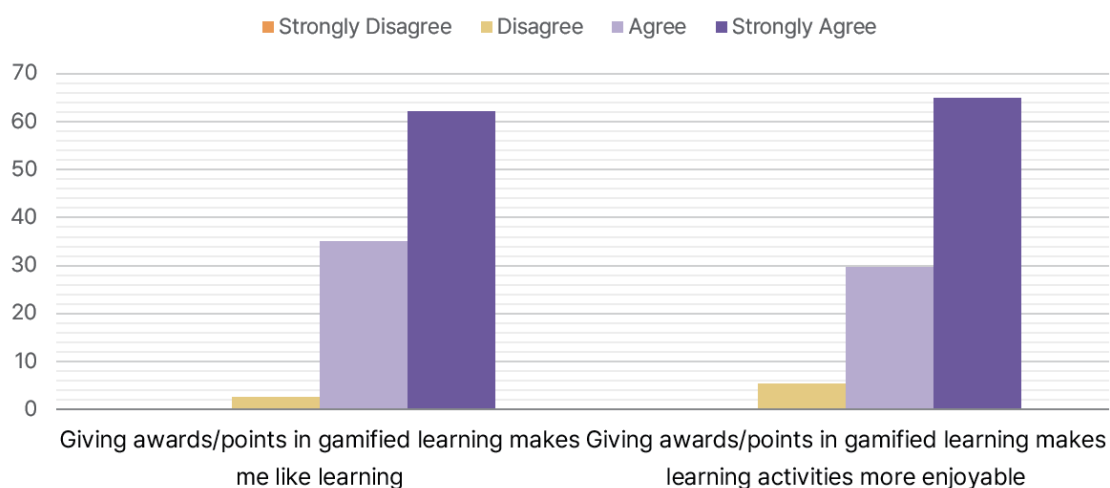




The results of the student response questionnaire show that the application of gamification in learning at Universitas Negeri Makassar, especially in the Educational Technology study program, has received positive responses from students. Most students think that gamification makes learning more enjoyable, with 70.3% of respondents strongly agreeing and 29.7% agreeing. This shows that gamification has created a more positive and entertaining learning experience for students. Apart from that, gamification also increases learning motivation, with 67.6% of students strongly agreeing and 32.4% agreeing. This shows that the use of game elements in learning has succeeded in stimulating student learning motivation. Apart from that, most students also feel that gamification encourages them to develop themselves in the learning process actively. As many as 73% strongly agree, and 27% agree that gamification encourages student involvement in developing themselves. This indicates that gamification not only makes learning more fun but also encourages students to take an active role in their learning process.

However, several things need to be considered. A number of students think that the use of gamification makes it more difficult to find information related to lecture material, with 64.9% strongly agreeing and 32.4% agreeing. This shows that several aspects need to be improved in the implementation of gamification, especially related to ease of access to learning materials. Despite this, most students still stated that they would like to achieve high grades in the subject because of gamification, with 62.2% strongly agreeing and 35.1% agreeing. Thus, gamification has motivated most students to try harder to achieve good academic performance.

## The Skill Engagement Responses



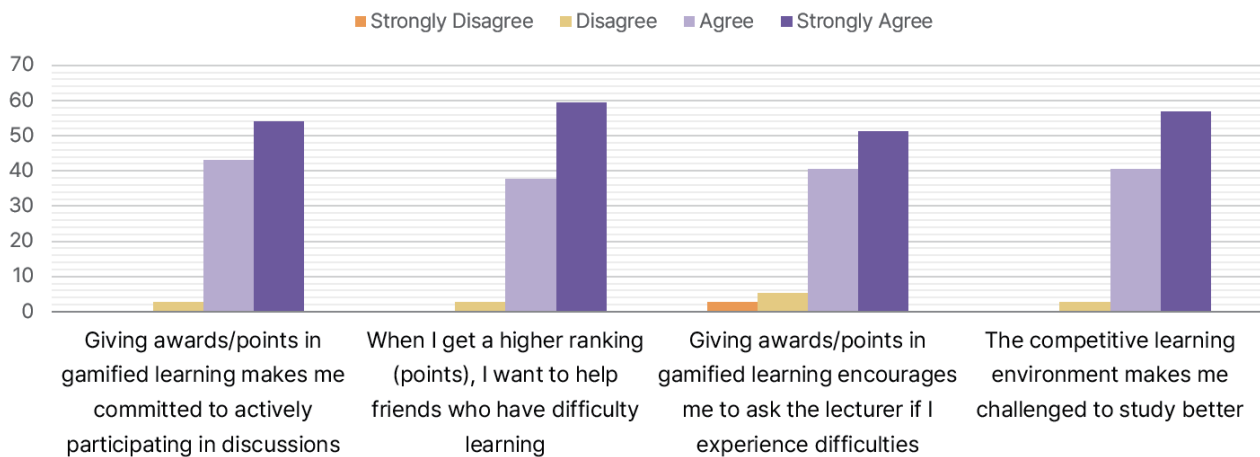
Further results from the student response questionnaire show that awards or giving points in gamified learning influences student involvement and commitment in the learning process. First, in the question of whether giving awards/points in gamified learning makes them more committed to actively participating in discussions, only 2.7% of students disagree. The majority, namely 54.1%, strongly agreed that rewards/points in gamification made them more committed to actively participating in discussions. This shows that the use of awards or points in gamification has succeeded in stimulating student involvement in discussion activities, which is an important aspect of learning.



Second, in the question of whether, when they get a higher ranking (points), they want to help friends who have learning difficulties, only 2.7% of students disagree. The majority, namely 59.5%, strongly agreed that giving awards or points in gamification encouraged them to help friends who faced learning difficulties. This shows that the point awarding system in gamification encourages cooperation and mutual care among students. Then, in the question of whether giving awards/points in gamified learning encourages them to ask the lecturer if they experience difficulties, only 2.7% strongly disagreed, and 5.4% disagreed. The majority, namely 51.4%, strongly agreed that the use of awards or points in gamification encouraged them to dare to ask the lecturer if they encountered difficulties. This illustrates that gamification elements encourage better communication between students and lecturers, as well as stimulate the initiative to seek help if necessary.

Finally, in the question of whether a competitive learning environment makes them feel challenged to study better, only 2.7% of students disagreed. The majority, 56.8%, strongly agreed that the competitive learning environment in gamification made them feel challenged to improve learning outcomes. This shows that competition in gamification can be a strong motivating factor for students to achieve better results. These results indicate that the use of gamification elements that involve giving awards or points in learning has succeeded in stimulating student engagement, cooperation, communication, and learning motivation, thereby encouraging more effective and meaningful learning.

## The Interaction Engagement Responses



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## Implications

The application of gamification in learning at Universitas Negeri Makassar through a questionnaire survey shows students' positive responses to the use of gamification. The majority of students think that gamification makes learning more fun (70.3%) and increases learning motivation (67.6%). Gamification also encourages student engagement (73%) and increases enthusiasm for learning. The use of awards or points in gamification succeeded in creating a positive and entertaining learning experience (62.2% liked learning, and 64.9% felt learning was more fun). Apart from that, awards or points also encourage student commitment in discussions (54.1%), helping each other (59.5%), daring to ask lecturers (51.4%), and challenging themselves to learn better (56.8 %). Thus, the use of gamification in mixed learning at Universitas Negeri Makassar has succeeded in stimulating active participation, cooperation, communication, and student learning motivation, which overall has a positive impact on more effective and meaningful learning.

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# Student Independency Facing the Online Learning Era

Ms. Prima Vidya Asteria / UNESA



The online learning achievements of students are proportional to the level of teacher preparation in planning and developing online learning tools. However, the average results of online learning outcomes can be said to be still far away when compared to the average results of offline learning achievements. This can be used as a basis for measuring the independency level of students in implementing online learning models.

## 01

## STUDENT INDEPENDENCY FACING THE ONLINE LEARNING ERA

### ► Backgrounds

The use of Virtual Learning Unesa as an online learning platform at Universitas Negeri Surabaya is experiencing a peak performance period when facing the COVID-19 pandemic. The Unesa Information Technology Development Center (PPTI Unesa) has been working hard to complement, improve, and refine the features and performance of Virtual Learning Unesa to support the smooth implementation of the fully online learning system at Universitas Negeri Surabaya for more than three years from the beginning of 2020 until the end of the covid-19 pandemic in Indonesia. Support for the reliability of the Virtual Learning Unesa platform is followed by massive teacher efforts to prepare for online learning. The struggle of teachers in planning and making learning tools that are used in every online lecture meeting shows that preparation for online learning takes a long time period and cannot be implemented suddenly to guarantee the quality of online learning. This is what distinguishes the characteristics of online learning from the characteristics of offline learning. The application of learning scenarios that accommodate student characteristic preferences, followed by the preparation of teaching materials in the form of instructional videos, and ends with an evaluation of learning outcomes that are comprehensive (Tait et al., 2008), for example, making videos based on case analysis in the field, is a preparatory stage that the most teacher's time and mind consuming when using Virtual Learning Unesa.

Thorough preparation can guarantee the quality of the online learning implementation so that the students show enthusiasm and better learning outcomes than online lectures, which are structured based on offline scenarios. In these conditions, teachers tend to compile lesson plans similar to offline learning, then upload teaching materials in the form of presentation materials and reference books, and end with uploading evaluation tests as applied to offline learning, namely multiple choice and closed/open questions.

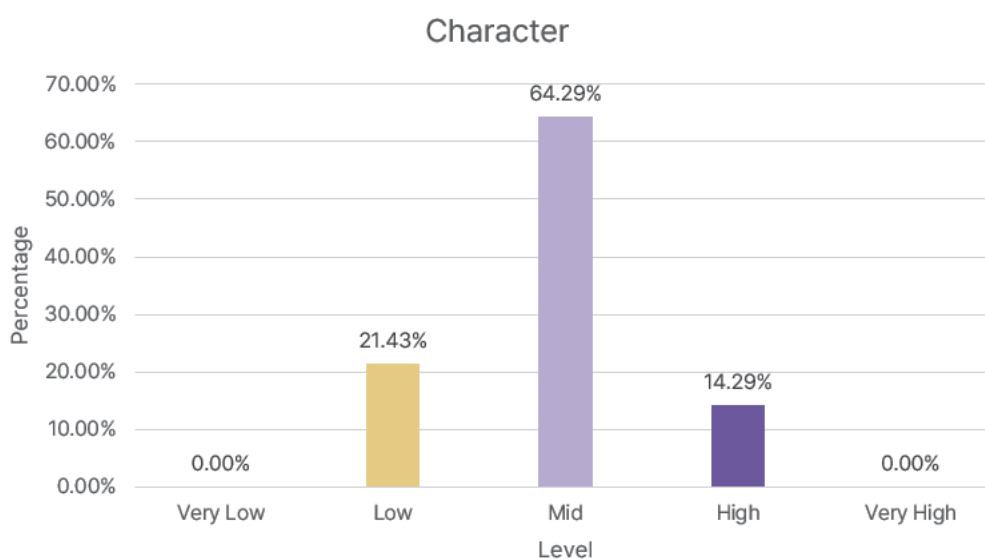
Even though the learning results achieved by students are proportional to the seriousness level of the teachers in preparing online courses, the average results of online learning achievements can be said to be still very far from the average results of offline learning achievements. The class average score obtained from the learning evaluation results shows that the average offline class score in previous years was higher than the average online class score during the COVID-19 pandemic. This can be used as a basis for measuring the independence level of students in responding to and dealing with online learning models.

## ► Main contents

The level of independency can be said to be proportional to the psychological age development of each individual (Affrida, 2017; Simatupang, Widayati, Adhe, & Shobah, 2021; Budiman, 2010; Ahsan, Kumboyono, & Faizah, 2018). Students at Universitas Negeri Surabaya are generally aged 18-25 years, during this period students have responsibility for their developmental period, including having responsibility for their lives to enter adulthood. Malcolm Knowles defines adults based on five premises, namely character, experience, learning readiness, learning orientation, and learning motivation (Belawati, 2019). Based on the explanation of these premises, a questionnaire was developed regarding the indicators for each premise which described the extent to which the level of suitability of the indicators corresponded to each individual. The following is an overview of the level of independency of Unesa students based on the premise of character, experience, learning readiness, learning orientation, and learning motivation.

### (1) Character

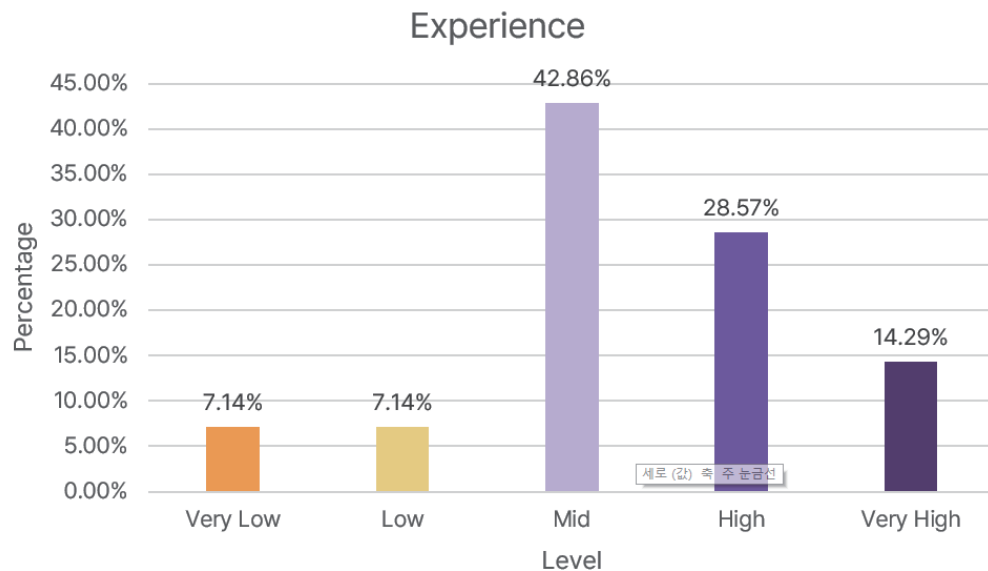
Adults who have a low level of dependence can direct themselves. Therefore, teachers only need to provide motivation and enthusiasm for studying diligently. In addition, other characteristics are making decisions on their own, assuming responsibility, and being aware of their duties and roles. The assumption is that an individual grows and develops toward maturity over time.



Graph of Self-Character Understanding Levels

## (2) Experience

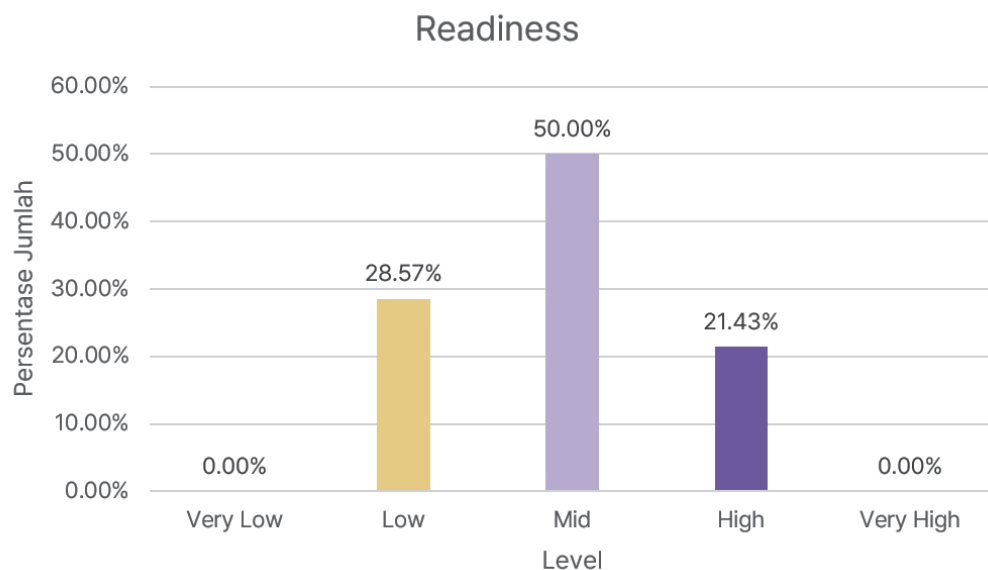
Experience is an observation that is a combination of sight, smell, hearing, and past experiences (Saparwati, 2012). Experience is something that has been experienced, lived, or felt, which is then stored in memory. Adults have had many life experiences that are rich sources of learning. Therefore, appropriate learning methods applied to adult learners are discussions, problem-solving, etc.



Graph of Personal Experience Level

## (3) Learning Readiness

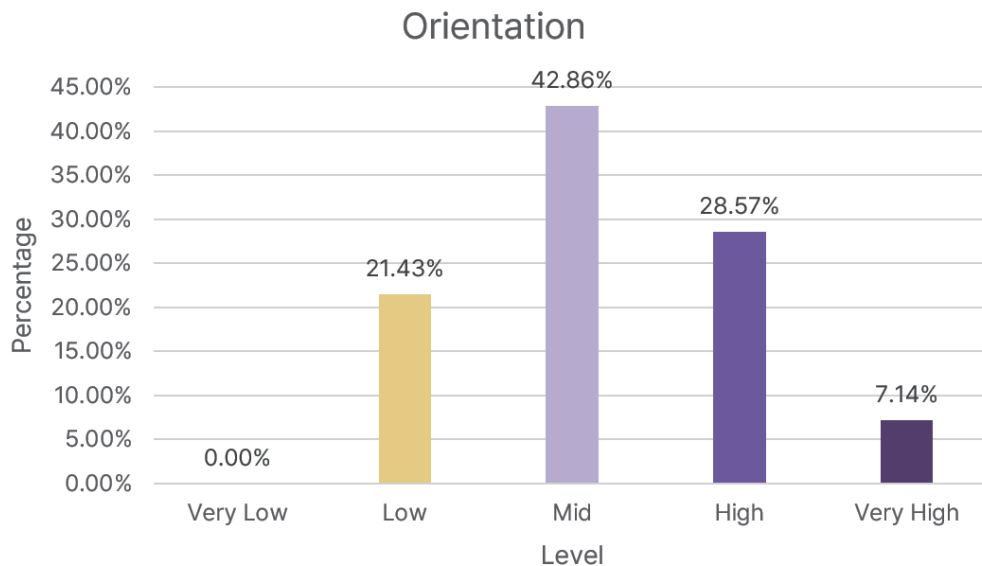
Readiness to learn is the initial condition of a learning activity that makes it ready to give responses/answers that exist in students in achieving certain teaching goals. Adults tend to learn for the completion of tasks and social roles. Adults learn according to their needs, so learning programs are organized according to real-life applications.



Graph of Learning Readiness Level

#### (4) Learning Orientation

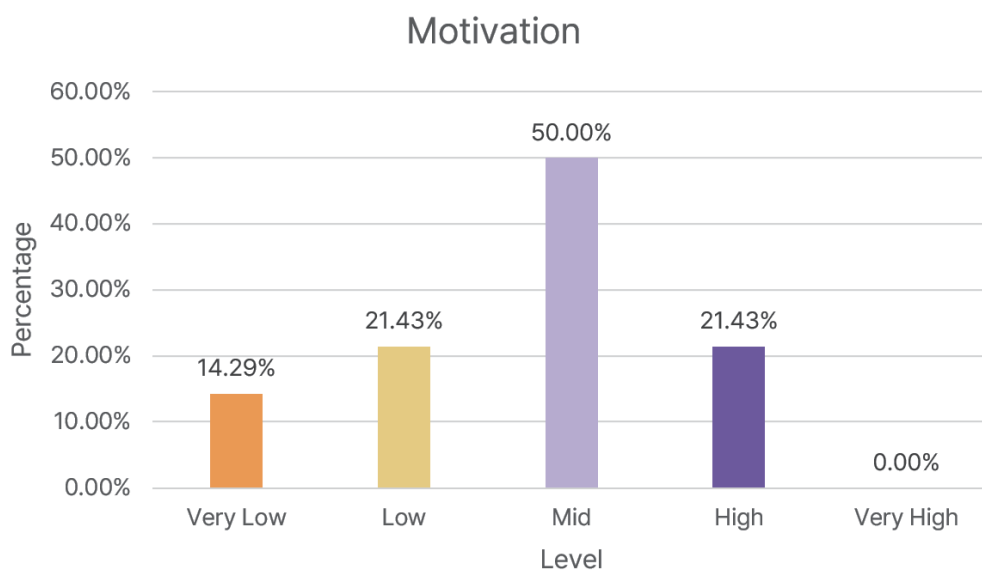
Student orientation toward learning includes student goals, objectives, motives, and concerns concerning their studies (Vermunt & Donche, 2017). Adults want to be able to apply their learning results immediately to solve the problems they face. Learning activities must be developed according to and in harmony with the experiences of students because the orientation of adult learning is to solve the problems they face.



Graph of Learning Orientation Level

#### (5) Learning Motivation

Motivation to learn consists of internal and external incentives or driving forces that propel one to engage in educational activities.



Graph of Learning Motivation Levels

## ► Conclusions

Although the number of respondents is limited, based on the graph of student knowledge level on the premise of self-character, personal experience, learning readiness, learning orientation, and learning motivation, it can be concluded that Unesa students' independence level is mostly still at the intermediate level. This naturally occurs when students are still transitioning from the group of adolescent thinking to the level of adult thinking. This also shows that the learner's character with the nature of the online learning model is still not aligned because this model requires a high level of awareness and independence from students. Because the level of student independence is still at the middle level, it is only natural that learning outcomes from online courses are prone to not meeting the target.

## Implications

The independence level of Unesa students needs to be increased immediately to support the effectiveness and efficiency of implementing Virtual Learning Unesa. Efforts to increase the level of student independence can be measured through indicators of developing self-character, personal experience, learning readiness, learning orientation, and learning motivation.

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# Transforming Teaching: Exploring the Impact of AI-Driven Lectures in Education

#AI-driven Lecture #Concerns #Adaptive Learning  
#Education

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This study examines how artificial intelligence(AI), especially AI-driven lectures, can enhance the teaching and learning process in higher education and the potential opportunities, challenges, and ethical considerations that need to be considered for the success of AI-enhanced education. AI-driven lectures present a promising option to improve future education as technological breakthroughs continue to change how we teach and learn. By examining the impact of AI-driven lectures on teaching and learning outcomes, this study aims to uncover the benefits and challenges associated with the evolving landscape of AI-enhanced education and provide valuable insights for educators on utilizing AI effectively for future education.

## 01

### AI-Driven Lecture Creation

Creating AI-driven lectures involves several key components and considerations. Before creating and delivering the courses, educators need to carefully plan, including identifying appropriate AI tools and resources such as natural language processing (NLP) tools, machine learning algorithms, educational software, and content generation platforms. Moreover, educators should consider, "Will the AI tools they choose effectively cover the intended learning objective?". Changing the way of teaching and learning content using AI can assist educators in improving the quality of their lecture content, including text, slides, multimedia elements, and supplementary materials.



## Challenges and Concerns for Adaptive Learning

AI-driven lectures offer numerous benefits, fostering education and catering to diverse learning styles and abilities, but they also come with their own set of challenges, including content delivery ranging from technical issues to pedagogical concerns, the role of human educators, technological infrastructure, and ethical considerations. AI-generated lectures will be factually up-to-date, but they may lack the depth, nuance, and accuracy that human educators can provide. AI lacks a deep understanding of pedagogical principles, making designing lectures that effectively engage and educate learners challenging. Effective teaching requires more than just information delivery; it involves active learning, motivation, and interaction. Educators and institutions should ensure that AI complements their teaching methodologies and enhances the learning experience rather than replacing human interaction entirely.

While AI-driven lectures and educational technology can enhance the learning process, human educators remain irreplaceable in providing the expertise, guidance, mentorship, and personalized support that contribute to effective education. To impart ethical values, critical thinking skills, and moral guidance to learners, to facilitate discussions and interactions, bring forth encouragement to keep learners motivated and on track, to provide emotional support and create a positive learning environment, the role of human educators in an AI-driven educational landscape is indispensable. Strong and adaptable technological infrastructure is essential to support AI-driven lectures and provide students and educators with a seamless and effective learning experience.

The next inevitable concern for AI-driven lectures is ethical consideration. Researchers, educators, and learners need to consider the rights of data owners and intellectual property as AI scrapes huge amounts of data from the internet and should be aware of it without the proper owner's permission. Thus, educators should be aware of how the data should be used without contravention.

## Readiness for AI in Education

Readiness for AI in education is essential for educators and learners to effectively harness the benefits of AI in the teaching and learning process. AI competencies for both educators and learners are essential in today's educational landscape, where artificial intelligence is increasingly integrated into the teaching and learning process. Familiarizing with the technology, its capabilities, and how it integrates into the curriculum and readiness for the use of AI is critical for the success of AI-enhanced education. Educators, as well as learners, should have basic digital literacy skills, including a basic understanding of what AI is, how it works, and proficiency in using AI tools and platforms relevant to education, such as learning management systems, adaptive learning software, and virtual labs and ethical awareness. It is necessary to provide training and support for educators as well as learners who will be using AI-driven lectures in their teaching-learning process.

**The training should be conducted:**

- the ability to use AI-driven tools to personalize learning experiences, adapt content and resources to meet individual learners' needs, and
- the skills in solving common issues that may arise when using AI tools in teaching.

## 04

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### Integration with Current Existing Systems

Adaptive learning pathways driven by AI are individualized and catered to the unique requirements and development of each learner. By tailoring instruction to the individual needs and abilities of each learner, these pathways can help improve retention, engagement, and overall learning outcomes of learners with automated grading, and help learners understand their strengths and weaknesses. Well-known personalized learning platforms and websites for using AI-driven features in their educational setting: Coursera, edX, Udacity, etc. that were integrating AI-driven features into their lectures and educational content. ChatGPT is the most popular AI-powered language model that is capable of generating human-like text based on context and conversations.

**Some language learning websites and applications that incorporate AI-driven features to enhance language instruction are:**

- Grammarly: writing assistant that employs AI to check grammar, spelling, punctuation, and style,
- WriteSaver: AI-driven proofreading and editing service specifically designed for academic and business writing,
- Duolingo: a gamified approach to language learning that provides instant feedback, and
- Rosetta Stone: a website that can provide pronunciation feedback using speech recognition technology.

**Some websites and applications in the field of science and mathematics that use AI-driven features to enhance learning experiences are:**

- Khan Academy: AI-driven content based on a student's skill level that can offer appropriate exercises with instant feedback;
- DreamBox: an AI-driven platform that adapts lessons based on a student's progress and provides personalized instruction;and
- Photomath: a mobile app that can solve handwritten or printed math problems using AI and provide step-by-step solutions and explanations.

The key is to choose AI applications that align with the course objectives and the needs of educators as well as learners. Some real-world examples are Adaptive Learning Platforms that analyze learners' performance and adapt the content to their individual needs. AI can be effectively incorporated into lectures to improve the educational goals and requirements of a specific course or program. Educators can incorporate platforms, like Kahoot and Symbaloo Lesson Plans, into lectures to create customized lesson plans, games, assignments, and resources for each learner. The capacity to adapt teaching methods based on AI-generated data and insights leads to better support for the learning process.

## 05

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### Impact on Teaching and Learning Process

AI-driven lectures have a profound impact on teaching and learning, transforming traditional educational approaches in numerous ways. For educators, AI can save time on repetitive tasks such as grading and preparing materials, allowing educators to focus more on instructional design and one-on-one interactions with learners. AI can help educators curate the most relevant and up-to-date content. AI can analyze learners' performance data and tailor learning materials to their individual needs and pace, leading to personalized learning. This personalization can generate the contents and tools that are particularly aligned with learners' strengths and weaknesses, leading to a more effective learning environment. For learners, AI-powered educational platforms can be accessed anytime and anywhere, allowing learners to learn at their own convenience. Adult learners with busy schedules would particularly benefit from this adaptation.

AI-driven education can have significant psychological, emotional, and critical thinking implications for educators and learners. While it can enhance motivation, engagement, and self-efficacy, it may also bring stress and ethical concerns. Educators need to consider how to handle the negative effects of AI by maintaining a healthy balance between AI and human interaction, addressing educators' and learners' concerns, and promoting critical thinking skills in the digital age.

It's essential to recognize that while AI can bring about significant educational advancements, it should be used thoughtfully and ethically. Educators must balance technology and human interaction to ensure the educational experience remains personalized and supportive.

### Implications

This study reveals that it is essential to balance automation and human interaction while AI can enhance teaching and learning systems. Educators, as well as learners, should keep abreast of AI developments, address the potential challenges, and consider how to integrate AI-driven tools into their teaching and learning system, and utilize AI effectively for future education.

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# Disaster-Proofing Education with Blended Learning: Benefits and Strategies

#blendedlearning #disaster-proofeducation #asynchronouslearning

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This paper focuses on blended learning, adoption of which ensures inevitably the delivery of disaster-proof education. It highlights particularly the benefits of and strategies for adopting blended learning modality.

## 01

### Introduction:

In a world that is increasingly challenged by disasters – be they natural, health-related, or unforeseen crises – ensuring continuity in education has never been more crucial. Disasters can disrupt education and cause long-term negative impacts on students' learning outcomes. Disaster-proofing education (Glass, 2023) is a proactive measure that ensures teaching and learning continue amidst calamities, both natural and man-made. The traditional model of education, which is centered around physical classrooms and face-to-face interactions, is vulnerable to disruptions. However, an innovative approach, known as blended learning, offers a promising solution to disaster-proof education (Padernal, 2020). Blended learning is a teaching approach that combines traditional face-to-face instructional time and online or computer-mediated activities. This article explores the benefits of blended learning in disaster-proofing education and provides strategies for its effective implementation.

#### ► What is Blended Learning?

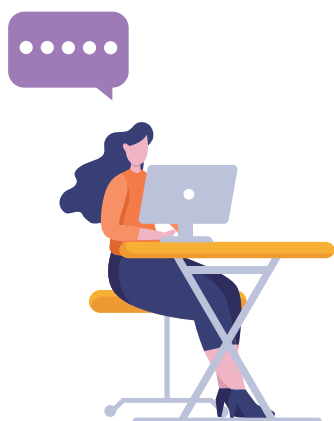
Blended learning is an educational strategy that seamlessly combines traditional in-person instruction with online components (Johnson, 2023). It offers a flexible approach whereby students could engage with course materials and resources both in a physical classroom and on digital platforms. This fusion of traditional and digital learning creates a resilient system that can adapt to various challenges, including disasters.

#### ► Benefits of Blended Learning in Disaster-Proofing Education:

Blended learning offers several benefits in disaster-proofing education, including:

##### (1) Continuity of Learning and Flexibility

One of the primary advantages of blended learning is its ability to ensure the continuity of learning during crises. Blended learning enables students to access learning content anytime, anywhere, and at their own pace. This flexibility is particularly crucial during



disasters when students may not be able to attend school physically. When schools or universities face probable suspension of classes due to disasters, especially natural disasters, which include volcanic smog (vog) or political turmoil or conflict, the online component of blended learning allows students to continue their studies from home. This adaptability minimizes the impact of interruptions on the educational process.

## **(2) Personalization / Personalized Learning**

Blended learning offers a personalized learning experience that tailors the learning experience to each student's needs, strengths, and weaknesses. This tailoring of content can be especially beneficial during times of stress or uncertainty.

## **(3) Engagement**

The digital elements within blended learning cultivate interaction and cooperation among students, as well as between students and educators. This becomes exceptionally valuable in times of crises when in-person gatherings are either restricted or discouraged.

Blended learning amplifies student engagement by providing interactive materials that infuse a sense of enjoyment into the learning process. This method can effectively sustain students' motivation and enthusiasm for learning, even amid disasters.

## **(4) Cost-effective**

Blended learning is less expensive to deliver, more affordable, and saves time. In the face of unexpected disruptions like natural disasters, health emergencies, or political unrest, blended learning allows education to continue, minimizing the financial impact of extended suspensions of onsite classes. This approach can help schools save costs while ensuring students continue learning during disasters.

## **► Strategies for Implementing Blended Learning in Disaster-Proofing Education:**

Effective implementation of blended learning in disaster-proofing education requires the following strategies:

### **(1) Good Learning Management System**

A good LMS is essential for delivering blended learning effectively. The LMS should be user-friendly accessible, and provide a range of interactive materials that engage students. It should have various features that will allow teachers to design varying asynchronous activities to ensure active and non-monotonous engagement of students. De La Salle University - Dasmariñas has been using Cypher Learning (NEO LMS) as its learning management system for more than 10 years, and it facilitated the creation of virtual classes where teachers upload their modules, assign activities, monitor their progress, and compute their grades.

### **(2) Pedagogy**

A good pedagogical framework is crucial for delivering effective blended learning. The framework should be student-centered, interactive, and provide expanded opportunities for collaboration and feedback.



### (3) Human Capital Structures

Effective blended learning requires skilled teachers who can deliver content online and in person. Schools and institutions should invest in training teachers to deliver blended learning effectively. Training includes not only technical skills but also strategies for engaging students online, providing support, and managing virtual classrooms.

### (4) Data Integration

Effective blended learning requires data integration to track student progress and provide feedback. Schools should invest in data integration tools that enable teachers to monitor student progress and provide feedback.

### (5) Effective Monitoring and Assessment

Monitoring and assessment of the implementation of the blended learning that education institutions adopt are crucial in ensuring that quality education is sustained. Appropriate monitoring schemes and assessment tools should be designed. A comprehensive assessment entails the active participation of all stakeholders involved in blended learning. Results derived from monitoring schemes and assessments are indispensable in any effort to improve the implementation of blended learning.

## 02

## Conclusion


Blended learning offers several benefits in disaster-proofing education, including flexibility, personalization, engagement, and cost-effectiveness. Effective implementation of blended learning requires a good LMS, good pedagogy, skilled teachers, data integration tools, and effective monitoring and assessment. By adopting blended learning, schools can ensure that students continue to learn during disasters and minimize the negative impacts of disasters on students' learning outcomes.

## Implications

Given the foregoing benefits that blended learning offers, educational institutions which adopt this modality ensure the delivery of quality education amid disasters, especially natural disasters or political turmoil or unrest. Adopting blended learning is both indispensable and inevitable in ensuring disaster-proof education.

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