

CENTRE OF EXCELLENCE FOR LEARNING AND TEACHING



## EDUCATION OF TOMORROW LEARNING IN POST PANDEMIC WORLD

**VOL 1-ISSUE 2** 



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## **FOREWORD**

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"The purpose of education is to turn mirrors into windows" – Sydney J. Harris

The Covid-19 pandemic has changed our education landscape and left many fundamental questions for us as a higher education provider to answer and deal with.

It also opens windows of opportunities as there are accelerations in globalization and a faster rate of technological development. This book shares thoughts in many areas of education, from comparing E-learning pre and post-pandemic to the technological advancement that is in progress and preparing education for knowledge creation.

The content of the book will answer some of the questions of what knowledge skills, attitudes, and values that today's students need in preparing them for the future and also how we move to prepare the right instructional system in guiding

them to navigate through the complex and uncertain world with the right-thinking skills, for them to be creative and innovative.

We know that education will equip learners with a sense of purpose to shape their own lives and contribute to the lives of others and it is hoped that this book will be the platform for sharing ideas in preparing students for the future.

## **FOREWORD**

## CENTRE OF EXCELLENCE FOR LEARNING & TEACHING DIRECTOR

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Welcome to the Centre of Excellence Learning and Teaching (CELT), UCSI University.

The COVID-19 pandemic has forced the closure of educational facilities in the majority of the world's nations and interrupted at least 1.5 billion pupils from attending school in 2020 and 2021. Although the pandemic has demonstrated how very susceptible nations' current educational infrastructures are to outside shocks, many education systems have been able to adapt in some fashion. While we need to be better prepared for such problems, schools and educators have shown incredible resilience in their attempts to recover from the crisis.

Higher education has also been severely impacted by the COVID-19 outbreak as universities locked their locations and nations closed their borders in reaction to lockdown measures. Even though universities moved quickly to substitute in-person lectures with online instruction, these closures had an impact on students' ability to learn and succeed in exams as well as their safety and legal standing in their host nation. The crisis

raises concerns about the value of a university education, which involves networking and social possibilities in addition to academic content, which is perhaps the most significant issue. Universities will need to redesign their learning environments in order to stay current so that relationships between students, teachers, and others are expanded and complemented by digitalization.

The difficulties do not, however, end with the current crisis. In the upcoming years, challenges in education would be getting more intense, and it required more effort and collaboration from different parties to overcome the issues. As such, the issue of the CELT Booklet entitled "Education of Tomorrow: Learning in Post–Pandemic World" aims to highlight the challenges and issues which worth increasing the awareness of the public. This is the first effort from CELT, and we are committed to continuing publishing to serve the education community.



The COVID-19 pandemic disrupted education in over 150 countries and affected 1.6 billion students. In response, many countries have adopted some form of distance education to ensure the sustainability of education without disruption by the pandemic. In the initial phase of COVID -19, the education response focused on the introduction of a distance learning mechanism as an emergency measure to ensure the continuity of the study. These were intended to reach all students from all walks of life but were not always successfully implemented. As the pandemic has evolved, so have education interventions needed to be involved as well.

As a result of the spread of the virus and the closure of physical classes, online or hybrid learning mode has emerged as an effective alternative teaching method using a variety of Internet-connected devices such as computers, laptops, tablets, and cell phones in both synchronous and asynchronous environments. Students can learn at their own pace and connect with peers, academic staff, and academic advisors no matter where they are because of the availability of these instructional strategies and environments. Online learning can occur in two different ways: synchronously or asynchronously, depending on the timing of interactions, and it promotes Through video tools learning effectiveness. such as conferencing and chat rooms, synchronous online learning allows face-to-face interactions between instructors and students during class. While asynchronous online learning gives lecturers and students the chance to communicate via emails and thread discussions prior to or after the online lesson. Online education benefits autonomous learning and the acquisition of new skills that promote lifelong learning.

However, for students who are disadvantaged, disabled, or marginalized within the lower social economic status, and have few resources or access to online learning, it can be extremely difficult to attend the classes effectively. The discrepancy and dropout among them are brought on by their incapacity to access and participate in online learning could be extremely

shameful, and discriminating the students from socioeconomic status. as they were deprived of the opportunity of equal learning. Online learning also takes discipline and dedication from the students, especially from vulnerable pupils who require engagement to develop their social skills. The consequences of the epidemic pose a great threat to this generation's aspirations and possibilities well into adulthood, which eventually affects their career pursuance in the future. The knock-on consequences can make it more difficult for them to deal with the challenges in the study, interpersonal skills as well as communication skills if the intervention did not deliver on time for this generation. The full extent of this crisis's short-, medium-, and long-term effects is still being formed.

Universities and students can benefit from online learning. Students in industrialized nations may easily have flexible study schedules and assess since due to the advancement of the network infrastructure. Additionally, universities reap advantages from using this teaching strategy, which is more affordable, has a large audience, and doesn't require any physical infrastructure. However, there are certain drawbacks to online learning because contemporary educators found it challenging. It takes a lot of time to prepare the materials for the online method.

Additionally, supporting students in obtaining tough tasks associated with online learning Less monitoring is needed while using online learning materials. Online education has become a popular new way for developing nations to study. Online learning required a high level of self-discipline and selfregulation in their study. Also, online learning may direct different types of disruptions for the students during the study, where and how we study can also be a source of distraction. Some students wear comfortable pajamas and lie on their beds with their laptops to watch lectures. This can be a problem for concentration because one mentally associates the bed with rest. Even when studying at a desk, just looking at the bed attention with students' interferes and breaks concentration. Every student faces a different challenge at home. Nevertheless, students can overcome these challenges through time management if they create and follow an organized daily schedule. In addition, motivation is an important key to success. Thinking about the grades they will earn, the prospect of graduating, and starting a new career after graduation can spur students to stick with it. Students can also reward themselves when they spend a certain amount of time studying or achieve good grades.

For both students and educators nowadays, online learning is a useful alternative learning approach, and it is an unavoidable trend in education; however, some difficulties need to be taken into account, such as the internet's patchy availability. What follows is the question of what will happen if the requirement is repealed. Will the demand for our education system return to pre-crisis levels, somewhat increase, or skyrocket? Time will prevail, but the empirical findings suggest that educators' ability to "rise to the occasion" with quality teaching will have to contribute a significant impact on demand as students become more accustomed to online learning. If many students suffer fundamental functional inadequate competency, instructional design, lack of social presence and interaction, and poorly implemented cognitive and social features as a result of the rush to bring classes online, they may be willing to return to the traditional classroom. Students will be pruned to accepted online and hybrid teaching if educators are able to blend highquality interactive teaching pedagogy with technological support. This would be a trend and we ought to prepare well before the next unprecedented occasion to strike our education system again.

## MAKE UNIVERSITIES SOURCE OF GAME CHANGING IDEAS FOR NATION BUILDING



Prof. Dato' Dr. Ahmad Bin Ibrahim FASc

All great things start with an idea. This applies to national policies, business undertakings, societal projects, and many more. They would always begin with ideas coming from someone somewhere. More often than not, tracing back such ideas would confirm they originate from those with knowledge and experience. People with knowledge and experience constantly think of new ideas to bring to the table.

These people are idea centric. They are seldom stingy with their ideas. They would eagerly share their raw crude unpolished ideas seeking comments to make them better. Over the years, we have seen how great scientists and business icons of the world often share their thoughts before they eventually submit them for real application.

Many such great would most likely have their early beginnings in higher learning institutions, universities to be precise. This is understandable since university academics are the people who are constantly doing research and discovering new things. It is therefore logical that much of the new ideas emerge from the outputs of research undertakings. Some of the new ideas are also accidental outcomes of research. There have been many such cases of accidental patents. The story about the MP3 technology spotted accidentally from a research project is now quite well known. The Fraunhofer institutes in Germany made that accidental discovery which earned them millions in licensing royalty.

Here at home, we have also borne witness to the emergence of great ideas coming from university academics. One such idea which has been cited often is the Tabung Haji model introduced by the late Royal Professor Ungku Aziz. He also had a hand in many other ideas such as the business of cooperatives which have now assumed national significance. The establishment of ANGKASA also came from his idea. Admittedly, in those days when Ungku Aziz was helming University Malaya, UM, the only university in the country then, discourses and debates among the academics were commonplace. That was how new ideas were born and polished till they became ready for real adoption. All the ideas then started as crude and unproven. But after some research and intellectual bargaining, they became more polished and meaningful. The ecosystem was very conducive to idea generation and sharing of thoughts.



Thought leadership was then the hallmark of universities. It is unfortunate that such a culture of tolerating differences of opinion has seen much erosion in recent years. Whereas, it was the such practice of tolerance that has been the single most important factor in churning out new ideas. Often times the crude ideas when first mooted could even be controversial. Sometimes they were toxic to some. But they were debated and argued, thereby further improving their acceptance. Communicating crude ideas well is also needed if they are to be elevated to be workable. It has become abundantly clear in recent times that many new academics are not comfortable with ideas that start as controversial. They are quick to pass judgment and brand them as unacceptable. Some are even saying they should be avoided at all costs. If we continue with such intolerance, universities will one day be no longer the nation's repository of knowledge and the birthplace of new ideas.

It is still not too late to stop this unfortunate decline in thought leadership. We should take stock of what has actually led to this rampant intolerance of conflicting views. Some say the root cause is the fear of failure among today's academics. The fear of making mistakes has driven many to hide in their comfort zone. This is unhealthy and will not help give rise to new ideas. They may not realize that without fresh ideas there can be no great innovation which is now recognized as a critical recipe for development. We will succumb human to а state of development paralysis if we continue to deny the need to generate good ideas. This is where the culture of critical thinking needs constant nurturing. Few would deny the need for thought leadership to flourish in universities. The only way to nurture this is to have a healthy ecosystem of agreeing to disagree and inculcating respect for idea sharing.



## TURNS YOUR PASSION INTO TEACHING AND LEARNING ACTIVITIES

Asst, Prof. Ts. Dr. Yu Lih Jiun

## The Future Teaching and Learning

Dr. Yu Lih Jiun shares her 9 years of teaching and learning experience and concluded, in order to establish a good foundation in learning, one must "Understand the purpose of learning". Teaching and learning could be possibly replaced by technology-assisted teaching aids or machines (AI) in the future. But the learning content and learning effectiveness is depending on the learner's purpose of learning. If the learner is confused with the learning purpose, he/she could not fully utilize the full knowledge or skills that have been taught.

## **Let The Passion Drives Your Way to Success**

If the learner is passionate about a particular topic, he will find all sorts of resources and ways to learn. The passion will drive him to learn in multiple ways (formal or informal), and he will find it is enjoying throughout this learning process. The way of learning can be in the form of the classroom lesson from the teachers (experts), reading books, watching online resources, listening to advice or sharing from those experienced, peers learning, and so on. There are more and more successful stories shared by successful entrepreneurs and influencers. We can observe that their eyes are full of passion when they are sharing.



## **Instructor's Sharing**

Dr. Yu is passionate about teaching and learning. She enjoys her work as an academician and she tends to 'experiment' her teaching and learning methods over the years for continuous improvement purposes. Various activities have been conducted in her classes, such as group discussion method, role-play simulation, gamification method, case study method, project management method, inviting guest lectures, industry visits, exploring technology aids in education teaching, and so on. The outcomes of the introduction of various methods have been recorded and analysed. The data and students' feedbacks are useful for continuous improvement purposes. Some works have been presented at educational conferences such as IEEE International Conference on Teaching, Assessment Learning for Engineering (TALE 2020) and the Teaching and Learning Innovation Festival (TLIF 2019). She received several awards in the teaching and learning category in the years 2016, 2020, and 2021. She is grateful that she is able to work together with co-workers who are passionate about teaching and learning, they have co-published several articles in education proceedings and journals.

## **Prepare Yourself For A Better Future**

You might have experienced some internal or external factors that limit yourself in learning, such as financial status, pandemic situation, discouragement from family/friends, health condition, etc. Please do not forget, you are learning for yourself. You are the one who understands yourself the most and you will be the who benefits from one receives more gaining new knowledge/skills. After completing basic education, you can persuade to higher learning opportunities, including learning in tertiary education institutions, vocational learning institutions, or any institution that could get yourself prepared for a better future. Life-long learning and following your passion!



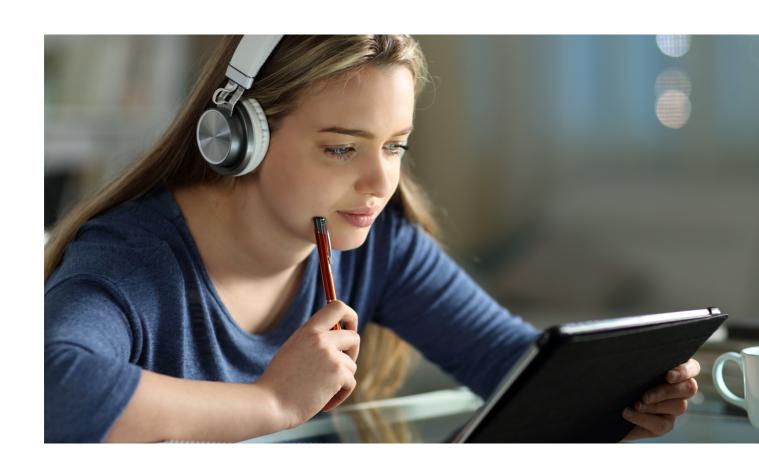
# PRACTICAL EDUCATIONAL PRACTICES & STRATEGIES IN ENHANCING TEACHING & LEARNING PROCESS



Asst. Prof. Dr. Chai Pui Vun

The Covid-19 pandemic has changed the way we execute our daily activities typically on the communication, operation of business, education mode, and many more to name. Over the past two years, the entire world was forced to adapt with the virtual communication and business operation in a short period of time to catch up with the fast-paced working routine. Among many sectors, education industry is one of the affected industries when the pandemic hit. Before the pandemic, physical classroom is adopted during the teaching and delivery of knowledge. On many occasions, classroom activities namely presentation, group study, case study, debating and many other modes of activities are widely used by the instructor to allow the scaffolding of knowledge among the students and thus improve the efficiency of teaching and delivery purposes. When the pandemic hit, majority of these activities is not effective and relevant in helping the students as it required the physical presence of both instructor and students.

During this period, the learning institution are struggling to manage their classroom. Although the existence of internet, virtual communication and virtual activity are available before the pandemic, however this option is not widely explored. Therefore, during this period, effective teaching and learning strategies are required to facilitate student's learning experience. These strategies include on how the instructor should attract their student attention during the virtual classroom. Clear intonation, clear slides, clear writing, proper annotation, clear voice, name calling, showing video, and appropriate pause are some of the good options during the virtual learning.





Besides, instructor should also explore the available virtual learning tools such as OneNote, Padlet, Microsoft Teams, Zoom and many more to allow the instructor to engage effectively with their students. It required effort and time, but the spirit of teaching and learning in building our next generation should continue to ignite the passion of the educator to continue to develop their lifelong learning attitude. Now during the early post pandemic, the learning system has returned to the physical classroom. The transition from the virtual learning to physical learning indeed will take time for both instructor and learner to adapt with the learning environment once again. Although there are several transitions from before pandemic, during pandemic, and post pandemic, this pandemic allowed the learning institution to adopt both the advantages of physical and virtual classroom to push the learning into the next step. For instance, the design of the curriculum can be more flexible with the adoption of virtual learning.

The mode of assessment does not only rely on the exam-based assessment, but instead, written critique, short write up, group projects, and other form of non-based assessment can be fully utilized to gauge the student learning experience. This will allow the student to practice their technical communication skills especially on their written skills. On another note, the design of the programme can also be more flexible such as the involvement of the mix mode learning from both physical and virtual learning while complying with the standard stipulated by the government. For example, in many of the micro-credential short course, it is run in a virtual mode, and this allowed the flexibility among the learners where they can study at their own pace. Besides, the invitation of the guest speaker can be executed easily as it can be pre-recorded or live recording depending on the speaker availability. This opens a lot of possibility of collaboration within the university all around the world and it will sure benefit our student. To conclude, learning during post pandemic is interesting. Changes in the learning occurred but it has gone to a positive direction.



## THE POWER OF GAMIFICATION IN EDUCATION



THE INTEREST IN DEPLOYING INNOVATIVE TECHNOLOGIES WITH GAMIFICATION TO ENGAGE STUDENT LEARNING IN AN ENJOYABLE STYLE

## The effective educational process with gamification

Games foster engagement, which is essential for any effective educational process. Gamification must be a part of every learning professional's toolkit given the rising popularity of digital games and interfaces with gaming elements. Gamification is one of the most effective learning strategies because it empowers the students and motivates the students. There is a myth about gamification may lead to lazy students and wasting a lot of time.

More than 30,000 undergraduates failed to complete their courses in 2020 and last year The default environment of school in Malaysia lead to disengagement, learn helplessness and dropping out

But games also create many other positive attitudes such as developing strong passion, concentration, and no failure attitude and enhancing their strive. Students who fully utilize gamification engage in active evaluation and analysis of new ideas, which helps with the retention and reinforcement of the material. These attitudes are very important for a student's future undertaking. Most educators struggle to keep their classroom environment engaged. Students tend to get bored with a long lecture or talk, they mostly lost interest, and concentration and missed important points.



A game can emphasize practice and mastering the material by giving students immediate feedback, allowing students who might have sat quietly in the background to participate, and providing them with the opportunity to interact with the material. Gamification is proven one of the best approaches because engagement is greatly increased by game elements like instant feedback and earning badges for successfully completing the challenges.



These further proven showed an increase in recall and retention on the topic that has been played among the students. Gamification not only develops a positive attitude at the individual level but also fosters an important value which is "team-work". This is because, gamification encourages crossideation and cross-collaboration, especially when there are teams or communities involved.

## **Implementation of Gamification in the classroom**

As a Nutrition lecturer, Dr. Vaidehi's teaching philosophy is "integration of knowledge and action". She strongly believes that the reformation of innovative practice teaching for students is effectively promoted by innovative strategies including enhancement in their theoretical understanding via a well-designed hand practical approach. Teaching and learning in the current era should provide a foundation for students to develop self-reliance and lifelong learning habits so that they can develop knowledge, enhance understanding, and serve society in their future lives.

Thus, knowledge generated by experience seems to be a more logical, sustainable, and applicable model, where such frameworks are able to enhance the soft skills of the students on a huge scale. Besides the experience that they will gain, such exposure will also enhance the positivity among them which is in line with the theory of progressivism in which individuality, progress, and change are fundamental to one's education. Believing that people learn best from what they consider most relevant to their lives, progressivists centered their curricula on the needs, experiences, interests, and abilities of students.

For a student, the fun element is the best experience they expect in a classroom. To meet that, gamification is one of the common strategies Dr. Vaidehi used in her classroom. She used platforms such as Quizzes and Jeopardylabs with the objective of providing more fun and engaging experience in conventional contexts. One of the most common approaches in the classroom is by assigning students quests or challenges. This is changing the context in the way assignments, tasks, or homework are presented can transform them into more enjoyable activities and increase student engagement in the learning material. There are several types of challenges were implemented in the classroom

Collect Quest	Students must find & collect specific resources/information either in textbooks or online
Puzzle Quest	Students must solve a puzzle or break a code to solve a math problem.
Kingdom Quest	Students take on roles, delegate tasks and investigate a specific historical time period in their roles.
Drama Quest	Students assume characters to improvise or enact a situation or specific behavior.
Scout Quest	Students watch videos on a topic, gather information and report their findings back to the class

Such class activities promote engagement and participation among the students and definitely it is beyond the traditional learning methods as traditional learning tends to be really boring. She believes that a gamification concept may provide an effective strategy to intensify innovative learning, including eliciting friendly competition among the students. Her main reason for implementing gamification is merely to implement the three positive approaches; students' engagement and motivation, academic achievement, and social connectivity during the learning activity.





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