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ISTLI 2022
2nd International Symposium on Teaching & Learning Innovation

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ENCAPSULATING HYPLEX IN TEACHING & LEARNING

2nd International Symposium on Teaching & Learning Innovation

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Message from the Dean of FM

Assalamualaikum w.b.t and Sincere Greetings to All,

Thank you to the Almighty for all of HIS blessings. With great pleasure, I would like to extend my warmest welcome to all participants of the 2nd International Symposium on Teaching & Learning Innovation (ISTLI) 2022, organized by the Faculty of Management, Universiti Teknologi Malaysia.

It is a great pleasure for us to host this symposium. In line with the current scenario, ISTLI 2022 theme, specifically focuses on meeting the demands of the "new normal" of teaching and learning at higher institutions. Indeed, in the endemic era, the education sector has been pushed to innovate faster than ever which contributed to global concern. Therefore, the theme Encapsulating HyFlex in teaching and learning will put forward many creative innovations from inspiring educators and researchers during this one-day event of ISTLI 2022.

ISTLI 2022 symposium aims at providing a platform for academics, educators, researchers, and scholars, to exchange ideas, information, and expertise, as well as showcase their inventions in teaching and learning. I hope that ISLI 2022 opens up many opportunities across international boundaries that resulted in many more future work collaborations.

My greatest appreciation goes to the committed committee members who have been showing great team spirit with high enthusiasm to make the virtual ISTLI 2022 a reality. I would like to thank the technical reviewers for their professional services in reviewing the proceedings. My special thanks to all authors, speakers, presenters, and session chairs who kindly spare their time and effort to participate in the ISLI 2022 symposium.

Finally, I hope the event runs smoothly and creates memorable moments for all participants. May this symposium sparks joy and more innovative ideas for all participants in the near future with more collaborations from industry partners, and government agencies who are in fact, part of the significant stakeholders of higher education communities.

Last but not least, I thank everyone who is here today, and may we see each other in next year's avenue. Thank you, Wassalam.

Associate Professor Dr. Ahmad Jusoh
Dean of Faculty of Management
Universiti Teknologi Malaysia

Foreword by the Director of ISTLI 2022

Bismillahirrahmanirrahim
Assalamualaikum Warahmatullahi Wabarakatuh and Salam Keluarga Malaysia

With HIS blessing, Alhamdulillah, we are pleased to introduce you to the International Symposium on Teaching and Learning (ISTLI) 2022 proceedings. The second ISTLI, which took place on December 04, 2022, led academics and researchers worldwide to discuss their newest research findings and ideas, theories, technologies, systems, tools, applications, work in progress, and experiences arising from teaching and learning innovations reshaping higher education for the twenty-first century. Furthermore, it provides a platform for academicians to enhance future research networking and collaboration at national and international levels. We have accepted an exceptional more than 20 abstracts for an oral presentation from different universities: Universiti Teknologi Malaysia and Yunan College of Finance and Economics, Kunming, China; good achievement for a second event; indicates a positive sign of sharing culture from authors of various backgrounds. The papers cover a wide range of fundamental issues, challenges, and opportunities facing contemporary academia in the hyflex teaching and learning within 7 big interests. Major topics include Students Engagement, Tools for Online-hybrid Teaching and Learning, Adapting Technology in online/hybrid Teaching and Learning, Issues in Education, Innovation in Teaching and Learning, Online Hybrid Teaching and Learning, and Assessment in Teaching.

The technical symposium program consists of 7 plenary sessions. The proceedings contain the papers that were presented during the symposium. A single-blind refereeing method was used for all manuscripts submitted for the symposium. We have also put together a distinguished keynote speech by Prof. Dr. Ather Azim Khan, Dean of Faculty of Management, Administrative Sciences of University of Sialkot with a title of "Encapsulating Hyflex in Teaching and Learning". A second keynote has been delivered by Associate Professor Ir. Dr. Hayati bt. Abdullah delivered entitled "HyFlex-Transforming the Landscape of Teaching & Learning". Besides, we have cordially invited speakers from different fields to share their knowledge, expertise, and experiences. Awards were given for each category for a more competitive and exciting session—our sincere congratulations to all the award winners for their excellent contributions and best paper award.

The great success of the conference depends on the conscientious efforts of many, which we are grateful for. I want to thank all participants and authors who joined the symposium, the reviewers, the faculty support, and the program committee for their tremendous efforts and teamwork in this valuable volume. With everyone's dedication, it was possible to have a successful ISTLI 2022 and a quality volume of the conference proceedings.

We are looking forward to the next ISTLI 2023. Thank you.

Wabillahi Taufik Walhidayah
Wassalamualaikum Warahmatullahi Wabarokatuh.

Dr. Roshazlizawati Mohd Nor
Director of 2nd International Symposium Teaching and Learning Innovation (ISTLI) 2022
Faculty of Management,
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Sub-Theme 1
Engaging Students

COLLABORATIVE LEARNING APPROACH FOR NON-LAW STUDENTS USING JIGSAW

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ABSTRACT

Collaborative learning approach involves group of learners working together to achieve a common goal. The task can be in form of solving a problem, creating a product and completing a task. Non-law students taking law subjects having lacked the ability to understand the legal principles, statutory provisions and case law. The aim of this study is to investigate the implementation of collaborative learning approach for non-law students using jigsaw activity. Five elements of collaborative learning are observed in this study; positive interdependence, individual and group accountability, interpersonal and small group skills, face-to-face promotive interaction and group processing. A total of 39 accounting students taking Company Law subject from Azman Hashim International Business School, Universiti Teknologi Malaysia took part in the study. In this study, active learning activity in form of collaborative learning approach is implemented. The collaborative learning approach is in form of jigsaw activity in classroom. The collected data were analysed using qualitative method specifically through face-to-face interview. Findings shows that collaborative learning approach in through jigsaw activity can improve student's understanding in company law subject for non-law students. Besides that, it enhances communication skills and confidence level among students. It is recommended that more time should be allocated for students and technology to be adopted in performing jigsaw activity.

Keywords: Collaborative Learning, Jigsaw, Law, Active Learning, Gamification

INTRODUCTION

A study by Klimoviene and Barzdziukiene (2006) founds that collaborative critical thinking activities can increase students' social skills in cooperative learning. While according to Warsah, et. Al. (2021) states that collaborative learning approach gives a positive and significant impact on learners' critical thinking skills. Additionally, collaborative skills improve learner's emotional awareness, learning motivation, cognitive development, and broad-mindedness. Legal study refers to the study of rules and regulations in one or more legal system and the application of the law in order to solve legal issues. The nature of law subject which consists of statutory provisions and case law are challenging for non-law students that does not have the foundation of law study. Jigsaw is a form of active learning in 21st century learning where a group of students become "experts" on a specific topic and then share the knowledge with another group of students. Collaboration skills is promoted in this activity as students will

be responsible for preparing mind map and teach new content to their peers. The aim of this study is to investigate the implementation of collaborative learning approach for non-law students taking Company Law in Azman Hashim International Business School using jigsaw activity.

METHODOLOGY

This activity was conducted during endemic period of COVID-19, therefore it was performed in face-to-face/physical environment. It was done during revision class for Company Law where all topics are revised in preparation for final exam. It involved 39 accounting students in Azman Hashim International Business School, Universiti Teknologi Malaysia. A total of 6 groups were formed among students which this group is known as 'Home Group'. Each of the member in the group is given a number. Subject lecturer plays the role as facilitator for this activity. Facilitator distributes 6 topics to each Home Group and all members of the groups were asked to prepare a mind map for the said topic and to highlight all important sections, principle and case law for the topic. A total of 40 minutes was given to Home Group. Next, members from each Home Group were asked to form a group with the same number as given earlier. This new group was known as Expert Group where each of the member is given the task to explain about their topic from Home Group. 5 minutes is given to each member and in total 40 minutes taken for this action.

Next, interviews were conducted in form of structured interviews to achieve the research objective of this study. There is no standard rule to determine appropriate sample size for qualitative research. Sample size in qualitative research depends on the time allotted, resources available and study objectives (Patton 1990). The questions asked were as follows:
(1) What do you think of the jigsaw activity?
(2) Have your understanding for the subject improved with the jigsaw activity?
(3) Have your communication skills improved with the jigsaw activity?
(4) How is your interaction with group members in this activity?
(5) Any recommendation to improve the jigsaw activity?

MAIN RESULTS

Based on the interviews conducted with respondents, following are some of the responses obtained:

(1) What do you think of the jigsaw activity?
 "In my opinion, jigsaw activity is fun and very interactive."

 "It is very interesting"

(2) Have your understanding for the subject improved with the jigsaw activity?

 "Yes now I am more confident to sit for exam"

 "Yes it is beneficial to me as I managed to understand the outline of the topic"

(3) Have your communication skills improved with the jigsaw activity?

 "Yes I learn how to explain the case law and sections"

 "Yes I really love to explain and help my friends to understand the topic"

(4) How is your interaction with group members in this activity?

 "It is really helpful and fun. We can argue or ask others opinion based on what they wrote, plus at the same time we can add our knowledge and understanding on that topic."

 "I really like it as we can share our opinion and discuss things that we learn. It makes it easier for me to apply what we learn in class"

(5) Any recommendation to improve the jigsaw activity?
 "Not enough time for preparing the mind map"

 "The topic is too broad for short period of time"

CONCLUSION

Collaborative learning approach through jigsaw activity can improve student's understanding in law subjects specifically for non-law students. Besides that, it enhances communication skills and confidence level among students. This study contributes theoretically in the área of 21st century learning and practically it contributes to the educators for non-law students to apply this activity in their classess. It is recommended for future researchers and educators to allocate more time for students to perform the activity and to integrate technology in performing jigsaw activity.

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A MEANINGFUL ENGAGEMENT WITH BUSINESSCOMMUNITY VIA SERVICE LEARNING

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ABSTRACT

Malaysia has a continuous agenda in strengthening human capital development and entrepreneurship where young people are encouraged and incentivised to be involved in business. However, the mushrooming of young entrepreneurs in the market has led them to face many business challenges from various aspects namely competition, finance, ethics, and human resource management. Thus, this paper discusses the engagement via service learning (SL) between Business Ethics course students of a public university and young entrepreneurs owning a business. This engagement aims firstly, to investigate the knowledge and understanding of business ethics and business sustainability from an ethical perspective and secondly to create a meaningful engagement. Using an online platform, 92 students have engaged with 80 young entrepreneurs who shared their business experience and challenges related to ethics. Having listened to their sharing, students then shared their knowledge in business ethics and sustainability principles. Findings from the surveys and reflections highlight that young entrepreneurs have improved in their knowledge and understanding before and after the engagement. Students also experienced enhanced learning and skills after the engagement claiming that SL provides a meaningful experience for students to obtain reality-learning, a great opportunity to engage with and serve a specific community as well as polish key transferable skills.

Keywords: Service Learning, Meaningful Engagement, Transferable Skills, Business Ethics, Business Sustainability

INTRODUCTION

Malaysia has a continuous agenda in strengthening human capital development and entrepreneurship where young people are encouraged and incentivised to be involved in business (Subramaniam, 2010). However, the mushrooming of young entrepreneurs in the market has led them to face many business challenges (Cueto et.al., 2022) from various aspects namely competition, finance, ethics, demand and supply, and human resource management (Noor dan Ayob, 2021). Many are less prepared for this situation and thus take inappropriate and unethical actions. Some even disobey the basic requirement which is registering or having a licence to operate. These lead to penalties and compound from the authorities (Sinar Harian, 2019). This may be due to lack of knowledge and understanding on business, particularly on business ethics and sustainability.

Why business ethics? When a business is run ethically, it brings not only profit but overall good for the business (Rani, 2022). Thus, knowledge in business ethics and sustainability are imperative among these young entrepreneurs.

A service learning (SL) activity was embedded in the Business Ethics course in a public University, attended by final year accounting students. The aim of the SL is to expose students to the reality of business particularly related to business ethics and sustainability. Specifically, the objectives are firstly, to investigate the knowledge and understanding of business ethics and business sustainability from an ethical perspective and secondly to create a meaningful engagement. After a briefing on the SL implementation, students form groups, conduct group discussions, distribute tasks, approach entrepreneurs, prepare questions on business ethics, challenges and sustainability of business, prepare sharing of knowledge and finally set online meeting for the engagement session. They need to present their progress reports, get constructive feedback and once ready – they engage! During the engagement, business owners shared their experience and views and respond to students' questions. Students, on the other hand, listen attentively to the business owners' responses and attempt to share their business ethics knowledge related to the experience and views. Both students and business owners learn from each other in this manner. Reflections from the students and business owners were gathered in order to improve the future implementation and enhance quality of teaching and learning. This will enable meaningful learning from the reality and provide rewarding experiential learning to students.

Using an online platform, a total of 92 students have engaged with 80 young entrepreneurs who shared their business experience and challenges related to ethics. The outcome of the engagement is reported in the following section.

MAIN RESULTS

Table 1 reports the demographic profile of entrepreneurs and students who participated in the engagement. Meanwhile, Table 2 reports the findings from pre, post and after four months of engagement survey responded by entrepreneurs and students. Results show that both entrepreneurs and students agree that their knowledge and understanding of business ethics and the reality of business have increased. Apparently, entrepreneurs agree that business ethics is important and thus the increase of their perception in the post engagement has increased but not significant.

Table 1. Demographic profile

ENTREPRENEUR	*Gender*	*Percentage*	STUDENTS	*Gender*	*Percentage*
	• Male	17%		• Male	14%
	• Female	83%		• Female	86%
	Ethnicity				
	• Malay	81%		*Ethnicity*	
	• Chinese	10%		• Malay	74%
	• Indian	6%		• Chinese	12%
	• Others	3%		• Indian	10%
	Type of business			• Others	4%
	• Product	69%			
	• Services	7%			
	• Product and services	24%			

Table 2. Paired sample t-test results on the effective of SL

SL objectives	Mean		Sig. (p-value)
	Pre	Post	
Young entrepreneurs:			
#Knowledge in business ethics	6.43	8.66	0.006**
#Understanding on Malaysian Code of Business Ethics	6.17	8.54	0.004**
@Knowledge on how to sustain business from the ethical perspectives	3.97	4.57	0.017*
@Perception on the importance of business ethics	4.26	4.72	0.403
Students:			
@Knowledge on business reality	3.42	4.45	0.012*
@Understanding on business challenges	3.38	4.61	0.008**

#Level of knowledge/understanding from 1 (Poor) -10 (Excellent)
@Level of agreement (5 Likert-scale) from 1 (Strongly disagree) to 5 (Strongly Agree)

Entrepreneurs and students have also made their reflections on the engagement through an online google form distributed after the engagement. The engagement has provided an experience that demonstrated an outstanding course learning outcome achievement which focuses on knowledge enhancement, communication, global citizenship, and team working skill. These reflections are extracted from the surveys as follows:

Knowledge enhancement
Students agree that they get to increase their knowledge on the practical skills in managing business and ethical issues after the engagement; this can be concluded from their comments such as, "…we get to increase our knowledge on how business is run and sustained ethically", "I learnt the practical side of business ethics during the engagement and this has sharpened my view on this subject matter", "I now understand that business ethics is crucial and yet challenging to be applied in the real business world", deepen our business ethics knowledge from the experiences and ethical practices that young entrepreneurs shared with us". Students also enjoy the engagement as their comments, "I like the way this engagement is conducted because I can learn both the theory and practice of business ethics", "…this engagement has raised my awareness on business ethics especially when it comes to quality products, customer service and managing employees…".

As for the entrepreneurs, similar agreement was gauged from the comments, for example, "…what students have shared is an eye-opener for me…", " …truly appreciate what students shared, this is something that I could apply in mybusiness…" "…yes indeed I have learned from their sharing too…", "I've gained some extra knowledge and perspective on the understanding of ethics from the student's simple briefing…especially on the dilemma, and how can we, as business owners know more on how to handle the dilemma, viewing it from different perspective and how to handle…", "Good discussion and sharing session. I will improve my company business ethics in the future...". In addition, an entrepreneur has given her fair share of her thought:

"This engagement has provided me with a clear understanding and deeperknowledge of how to act ethically while conducting a business. For instance, we always need to be honest with our customers while providing them with products. As I'm an Amway Business Owner who will be providing health supplements, I've to always be concerned about customers' health while providing them supplements. Apart from this, if there is any side effect obtained by customers when consuming the supplements that I suggested. I will directly issue a report and complaint to my company in order to make sure that this won't happen again to others. Rather than this, I would also help my customers with compensation. In Amway's business, there is a policy where if the products that are bought from Amway if not work or give bad effect to customers' health. Amway will return back 100% payment."

Entrepreneur J.

Skills - Communication skill, global citizenship and team working skill
The engagement has contributed in enhancing students' skill especially their communication skill. They assert that, "it has also strengthened our communication skills…", "…I am happy that we were able to communicate with the society, this experience has improved the way I communicate with people other than family and friends". In addition, they commented that, "…during the arrangement, I learned on how to act when dealing with the entrepreneurs as we have to carefully and courteously ask them questions and the challenging part is to listen to their stories andwe then share the appropriate business ethics principles related to it".

CONCLUSION

In conclusion, a meaningful engagement on business ethics and sustainability between accounting students and young entrepreneurs was achieved via service learning. The SL has exposed students to the reality of business particularly related to business ethics and sustainability. Specifically, the engagement has led to an improvement in the knowledge and understanding of business ethics and business sustainability from an ethical perspective among young entrepreneurs. In addition, evidences show that knowledge and skills enhancement occurred among students from the engagement. Among recommendation for future research includes a follow-up on the entrepreneurs after six months or more on how they apply the knowledge that students have shared during the engagement. If application of knowledge happens, it could be a significant contributionof students to the business society.

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ENHANCING STUDENTS' COMMUNICATION AND PRACTICAL SKILLS BY USING REAL CASE SCENARIO APPLICATION

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ABSTRACT

The obtainment of communication and practical skills among students are the mainobjective in Business Communication and Management courses. The objective of the study is to assess the effectiveness of real case scenario application in teaching and learning to ensure the students are well equipped with the skills of communication and practical. The application of real case scenario or case study has been applied throughout the learning activities in this course. The real case scenario activities were based on the current issues happening throughout the world. Feedback on this learning activities has been gathered via online survey to measure the effectiveness of this learning activities throughout the course implementation. Assessment and feedback on this learning activities had showed good response and attentiveness from the students. Significantly, with the exposure to the real case scenario will make the students alert with the technological, societal challenges and opportunity for future business. In addition, the application of real case scenario will improve the student's ability to articulate idea for knowledge and generic skills development.

Keywords: Real Case, Real Case Scenario, Case Study

INTRODUCTION

Real case scenario can be defined as the ability to understand different scenario based on actual cases that happening in many situations in different manners. Case scenario or casestudy can be interpreted as a description of a real or stimulated managerial situation alongwith personal history of an individual, institution, or business faced with a problem that must be solved. (Popil, 2010). As quoted by Herreid (2011). teaching with cases can be either written, oral or in an audio-visual form that are being synthesized by the instructor and learner as derived with an ultimately comprehend conclusion. Teaching amanagement and business communication courses requires a comprehensive and detail explanation to ensure their understanding on the subject matter. Thus, an application of the real case scenario was considered as the effective way to understand the applicationof the theory learned with the real situation in today's business scenario. The application of real case scenario will give an opportunity for the students to understand the issues anddeveloped the method of problem solving based on the real case scenario of any organization, community, or individual cases. Many learning activities has been developed in the class by using the real case scenario such as the synchronous learning of online quizzes, simulation case, case presentation and other activities. While for asynchronous learning it is more towards the coursework assessment of case study, groupproject, individual assignment and presentation.

Henceforth, the aim of the study is to enhance the student knowledge on business communication and management courses by using real case scenario application associated with business and practicality in learning process. The real case scenario application enhances student's knowledge and improve student's engagement skill whilst optimize their blended learning (Dicheva et al. 2017). Additionally, the real case scenario application encouraged the awareness of the students on the real-world business issues and problem associated with technological advancement, risks, and global business issues. Students able to articulate idea, communicate effectively based on the situation and develop their own idea to solve the issues addressed based on simulation case and the organization project (Burko, 2015). Adopting business simulation and case scenario will enhance student's generic skill such as critical thinking and decision making, and it is proven as a successful strategy in teaching and learning.

METHODOLOGY

A survey was conducted by using web-based questionnaires such as Google Form which consists of open and close ended questions. The form was distributed to 85 students in business communication class for two sections. This study adopted qualitative data analysis to assess the effectiveness of real case scenario application activities in class. The result will indicate the student's acquisition on commnunication and practical skills from the implementation of real case scenario in this course. Thematic analysis was used to analyze the qualitative data. Open, axial, and selective coding was being adopted to derive with the main theme of communication and practical skills acquisition in this course.

MAIN RESULT

In this study, the data was being analyses by using the grounded theory method as the procedure for qualitative data analysis. The first procedure started with the development of the categories of information collected. Apart from that, the themes have been identified based on the open, axial, and selective coding. Consequently, the core variablesof the study have been identified based on the grouping themes of knowledge, experiential learning and problem solving based on selective coding.

Table 1. List of theme development based on the study findings

No.	Theme Category	Theme	Code
1.	Knowledge	Experience	'I can relate with real business case'
		Enhance Knowledge	'I learned a lot through the case given'
		Theory Application	'Apply the theory to real practice'
2.	Experiential Learning	Real Time	'It is related with real situation of the current business and issues

		Simulation Approach	I can learn real business strategy
		Practicality	Apply the theory to case study
3.	Generic Skills	Decision Making	'I feel confident with decision in group'
		Critical Thinking	'I am able to reflect and generate idea'
		Communication Skills	'Feel confident during presentation and free to present idea'

CONCLUSION

The study had come out with the result that the application of real case scenario in teaching and learning for Business Communication and Management courses is a suitable approach to increase knowledge and influence positive impact on the student's understanding of the course. The approach of real case scenario will develop the student's understanding by applying the theory learned and linked with the strategy and decision-making process. Based on the findings, many of the student's agreed that their understanding on the course has been developed with the learning activities eitherthrough synchronous or asynchronous learning based on the assessment given duringthe learning session. The other theme developed from the study which is experiential learning also considered as the best learning outcome achieved in this subject. The students can experience the real situation of business process and concept with the meaningful learning activities during class such as quizzes, company case study, group project and presentation and business simulation in class. It was indicated that the learning activities able to develop the problem solving and decision-making skill by enhance the critical thinking to analyses the real business scenario and generate the solution based on the factors of technological societal challenges and opportunities in business. Students can understand the logical relationship between the ideas generated during the learning activities and able to solve problem of real case scenario in a systematic way.

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ENGAGING STUDENTS USING EXTERNAL FACTOR EVALUATION (EFE) MATRIX

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ABSTRACT

The impact of competition in a global economy on all sectors have been very intense for organizations. Thus, organizations need to have fresh graduates that possess the required employability skills. The purpose of this article is to review the issues of graduates' employable skills and how to help the students through the engagement approach by using the external factor evaluation (EFE) matrix in teaching and learning. Finally, the higher education institutions should make changes to accommodate a more effective engagement in teaching and learning.

Keywords: Employable Skills, Higher Education, & EFE Matrix

INTRODUCTION

The fast-changing economy creates a more competitive environment for organizations to survive. The survival of the organizations among other things depends on the quality of the employees. In relation to this situation, it is imperative that higher education institutions to ensure the employability of their graduates.

Various studies have probe into the issues of graduate employability. According to Suleiman, Baharun, Rohaizat and Simpol (2004), the employers continuosly assess the graduates' skills as required by the industries. The businesses' need to adapt to the rapid changes and be more competitive require specific skills from the university's graduates. A fast-changing environment and frequent organizational restructuring means graduates now find jobs are more demanding. Empirical evidence from the study suggests the development of common skills within the context of a business and management studies of the undergraduate programme. The findings of the study also suggest greater emphasis on major subjects of management and business (53.5%) and less on elective subjects (18.4%). The study also confirmed that the industry also has the same view that the key skills in management and business programme. The verbal and written communication skills were ranked higher and less on innumeracy skill. This finding also supported findings that the communication plays an important role in designing management and business syllabus. The employer also put a high emphasis on other skills for example being independence and ability to solve business problem.

Other studies also suggested the strong pressure on higher education institutions to prepare graduates to be able to adapt to the competitive world of work. University graduates are expected to develop the cognitive, technical, and relational skills (Fatema Suleman, 2018).

According to Rudzi Manap (2014) it is important for the higher learning institutions to identify the employability skill that is needed in the job market. The finding suggests six variables that make up employability skills contributing towards employee productivity at the workplace.

The issue of graduate employability of university graduates raised more question in the Fourth Industrial Revolution era. A study was conducted to examine the industry's expectation on the employability skills of new graduates in the communication and media industry. The findings of the study revealed the following employability skills are required by the industry: communication, ICT or digital, leadership, interpersonal, and personal qualities skills. These employable skills are key to the ability of the graduates to adapt to the changes in the workplace. (Siti Nor Amalina Ahmad Tajuddin et al, 2022).

Engaging Students

Based on the issues and challenges discussed in the graduate employable skills, it is important for educators in higher education institutions to find ways to engage students in their class. Engagement will help students to deal with problem-solving cases in class (Riggs and Linder, 2016). This approach will enable the students to develop the employability skills as required by the industry.

One of the methods to engage students is to use matrices. In other words, students can learn the major concepts or topics in class, and then can develop the matrices independently or in class. In Strategic Management class for example various matrices such External Evaluation Matrix, Internal Factor Evaluation Matrix, Competitive Profile Matrix, Internal-External Matrix, SWOT Matrix, Grand Strategy Matrix, Boston Consulting Group Matrix and the Quantitative Strategic Planning Matrix (David, 2017).

External Factor Evaluation (EFE) Matrix is a strategy tool used to examine company's external environment and to identify the available opportunities and threats. The external factors are deriving from the tools like Political, Economy, Social and Technology (PEST) analysis, Porter's Five Forces or Competitive Profile Matrix. The general rule is to identify 10-20 key external factors and each key factor should be assigned a weight ranging from 0.0 (low importance) to 1.0 (high importance). The sum of all the weights must equal 1.0. Each of the factor will also be given rating from 1 to 4.

The rating is based on the ability of the organization to responds to the opportunities and threats. Finally, the total weighted score will be calculated based on the sum of the weight multiplied by the rating (David, 2017).

CONCLUSION

The implementation of external evaluation matrix in teaching can help to enhance the graduated employable skills. This will enable the students to develop the skills needed to adapt to the changes of work place in a competitive environment. From the discussion of this paper, it is imperative that higher learning institutions gave greater emphasis in developing the soft skills

of the students as well as preparing them with good attitude for employment (Suleiman, Ebi Shahrin and Baharun, Rohaizat and Simpol, Mohd. Sallehuddin, 2004).

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Sub-Theme 2
Tools For Online/Hybrid Teaching & Learning

TEACHING BUSINESS MATHEMATICS USING AN ELECTRONIC DISCUSSION FORUM: STUDENT-CENTERED E-LEARNING APPROACH

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ABSTRACT

The COVID-19 pandemic has caused a sudden shift away from the traditional classroom, and some academics are unsure of the viability of adopting online learning. The alteration in pedagogical practices led academics readily accept online teaching as a temporary solution. This brings up the question: Does online teaching apply to all subjects, particularly those that include calculations, such as business mathematics? Therefore, this study aims to highlight the electronic discussion forum as an approach to teaching business mathematics online. When learning mathematics, students must be given a meaningful opportunity to develop and express their ideas and justify their solutions. In this instance, the electronic discussion forum offers the opportunity for students to engage in and communicate with the instructors and other students throughout the online learning environment. In this approach, students are at the center of the teaching and learning process, which is referred to as a student-centered learning environment. Thus, this allows students to interact and engage throughout the semester with minimum instructor engagement while the instructor is accessible to provide timely guidance and support as needed.

Keywords: Business Mathematics; Electronic Discussion Forum; UTM E-learning

INTRODUCTION

The worst pandemic of the contemporary era was Covid-19, which emerged in 2019 following the influenza epidemic of 1918. Socioeconomic factors have been significantly impacted globally as a result of surging in China and infecting every country in the globe (Kumar et al., 20020; Shrestha et al., 2020). Education sectors are one of the socioeconomic factors influenced by the covid-19 epidemic, which affects the delivery of knowledge and skills at all levels of education (Kumar et al., 20020; Shrestha et al., 2020). This has caused education to be delivered through many virtual platforms, including Google classroom, Webex, WizIQ, and LinkedIn Learning, to allow instructor to give live or on-demand course content.

Unfortunately, this approach is complicated, and many obstacles must be overcome, including the adaptation of learning materials, a new learning methodology, and an innovative evaluation system that must be integrated for the first time. Some of these obstacles arise from the self-perceptions of the instructor and students, who think that the traditional face-to-face

educational paradigm cannot be directly applied in an online learning environment and is less efficient than conventional learning methods.

Mathematics courses have generally been one of the subjects that have been familiar with traditional teaching and learning methods and reliance on paper rather than technology due to its symbolic nature. For instance, according to Bringula et al. (2021), students have negative perceptions of their ability to learn mathematics online and prefer the face-to-face traditional method of teaching and learning methods, which allows them to seek out immediate learning interventions from instructor or their peers. Therefore, the present study attempted to contribute to the current threads of discussion about teaching business mathematics in the context of electronic discussion forums using E-learning Universiti Teknologi Malaysia (UTM).

TEACHING BUSINESS MATHEMATICS IN ONLINE ENVIRONMENT
Mathematics is the science that deals with the logic of shapes, numbers and patterns while business mathematics emerges when it applies mathematical concepts and skills related to business. Especially for first-year students, business mathematics is offered in the undergraduate bachelor of accounting and bachelor of management (technology) degrees. This course equips students with the basic mathematical tools and foundation needed to comprehend other courses with quantitative contents and introduces to students' applications of mathematics in economics, business and accounting. The change to online teaching and learning during the COVID-19 epidemic has allowed us to use e- learning as a platform for knowledge sharing and to create an atmosphere that is engaging for students.

The term "e-learning" is now frequently used by both students and instructor to describe a style of teaching and learning that can be carried out through website online learning. Due to the benefits eLearning brings to universities, such as a lack of dependence on time constraints, the freedom to ask questions without embarrassment, and access to resources from anywhere, the creation and implementation of e-learning have become a prerequisite for academic institutions (Rudy, 2007). Hence, Universiti Teknologi Malaysia (UTM) offers its students an online learning platform powered by Moodle, known as E-learning UTM (Wang, 2003). Lesson notes, tasks, and projects can all be added by lecturers using E-learning UTM. As for students, they are given access to the resources necessary to download, submit, and communicate with lecturers and other students.

In this context, e-learning UTM is utilised as a learning platform for business mathematics to improve student interest in and comprehension of their field of study. The UTM e-learning framework is divided into four sections, namely information, resources, activities, and assessment, where lecturers can select the best tools to communicate the course materials to their students. Figure 1 below summarises the tools that are accessible for each component. For example, the resources section's toolset includes a file, page, book, folder, label, URL, IMS content, and recording. Quiz, folders, books, recordings, lessons, assignments, and forums are extensively used tools for business mathematics online teaching, active learning activities, and online assessment.
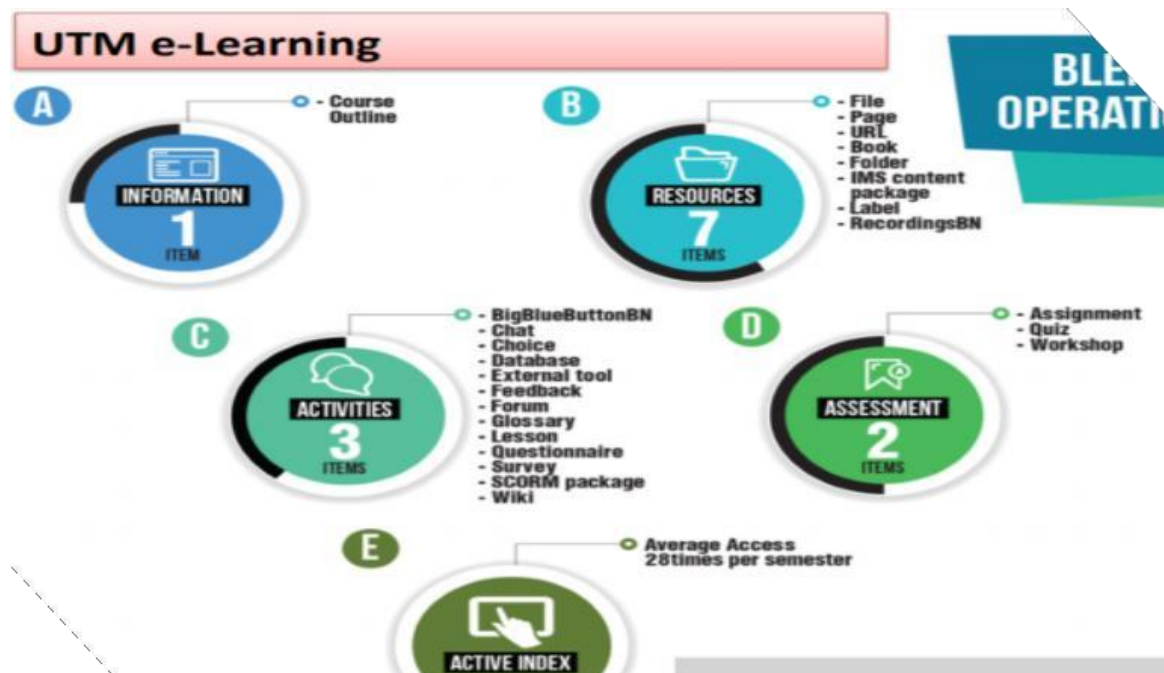
Figure 1: Tools in UTM E Learning
Source: https://utmcdex.utm.my/utmlead/

Forum tool is referred to as a communication and collaboration tool that enables instructors and students to communicate with one another whenever they want, from anywhere with an internet connection. Forum is the most infrequently utilised method for teaching mathematics because it is more often used as a tool for language courses than for courses that concentrate on numbers. Here, employing efficient forum tools, the business mathematics students communicate in the language of mathematics. This brings up the question of how a forum will be appropriate for teaching business mathematics and how students will interact with the mathematical language.

ELECTRONIC DISCUSSION FORM AS A STUDENT-CENTRED E-LEARNING ENVIRONMENT

For each chapter addressed, a forum is used as a Questions & Answers (Q&A) platform during or after business mathematics lessons. The Q&A forum enables the posting of questions, which the students must respond to in order to view other answers. For instance, after a particular chapter lesson, the instructor may ask the students to solve a math problem posted in the discussion forum. The students will then need to spend 20 to 30 minutes responding to the forum questions by providing the answer and the techniques employed. After the students submit their replies, the Q&A forum enables them to interact with their peers and learn how other students have solved the problem. As an instructor, we then discuss the forum question in class to help students further comprehend.

Through this forum, students are more engaged in the course and the instructor's role changed from imparting knowledge to mentoring students, creating what is known as student-centred e-learning environments. This is because it is difficult for students to address mathematical questions and doubts in a virtual classroom.

It is simpler for students to communicate with their classmates about their tasks or assignments when each topic addressed has its own online forum. As a result, Figure 2 depicts a model of an online discussion forum as a student-Centred E-Learning Environment.
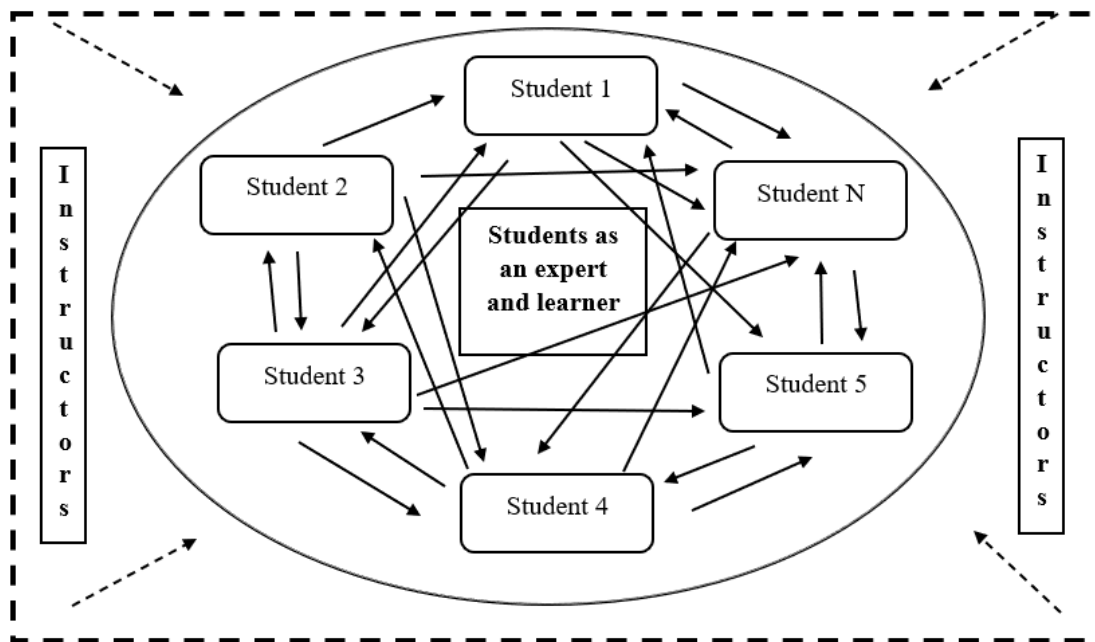
Figure 2: An electronic discussion from as a student-centred e-learning environment
Note: ➘ Student-student interactions ⬊ Instructor- student interactions
Source : Authors own illustration

In this model, a student actively participates in the teaching and learning processes in the dual roles of expert and learner. Students must: actively listen to others, reflect, offer comments, discuss ideas, ask questions, read, write, talk, observe, and actively listen for understanding. By recognising the learner as a co-creator in the teaching and learning process, this paradigm shift has supported shifting control away from the instructor. Besides, Instructors will encourage students to participate in discovery learning, learn from each other, and focus on creating real-world tasks that stimulate student involvement and participation. Overall, this process enables students to participate in class and achieve better learning outcomes. It also can lessen the instructor's workload, where they must provide prompt support and direction when necessary.

CONCLUSION

It might be challenging to create a social presence that helps an online learner feel a part of the academic community by transferring from in-person to online education. Every course has its difficulties, but math-related courses are especially difficult to keep track of learner performance and interact with them regularly online. The rationale for this belief is that, in general, we find that learning and teaching mathematics in a face-to-face context is more enjoyable than online. Due to this, we present in this study how to teach business mathematics employing an online forum. Electronic discussion forums are seen as a method for engaging students in online learning by allowing them to play a more active and central role in the teaching and learning process.

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FACTORS INFLUENCE STUDENTS' SATISFACTION USING E-LEARNING DURING POST-COVID-19

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ABSTRACT

Online learning or electronic learning is known as e-learning. During post-Covid-19, the e-learning system is still famously used as the way technology becomes a synonym for students' life. The research examines the influences of students' e-learning satisfaction at Azman Hashim International Business School, Universiti Teknologi Malaysia. The study found three factors that influenced the use of the e-learning system to the satisfaction with the system. The result shows that respondents showed high satisfaction with the e- learning system. However, some improvements still need to be made to e-learning.

Keywords: Online Teaching and Learning, Covid 19, Education, Internet

INTRODUCTION

Online teaching and learning speedily develop at the end of 2019 due to epidemic Covid 19. Many software and applications such as google meet, zoom, webex, and others are getting bieng sought by the education industry. Due to this Covid 19, a new norm of teaching and learning, especially online, need to be faced not only on the teachers but also students. The questions come the students are ready to face online teaching and learning. Hence, this research aims to understand the student's situation, condition, and perspective based on online teaching and learning. This research also aims to comprehensively view students' experiences and preferences in online learning versus face-to-face learning. This research is expected to help various field education industries to see the student's situation and perspective.

(a)   Learner interface

In e-learning, there is an online interaction that calls learner-interface interaction, which is an interaction between a student and the digital interface, such as a learning management system shown on a computer screen, that mediates all interactions in the online educational setting (Johnson & Cooke, 2016). The student must engage with some technological medium as part of the course requirements. This engagement is critical to the online experience since it improves cognition and is the interaction that allows for online learning. It is critical to consider some improvements, such as suitable layout, including the placement of various items on the screen, for example, accessibility difficulties, and what tools and resources are accessible (Pituch et al., 2006). There are several approaches to enhance active interaction with material and encourage collaborative learning in a standard online workspace, resulting in an active, dynamic class structure.

(b)   Learning Community

A learning community is a group of students and teachers who exchange ideas, conduct critical research, ask numerous questions and provide educational lectures. Instructors often administer learning communities, create academic classes, examine each student's viewpoints, and provide thorough comments. Learning communities typically necessitate instructor cooperation, which allows educators to communicate about their shared students and integrate content across courses through activities such as collaborative assignments and readings (Weiss et al., 2015).

(c)   Personalization

Personalization in e-learning involves more than just a customized objective or device support. For example, users may change the system's look based on their needs. Furthermore, customization implies that everyone can select their own goals, convey them to educators or instructors, and build a tailored learning environment. This method can dramatically improve learning efficiency while opening new prospects for professional advancement (Al-Yahya et al., 2015). Figure 1 shows the framework of this research.
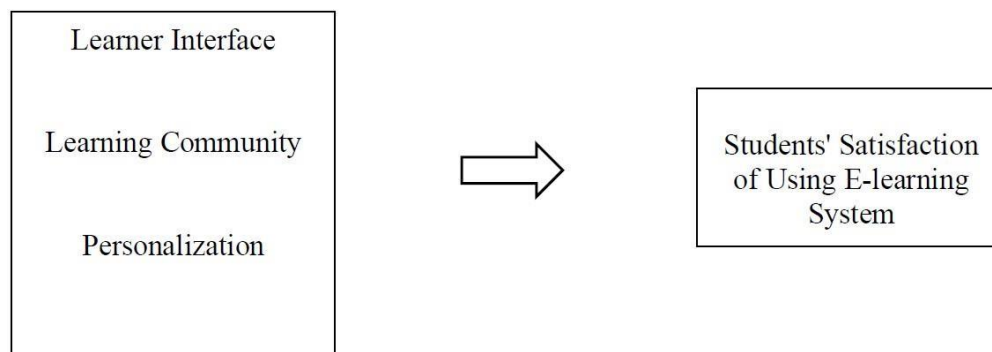
Figure 1. Research Framework

MAIN RESULTS

This research was conducted based on the quantitative approach of data analysis. The population sample is taken from 54 undergraduate and second-year students of Bachelor of Management (Marketing) at Universiti Teknologi Malaysia (UTM). The questionnaire involved five sections. Section A is the demographic information of the respondents. Section B is the learner interface to e-learning, section C is the learning community on e- learning and Section D is the personalization of e-learning. Finally, section E is about students' e-learning satisfaction.

Table 1 shows respondents' demographic data such as gender, ethnics, internet provider and frequency of using e-learning system per week. Table 1 shows that most of the students who participated in the project were female, involving 45 respondents (83.3%), while nine (16.7%) were male.

Table 1. Demographic of respondents

Variables		Frequency, n	Percentage, %
Gender	Male	9	16.7
	Female	45	83.3
Race	Malay	26	48.1
	Chinese	21	38.9
	Indian	2	3.7
	Others	5	9.3
Internet Provider	Maxis	3	5.6
	Digi	11	20.4
	Celcom	10	18.5
	UTM WiFi	17	31.5
	Others	13	24.1
Frequency of using e-learning per week	1-3 times	9	16.7
	4-6 times	23	42.6
	Everyday	22	40

Based on Table 1, the respondent distribution by ethnics shows that most of the respondents were Malay which was 26 respondents (48.1%) and thus followed by Chinese which was 21 respondents (38.9%), others such as international respondents, five respondents (9.3%) and Indian 2 respondents (3.7 %). On the other hand, the internet provider shows that Maxis had the least number of respondents using it, which were three respondents (5.6%). Seventeen respondents (31.5%) used UTM WiFi, the most internet provider from 54 respondents. Celcom had second the least respondents, which was 10, followed by Digi, which was 11 respondents and others 13 respondents, which was 18.5%, 20.4% and 24.1%, respectively. Other's internet providers included Umobile, Telkomsel, Unifi, and China Unicom. The frequency of using e-learning per week also shows that 4-6 times had the most respondents, 23 respondents, 42.6%. While 1-3 times had the least, there were nine respondents (16.7%). Every day had 22 respondents (40.7%). Table 2 shows the descriptive analysis of this research.

Table 2. Descriptive analysis

	N	Mean		Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
Factor_A	54	4.4074	.07096	.52146	-.883	.325	.458	.639
Factor_B	54	3.7407	.13034	.95779	-.748	.325	.132	.639
Factor_C	54	4.2477	.08091	.59454	-.565	.325	-.546	.639
Factor_D	54	4.4444	.08429	.61939	-.895	.325	-.043	.639
Valid N (listwise)	54							

Based on the descriptive analysis, Factor A for learner interface had a mean of 4.4074, factor B for learning community had a mean of 3.7407, factor C for personalization had a mean of 4.2477 and Factor D for students' satisfaction with using the e-learning system had a mean of 4.4444. The mean result shows that the design of the e-learning system plays an essential role in students' satisfaction with using the e-learning system with the learner interface (Mean=4.4074), learning community (Mean=3.7407) and personalization (Mean=4.2477). These findings show similarity to another study by Chen et al. (2010). Table 3 shows the relationship analysis of this research.

Table 3. Pearson correlation analysis

		Factor_A	Factor_B	Factor_C	Factor_D
Factor_A	Pearson Correlation	1	.577**	.724**	.553**
	Sig. (2-tailed)		.000	.000	.000
	N	54	54	54	54
Factor_B	Pearson Correlation	.577**	1	.695**	.544**
	Sig. (2-tailed)	.000		.000	.000
	N	54	54	54	54
Factor_C	Pearson Correlation	.724**	.695**	1	.624**
	Sig. (2-tailed)	.000	.000		.000
	N	54	54	54	54
Factor_D	Pearson Correlation	.553**	.544**	.624**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	54	54	54	54

The relationship between learner interface and students' satisfaction with using e-learning systems is a moderate positive linear relationship. Similarly, the relationship between the learning community and students' satisfaction with using the e-learning system is a moderate positive linear relationship and personalization, and students' satisfaction with using the e-learning system is a moderate positive linear relationship.

On the other hand, the relationship between factors such as learner interface and learning community is a moderate positive linear. The relationship between learner interface and personalization is a strong positive linear relationship. The relationship between learning community and personalization is a moderate positive linear relationship.

CONCLUSION

The research has successfully researched factors influencing students' satisfaction with e-learning during post-covid-19. Based on the result, the respondents are highly satisfied with the UTM e-learning system, which has a mean of 4.44. The project revealed that students' satisfaction with the e-learning system is correlated with the factors that influence intention to use e-learning which is learner interface (Mean=4.4074), learning community (Mean=3.7407) and personalization (Mean=4.2477). This research found that most students who took part in the study had high satisfaction with the e-learning system due to its learner interface, learning community and personalization.

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LEARNING COMMERCIAL LAW USING KAHOOT! FOR NON-LAW BACKGROUND STUDENTS

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ABSTRACT

Technology is being increasingly integrated into teaching environments in view of enhancing students' engagement and motivation. In particular, game-based student response systems have been found to foster students' engagement, enhance classroom motivation and improve overall students' learning experience. This paper presents outcomes of study that examined students' experience using a game-based student response system, Kahoot! in Commercial Law course for year 2 students of Bachelor of Management (Technology) at Universiti Teknologi Malaysia. A set of questionnaires has been distributed to 70 students to identify to what extent the Kahoot! influence classroom motivation and students' learning process. Key findings revealed that Kahoot! enriched the quality of student learning in the classroom, with the highest influence reported on immediate result or timely feedback after the assessment. Beside of that, it increases classroom engagement, motivation and improved learning experience. The findings also suggest that the use of educational games in the classroom is likely to minimise distractions, thereby improving the quality of teaching and learning beyond what is provided in conventional classrooms.

Keywords: Game-based student response systems, Commercial Law, Kahoot!, Learning, Non-Law Students

INTRODUCTION

Kahoot! is a game-based learning platform used to review students' knowledge, for formative assessment or as a break from traditional classroom activities. It is among the most popular game-based learning platforms with 70 million monthly active unique users (Alf & Rbail, 2020). Since the platform was released in 2013, many studies have been published on the effect of using Kahoot! in the classroom. This study will highlight on the implementation of Kahoot! as an approach in teaching and learning Commercial Law subject for non-legal background students. This course typically being taught in lecture format, discussion, debate, problem-based learning and case studies. However, using Kahoot! as an assessment tool is considered as a new approach because previously Kahoot! is only be used as an ice-breaking tool. Law courses been known among students as dry subjects. Students feel it is very hard to understand legal jargon, learn complex legal terminology, memorize sections and cases, extract out issues

from legal problem, application of rules, lots of facts and theories and the decision must be justified. Thus, Kahoot! will be introduce to instill the interest and motivation of learning amongst student, change their perception that learning law also can be fun and to increase the level of understanding of the said subject. In the end, the result also can be seen in their marks and grades.
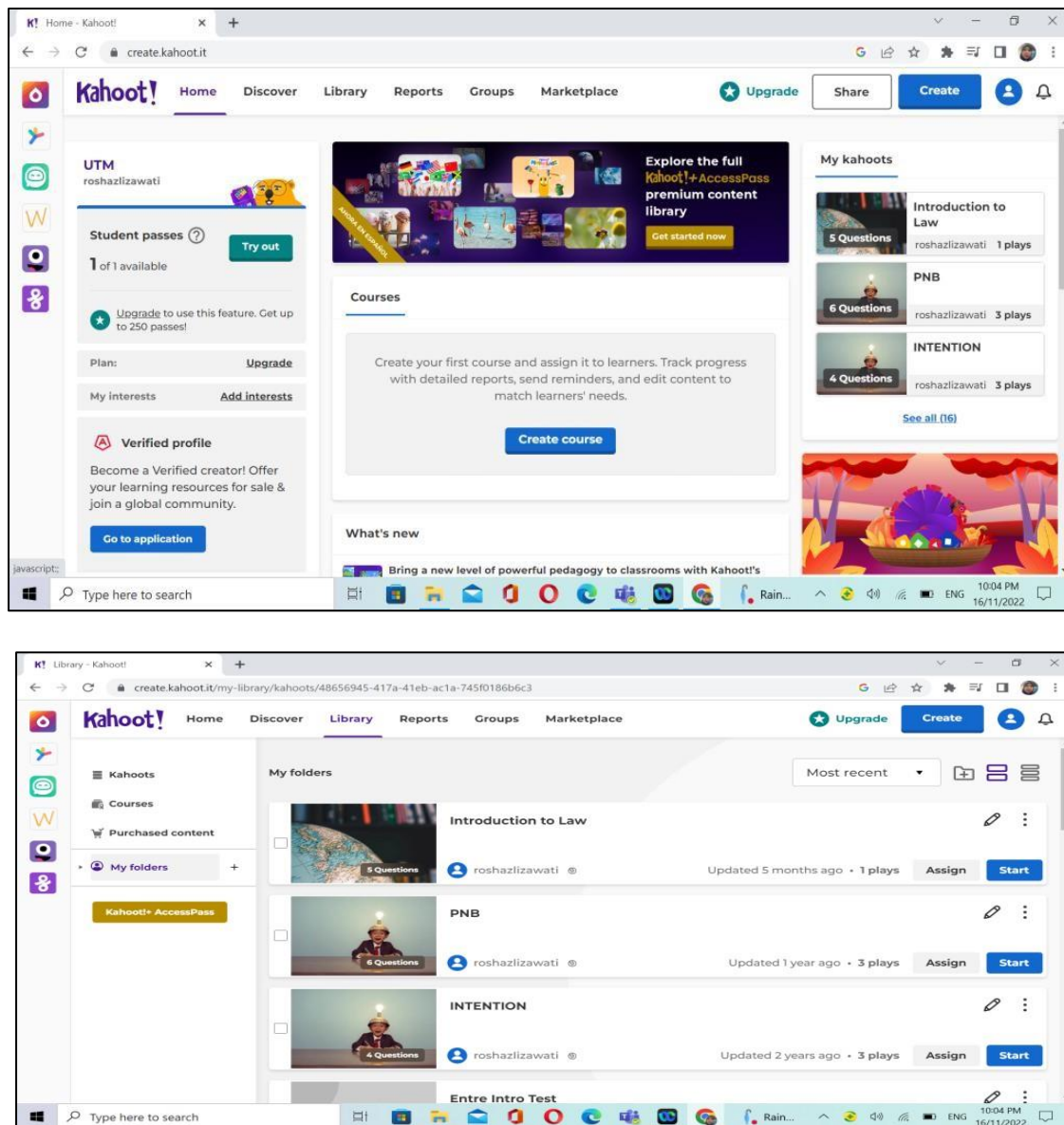
Figure 1. Screenshot of the author account of kahoot

This type of tool allows the creation of online questionnaires by the lecturer that students answer with the use of the smartphones or tablets, with the possibility of having immediate feedback for each answer. This type of questions can be launched at the beginning of the lesson, to check the previous knowledge of the students; in the middle of the class, to break the monotony and keep the attention of the students or at the end of the subject, to check the learning acquired (Licorish et al., 2018).
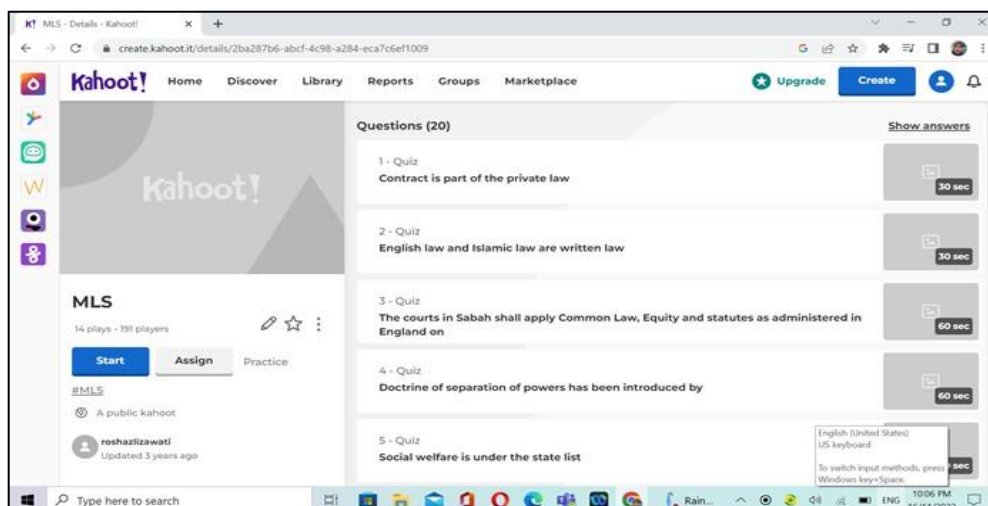
Figure 2. Sample of questions in authors' Kahoot! Library

The use of these technologies allows the lecturer to be informed of the degree of learning achieved by students and the statistics of the data almost immediately.

Figure 3. Instant feedback of the results after the assessment

Instant feedback of the results after the performance allows the lecturer to detect particular problems in the learning process with a certain topic and take the appropriate measures more effectively. Later, it be a key piece in the initial, formative and final evaluation of the students. Different studies on Kahoot agree that the use of these tools in the classroom not only improves the students' learning process but also their participationand the positive relationship among the class members (Ai Lin, D. et. al, 2018, Farihana Abd Razak et.al, 2020, Marta Curto Prieto et.al, 2019). This is due to the fact that watching the correct answer between everyone in an instantaneous way, as well as assimilating the strategy as a game, allows comments to be shared among the students in a group and in a relaxed manner. It also facilitates the understanding and the participation of all the class as well as helping the development of social skills (Resmayani & Ida, 2019).

METHODOLOGY

Target population was defined by Sekaran & Bougie (2013) as an entire group of people, events or things of interest that need to be investigated and surveyed in research. Therefore, the respondents of this study were 2nd year students who enrolled in Commercial Law subject for Sem 1, 20212022 (70 students from 2 sections according to the Aims Web). Selecting the most appropriate sampling techniques is important toensure sample accurately reflects the larger entity (Saunders, Lewis and Thornhill, 2019). The sampling techniques used in this study is purposive sampling techniques. Self-administered questionnaire will be the main method of data collection. The questionnaire will be employed to acquire the students' perspective on the application of Kahoot! in their course. Questionnaires were distributed via Google Form. 5-point Likert S-scale were used in the questionnaire and one open ended question on recommendation to improve the understanding on legal subjects. A total of 70 sets of questionnaires were collected and analysed using SPSS. This study provides insights that can help to understand on how Kahoot! affects learning performance, classroom motivation and students' perceptions. Their feedback from this study will help the researcher in improving approach of teaching and learning in classroom for future non-law students.

MAIN RESULTS

As can be seen in Figure 4, on the evaluation of students on learning Commercial Law via Kahoot!, the only ítem that has obtained 100% "I know my result right after the assesment". The second highest percentages are on the item "My learning result have increased". Furthermore, the effect of the Kahoot! on students learning can be seen on ítems "I see more possibilties to show what I have learned", "I have changed my perception on studying legal subjects" and "I had fun while learningbeen able to self- evaluate my learning process", "I had fun while learning" and "I think learning is more active and experienced" where almost 60 out of 70 students strongly agree on those ítems. And the leat ítem that they strongly agree is "I have had the facilty to access the materials and contents". For the recommendation part, 62 students love this technique of teaching and they are looking forward for more fun as well engaging activities in law classroom in the future.
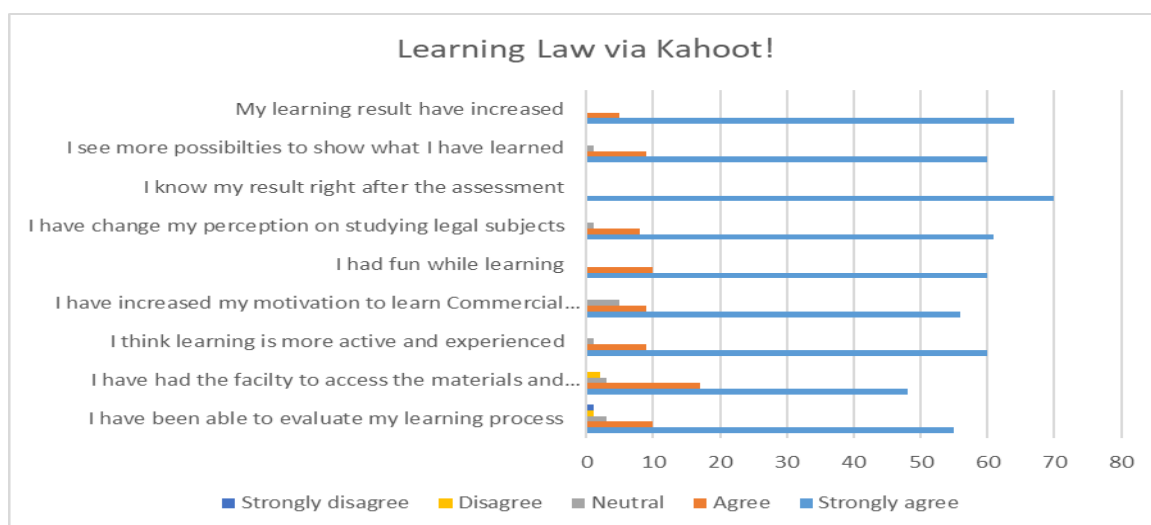
Figure 4. Evaluation of the students on learning Commercial Law via Kahoot!

CONCLUSION

Students with non-law background normally perceive the legal subjects as being difficult, challenging, feel burden by the quantity of reading material and tedious. Therefore, an effective teaching methodology is required to change this perception. Thus, traditional technique of teaching should be transformed to the current information technology modern mode of teaching. Based on the study, it can be concluded that beside of knowing their result right after the assessment, learning Commercial Law using Kahoot! also able to improve understanding in law subject, they also have fun while learning and lead to the change of perception on legal subjects by the appropriate content in Kahoot!. This study contributes theoretically in line with 21st century learning techniques and practically it contributes to the lecturers for non-law students to apply this activity in their classess. It is hoped that the outcome from the study will have a major impact on imroving the teaching and learning methodology for future non-law students.

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Sub-Theme 3
Innovation In Teaching & Learning

CREATIVITY TEACHING & LEARNING TO MARKETING STUDENTS: ARE WE DOING IT RIGHT?

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ABSTRACT

Creativity is required for innovation, novelty, and survival. This paper is concerned with the study of creativity in education, specifically the training of lecturers and future lecturers to apply creativity theories in marketing syllabus. Marketing as a profession requires the ability to engage in a creative process to solve a problem or design a novel item. According to research, curricula that improve students' creative skills in business marketing are much needed.

Keywords: Creativity, Marketing Students, Teaching Methodology, Student Engagement

INTRODUCTION

The ability to engage in a creative process to define or solve a problem or design a novel artefact is critical to the marketing profession, particularly for future marketers. In the engineering sphere numerous reports emphasise the importance of fostering engineering students' ability to think creatively. This could not be more correct for the marketing students and programs. Creativity and innovative thinking have been linked. According to the Association to Advance Collegiate Schools of Business (AACSB) report on Business Schools on an Innovation Mission, business schools should sharpen students' creative problem-solving skills to enable innovation (AACSB, 2010). Many factors influence solution success or failure, but creative thinking within the environment by individuals or teams is a key source of innovative ideas (Cropley, 2006). This paper identified four key domains from the literature and represent them in a conceptual model centred on: (1) Learning creativity, (2) Meanings of creativity, (3) Discourses on creativity, and (4) Impacts of creativity on future education.

LEARNING CREATIVITY

Learning focuses on international pedagogical and learning practises that encourage creativity with and through technology, hence, it is practice oriented. Because educational practises are contextual, technologies evolve, and pedagogy is deeply personal in the practises of teachers, this is a constantly shifting space, indicating a need for practitioner perspectives within research. The relevant literature on creativity and pedagogical practises is fragmented and does not provide a unified view of practical technological findings. In their scoping literature review, Aguilar and Turmo (2019) note that there has been a greater emphasis on technology as a tool for creativity rather than on teachers' practises. As Hong et al. (2009) discovered in a quantitative survey study of teachers' epistemological beliefs, motivation, and goal orientation

around instructional practises that foster student creativity, creativity can be seen as an epistemological-pedagogical orientation, both as practise and discourse with students. Despite the large amount of literature advocating for a greater emphasis on developing students' creativity, there is a scarcity of evidence-based practises (Egan et al. 2017). The absence of evidence-based criteria could be attributed to the fact that many educational settings make it difficult to move beyond existing curricular/assessment practises that limit creativity. Furthermore, creative practises may have an emergent or temporary character that resists standardisation (MacLaren 2012). DeHaan (2009) proposed making explicit the goals of creative learning, i.e. proposing a focus on cognitive flexibility for creativity and making this clear in instructional design, to manage this type of emergent practise. The deliberate and well-designed use of ICT in learning environments may encourage students' flexibility and creativity. However, the literature is unclear about what such environments might look like, leaving teachers with little guidance for practise. While the arts are perceived to be more easily aligned with creativity, scholars have observed the importance of technologies as tools of scientific progress; Root- Bernstein et al. (1995) established this in a mixed-method study of the practises of highly accomplished creative scientists, and subsequent work has noted the importance of creativity and imagination to high-level scientific practise (Root-Bernstein and Root-Bernstein 2013), despite the fact that teaching for creativity is frequently a low priority in science education. Because art-centred integrated learning can foster flexible thinking and inquiry, the arts may offer new approaches to teaching and learning in science and mathematics (Marshall 2014).

In conclusion, the literature on creativity and technology is fragmented, making consistent or defined classroom practises difficult to implement. When compared to the larger body of psychology literature that addresses creative thinking in individuals, scholarly literature dealing with the messy socio-cultural spaces of classrooms is scarce. Educators have long recognised the arts' potential to foster and promote creativity and divergent thinking.

MEANINGS OF CREATIVITY

Creativity has been defined as a type of novel thinking in which people redefine problems, identify gaps in knowledge, generate ideas, analyse ideas, and take reasonable risks in the development of ideas. The ability to combine and connect ideas in novel ways has also been defined as creative thinking (Finke, Ward, & Smith, 1992). Everyone is capable of exhibiting creativity in different ways, at different levels, and under different conditions (Cropley, 2001); it is not an attribute or skill that one either possesses or lacks (Kirton, 2003). The "standard definition" considers creativity to be the ability, capacity, or skill to produce novel and effective things (Runco and Jaeger 2012). The term novelty refers to the creation of something that did not previously exist or is relatively new in context. However, a novel idea with no practical application cannot be considered creative (Cropley 2003). So, things that are creative must also be "effective", that is, useful, logical, understandable, or valuable to others. There is uncertainty in the context of technologies and classrooms about whether and how shifts in knowing and doing in the digital age have shaped how creativity is done and conceived.

For example, do digital technologies hinder or facilitate creativity, and under what conditions? According to Glück et al. (2002), creativity is based on intrinsic motivation and imagination, but it is also subject to external constraints. The ability of a person to choose their tools, modality, and context influences their capacity for creative learning (Barroso-Tanoira 2017).

However, in schools, teachers and students must deal with constraints, navigation tools, technologies, situational variables, and other constraining forces. A task for instructors in the classroom is how to use existing scholarly findings, definitions, and discourse about creativity in ways that align with the realities of pragmatism. Creativity is positioned as essential for future work and learning in twenty-first-century rhetoric. However, many scholarly meanings treat creativity as an individual construct based on traits. Definitions or models provide abstractions, whereas classroom spaces address practicalities and the social-situatedness of learning. In light of the realities of assessment, educators in systems built on strict standards, norms, and guidelines may be unsure what to do with creativity.

DISCOURSE ON CREATIVITY

Globalization, educational change, and technologies have been linked with creativity and innovation in some literature, often through a linear model in which creativity leads to innovation, which leads to change (Dawson and Andriopoulos 2014). Scholars such as Pratt (2017) have used this discourse about change, creativity, and innovation to describe western cities and urban centres as new hubs for creativity with a global focus, leveraging creativity in shifting notions of cityscape. It has also been strongly linked to digital technologies and the emergence of design thinking and practises in society and educational settings, with the goal of cultivating the aptly named twenty-first-century skills. As a result, creativity is pragmatically oriented toward entrepreneurship and expressed through positive change, corporatization, branding, and industrial innovation (Jones 2010). According to Bassett-Jones (2005), in the context of organisations, creativity is frequently promoted as being essential for corporate success; however, the need for diversity (of approach and personnel) to foster creativity may conflict with promoting organisational cohesion and compliance. At the same time, it is critical to be conscious of the cultural context of contemporary discourses on creativity. Much research has also viewed creativity as a Western construct, presented as an idealisation with utopian connections to technology, innovation, and change (Saad 2009). According to Sawyer (2011), a distinctly Western cultural model or understanding of creativity may be based on potentially false assumptions. This translates to a dominant and pervasive narrative about what creativity can offer in the current social and economic order, which is driven by western concepts (Baer 2011). Creativity could be viewed as a term that has been colonised with the specific objective of supporting the progress-narrative of western society and being used as a transformation catalyst through entrepreneurial culture.

IMPACTS ON FUTURE EDUCATION

When used in reference to education, the term "futures" refers to patterns, trajectories, and changes in instruction and learning that indicate forthcoming problems and demands. At the same time, we acknowledge the contested nature of this term, its transdisciplinary application, and the various ways in which it has been understood and applied (Brown et al. 2016). A lot of the thinking about the future and creativity has been based on the idea of 21st-century skills, which combine creativity and critical thinking (Balcom Raleigh and Heinonen 2019). This has an impact on policymaking and the need for educators to design creative classrooms that foster "skills for the future." The concept of 'future' is also linked in academic literature and industry discourse to synchronous and asynchronous modes of digital education delivery, as well as new constructions and interferences of technologies that embody the concept of 'tech futures' (Perng 2019). These conglomerations refer to online, mobile, and emerging technologies associated with artificial intelligence (AI) and augmented reality (AR) (Leahy et al. 2019). Both students and instructors must learn and adapt to a rapidly changing economic environment as a result of

technological advances that enhance creativity and analytical skills. Many countries' education courses and curricula have been transformed by technological advancement. The rapid adoption of new technologies best prepares students for the economic and social change dynamics. Even though technological responsiveness is not a new phenomenon, it has been established that the most successful teaching methods include complementary and supplemental courses that produce multi-skilled and creative graduates. These courses place a strong emphasis on self-development skills and are less concerned with traditional content. The current trend is toward horizontal focus and a student-centric balance, which is displacing vertical over-specialization of learning. However, where the goal is to equip graduates with creative and adaptive skills, the central role of educator is still seen as appropriate and necessary.

CONCLUDING REMARKS

Creativity and technology have been elevated as critical components of educational outcomes and future prospects. Their significance in twenty-first-century learning environments is undeniable, especially in light of the corporatization of education, globalisation, and the perceived need to innovate in order to survive. Despite their significance, these constructs have yet to be linked in a cohesive body of research that informs classroom practices.

One of the difficulties in enacting creativity and technology in learning spaces is the diversity of these constructs' practical perspectives and disciplinary lenses. These variations increase the complexity and perceived subjectivity in research and practice, where different stakeholders may have competing needs, priorities, beliefs, or values about where and how creativity and/or technology should emerge in teaching and learning.

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COMPETITION AS A MODE OF TEACHING INTELLECTUAL PROPERTY LAW

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ABSTRACT

Intellectual Property Law is important to nurture innovation and the creation of a creative society. Without the protection of intellectual property rights, innovators and companies cannot exploit their rights and this will create a negative impact on research and development. To avoid this negative impact, it is important to know the basic principles of intellectual property law on the protection and what acts constitute infringement. However, even though the intellectual property is important, the researcher realise that innovators did not know their rights and benefits as innovators. Hence, a battle of poster competition was organized among the students of the Faculty of Mechanical Engineering to know the level of awareness of the students to protect and commercialise their intellectual property. 200 students from Faculty of Mechanical Engineering taking Fundamentals of Intellectual Property Law join the competition. The researcher is using quantitative analysis as a research methodology with AIDA Model as a benchmark. The questionnaire was distributed using google forms. Findings show that after the competition, there is an additional of mean 0.5 for the desire to protect and commercialize their intellectual property.

Keywords: Intellectual Property, Law, Competition, Teaching and Learning

INTRODUCTION

Intellectual property refers to creations of the mind which involves invention, literary, artistic and musical works, and symbols, images and designs used in commerce (World Intellectual Property Organization). Among the types of intellectual property are patents, trademarks, industrial designs, geographical indications, copyrights and integrated circuit layouts. Acts that provide protection to intellectual property in Malaysia involve the Trademark Act 2019; Patents Act 1983; Copyright Act 1987; Industrial Design Act 1996; Geographical Indications Act 2000; Integrated Circuit Layout Act of 2000. Under intellectual property law, holders of one of the abstract intellectual rights have certain exclusive rights to the intellectual property they create.

The importance of intellectual property rights cannot be denied anymore. It is because the protection of intellectual property mainly involves technology providing comfort to society (for example patents and copyrights). Intellectual property also contributes to the cultural development and economic improvement of some countries. However, with the development of technology, intellectual property is easier to reproduce, disseminate, and save for anyone to

enjoy since it has become a product of necessity. Hence, this technology can also bring disadvantages because copyright infringement is easier to do, thus threatening the moral and economic rights of creators and copyright holders.

This is clear with the increase in piracy cases and the high value of loot by the Ministry of Domestic Trade and Consumer Affairs (KPDNHEP). KPDNHEP data in 2018 shows that as much as RM 1074512.00 was successfully confiscated through the Trade Description Act 2010 while as much as RM 1178938.00 was for the Copyright Act 1987. This happened because of a lack of awareness regarding the importance of protecting intellectual property rights and offenses for intellectual property infringement. Therefore, this study needs to be conducted to see the extent to which university students are aware of the importance of intellectual property protection. This is important as university students are potential innovators or they may inadvertently infringe on the intellectual property rights of others.

Despite having comprehensive legal protection and yet, Malaysia is still seen to be behind developed countries in protecting their respective patents, designs and products, behind Japan, the United States, Europe, China and Singapore. Not many local companies know the importance of registering their respective patents, trademarks and industrial designs, leading to disputes both at home and abroad due to ignorance and insensitivity. This scenario is of course very detrimental to the country's productivity and has a negative impact on the development of the intellectual property industry in Malaysia (Mohamad Sofee Razak, 2010). This happens because of the lack of knowledge about the advantages and benefits of intellectual property registration for businesses as well as indifference to the importance of protecting intellectual property in the community (Harían Metro, 2020).

Data from WIPO shows that registrations for patents have decreased in 2020 with patent filings decreasing to 1923 compared to 2141 filings in 2019. The same is true for trademark filings which are 29689 filings in 2020 compared to 32834 in 2019. This decrease may be due to by the global pandemic (Figure 1).
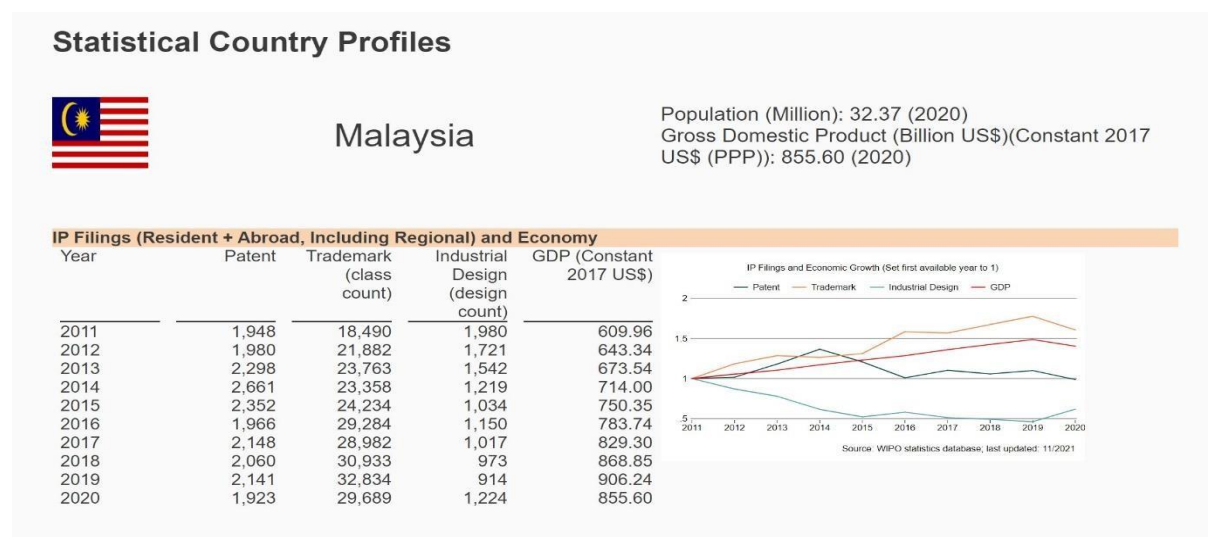
Figure 1. IP filings in Malaysia

In addition, Figure 2 shows that patent applications by foreign nationals are much higher than local citizens with a total of 5839 filings compared to 989. This shows that the awareness of intellectual property among local citizens is still low.

Patent			
Patent Applications			
Year	Resident	Non-Resident	Abroad
2011	1,076	5,376	872
2012	1,114	5,826	866
2013	1,199	6,006	1,099
2014	1,353	6,267	1,308
2015	1,272	6,455	1,080
2016	1,109	6,127	857
2017	1,166	5,906	982
2018	1,116	6,179	944
2019	1,071	6,480	1,070
2020	989	5,839	934
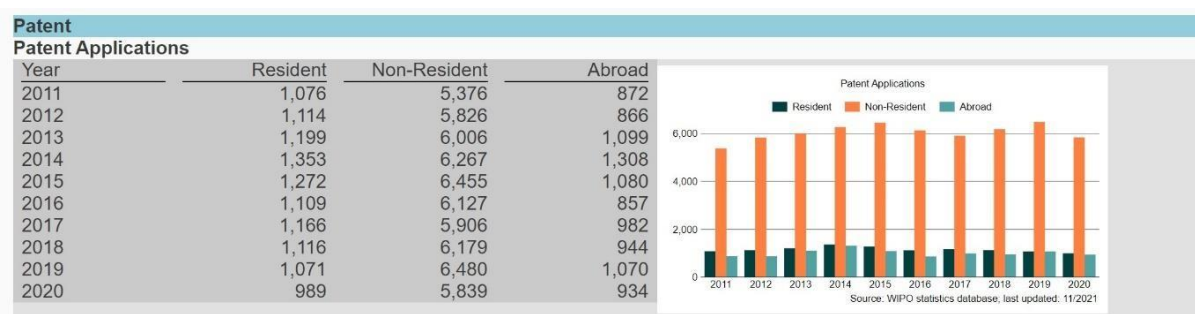
Figure 2. Number of patent applications

Referring to the data above, it is important to know the students understanding with regard to the protection and commercialization of intellectual property. As such a Battle of Poster Competition was held for the students taking Fundamentals Intellectual Property Law (UHAK 2072) Semester 2 2021/2022. 200 students from Section 1 to Section 6 were involved in this competition.

METHODOLOGY

According to Chua (2011), the research design is a strategy designed to conduct research and a plan for implementing the strategy that has been designed. While Ray (2008) stated that research design is a chain of choices in the decision-making process that covers aspects of the time and level of data analyzed. This study evaluates safe cosmetic use behaviour among university students using the A.I.D.A model. For this purpose, researchers need to detail the results of the study and choose the best method to obtain the desired study results (Babbie, 2007). The results of the study are determined by the method and design of the study, where the design of the study is determined by the purpose of the study (Chua, 2011). For this study, the researcher used a quantitative method which is data collection through questionnaires. Babbie (2002) stated that structured questionnaires are easy to manage and code. He added that statistical analysis has a significant impact on structured questionnaires. The researcher will analyze the data collected in the form of frequency, percentage, mean, and standard deviation based on pre- and post-questions to the respondents.

MAIN RESULTS

Questionnaires were collected and processed based on specific codes using SPSS software to obtain mean values. The data of the current study is analyzed using descriptive methods to identify changes in the behavior of university students regarding the awareness and protection of intellectual property rights.

In order to measure changes in consumer behavior, this study allowed respondents to make an assessment of 14 items believed to be indicators for evaluating AIDA. Initial and final research findings (pre and post) from the questionnaire are summarized in the table below:

Table 1. Final research findings

Bil	Item	Mean Value (Pre)	Mean Value (Post)	Changes
1.	I have a positive attitude about Commercialization of intellectual property.	4.45	4.58	+0.13
2.	I am taking intellectual property Commercialisation as my primary consideration in exploiting/licensing/assigning of my intellectual property rights.	4.36	4.42	+0.06
3.	I started to understand the purpose of Commercialisation of Intellectual Property.	4.45	4.49	+0.04
4.	I understand the challenges of Intellectual Property Commercialisation.	4.39	4.47	+0.08
	Total Mean Awareness	**4.24**	**4.49**	**+0.25**
5.	I am starting to like the idea of Commercialization Intellectual Property regarding my personal and property rights.	4.39	4.42	+0.03
6.	I am starting to plan to Commercialise my personal and property rights through Intellectual Property.	4.22	4.23	+0.01
	Total Mean Interest	**4.31**	**4.33**	**+0.02**
7.	I start to try to Commercialise my Intellectual Property (i.e. copyrights, patents, trademarks, industrial designs, and trade secrets).	3.06	4.35	+1.29
8.	I will be using Intellectual Property Commercialisation as effective as possible to improve the quality of life for consumers and business sustainability.	4.31	4.41	+0.1
9.	I am looking for in-depth information and knowledge about Commercialisation of Intellectual Property.	4.27	4.39	+0.12
	Total Mean Desire	**3.88**	**4.38**	**+0.50**
10.	I would highly recommend others to Commercialise their Intellectual Property.	4.48	4.48	0
11.	I am going to Commercialise the Intellectual Property wisely.	4.40	4.47	+0.07
12.	I am willing to purchase Commercialised Intellectual Property products.	4.29	4.49	+0.2
13.	I am willing to pay for Commercialised Intellectual Property products even if it is expensive.	4.08	4.29	+0.21
	Total Mean Action	**4.31**	**4.43**	**+0.12**

Table 1 shows a comparison of mean scores for the items studied. Overall, there was an increase in the mean of each item. The pre and post study found that from the behavioural aspect, there was a positive development after the competition series between 0.03 and 1.29. If observed, it was found that the statement "I start to try to Commercialise my Intellectual Property (i.e., copyrights, patents, trademarks, industrial designs, and trade secrets)" which measures desire shows the highest increase. While the statement "I would highly recommend others to Commercialise their Intellectual Property" which measures Action gives the lowest mean reading. This finding gives an overview of the development of changes in the user's level of Awareness, Interest, Desire, and Action. This also shows that the effort to hold this competition is achieving its objective.

ANALYSIS MODEL AIDA

For the current study, the traditional marketing funnel approach, known as the AIDA Model (Awareness, Interest, Desire and Action - Awareness, Interest, Desire and Action) is used. The AIDA model developed by St. Elmo Lewis in 1898 has been around for more than a century. It describes the various stages of the sales process in the buying behavior that will eventually lead to a customer purchase. The AIDA model in this campaign aims to introduce the concept of intellectual property to university students first before attracting their interest in protecting intellectual property. Once university students have that level of awareness and interest, stimulation and stimulation can help their desire to protect and commercialize their intellectual property. This model suggests that users go through successive phases in response to a simulation to 4 levels namely awareness, interest, desire and behaviour. Belch and Belch (1995) summarized these four levels into three states of attitude as presented in Figure 3 known as affective, behavioural and cognitive. In the current study, these three levels are known as setting learning goals. In other words, the researcher wants to study the results of knowledge transfer through competition by measuring the interrelationship of these three states of attitude.
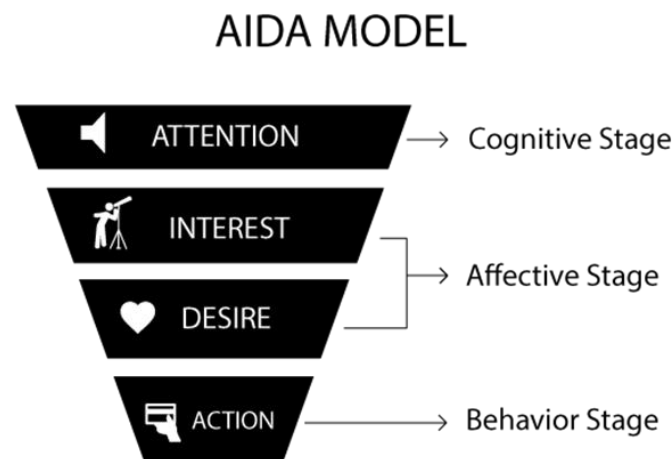
Figure 3. AIDA model

As shown in Figure 3 above, the three levels of attitude are the cognitive level (the individual's belief about the object created from the attention given to it), the affective level (the individual's positive or negative feelings towards the object that stem from interest and desire for the object) and the behavioral level (the individual's willingness to take action on the object) (Belch and Belch, 1995). The model shows that there is a sequential connection between the levels.

CONCLUSION

Based on the analysis as shown in Table 1, the results of the study show that the level of desire (desire) is at the highest increase (overall increase mean 0.50) which proves the success of this program in increasing the desire of students to protect and commercialize intellectual property. On the other hand, the lowest mean change is in the dimension of interest, giving an indication that other interventions need to be carried out to encourage students to change their interest in intellectual property protection. For the overall mean values of the other dimensions, there is not much difference between the mean changes that occur. Based on the findings of the study, for the purpose of improving the program in the future, the researchers suggest that the next intervention involves a more interesting interactive program involving a speaker from the

Intellectual Property Firm who gives a presentation related to the importance of intellectual property protection in practice. Researchers also suggest inviting an intellectual property lawyer to discuss related to cases of intellectual property infringement from a legal point of view.

Overall, this study received good and positive feedback from the respondents. Respondents rated at a high level for all statements that showed an encouraging response. The findings of this study can be used by the university in designing programs related to awareness more efficiently and effectively. In the end, the findings of this study focus on the AIDA Model. Through this competition, all elements of the model were successfully improved, and the participants received high-impact benefits.

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THE HEUTAGOGY METHOD'S IMPACT ON ENGINEERING DRAWING TEACHING

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ABSTRACT

Engineering Drawing is a required (Discipline Core) course for Semester 1 Mechanical Engineering Diploma students in Malaysia Politeknik. This 3 credits hours Engineering Drawing course requires students to draw engineering drawings in two parts: (i) manual drawing and (ii) computer-aided drawing. The problem was initially brought up when a few students failed to complete assignments, delayed submission and did not submit them at all. Students complain because they don't remember and understand the drawing approach, which causes them to fail to submit the required assignments. This subject course evaluation method is based on 100% continuous evaluation marks. Students may fail or receive a poor grade. Lecturers also had to hold extra classes on weekends to help weak students because the students informed the lecturers that they did not have materials that could help with Independent Learning Time (ILT) in the hostel. Therefore, as a solution, T- HEUGAR was developed. T-HEUGAR has gone through 2 prototype phases: testing and analysis. As a result, an Engineering Drawing Book Using Augmented Reality Technology that based on Heutagogy method approach was created. T-HEUGAR has been validated for use and standardisation instructions have been created for use. T-HEUGAR is able to improve the implementation time of Teaching and Learning (T&L), and importantly, T-HEUGAR is able to improve student performance reaching grades C and above, improve the quality of students' ILT, and improve teaching aids.

Keywords: Augmented Reality, Engineering Drawing, Teaching and Learning

INTRODUCTION

All facets of society have had to adjust since the advent of Industry 4.0, utilising more digital technology to carry out their operations sustainably (Devisakti & Muftahu, 2022). In accordance with industry 4.0, the current rapid growth of information technology has given the use of technology a fresh boost, particularly in the sector of education. The use of scanning technology as a learning tool in Augmented Reality (AR), one of today's breakthroughs, is growing in popularity (Hasan et al., 2019).

In fact, the shift in instructional strategies is consistent with time changes. The modern teaching and learning methods are impacted by the rapid changes in technology. Information and communication technology (ICT) has undoubtedly made a substantial contribution to education, particularly in the field of engineering where instruction must keep up with technical advancements (Ismalina et al., 2018).

Subsequently, IoT offers several advantages in the setting of higher education, extending instructional strategies and learning opportunities from improved online courses to mobile technology integration and effective teaching techniques. IoT gives students improved access to course materials, the ability to track important resources, and real-time or archived interactions with teachers and other students (Negm, 2022). While being able to address issues that occur, in parallel to the existing circumstance.

Students in the first semester of the Diploma in Mechanical Engineering at Polytechnic Malaysia are having trouble with their core subject, Engineering Drawing, which is 3 credit hours. This subject requires students to draw engineering drawings in two parts: I manually, and (ii) using computer-aided drawing. When some students didn't finish assignments, submitted them late, or didn't submit them at all during the June 2018 session, this issue was first brought to light. Students claim that they forget and don't comprehend the sketching method, which prevents them from submitting the needed tasks. The Engineering Drawing Course Evaluation Method, which is based on 100% continuous assessment marks, makes this a difficulty. Students might not pass or get bad scores. The students alerted the instructors that there were no resources available for Independent Learning Time (ILT) at the dormitory, therefore the lecturers were forced to organise additional lessons on the weekends to assist weak students.

Thus, T-HEUGAR which is apply heutagogy method was created as a remedy as a problem arose. Heutagogy entails taking up residence in the world of the student. To encourage students to explore and learn via self-directed activities, educators should also concentrate on objectives and delivery rather than teacher-centered learning. This is in addition to understanding how to master self-determined learning (Martínez & Muñoz, 2021). The continual transition of learning from pedagogy to andragogy and then to heutagogy, which has opened up a wealth of new prospects for the learning process, demonstrates the necessity of change in the classroom (Mohamad et al., 2020). Besides, the heutagogical approach sets practical limitations to assist educators consider how to use these kinds of assignments in the classroom and is the best match with the learner-centered, unstructured student engagement that happens while utilising ICTs (Lynch et al., 2021). Additionally, although heutagogy is linked to independent learning, it may also be used to describe a more comprehensive view of student ownership and citizen empowerment (Stoten, 2022).

METHODOLOGY

An instructional model called the ADDIE model design may be used as a roadmap for developing learning resources and software. This model is one of the teaching models that frequently serves as the foundation for other instructional design approaches (Stapa & Mohammad, 2019). This study employed the ADDIE model and T-HEUGAR, a developed project, has undergone testing and analysis in two prototype phases. This led to the development of the Engineering Drawing Book Using Augmented Reality Technology. The use of T-HEUGAR has been approved, and standardised guidelines have been developed.

T-HEUGAR is able to reduce the time it takes to implement teaching and learning, but more importantly, T-HEUGAR is able to enhance student performance at the grade C and above level, enhance the calibre of their ILT, and enhance the effectiveness of teaching aids.

The basic method used by instructional designers and training developers, known as the ADDIE model, consists of five steps: analysis, design, development, implementation, and evaluation. Rosset created the ADDIE model in 1987, and it has since served as the foundation for the creation of several additional models.
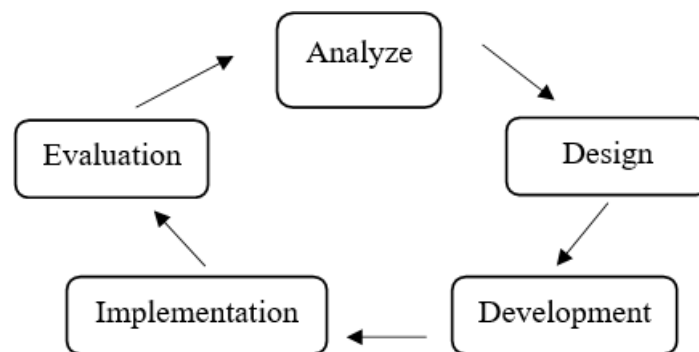
Figure 1. Model of teaching ADDIE
(Source: Module Header DesignEducationalTechnology and Instructional Model 2012)

Analyze Phase

The analysis phase is the first stage in the ADDIE paradigm of instructional design. The goal of the analysis phase is to choose the inputs that will support the creation of a product. Therefore, this phase includes determining the scope of the proposal, the characteristics of the target audience, and goals connected to the educational process and students (Stapa & Mohammad, 2019). The instructional design model's phases are built upon phase analysis. To improve the planning of teaching aid creation, an assessment of the needs for teaching aids in the learning process is conducted. Researchers have done some studies on the issue of the engineering design subject's poor academic performance. In this stage, the responses to the augmented technology surveys given to the students are also analysed.

Design Phase
Changes in the concept of learning, the study-education technique to be used, interactive feedback systems, interface usability issues, and others are all part of the design process. The second step in creating training materials using the ADDIE model is design. This phase is applied after Phase 1 is finished and serves as the "blue print" or spine of planning during the designing process. A design for an engineering drawing book has been familiarised using augmented technologies.

Development Phase
The development phase's goal is to put the planned building's structure into practise according to the specifications from the first two processes. This phase "translates" the tasks listed in Phases 1 and 2 of the prototypes to make them clearer. According to the Polytechnics Malaysia syllabus, researchers created an engineering book that uses an augmented reality technique.

These elements must to be used to produce engaging teaching tools that are both transportable and user-friendly.

Before   After

Figure 2. Development phase

Implementation Phase

The parts are added to a learning platform that is accessible during the implementation process, and tests are also run. Any temporary review of instructional materials and related resources conducted to ascertain their applicability in the actual world is known as the implementation phase. This stage entailed creating instructional materials in accordance with the development phase's plans. Testing was done at this time. Testing will be done against research-developed teaching resources. Students will participate in this phase as well, using the teaching aid prototype before it is published. Tuanku Syed Sirajuddin Polytechnic students participated in this phase, which aimed to evaluate the design's adaptability, the technology's efficacy, and the user-friendliness.

Evaluation Phase

The evaluation phase strives to design and deploy structured tools for monitoring the efficacy of the plans, and it also aims to examine the evolutionary process involved. the evaluation step, which is the last stage. The prototype that was fixed in phase 4 will be assessed in this phase from two perspectives: (i) usability evaluation and (ii) appropriateness assessment. Three experts will assess the teaching tool that engineers produced using the criteria for usability evaluation. On the other hand, the lecturer who teaches the subject of engineering drawing will evaluate the appropriateness from the perspective of effectiveness against the target user (students)

Figure 3. Evaluation phase

MAIN RESULTS

As a consequence, the students' independent learning time (ILT) is of higher quality. T-HEUGAR can in fact support students' independent learning time (ILT). In the past, students have griped about their inability to recall and comprehend sketching skills. The development of T-HEUGAR has aided students in doing independent study outside of class without the guidance of lecturers. This demonstrates that the heutagogy strategy used to write this book was successful. The level of student satisfaction indicates that the learning time is also more concentrated and high-quality. Additionally, the drawing evaluation is finished on schedule.

Consequently, the percentage rate of student achievement above grade C increased by 8.1%, which is 100% in Session I 20211/2022 compared to 91.9% in June 2018 Session as shown below.
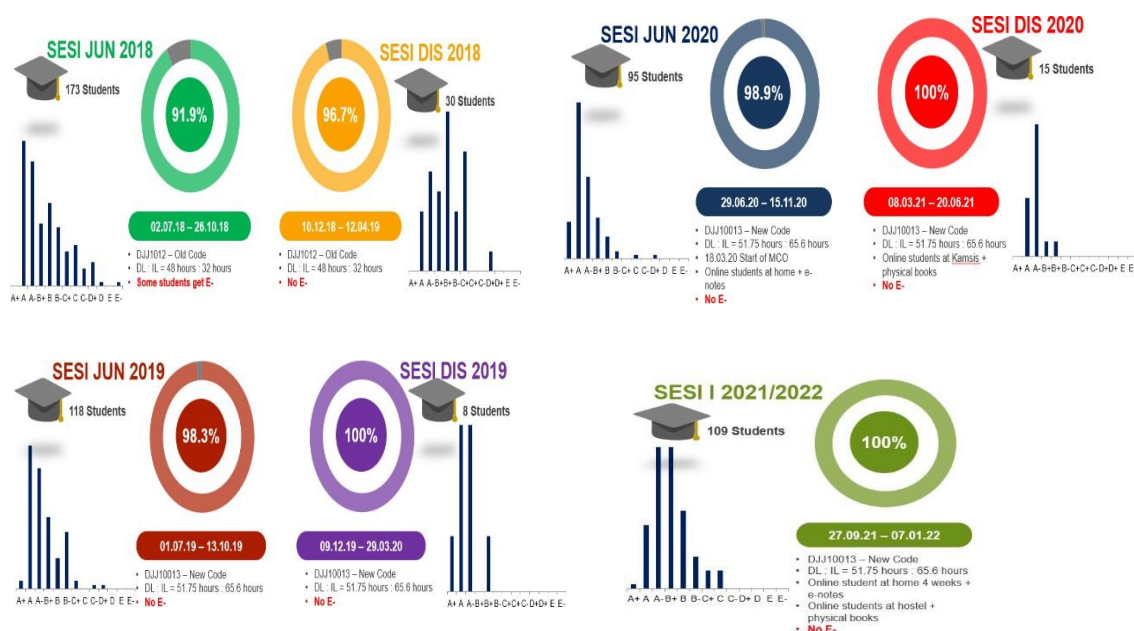
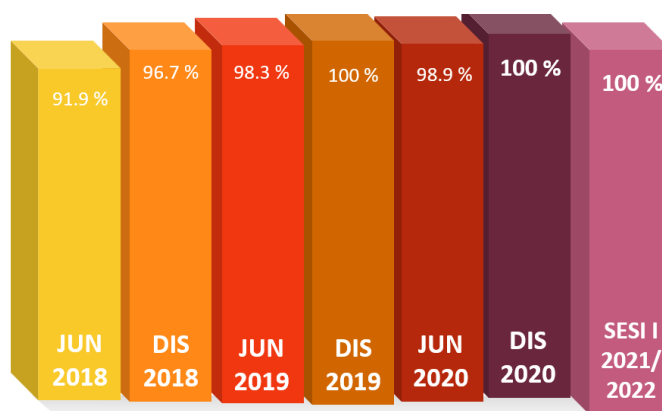**Figure 4.** Percentage rate of student achievement

Figure 5. Bar chart of student achievement

Figure 5 above illustrates how utilising T-HEUGAR enhanced the percentage of students achieving above grade C. Additionally, after employing T-HEUGAR, teaching and learning time limitation difficulties are no longer an issue. Students have also been successful in finishing and submitting homework on time. Therefore, lecturers are no longer required to offer extra classes.

CONCLUSION

This leads to an advancement in technology. Researchers worry that the younger generation won't pursue careers in engineering, technology, science, and mathematics because they believe these fields are exceedingly hard to learn and master. As a result, the use of augmented reality technology and heutagogy method in instructional books has been established with the use of a smartphone. This aids students by offering a medium of augmented reality technology in line with the 21st century learning technique. As a result, by assessing how well they performed on the tests, the students' comprehension of the subject of engineering drawing has improved.

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MOVIE AS ACTIVE LEARNING TOOL FOR EFFECTIVE EXPERIENTIAL LEARNING

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ABSTRACT

In this era of technology, education has evolved particularly in teaching and learning method. Apart from the traditional in-class teaching, among other effective teaching and learning tools include blended learning, active learning and experiential learning. This paper emphasizes on how movie can be an effective medium in teaching and learning to enhance student's understanding and knowledge on a particular topic. This study was conducted on accounting students who have attended audit and internal audit courses at Universiti Teknologi Malaysia. A questionnaire survey was distributed to students who watched a movie titled 'Inside Job'. Data gathered was analysed using descriptive analysis. Findings revealed that students find that by watching the movie it improved their understanding on fraud, forensic accounting, whistleblowing and professional ethics. It was also found that student can relate theories learned in class with real-life situation. Henceforth, movie has proven that it poses effectiveness in student's learning experience. This teaching method can be extended to other topics in audit, accounting, finance or even management and marketing. It is recommended that future research can explore students' perception with relate to the use of active learning tools in other courses such as Business Ethics and Corporate Governance and Corporate Finance.

Keywords: Experiential Learning, Fraud, Forensic Auditing, Whistleblowing, Ethics

INTRODUCTION

Experiential learning refers to a process of learning by experience which may include activities such as interaction, observation, hands-on activities, walk-through activities or even watching movies. According to Butler et al. (2019) and Mortimer (2017), experiential learning can greatly instil student's critical thinking skills. Additionally, McCarthy (2016) emphasised that a learning technique for instance active learning, interactive learning or 'learning by doing' will bring positive effect on an individual. Hence, efforts to use movie as part of learning is expected to provide students with a different learning experience apart from traditional in-class lecture. Experiential learning enables students apply their knowledge, express their reflection on topics related on the movie and stimulate critical thinking skills.

Likewise, Blasco et al. (2015) highlighted that cinema (movie) is one of an audiovisual version of storytelling which is able to inspire emotions and memories that eventually can develop reflective attitude in an individual. This coincides with Nalevska1 and Kuzmanovska (2020) who argued that any form of activities brought into effective learning or education purposes that aim to motivates a greater learning experience.

This study was conducted to examine and discusses whether using movie as part of teaching tool can boost student's understanding and critical thinking skills with relate to topics previously taught in the class. It is expected that learning via movie is able to provide students with exposures on a real-life scenario, while delve into the story plots in the movie thus enhance their learning experience. This can gauge student's understanding based on what they have watched in the movie with what they have learned theoretically on fraud, accounting, audit, ethics, whistleblowing and governance. With advanced use of technologies in current education, movies can be promoted as an innovative active learning tools in class, particularly when students can get access to movies easily at their convenience.

PRIOR AND SUBSEQUENT TO WATCHING INSIDE JOB MOVIE
The 'Inside Job' is a documentary movie with collections of real based scenario of fraud and business misconducts in large corporate companies. The selection of this movie is based on its elements that covers topic taught in class including fraud, forensic accounting and forensic auditing, whistleblowing and ethics. Prior to assigning the movie, students were given a chalk-talk lecture in the class to explain important definitions and key points related to the topics. Then, students were given questions on why does a person or organization is tempted to commit fraud and types of evidence forensic accounting or investigation in the movie. Students given allowed a week to watch the movie at their convenience while searching for answers to the questions. Subsequently, students were required to present and discuss their case answers in the class while allowing them to provide reflections and opinions of what they found or learned from the movie.

METHODOLOGY
A survey questionnaire with 5-point Likert scale using Google Form was distributed to all 49 students in who attended the Internal Audit course at the Faculty of Management, Universiti Teknologi Malaysia (UTM) in year 2022. They were required to watch the movie titled 'Inside Job' prior to answering the questions. A total of 71.45% response rate was received (35 responses). Data gathered and analyzed using descriptive analysis to observe student's perceptions related to learner's experience and whether the movie has effective impact on their understanding of topics on fraud and whistleblowing.

MAIN RESULTS

This study uses primary data collected from respondents based on their perceptions on the statements or questions distributed to them. This section reports the findings attained from the descriptive analysis performed and discusses the findings. The demographic analysis on respondent's background, shows that there were 25 female (71.4%) and 10 male (28.6%) who participated in this survey. All of the respondents were students who attended Audit 2 course in 2020 and attended Internal Audit course in 2021. Table 1 illustrates the findings gathered from survey questionnaire which captures information which aims to examine students' perception when using movie as experiential learning tool to enhance their understanding on topics related to fraud, forensic accounting and audit, and ethics.

Table 1. Findings of student's perception on 'inside job' movie to enhance learning

Survey Items	Percentage (%)				
	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
The movie 'Inside Job' enhances/ improves my understanding on topic of Fraud, Forensic Accounting and Auditing	0	0	0	37.1	62.9
I can relate to what I have learned in class when watching Inside Job	0	0	11.4	28.6	60
I can differentiate between what is ethically 'right' or 'wrong' in the movie	0	0	2.9	25.7	71.4
I was able to answer the questions (on Red flags and evidences in Audit investigation)	0	0	11.4	34.3	54.3
Watching INSIDE JOB is useful for me to understand works done by accountants/ auditors.	0	0	5.2	42.9	51.4
Inside Job made me understand about the effect of fraud, unethical business activities & corruption in business & society.	0	2.9	0	20	77.1
Inside Job made me understand the importance of practicing high ethical values and integrity.	0	0	2.9	28.6	68.6
I enjoyed watching the movie	0	0	25.8	40	34.2
INSIDE JOB made my learning experience more pleasant and enjoyable	0	0	5.7	48.6	45.7

This movie has an impact on enhancing good understanding about what is going on in the real world.	0	0	0	25.7	74.3
I would recommend the use of movie or video clips to enhance student's learning experience	0	0	2.9	31.4	65.7

Results of this study revealed that 100% respondents agree and strongly agree to most of the statements in the survey and the movie Inside job provides them with relevant real- life events or scenarios that help enhanced their knowledge and understanding on topics with relate to fraud, forensic accounting, ethics and corruption. Following that, a total of 88.6% respondents agreed that this movie enables them to relate with what was learned in the class. While, 71.4% respondents strongly agree that they can differentiate between what is 'right' or 'wrong' in the movie, indicating that they understand on values related ethics or integrity. Importantly, 97.1% inclined into agreeing that unethical business activities pose danger and damages to business and society at large.

It was found that a total of 74.32% respondents agree that enjoyed watching the movie, while 25.8% somewhat agree on this. This may be because the movie is a documentary movie with less exciting plots or storyline like any other conventional movies. On contrary, 94.3% respondents agreed that this movie made their learning experience more pleasant and enjoyable. Importantly, all (100%) agreed that this movie brought an impact to enhance their understanding on real world scenarios. Finally, 97.1% students agreed that they would recommend the use of movie or video clips in the class to enhanced student's learning experience.

While most respondents agreed the statements posted in the questionnaire survey, they also presented a constructive and reassuring remarks or observations from watching the movie. Student's feedbacks on the movie are as shown in Table 2.

Table 2. Feedback from students on using movie to enhance learning

1	Great way in helping students understand the topic even more
2	Lecturer could recommend more movies, video clips or real-life situation in the class for better understanding on what we learn in Internal Audit class and how to apply the knowledge that we have when we get into work-life after graduated.
3	Watching more movies or documentary would definitely help students to understand better how fraud can happen as well as the job as an auditor to find out regarding the fraud
4	The movie has a good benefit for it, but I got bored while watching it as it was more of a documentary and less entertaining
5	We can learn fast by watching some of the real situation fraud in the industry
6	Use video in class help me a lot to understand more about certain topic.
7	Watching more movies or documentary would definitely help students to understand better how fraud can happen as well as the job as an auditor to find out regarding the fraud

Generally, students do acknowledge that this movie helps them to understand issues related to fraud, accounting and audit practices and ethics in business. Respondents also agree that more movies or other active learning tools can be brought into class to allow students understand real life scenarios and incidents that provides them opportunities to discuss and criticise on the movie. Hence, this experiential learning via movie would enhance their understanding related to the topics taught in the class. This is consistent with notions highlighted by Butler et al. (2019) on how students are able to thing, reflect and apply their knowledge in experiential learning. Additionally, this would instil greater motivation for students to gain more knowledge, provides them with a holistic overview of real-life events in corporate world.

CONCLUSION

In conclusion, an innovative teaching and learning tools introduced as part of student's learning experience, enables them to enhanced their understanding and develop greater critical thinking skills. This is seen as an innovative way that instil student's learning affective domain. Apparently, the aim of using movie is achieved by the ability to drive their cognitive skills that enhances their understanding by applying their knowledge through sharing of their opinions and perceptions after watching the movie.

This was obvious when students were able to express their feelings and what they understand from the different fraud scenarios seen in the movie, particularly on fraud, ethics, corruption, accounting practices and many more. Nevertheless, this study was conducted limited to only students who attended Internal Audit course in year 2022. Hence, this teaching method of teaching and study conducted post-movie can be extended to other courses in to investigate the effectiveness of using movies to enhance student's experiential learning and understanding especially on topics that are mostly theoretical and technical in nature. This study highlights ideas to researchers and educators about the importance of introducing innovate or new teaching techniques into class to provide more engaging and exciting learning experience.

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HYPERENGINEERING COMMUNICATION SKILLS WITH PECHA KUCHA TECHNIQUE FOR HIGHLY QUALITY GRADUATE ATTRIBUTES

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ABSTRACT

Stakeholders in business programs, particularly marketing programs, emphasize the importance of communication skills. Graduates should develop communication skills so that they can be productive employees at work and communicate their ideas effectively to clients. Despite of the significance of being able to communicate effectively for professional graduates, there is little reference to the development of these skills in the current graduate attributes of many universities. This study was carried out to examine students experience on Pecha Kucha technique used for presenting their assignment presentation. A total of 52 students from Retail Management class have participated in the survey distributed from April to May 2022. Majority of students strongly agree that Pecha Kucha technique helped them to improve presentation skills, increase understanding on the subject also encourage more cooperative learning. It was discovered that critical thinking skills were enhanced among students while they preparing for the presentation.

Keywords: Pecha Kucha, Communication Skills, Graduate Attributes, Presentation

INTRODUCTION

According to the Malaysia Job Street survey in 2013, employers are dissatisfied with the quality of fresh graduates in Malaysia (Jobstreet, 20210. The poor ratings were not generally associated with their academic qualifications, but the poor attitude and communication skills shown during interviews or in the workplace. In some companies, graduates were asked to do a presentation during the job screening process. Some university students find presenting outside or inside the classroom difficult. There is a lack of confidence among students when presenting to large groups of people. Students often find the experience of presenting to be stressful and they feel nervous and apprehensive when it comes to giving an oral presentation (Muthusamy, 2019).

As suggested by Murugaiah (2016), the most commonway to present content verbally is to use Microsoft Office Power Point. However, presenting using Power Point has its limitation such as difficult to concentrate on mainpoints, students always reading from wordy slides, and often running out of time. As an alternative to the time- consuming traditional presentations with text-heavy slides, Pecha Kucha has emerged as a result of the creative use of PowerPoint (Klentzin, Paladino, Johnston & Devine, 2015; Robinson, 2010).

Pecha Kucha

Pecha Kucha is known as a 20x20 presentation format, the slide shows 20 images, with the time given only 20 seconds for each slide. It's non-stop and you've got 400 seconds to tell your story, with visuals guiding the way (pechakucha.com). PechaKucha was created in Japan in 2003 by renowned architects, Astrid Klein and Mark Dytham. The word "PechaKucha" is Japanese for "chit chat." Table 1 lists the advantages of Pecha Kucha from students' perspectives.

Table 1. Advantages of Pecha Kucha technique

The Advantages of Pecha Kucha	1. The presentation is well planned. 2. Pecha Kucha encourages students to practice more before a presentation. 3. The information explained is clear and straight to the point due to the limited time of presentation. 4. The audience pay more attention with the 20 seconds per slide presentation. 5. The presentation slide is more appealing since the use of sentences is very minimal with more graphic/ pictures. 6. Pecha Kucha helps the students focus only on the key points while the normal presentation with no time limit sometimes allows them to talk out of the key points. 7. Pecha Kucha presentation promotes discussion at the end of the presentation session. 8. Presentation helps students in improving their skills in presentation.

Source: Solusia, Fannil Kher and Rani (2019)

Meanwhile, disadvantage of Pecha Kuhca as described by Reynolds (2012) includes the time constraint of 20 second per slide, where the students often find hard time to pick the right word to describe the slides. A similar claim is made that Pecha Kucha requires students to practice and rehearse for a long time prior to presenting. Even though we see the two factors explained above as the two disadvantages of Pecha Kucha, they can be seen as an advantage if these practices are able to reduce the number of mistakes that are commonly made when delivering traditional presentations.

Graduate attributes are defined by the Australian Technology Network (Bowden, Hart, King, Trigwell & Watts, 2000) as the qualities, skills and understandings a university community agrees its students would desirably develop during their time at the institution and consequently shape the contribution they are able to make to their profession and as a citizen. Sometimes referred to as generic skills, transferable skills, core skills, soft skills, graduate capabilities, work-ready skills and key skills, graduate attributes are no longer seen as being independent of discipline knowledge because they interact with discipline knowledge. Students taking the Retail Management course must be able to present clearly and confidently to a large variety of

audiences, which is Communication Skill level 3 as specified in the Graduate Attributes of the University of Teknologi Malaysia.

The purpose of this study is to examine the effectiveness of Pecha Kucha techniques in improving communication skills through presentation. This study employed a descriptive method that aims to describe the effectiveness of the Pecha Kucha technique in learning activities in Retail Management course, which is a 3 credit course. The survey was distributed after the final presentation of report in class. The research was conducted from April to May 2022 with the third-semester students as the research subjects. There were 52 students participated in this survey.

MAIN RESULTS

The results show that learning activities using Pecha Kucha could improve students' speaking skills and self-confidence. By means of Pecha Kucha technique students were trained to summarize information and present it effectively in limited time. Learning to speak became more fun and students realized the importance of choosing the right word to speak effectively. The least popular items receive less than 70% of the votes, including Pecha Kucha which promoted better understanding of the retail subject I presented, improved my English speaking and presentation skills, and contributed to the development of confidence. For other items, majority of the respondents vote strongly agreed to the statements (refer Table 2).
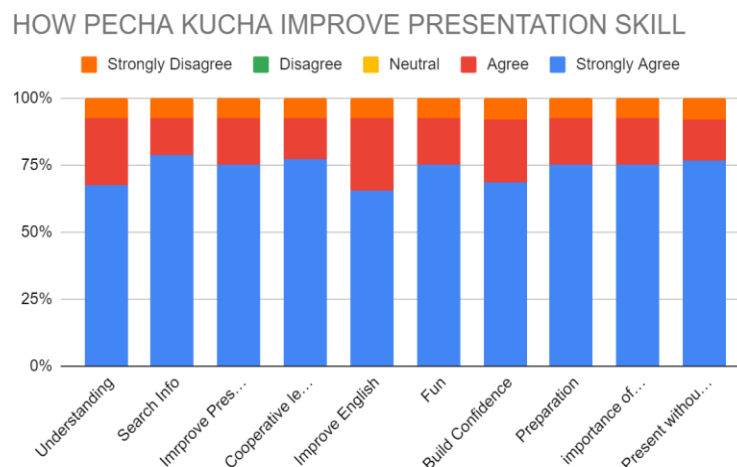
Figure 1. How Pecha Kucha improve students' presentations skills

Table 2. How Pecha Kucha improve communication skills

How Pecha Kucha Technique Improve Communication Skills	Strongly Agree	%	Agree	%	Neutral	%	Disagree	%	Strongly Disagree	%
Pecha Kucha [improved my understanding of theretail subject that i presented.]	35	67	13	25	0	0	0	0	4	8
Pecha Kucha [encouraged me to find more information on the subject.]	41	79	7	13	0	0	0	0	4	8
Pecha Kucha [were an effective tool to help in improving presentation.]	39	75	9	17	0	0	0	0	4	8
Pecha Kucha [encouraged cooperative learning (learning with peers).]	40	77	8	15	0	0	0	0	4	8
Pecha Kucha [improved my English speakingand presentation skills.]	34	65	14	27	0	0	0	0	4	8
Pecha Kucha [provided a fun learning environment.]	39	75	9	17	0	0	0	0	4	8

How Pecha Kucha Technique Improve Communication Skills	Strongly Agree	%	Agree	%	Neutral	%	Disagree	%	Strongly Disagree	%
Pecha Kucha [helped in build confidence while presenting.]	35	67	12	23	0	0	0	0	4	8
Pecha Kucha [made me prepare myself for each presentation.]	39	75	9	17	0	0	0	0	4	8
Pecha Kucha [created awareness on the importance of preparation before doing any presentation.]	39	75	9	17	0	0	0	0	4	8
Pecha Kucha [taught me to present without too much relying on text in the slides.]	39	75	8	15	0	0	0	0	4	8

Student's comments

The survey included a section with open-ended questions. This section was optional for the students. Here are some of the comments found in this study:

What do you like about Pecha Kucha oral presentations in this class?

Managing our script so that we focus on the main point of the topic.

It can train my speaking and presentation skills with creatively.

Save time, not so boring.

An effective presentation because less words used and simple presentation to understand.

The slides are more attractive with more pictures.

Deliver my message in the best, short and optimum notes.

Simple and accurate information.

It's fun and can see everyone's creativity.

Fun and challenging.

Improve my speech.

I got new experience and improve my presentation skills. Besides, encourage me to find important point.

Point out the important point.

It is interesting.

Can enhance our presentation skills and speaking skills.

It makes me more confident to present without reading the slides or text because it is based on picture only and just focus about the main point of the slide.

Present the best part in about the topic, make it short but informative.

Unique presentation because it has a limit time.

Help students to deliver important message in short time.

When asked on whether this technique improve their presentation skills, majority of the students agreed that Pecha Kucha technique helped them to improve presentation skills and increase confidence while presenting. It was found that majority of students commented time and lack of flexibility as the drawback of this technique.

CONCLUSION

As a whole, students tend to have positive attitudes and views towards the use of the Pecha Kucha format in general. However, time constraints and lack of flexibility were reported as drawbacks, despite students reporting that they enjoyed creating and presenting using this format.

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IMPROVING LEARNING OUTCOMES THROUGH APPLICATION OF *KAHOOT* FOR ACCOUNTING COURSE

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ABSTRACT

21st Century Learning is one of the transformations commended by the Malaysian Ministry of Education in the Malaysian Education Plan (2013-2015) to equip students with communication skills, critical thinking and collaboration, or advanced thinking skills. (HOTS). This learning in the 21st century requires the right materials to achieve the learning objectives. Gamification approaches to teaching and learning are recognized as one of the new ways to improve student performance. The purpose of this study is to improve the learning outcomes of accounting students through the application of the kahoot educational game in higher education. This study was attended by 103 students from private university in Year 1 and Year 2. The sampling method used is a targeted sampling focused on students in the accounting programmes in Year 1 and Year2. In this study, a questionnaire was used and data were collected and analysed using the Statistical Package for the Social Sciences (SPSS) version 24.0. Based on the analysis, the Cronbach alpha value of the instrument is 0.80, Research has shown the application of 's gamification concepts to his Kahoot! Well accepted in terms of acceptance, motivation, and student perceptions. This shows that Gamification 's implementation concept uses his Kahoot platform. It can be concluded that applying the Kahoot educational game improves the arithmetic learning outcomes of students in higher institution.

Keywords: Interactive Learning, Gamification, Learning, Innovation

INTRODUCTION

This gamification approach to education is considered as one of the new teaching era that is capable in improving students' achievement. One of the main factors affecting students' achievement is acceptance on the subjects itself. In the learning where gamification is incorporated, attitude affects the extent to which learners can learn and master them quickly (Roll et al., 2018). Self-factor is the factor that most influence someone to learn something new if the student has a positive attitude such as awareness of the importance of a subject being studied. According to Gardner (2014), motivation is one of the components in the motivational construct but differences in factor composition. With the motivation, students will learn harder, diligently, and fully concentrated in the learning process. Motivation in learning is one of the things that need to be highlighted in school learning efforts (Lin-Siegler, 2016).

Motivation is also a stimulus involving the process of generating, retaining, and controlling interest (Harackiewies, 2018). Highly motivated students usually have a strong and steady impetus to continue to be interested in what is being presented because of strong stimulus through incentives and motives. Thus, as a teacher, it is best to choose teaching and learning materials, teaching methods and techniques that meet the needs and interests of their students (Harackiewies, 2018). Teaching through gamification is a student-cantered approach where the student will be more independent while the teacher will only act as a guide for knowledge and not the conveyor of knowledge. Loos et all (2018) claimed that gamification-based teaching methods can replace conventional methods in a variety of ways, especially in a normal classroom environment. In the study by, teachers should choose the teaching approaches that can involve students actively and effectively in learning. This teaching approach allows students to use imagination and thinking skills in making decisions and learners can also experience new experiences in their learning. This study intends to see the influence of student perceptions, acceptance, and motivation towards gamification in learning. In addition, this study also wanted to identify the factors that influence the students in using gamification in learning and to examine the extent to which these factors influence the acceptance of students towards gamification in learning and further explore how these methods help solve problems arising from conventional learning.

Many problems and challenges that make e-learning not implemented in accounting departments of universities are both technological and social in nature, these are educationally, economically, and culturally sensitive (Domingo, 2021). Gan, Menkhoff, and Smith (2015) stated that teaching and learning process should be an enjoyable and rewarding experience for all students. Teachers must use today's technology wisely to bring about change in classroom teaching and learning (Domingo et al, 2016). Some teachers use brute force to scare their students, but then they become anxious and begin to become not interested about attending classes. Acceptance, motivation, and student perception are key factors that need to be emphasized in the development of teaching materials. Teaching based solely on books seen fails to attract students' interest in learning. However, traditional teaching methods are no longer relevant today. Therefore, all educators should use effective teaching methods to achieve optimal results. Student success depends on how you teach. Therefore, it is important for teachers to search for suitable teaching methods for their students.

METHODOLOGY

The study adopted a quantitative survey approach where the questionnaires were distributed through the heads of program in the institutions. This study was conducted in one of private institution in Malaysia. The results of studies were reported descriptively to explain the results. Questionnaires were used as research tools to examine student acceptances, motivations, and perceptions in the context of learning. The questionnaires consisted of sections comprising of demographic profile, student acceptances, student motivations and students' perceptions of adapting the gamification in learning. In addition, the study also analysed instrument reliability based on an α Cronbach value of 0.80, which indicates high reliability of the questionnaire items.

Sample of Study
The population of the study involved 103 students of Accounting Programme at one of the private institutions in Selangor. Then, the sampling method used is a purposive sampling focusing on Year 1 and Year 2 students from Accounting Programme.

MAIN RESULTS

A total of 103 respondents responded to the survey carried out in two semesters with 80 female students (77%) and 23 male students with the following breakdown by year of study: Year 1 (48%) and Year 2 (52%). In this study, data obtained from the questionnaire were analysed using the Statistical Packages for Social Science for Windows Version 24.0 (SPSS V24.0). Results from Part B, Part C, and Part D are presented in the mean and standard deviation table. Averages are used to indicate the level of student readiness in acceptance, motivation, and perceptions of gamification in the context of learning.

Table 1. Main results on mean and standard deviation

Acceptance	Mean Score	Standard Deviation
I appreciate the teachers who incorporate gamification during the teaching and learning process.	3.81	0.64
Gamification makes me not stressed to learn a lesson.	3.97	0.62
I am fully concentrated in the teaching and learning process that incorporate gamification.	4.00	0.61
I respond positively when the teaching and learning process using gamification is executed.	4.16	0.59
Motivation		
I am happy to compete with my colleagues during gamification in the classroom.	3.87	0.82
I feel appreciated with the display of the available gamification marks.	4.07	0.68
I like teachers who incorporate gamification in teaching aid.	4.04	0.71
Perceptions		
I understand clearer on the content of learning by using gamification.	4.13	0.62
I was given the opportunity to explore learning using gamification on my own.	4.08	0.65
Feedback	Neutral	Agree
I have benefited from this gamification.	14%	86%
The game benefits me in understanding the subjects.	11%	89%

Likert Scale: 1= Strongly Disagree, 2 = Disagree, 3= Neither, 4 = Agree, 5 = Strongly Agree
Source: ME Ismail et al. (2018)

Students' acceptance toward gamification
In Part B the questionnaire instrument has four questions regarding acceptance. The highest mean value for the acceptance construct is 4.16 on item; "I respond positively when the teaching and learning process using gamification is executed" and the lowest standard deviation is 0.59. The minimum value as well as the highest standard deviation is 3.81 and 0.64 on item;

"I appreciate the teachers who incorporate gamification during the teaching and learning process.".

Students' motivation toward gamification
In Part C, there are three questions related to motivation The highest mean value for motivation constructs is 4.07 on item; " I feel appreciated with the display of the available gamification marks" and the lowest standard deviation is 0.71. The lowest mean score is 3.87 on item; "I am happy to compete with my colleagues during gamification in the classroom."

Students' perceptions toward gamification
In Part D, there are two questions pertaining to perception. The highest mean value for perceptions constructs is 4.13 in question, " I understand clearer on the content of learning by using gamification." and the lowest standard deviation is 0.62.

From the result on feedback, 86% agreed that they have benefited from this gamification and 89% agreed on the game benefits them in understanding the subjects.

Students are more outstanding in learning when learning is fun (Sawyer, 2017). This statement is supported by Jagust (2018), which states that students stand out when they feel comfortable in their learning environment. This could be a way of recognizing teachers' efforts to create good teaching materials (Aynsley et al.2018). A good teaching tool should correspond to its characteristics. The suitability of the lesson content and teaching materials being taught to ensure that the content of the lesson is clearly communicated to the student especially when involved accounting students where related to the calculation. So, the use of Kahoot! as a teaching and learning platform, respondents seem to be attracted to higher levels of motivational structures (Kuo Ms and Chuang, 2015). According to Gene 2016, gamification enables self-learning by allowing teachers and learners to control the time, content, and pace of learning. Indirectly, it engages students and encourages them to achieve peak learning performance. Accounting students are more concerned with what they can do, believing that calculation is part of gamification. Therefore, smart teachers should use this opportunity to push their students to do well in specific subjects. Students just need to paste the link and pin the game; they can choose the name they like and play the game.

For this study, we choose Kahoot because students can easily understand it even its involved calculation part. Otherwise, students will run away from what they find difficult. Therefore, teachers need to choose teaching methods and materials wisely while preventing negative views from students.

CONCLUSION

As for the conclusion, using Kahoot educational game application basically can increase the learning effect of counting arithmetic. Also, the students are very enthusiastic and active in the learning process. The student learns to develop interaction and communication skills by working together in groups. Kahoot educational game application also encourages the lectures to enhance their creativity and innovation to design technology by only using smartphones and android.

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FACILITATING SOCIAL INTELLIGENCE AMONG STUDENTS VIA SOCIAL MEDIA AND NETWORKING SITES USAGE IN TEACHING AND LEARNING

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ABSTRACT

This paper presents a proposed study on identifying the perceptions of undergraduate students with regards to the use of social media and networking sites in teaching and learning activities at university, and how it may influence their acquisition of social intelligence. An increased focus of employers towards the significance of social intelligence among graduates signify that it should be embedded as part of the outcome of teaching and learning. Meanwhile, the expectation of digital learners on the integration of technologies into teaching and learning activities requires the instructor to impart the knowledge to students in the most creative ways possible. Social media and networking usage in teaching and learning is expected to be able to facilitate students' acquisition of the social intelligence skills as deemed necessary by employers.

Keywords: Social Intelligence, Graduates Employment, Social Media, Teaching and Learning

INTRODUCTION

The concept of social intelligence

Social Intelligence has become a major topic of interest since the publications began appearing in the twentieth century with the work of Edward Thorndike, a Columbia University psychologist who first propounded the concept in Harper's Monthly Magazine in 1920, where he noted that such interpersonal effectiveness was of vital importance for success in many fields, particularly leadership. (Bhat and Khandai, 2016).

Social intelligence is a person's ability to understand and manage other people and to engage in adaptive social interactions. It encompasses two key constituents namely: intrapersonal intelligence and other is interpersonal intelligence. Intrapersonal intelligence is someone's ability to gain access to his or her own internal, emotional life while interpersonal intelligence is the individual's ability to notice and make distinctions among other individuals (Saxena and Jain, 2013).

Meanwhile, Ganaie and Mudasir (2015) described social intelligence as the ability to read other people and understand their intentions and motivations. It is basically the capacity to effectively negotiate complex social relationships and environments. A more recent definition of social intelligence by Awasthi (2021) encompasses the ability to understand self and others so that one can act effectively in social situations while maintaining social relations. In simple words, social intelligence is the capacity to form good interpersonal relations in social settings.

The Value of Social Intelligence for Graduate Employment

The skills that cannot be replaced by technology but are essential to navigating the globalised workforce, such as the ability to build relationships, negotiate and communicate effectively with others, and interact and understand a diverse workplace, has become some of the key attributes driving the economy.

Research amongst 200 employers in organisations of varying sizes across the UK shows that businesses are already beginning to place a higher value on social intelligence, both in terms of hiring staff and progression once in the workplace. Among the important findings of the study were: employers see social intelligence skills as more integral to progression than academic intelligence or initiative; two thirds of employers (63%) would not hire an employee who had low levels of social intelligence; and 62% of employers believe more investment and programmes are needed outside of the school system to help young people develop social skills (Lau, 2016)

Employers report that they are already spending too long interviewing 'good on paper' candidates that lack social intelligence, wasting up to 600 hours a year. It would be helpful to employers if applicants' resumes could reflect their social intelligence as well as more individualistic educational achievements such as demonstrating with examples their ability to listen, work in groups, how they maintain interpersonal relationships, and how they also resolve conflicts and receive feedback from others. The earlier young people learn about and develop skills in social intelligence, the more comfortable and effective they will be when they enter the workplace. Young people often struggle to make the transition between education and work and one of the main reasons is their ability to deal with the dramatic difference between these two environments (Lau, ibid.)

In their study of social intelligence among college students, Bhat and Khandai (2016) found that female college students have been found to have better social intelligence as compared to male college students. Saxena and Jain (2013) study also point to a conclusion that there exists significant difference between male and female undergraduate students on overall social intelligence.

Suggestions for Developing Social Intelligence

Sleigh and Ritzer (2004) proposed four ways for developing social intelligence. First is through formal student presentations where they have to practice and develop confidence in oral communication and maintaining a professional demeanour.

Secondly is via inviting community speakers to give talks on topics that are of interest to students. Through these experiences students can benefit from a role model and are also invited to share opinions through facilitated discussions.

Thirdly, social intelligence may also be developed via organising career building workshops and within these exercises that can involve role-playing different formal interpersonal scenarios to practice professional social behaviour, such as giving feedback to another person or negotiating conflict.

Finally, social intelligence may be acquired by organising more formal professional community interactions. These could be anything from showcasing students' work to the community through mini-exhibitions or through work experience placements that involve interactions with members of the community in a professional setting.

Nevertheless, since social media are being employed on a daily basis by the current generation of students entering universities, the integration of these technologies into teaching and learning is something which is expected by this generation of learners who are coined 'digital natives' or the 'net generation'. This is because they expect to learn using these new technologies and because the aim of higher education should be to prepare them for the requirements of their workplace of the future. Understanding their perceptions of online social networking will provide great benefits to academic researchers as their preferences for online social activities could be seamlessly integrated into their learning experiences (Hamat et al., 2012).

THE PROPOSED STUDY

Universiti Teknologi Malaysia (UTM) undergraduates are expected to possess a range of generic skills namely: communication skills, thinking skills, scholarship skills, leadership and teamworking skills, adaptability skills, global citizen skills, and enterprising skills (Office of Undergraduate Studies, 2020). In order to acquire these generic skills especially communication, leadership and teamworking, and adaptability, certain measures of social intelligence is indeed critical.

As such, the proposed study objectives would be:

1. To identify students' perceptions on the influence of social media (whatsapp) and social networking sites (Linkedin) usage in teaching and learning towards the acquisition of their social intelligence.
2. To determine whether differences exist in perceptions between male and female students.

The proposed study will incorporate a qualitative approach. The population would be the students who were taught by an instructor who embedded the usage of social media and networking sites in their teaching. Selected number of students will be chosen via purposive sampling technique to be included in focus group discussions and in-depth interviews. Data collected will be analysed via thematic analysis.

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Sub-Theme 4
Entrepreneurship Training

THE IMPACT OF TRAINING TO WOMEN ENTREPRENEURS: A STUDY FROM MALAYSIA

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ABSTRACT

Since women have emerged as the primary drivers of today's economy, the entrepreneurial endeavours of women have piqued the interest of a significant number of researchers. Even the government of Malaysia, through the Ministry of Entrepreneur Development and Cooperatives (MEDAC), has provided a variety of trainings, supports, and programmes to make it easier for women to start their own businesses. Despite this, the level of training and mentoring is still not good enough to be considered satisfactory. Therefore, the purpose of this study is to investigate the effects that training has had on women entrepreneurs in Malaysia. This study's research design focused on primary data collected through a self-administered questionnaire distributed to 30 training participants. The instruments evaluated pertinent areas such as demographic and business information, as well as knowledge of the three types of training provided, namely (i) Business Model Canvas (BMC), (ii) Digital Marketing, and (iii) Financial Literacy. The survey results show that training has a significant impact on women entrepreneurs. The study's implications are discussed, along with some recommendations.

Keywords: Women Entrepreneurs, Training, Business Model Canvas (BMC), Digital Marketing, Financial Literacy

INTRODUCTION

Women represent a significant percentage of Malaysia's population, and the country places a high value on the contribution that women entrepreneurs make to the expansion of the economy here now. In this age of globalisation, the world of business is not uncharted territory for the women of Malaysia. It is not impossible that one day these women will pave the way for others in the business world if they continue to exhibit the same mentality, commitment, and desire that they do today. This is due to the fact that pushing factors, which include psychological factors, environmental factors, family background, and marriage results, are motivations for women to continue to be determined to succeed and to venture into the business world. However, the findings of numerous studies indicate that one must first triumph over a number of difficulties and impediments in order to achieve success in the field of business (Embong & Rusdi, 2021).

In a similar vein, the government is actively sponsoring a variety of events and activities in order to promote and foster entrepreneurialism among women. However, despite their dogged determination, they have not yet been able to become a prosperous business owner. This is due to the fact that a significant number of them do not yet comprehend the primary and modern-day concepts of business, such as holistic planning, digital marketing, the fundamentals of business management, and appropriate methods of conducting business functions (Nazri & Halim, 2021).

As a result, a programme that provides guidance and entrepreneurial training has been held. The primary goal of this programme is to provide 30 women from Johor with the knowledge and skills necessary to develop their businesses with the help of the business model canvas (BMC), the application of digital marketing in business, and financial literacy. This programme was carried out with the collaboration of the Johor State Women's Development Department. Participants in this training programme are required to have between one and two years of prior experience in the business world. For the purpose of determining how successful this training was, a study was carried out both before and after it was delivered. This approach, which is more comprehensive, was developed to assist and monitor the entrepreneurial activities of women entrepreneurs in Johor, Malaysia.

LITERATURE REVIEW

The increasing involvement of Small and Medium Enterprise (SME) entrepreneurs during a period of uncertain economic stability in Malaysia demonstrates that the industry is still capable of stimulating the nation's income holistically. Women-owned businesses account for 20.6 percent of all SMEs in Malaysia, contributing up to RM69.1 billion to the country's GDP and providing 786,132 job opportunities (SME Corp Malaysia, 2019).

In addition, the government plans to increase the number of women entrepreneurs, particularly those who run small and medium businesses (SMEs), by two to three percent annually (Daily News, 30 October 2022). In addition, one of the difficulties that women entrepreneurs face is the difficulty of obtaining business advice (Nazri & Halim, 2021). Other difficulties include the development of technology and the application of digital in business (Ughetto et al., 2020), as well as the lack of systematic basic knowledge (Al-Kwifi et al., 2022). Past studies conducted in the past point to the significance of the business model (Putri et al., 2022; Hutamy et al., 2021) in ensuring that entrepreneurs understand the business concept in a manner that is holistic, systematically, easily, and clearly (Putri et al., 2022). In addition, BMC is extremely well-liked and helpful among start-up businesses, and it contributes to the development of an innovation framework for the future. In addition, the application of technology and digital in commercial settings is of utmost significance in order to accurately and speedily reach user targets (Baharuddin et al., 2022). Facebook page, Instagram, and tik tik are just a few of the social media platforms that women entrepreneurs absolutely need to be familiar with. Financial literacy is also one of the important components in the development of entrepreneurship, but it is one that is frequently neglected (Ripain et al., 2017; Hamdan et al., 2022).

As a result, the purpose of this training programme is to improve women entrepreneurs' knowledge and entrepreneurial skills in order to develop their business by utilising three programs in the training:
    i.   Business Model Canvas (BMC)
    ii.   Digital Marketing (DM)
    iii. Financial Literacy (FL)

METHODOLOGY

This study used a descriptive survey method to identify the effect of the training to the women entrepreneurs in Johor, Malaysia. A set of questionnaires were distributed, and 26 sets of questionnaires were returned by respondents (86.7% response rate). A 5-point Likert scale were employed in the questionnaires.

FINDINGS AND DISCUSSION

The survey on the effect of the training were categorized into three programs: (i) Business Model Canvas (BMC), (ii) Digital Marketing, and (iii) Financial Literacy. The same questions were asked prior to the training and after the training and the finding shows a significant change, as presented in the Table 1, provides a comparison of the mean scores for all of the items that were looked into. In general, there was a rise seen in each item's corresponding mean value. According to the findings of the study that compared behaviour before and after the implementation of this guidance programme, there was a significant improvement after the programme was put into place.

The statement "I have a good understanding of the Business Model Canvas (BMC)" which measures the understanding of BMC shows the highest increase, which is a change of 1.9. If observed, this statement shows the highest increase. While the statement "I know in depth about the techniques of identifying the right target customers through online marketing," which measures a marketer's expertise in digital marketing, yields the second highest mean reading change of 1.3, the statement "I know in depth about the techniques of identifying the right target customers through online marketing." In addition, when it comes to assessing one's level of financial literacy, the statement "I am able to differentiate between income, profit, and cash," which has a mean reading change of 1.2, has the third highest mean reading change. This finding provides an overview of the changes that have taken place in the level of knowledge and skills required to develop a self-employed business among women entrepreneurs.

Table 1. The summary of Pre and Post data

		Mean (Pre)	Mean (Post)	Changes
1	**Business Model Canvas (BMC)**			
	I feel confident to present my business idea to others.	3.6	4.3	+0.7
	I have a good understanding of the Business Model Canvas.	2.1	4.0	+1.9
	I understand the wants and needs of my customer.	3.4	4.3	+0.9
	I fully understand all processes in my business.	3.2	4.2	+1.0
2	**Digital Marketing**			
	I have high confidence in building a business online.	3.5	4.0	+0.5
	I have good knowledge in building a good brand for my online business.	2.8	3.9	+1.1
	I know in depth the techniques of identifying the right target customers through online marketing.	2.6	3.9	+1.3
	I believe in using social media for online marketing.	3.7	4.5	+0.8
3	**Financial Literacy**			
	I realize every business needs to generate income, profit and cash.	4.4	4.6	+0.2
	I can differentiate between income, profit and cash.	3.2	4.4	+1.2
	I am able to record financial information based on the business documents involved.	3.0	3.9	+0.9

CONCLUSION

The purpose of this research is to investigate the perspectives of women business owners regarding the effectiveness of three different types of training: (i) Business Model Canvas (BMC), (ii) Digital Marketing, and (iii) Financial Literacy. As a result, the government of Malaysia, specifically the Ministry of Entrepreneur Development and Cooperatives (MEDAC), needs to play a significant part in improving the plan, policies, and procedures that are in place to encourage the growth of entrepreneurship among women entrepreneurs in Malaysia.

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Sub-Theme 5
Issues In Education

SCIENCE AND THE FRIDAY SERMON
– AN EXPLORATORY STUDY

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ABSTRACT

The hard reality is the Muslims of today end up travelling to Mecca in a jet set not produced by its people, and so are most of the hardware and software in the place of prayer. The state of the science and technology deficit is apparent to those willing to reflect, resulting in a call for its development as a higher purpose of Islamic Shari'ah. With this in mind, this study investigated a small aspect of the religious authority's output in overcoming this deficit – the Friday sermon (*khutbah*) texts. The finding is as has been expected.

Keywords: Friday Sermon, Khutbah, Science, Technology

INTRODUCTION

Last year I chanced upon a local TV channel Al-Hijrah and on air was a re-run of a programme, "*Adik Tanya Ustaz*", led by a celebrity preacher. Rushing to work, I listened half-attentively, but something he said made me halt my walk. And since I could now swiftly operate the TV remote managed to review the relevant segment. This is what the young celebrity preacher uttered crispy-clear to emphasise his statement: "kill" (*bunuh*). He explained that an apostate (*murtad*) must be slayed after all attempts to dissuade the offender have been exhausted. "Must. Kill" (*Wajib. Bunuh*), he repeated the gory words six times without batting an eyelid. Well, I am no child psychologist, nor am I a religious preacher – but that kind of language in front of primary school children is way out of place[1]. I am pretty sure the TV station's owner has a sincere intention at heart, but are we not obliged to promote love, tenderness and manners to children and leave the hard stuff, at least, to the elderly? Anyhow, one of the boys of about nine is obviously perplexed, shocked perhaps (there are three girls and three boys in the studio). Still, what went through the innocent eardrums is irreversible – six times in a span of two minutes. I was dumbfounded – not least because the unknown celebrity preacher failed to back up his claim but the gullibility of the audience. That was the triggering story. The offending video was relayed to my wife, daughters and acquaintances (interestingly, 8 out of ten were indifferent!). But that was as far as it went. I thought of bringing it to the attention of the Malaysian Communications and Multimedia Commission (MCMC) and the TV station itself, but at the very last minute, decided against it; hung up the phone and raised the big white flag. For some unexplained reason, the courage in me to speak up just disappeared into thin air. Personal struggle aside, the point is, amid nationwide drives for artificial intelligence, hybrid

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[1] For an alternative view on the issue of *murtad* see Mohd Asri Zainul Abidin (Worldkuliah, 2018).

and flexible teaching techniques, heightened tension on the appropriate content and context of instructions can remain central to the quality of an education system.

This elaborate reminder brings us nicely to the topic of the study today – science and Muslim's Friday sermon; both (TV programmes and sermons) are day-to-day forms of indirect education in society.

BACKGROUND OF STUDY

Before anyone thinks the study has a sinister intention towards the religious authority, we (the fellow researchers and contributors of this study) would like to make an upfront declaration here that the contents of the Friday sermon in Johor, thus far, have been excellent. Top-notch. The aim is only to bring the already outstanding text to a new level. We must not stop ploughing through in science and technology if we wish to elevate Malaysia to be on par with other more advanced nations. The moment we think we are a master and have learnt enough, we are doomed.

In this context, we would like to raise our hands and admit that our earlier claim on the Malays psyche concerning reverse engineering in the first instalment of this conference was unduly overboard; hence like to take back our words. This is what we said about the community and reverse engineering:

"They have not in the past, they do not today and they never will. And perhaps they can't and never will be able to."

(Bajuri et al., 2021:132)

For that, we would like to apologise. On the contrary, we now believe the Malays can undertake a successful reverse engineering project. Nonetheless, we are adamant with our earlier claim that success in this kind of endeavour is a better milestone of a country's prowess in science and technology than numerous manuscripts and research papers, including league of tables and World competitions.

But for that to bear fruits, it requires society to shift its mindset. It must be understood that counting on other nations for our daily needs and survival is a degrading act since it will only turn us into a dependent and subservient subject and perpetuates the Western World hegemony. The concept of "dignity" (*maruah*) and "peace" (*keamanan*) have to include being free from threat and subjugation from anyone and group. Defining the two life concepts only at the individual level sans state-wide technology deficit is simply too narrow and delusional – way too self-centric and perhaps might even count as a criminal act.

Unfortunately, that is the current Muslims' Achilles heel. Addressing a meeting of the Organization of the Islamic Conference (OIC), former Prime Minister of Malaysia Tun Mahathir Mohammad reiterated that "technologically backward and economically poor, we will slide further and further into depending on others for everything that we need" (Fuller, 2000). The present Muslims' lives are, in essence, in the hands of others. In fact, according to Kamali (2015), Islam and science are closely linked, and the development of science and technology is also one of the higher purposes (maqasid) in Islamic Shari'ah. Ironically, the hard fact is the Muslims of today end up travelling to Mecca in a jet set not produced by its

people, and so are most of the hardware and software in the pulpit and place of prayer. They excel at using technology but not at producing them. With that in mind, this study has investigated a small aspect of the religious authority's output in overcoming this science, technology and reverse engineering deficit – the texts of Friday sermon.

Why? Because listening to the sermon is part of a Friday prayer, a compulsory obligation for Muslim men. As such, an attendee should have heard close to four thousand sermons throughout his life. That is an astronomical amount of lessons and recounting of info and agenda by any account. But, perhaps more importantly, listened to by millions, the advice and warning coming from the sermons can be taken as binding on the Muslim's life – and so are any omissions (such as on the centrality of science and technology). On a side note, the budget allocated to religious authorities in the country has always been huge – over RM1.5 billion a year (Malaysia, 2022), permitting them to spur society's interest in this kind of aspiration.

As a background, the Friday sermons delivered at the majority of the mosques in the country are prepared by the religious authority under each jurisdiction, of which the khatib of the mosques under the direct control of the religious authority is obliged to read word-for-word. Those that are not are also expected to use this text. In all, it is safe to say most of the mosques in similar jurisdictions will deliver the same Friday sermon. For example, the khatibs of the mosques in Johor will deliver the sermon issued by the Jabatan Agama Islam Johor (JAIJ) and in the Federal Territory of Kuala Lumpur by Jabatan Kemajuan Islam Malaysia (Jakim).

Thus far, we have known that the sermons are generally of good quality and emphasise the fundamental of Islam and everyday life matters of Muslims (Ibrahim, 2016). Essentials such as prayers, zakat and respecting the elderly are promoted and reiterated, though not without shortcomings. Perhaps one area that requires fine-tuning is the length of the sermon (Usman & Iskandar, 2021). Cutting it short without losing the quality of the messages will improve the listener's concentration, not least is a sign of the authority's expertise on the subject matter.

The themes of the Friday sermons include religion, family, education, economy, and current issues (see Ismail and Sobali, 2020). "Prevention of drugs starts at home" (current issue) and "zakat: cleaning your soul, prospering your heart (economy) are some examples. They were also evidence of Friday sermons (dated data) on respecting multiculturalism produced by Jakim (Mohd Nor, 2012). The fact that God has created human being of various origins and races were recognised. It is God's command not to insult those who pray other than Him[2].

On a related note, the Friday sermons have also been used to promote Sunni Islam and monopolise the interpretation of religion (Samuri and Hopkins, 2017). Other versións of the religión were unequivocally sidelined. But the more significant concern is the source of proof cited in this weekly religious ritual. In a study in Kedah by Shamsudin (2003), as cited in Sulaiman (2012), only 68.9 percent of the hadiths cited between 1995 to 2000 can be categorised as authentic (*sahih*) and good (*hasan*). A similar finding was also echoed in Selangor. Only 82 percent of hadith cited between 2016 and 2017 were of similar categories (Ismail and Sobali, 2020). To put it plainly, 18 to 31 percent of the hadiths cited in Friday sermons are either[3] weak (*dhaif*), fake (*maudu'*) or unknown. The trend was also witnessed elsewhere (see Zakaria et al., 2019).

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[2] Surah Al-An'am (6:108). "And do not insult those they invoke other than Allah, lest they insult Allah in enmity without knowledge. Thus We have made pleasing to every community their deeds. Then to their Lord is their return, and He will inform them about what they used to do."

[3] Only a hadith of the *sahih* and *hasan* category is normally accepted as adequate proof (see e.g., Shah, 2016).

Nonetheless – a word of comfort for the uninitiated – these slipped-ups can be attributed to (though not the only possible cause) the religious authority's oversight emanating from the eagerness to serve the society (see Shah, 2016). In their enthusiasm, some procedural aspects might have been overlooked.

Those are some of the past findings. This study of ours is different in a small way. It answered a question that might not have been probed in the past. Do the current Friday sermons promote the importance of science and technology? – including reverse engineering. Let us find out.

METHODOLOGY

The subject of the study is Friday sermons written by JAIJ for Friday prayers from 6 May to 28 October 2022 (JAIJ, 2022). In all, content analyses on twenty-six sermons have been conducted, representing nearly 50 percent of a year's worth of Friday sermons.

Precisely, the theme investigated is "promotion of science and technology", and for that, the words we looked out for amongst others are "science" and "technology" and other terminologies such as "reverse engineering", "rockets", "robots", "mathematics", "chemistry", "biology", "innovation", "engineering" and "artificial intelligence". Other words would also be put to test if and when they appeared in the texts.

THE FINDINGS

Promoting science and technology is not part of the Friday sermon's agenda. We found no evidence of this kind of promotion. Language vocabularies such as knowledge (*ilmu*), development (*pembangunan*), nation (*negara*) and independence (*kemerdekaan*) did pop-up in the texts, but they are too wide in meaning to be deduced as referring to the theme under study.

For some ideas, the topic covered in the Friday sermons ranges from: "Islam and sacrifice" and "believing youth is the pillar of Islam" to "a useful human being". (For more titles, see appendix).

CONCLUSION AND SUGGESTION

The finding is somehow as we had expected. Most attentive Muslim men are not unaware of the practice. It has been the tradition. But tradition is not necessarily correct and beneficial, especially when it lulls society into complacency and falls sense of security. In the story of a "man in the whale", a servant of God was thrown off the swirling ship due to overconfidence and complacency in remembering God. That historical story also has a lesson for us all – that we must never be complacent: especially in being mindful of God or any other treasured matter for that part, such as undertaking reverse engineering and acquiring knowledge.

The aim of the study is to be the spark of change. As a reminder, if reminding is useful. For that purpose, it is intentionally small in scale and simple in analysis. Nationwide undertakings that employ advanced analytical software such as NVivo and Dedoose are welcome, though we do not expect the findings to differ significantly, at least not in the immediate years.

Speaking of young children and the spine-chilling video hosted by the celebrity preacher introduced earlier, in the end, the clip remains where it was first shot and stored – like a stone gathering moss.

(*The video clip is available upon request*).

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Appendix

List of Friday Khutbah Title, State of Johor (May to October 2022)

Date	Title
6 May	*Perbanyakkan amalan yang memperkukuhkan silaturrahim.*
13 May	*Berbakti kepada kedua ibu bapa.*
20 May	*Memuliakan guru amalan terpuji.*
27 May	*Rasuah perbuatan yang dilaknat Allah swt.*
3 June	*Kiamat pasti berlaku.*
10 June	*Perpaduan kunci kebahagian hidup bermasyarakat.*
17 June	*Hargai mukjizat Al Quran.*
24 June	*Kepentingan menyimpan harta dengan cara yang halal*
1 July	*Perbanyakkan amalan pada 10 Zulhijjah.*
8 July	*Persiapan menjadi tetamu Allah.*
15 July	*Pengorbanan terhadap Islam.*
22 July	*Nikmat akan dipersoal di akhirat kelak.*
29 July	*Keutamaan amalan di bulan Muharam.*
5 August	*Hijarah mempurkukuh perpaduan.*
12 August	*Keutamaan istigfar dalam kehidupan.*
19 August	*Golongan yang beruntung.*
26 August	*Jadilah manusia yang bermanafaat.*
2 September	*Akhirat kehidupan yang sebenar.*
9 September	*Siksaan neraka yang mengerikan.*
16 September	*Syurga dan segala kenikmatan.*
23 September	*Keutamaan sifat sabar.*
30 September	*Mengimarahkan masjid tanggungjawab bersama.*
7 October	*Sambulan Maulid Nabi tanda syiar Islam.*
14 October	*Mencintai Rasulullah SAW.*
21 October	*Amalan sunnah tanda keimanan kepada Rasulullah SAW.*
28 October	*Belia beriman tunggak pembangunan negara.*

(Source: Webpage of Jabatan Agama Islam Johor: https://jainj.johor.gov.my/ekhutbah-2022/)

THE DYNAMIC OF TEACHING IN HIGHER EDUCATION: AN AUTOETHNOGRAPHY OF MILLENNIAL LECTURER

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ABSTRACT

The present study identified the dynamic changes lecturers adapt to the environment and different generations of students through the ethnographic self-reconstruction method by reviewing personal teaching methods and practices. In addition, fifty random respondents from the alums were also surveyed to complement the qualitative method through adapted measurement items from the previous study. The findings suggest that Generation Y (millennial lecturer) is an 'innovative teacher'. Finally, generalisation is being made based on the characteristics of the lecturer reflected by the three domains of learning which is the competence-centred teacher," "the empathetic teacher," and "the innovative teacher." The author examines the network of relationships that would facilitate more positive teacher identities throughout professionalisation. Future studies can focus on longitudinal studies to measure students' performance.

Keywords: Autoethnography, Generation X, Y and Z, Domain

INTRODUCTION

On October 16 2018, my first day returning to teaching after a four-year break, I discovered that I needed to reform my teaching style. This is a consequence of the World Development Report elaborating on 9 crises in learning from 2018. One of them is that learners are often failed by their schools and teachers. The report is not meant to blame the teacher but to draw attention to systemic problems that might impact teaching quality (Khokar, 2018).

I feel helpless and hopeless. My take is that I noticed that the students were not the same generation I used to teach during my earlier teaching career in 2011, who was more or less just 5 years younger than me. This new batch of students was Generation Z; being the first to have never lived without the internet, they are extremely cooperative, independent, practical, value variety, and develop their own distinctive identities (Katz, 2022).

To stay afloat without drowning, I enrolled in several courses within that year, trying to gain momentum toward the career of my passion. The first course I attended was on the digital classroom, and in the program's opening remarks, the speaker asked some of us questions about our teaching method. I volunteered and proudly explained my typical teacher-centred instruction method. To me, "it has always been done this way," … my way. What baffled me is that the speaker soon made me realise that teaching in the twenty-first century is different; learning could never take place the way it did previously. Learning takes place everywhere, constantly, on any topic, and supports all learning preferences with students were given the options to choose. At this point, I may have doubts more than ever that my traditional ways of teaching do not work anymore.

Within that year, I maintained the teaching method and continued exploring several other teaching and learning programs. I had never considered that the quality of my teaching methods might be questioned. I was still unsure which method worked, but I started slowly to study Gen Z.

I found plenty of support indicating that generational differences between instructors and learners impacted student learning performance. Students today are regarded as "digital natives" because they are "fluent in the digital language of computers, video games, and the internet". Hence, instructors must properly map to the learning demands of the present generation of students.

As Generation Y or "Millennials" lecturer myself, I started to understand that bridging these gaps is my key to success, eventually leading to students'' performance. The pedagogical traits of the lecturer should be identified via empirical research since they significantly impact students' accomplishments. Hence, this hybrid research is to identify the millennial pedagogical method for mapping.

In the consequent year, I explored a professional certificate for the facilitator. I was told that while an educator would instruct, a facilitator would rather engage the senses, promote critical thinking, and support learning. Moreover, I thought that was the way to go with this new generation; I became more relaxed.

I was about to adopt the method when a new dynamic development required different measures, and I started panicking. Suddenly, COVID-19 hit hardest, forcing Malaysia's prolonged school and university closures. I know I need skills to survive this I registered in virtual classes. The course emphasises that instruments (tools, i.e. Mentimeter, Kahoot, Edpuzzle, Jamboard, Business Simulation etc.) are just tools.

Although the educator is, in a sense, more significant than the tool, without the proper tools, the educator would not be as effective. However, the lack of tools might make it difficult to guarantee that the learning objectives are satisfied, especially given the current student generation and the rapid evolution of technology.

In this article, I explore my experiences in the dynamic world of higher education especially bridging the gaps between the students (Gen-Z). My research uses the autoethnography method, and the subject is the self millennials (the lecturer, myself) who values the self as a source of information. Additionally, this method recognises that knowledge relies on one's location, identity, and inquiry.

The approach has drawbacks as it is shaped by an analysis of experience that considers reductive academic analyses or theorisation. To reduce bias, a survey that engages directly with theories and research findings is presented in this article to complement the analysis explicitly (Canarajah, 201). In conclusion, this story is not just about me; it is about lecturers' identities that have transferrable effects on other people, including students.

MAIN RESULTS

My first semester of online lessons (due to Covid) was primarily handled using Telegram for discussion due to the difficulties of online learning and the issues my students faced with internet accessibility. I was also unfamiliar with online learning at the early beginning. Later, I switched to recorded YouTube videos and had live Facebook sessions, which students could view whenever convenient. The method, technique, and tools grew dynamically over time, depending on the readiness and confidence level of myself and the students.
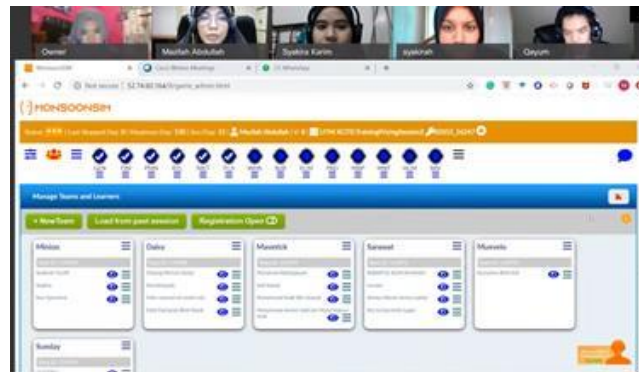
I have also invested in educational gadgets, for example, a transparent green screen, glass screen, wireless microphone and Bluetooth headset (Figure 1). Gradually I have also explored various educational apps and simulations, as per Figures 2 and 3.

Figure 1. Facilities and equipment

Figure 2. Educational apps

Figure 3. Online MonsoonSim business simulation

To complement the autoethnography, I have surveyed 50 alums from Bachelor of Management (Marketing) Batch 201 through convenience sampling. They were chosen since they are the students affected by Covid and have experiences with my teaching method online and offline, thus providing a holistic view. Using a 5 Likert scale, students were asked to evaluate my teaching method according to the dimension below:

Table 1. Mean

No	Types of Personality	Mean
1.	The Empathetic Teacher	4.46
2.	The Competent Centered Teacher	4.64
3.	The Innovative Teacher	4.89

Students rated my teaching method highly on the innovative teacher (enthusiastic, interprofessional, interactive, applies to learn to real-life experiences, uses technology effectively and efficiently and has effective teaching strategies). In contrast, Rayes et al.(2020) found that Gen Y (as myself) was supposed to be an emphatic teacher who emphasised human connection (understanding, patience, strictness, and always being available). They show tough love to their students.

This discrepancy may be due to the sudden Covid-19 pandemic that urges lecturers to modify their teaching method accordingly with no experience and capabilities. However,many did succeed and survive. Many others foresee other opportunities for flexible teaching mediums.

These findings demonstrate how Gen Y lecturers are adaptable to change and willing to explore various teaching methods for the sake of professional experience. They also focus on psychomotor rather than empathetic (affective), and competence is cognitive. Hence, from this study, it can be concluded that Gen Y lecturer is considered a flexible and adaptable generation. It is a perfect match for Gen Z students who constantly crave technology, critical and competitive. In line with this, alums commented on Linkedin.

"Thank you, hardworking mommy, like lecturer Dr Mazilah Abdullah, always trying her best for her students and me. Always trying new software/applications to deliver her class to make sure all of us understand and can get A's in her class."
Fitri Nurliza Syapri
Vice Chancellor Awards recipients; 66th Convocation Universiti Teknologi Malaysia.

This indicates the tendency to apply innovative teaching methods in classes. On the other hand, Rayes et al. (2020) reported that competence-centred teacher strives in a cognitive domain where there were considered to be well-qualified, treat students like adults, be hands-on in teaching students and set expectations for student learning and behaviour. In comparison, Generation Z teachers were branded as "innovative" due to their technological efficiency and effective teaching strategies (Rayes et al., 2020).

In conclusion, effective teachers are most successful when they can close the gaps between teaching and recipients' learning methods. Closing the gap would eventually lead to higher performance. By knowing the qualities of a lecturer, the institution could determine training requirements and professional development plans to match the requirement of students.

The moderated generalisation offered in this study calls for a more in-depth longitudinal and cross-sectional investigation to test its universality and generate a perspective. Most importantly, an effective lecturer can build a relationship with students if both mutually consider each other's character.

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Sub-Theme 6
Adapting Technology in Online/Hybrid Teaching & Teaching

STUDENTS' PERCEPTION ON THE IMPLEMENTATION OF HYFLEX APPROACH IN TEACHING AND LEARNING

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ABSTRACT

This paper describes the students' perception on the implementation of Hyflex mode in Faculty of Management, University Teknologi Malaysia. When the endemic of Covid 19 begun in Malaysia, Universiti Teknologi Malaysia (UTM) started implemented Hyflex mode of teaching and learning. A survey has been conducted to year 3 and year 2 students enrolled in Operations Management and Logistics Management subjects. Of the study population, 47% completed and returned the questionnaire. The results of the survey show that students satisfied with the implementation of Hyflex mode, and they felt that this mode of teaching has a positive impact on their learning.

Keywords: Hyflex, Covid 19, Students' Perception

INTRODUCTION

WHO declared Covid-19 a global pandemic on Jan 30, 2020. Covid 19 pandemic has forced many governments to enforce 'lockdown' to avoid spreading the new infections. Malaysia started the Movement Control Oder from 18 March 2020 and all government and private premises has been closed including schools and universities (Bunyan, 2020). Thus, higher education has undergone significant changes due to Covid 19 pandemic. Many universities around the world were forced to make immediate changes to their teaching and learning methods. As a result, many universities shifted to online or blended learning education from traditional face-to face classes. As a result of these approaches, established online practices have been increasingly used, as has the implementation of newer options, such as synchronous lessons utilizing video conferencing tools. Thus, the move towards online teaching methods has changed how students engage with the course content, classmates, and teachers.

Malaysia begun the transition to endemic phase from 1st April 2022 (Ministry of Health Media Statement, 2022). The overall risk decreased due to vaccinations or acquired immunity, resulting in a relaxation of many restrictions and mandates. Higher education at the time was facing a dilemma about whether to bring students back to campus full- time or continue with online classes (Ambrose et al., 2022). The Academic Circular No 2/2022 issued by Universiti Teknologi Malaysia (UTM) instructs that lectures will be conducted face to face from 9th May 2022 onwards. Despite this, some students were unable to attend due to visa and transportation

issues. In order to address this complex situation, Hybrid Flexible (Hyflex) gave students the choice of participating online or in the classroom.

Hybrid is an approach to education that combines online teaching materials and interaction with traditional place-based classroom methods (Lee, J., 2022). However, according to Lee, J. (2022), by using Hyflex, students can participate in classroom sessions, online sessions, or both through a flexible course structure that presents the components of hybrid learning. The HyFlex approach allows students to have a face-to- face course, as well as an online synchronous course, and an online asynchronous course all at the same time. Depending on their current circumstances, students can attend each session as needed. HyFlex allows students to choose in-person instruction or online instruction in real-time from a remote location (Beatty, 2019). Using Hyflex is also seen as beneficial for lecturers, who are not required to deliver each course separately as face to face and online. Although many online courses today include synchronous components, students have traditionally been passive participants during the session. As a result, it creates unnecessary instructional barriers. No study has been conducted on students' perception of Hyflex method implemented at Faculty of Management, UTM. Thus, the purpose of this study was to explore the students' perception on the implementation of Hyflex approach in teaching and learning at Faculty of Management (FM – formerly known as Azman Hashim International Business School), UTM.

METHODOLOGY

In order to investigate the students' perception on the implementation of Hyflex teaching approach, a quantitative approach with descriptive statistics were used. The questionnaires were distributed via Google form to students enrolled in Logistics Management and Operations Management course during semester II 2021/2022. The population for this study is 131 respondents.

MAIN RESULTS

A total of 56 respondents answered the survey with a response rate of 42.7%. Table 1 shows the demographic of respondents. From table 1, majority respondents are female (80.4%) and Chinese are the highest responded to the survey (44.6%). The are 51.8% enrolled in Logistics Management course while 48.2% enrolled in Operations Management course. Majority of the respondents (80.4%) used laptop when attending the Hyflex class.

Table 1. Demographic

Gender	Male	19.6%
	Female	80.4%
Race	Malay	41.1%
	Chinese	44.6%
	Indian	7.1%
	Others	7.1%
Course attended in Semester II 2021/2022	Logistics Management	51.8%
	Operations Management	48.2%
Device used when attended the Hyflex class	Laptop	80.4%
	Ipad/tablet	7.1%
	Handphone	12.5%

Figure 1 presents the overall level of satisfaction of respondents with the Hyflex method. From the survey, 65.3% respondents satisfied with the implementation of Hyflex mode while only 5.4% dissatisfied with the mode of teaching.
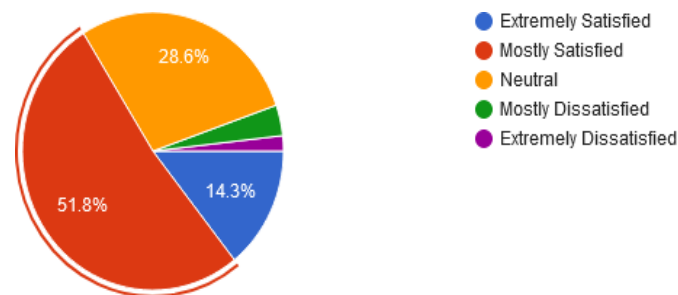
Figure 1. Level of satisfaction with Hyflex mode

Figure 2 compares the impact of Hyflex method on students' learning. The results reveal that 64.3% respondents agreed that the flexibility of hyflex method has a positive impact towards their learning. Only a small number of respondents (6.43%) indicated that Hyflex mode has a negative impact to their learning.
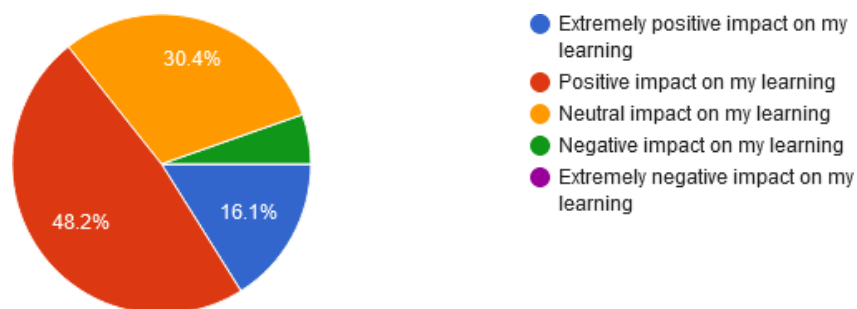
Figure 2. Impact of Hyflex mode towards students' learning

Figure 3 illustrates the respondents' perceptions on the future enrolment to Hyflex class. The majority (78.6%) of the respondents felt that they will enrol in Hyflex class in future.

A minority of participants (3.6%) indicated that they will not enrol in Hyflex class in future.
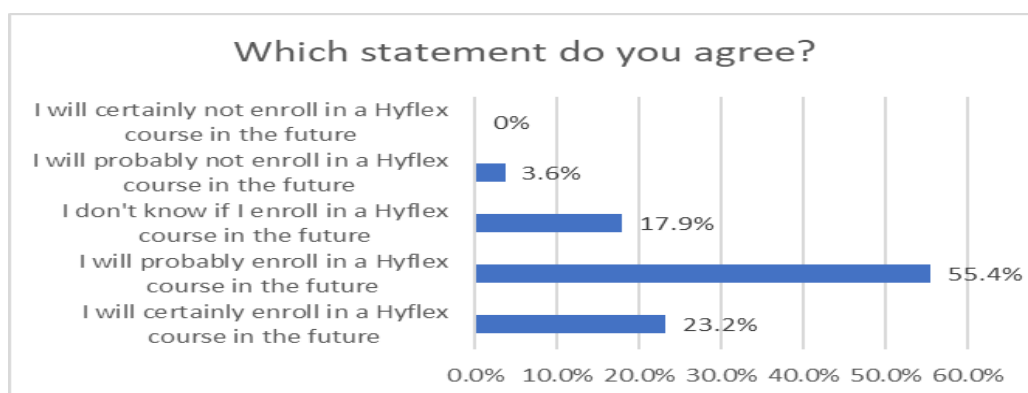
Figure 3. Future enrolment in Hyflex mode class

CONCLUSION

This study was set out to explore the students' perception on the implementation of Hyflex method in teaching and learning. This study has shown that students were satisfied with the method and this mode of teaching has a positive impact in their learning. The results of this study indicate that the gen Z students are more flexible, and they are comfortable with the Hyflex method. The main challenge of conducting the Hyflex approach is to ensure the students engagement for online student. However, with a small sample size, caution must be applied, as the findings might not be transferable to other subjects. Further research might explore the whole FM students' perception and the readiness of lecturers in conducting the Hyflex classes.

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Sub-Theme 7
Teaching and Learning Challenge

CHALLENGES IN ONLINE LEARNING AND PRACTICAL METHODS TO OVERCOME

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ABSTRACT

Nowadays in 21st century era, online learning has been widely adopted as a teaching and learning method. The adoption of online learning can benefit the teaching and learning process. Nonetheless the literatures suggest that online learning is still perceived as less effective compared to face-to-face traditional learning. Previous studies also highlighted issues and challenges in the implementation of online learning. However, there are limited studies conducted on the practical methods adopted by students to address the problems. Therefore, this study intends to identify students' perception on the problems faced in online learning and explore what are the practical methods adopted to address the problems. This study employed qualitative research design as a method of study. Data were collected through qualitative survey, comprising open-ended questions that were conducted online. A total of 43 responses were collected from the survey involving year 3 students of Bachelor of Management (Marketing) from Faculty of Management, UTM. The data then were analysed by using thematic analysis. The findings showed that there are five (5) main challenges faced by students in the implementation of online learning, that is (1) internet problem, (2) loss focus, (3) difficult to understand, (4) device problem and (5) tiredness. The findings also revealed that there are several methods adopted by students to overcome the problems. The findings of this study can provide some information to the relevant parties such as universities and lecturers as to how to support students need in online learning and ensure its effectiveness.

Keywords: Online Learning, Challenges, Practical Methods

INTRODUCTION

The advancement of technology has significantly influenced the development in teaching and learning. Nowadays in 21st century era, online learning has been widely adopted as a teaching and learning method. Online learning refers to a method of teaching and learning that is conducted via online platform by using internet, computers and multimedia technology. In this method, both educators and students use suitable learning platforms in conducting teaching and learning (Gunasekaran, 2002).

The implementation of online learning in education is accelerated by COVID-19 pandemic. During this pandemic, most educational institutions including higher learning institutions

moved to full online learning as a teaching and learning method to ensure the continuation of teaching and learning process while maintaining social distancing.

The adoption of online learning can benefit the teaching and learning process. For example, a study conducted by Mushtaha, Dabous, Alsyouf, Ahmed and Abdraoh (2022) revealed that flexibility in respect of time and place is viewed as the most important benefit of online learning. In addition, Biscoglia and Monk-Turner (2002) found that online learning reduces the time and cost of travelling.

Despite the benefits of online learning, previous studies suggest that online learning is still perceived as less effective compared to face-to-face traditional learning. A study conducted by Singh, Srivastas, Bhardwaj, Dixit and Misra (2020) found that even though students valued the implementation of online learning, they still perceived traditional face-to-face learning is more effective compared to online learning. Similarly, Abidah, Hidaayatullaah, Simamora, Fehabutar and Mutakinati (2020) revealed that online learning was ineffective. This indicates that online learning may have negative effect on the effectiveness of student learning.

Furthermore, previous studies highlighted issues and challenges in the implementation of online learning. A study conducted by Haron, Masrom, Ya'acob and Sabri (2021) identified 5 main challenges in online learning comprises of network and band with limitation, less interactions, hard to learn for technical subjects, new norms for class interactions and stress. In addition, Agustina, Matra and Karimah (2020) found that lecturer's poor performance, students' poor independent study skills, technical issues with the use of technology, heavy tasks, students' low motivation and unsupportive environment constitute main challenges in online learning. Moreover, Ayub, Kadir, Md. Shah and Rahman (2022) revealed that challenges faced by students in online learning comprises of limited access to communicate technology, changes in the reading and reference material search system, spending too much time in front of the screen, changes in students' daily lifestyles and external interference while completing online tasks.

Challenges in online learning may affect the effectiveness of online learning. Although many studies were conducted on challenges in online learning, limited studies conducted on the practical methods adopted by students to address the problems. Knowledge on the practical methods adopted by students would give clear insight on students' needs while they are having online learning (Barrot, Llenaries & Rosario (2021). Therefore, this study intends to identify students' perception on the main problems faced in online learning and explore what are practical methods adopted by them to address the problems.

METHODOLOGY

This study employed qualitative research design as a method of study. Data were collected in November 2022 through qualitative survey, comprising open-ended questions that were conducted online. The questions focus on students' perception towards challenges in online learning and methods adopted to overcome the challenges. A total of 43 responses were collected from the survey involving year 3 students of Bachelor of Management (Marketing) from Faculty of Management, UTM. The data then were analysed by using thematic analysis.

MAIN RESULTS

Students' Perception on the Main Problems in Online Learning

The results showed that there are five (5) main challenges faced by students in the implementation of online learning, that is (1) internet problem, (2) loss focus, (3) difficult to understand, (4) device problem and (5) tiredness.

1. Internet Problem

Almost all respondents perceived internet problem as major challenge in online learning.

> *"The challenges that I experienced in doing online learning is Internet issues. I cannot access good Internet."* (R15)

Respondents viewed that poor and unstable internet connection during online class may interrupt their learning session. They also viewed that they missed some important information from lecturer due to internet problem. A respondent said:

> *"Technical issues are bound to happen in an online-only environment. This may sound obvious but technical issues, and internet connection only add to the online environment's frustration and interrupt new distance learning sessions." (R8)*

2. Loss Focus

Majority of respondents viewed loss of focus as another challenge when they are doing online learning. They viewed that it is difficult for them to remain focus and concentrate while having online class. In this respect, the respondents also perceived that they can focus more in physical class compared to online class. A respondent said, *"For me online learning is quite hard for students to stay focused."* (R4)

Respondents also admitted that they feel sleepy during online class. *"The challenges that I usually face are internet connection and sleepy eye."* (R25)

3. Difficult to understand

Some respondents viewed that it is difficult to understand the lecture in online class. They also viewed that this problem arises due to lacking of communications between students and lecturers. In this regard, they opined that the lacking of interactions have caused difficulty in understanding the lesson. A respondent said, *"Internet connection, less communication makes understanding harder."* (R3)

4. Device Problem

Respondents also viewed that device problem is another challenge in online learning whereby their devices do not work properly, such as lagging or shutting down. As a result, they lost track or unable to catch up with the lesson. A respondent said:

"Sometimes my computer will shut down, or there are moments when my wifi is spotty, and weak monitors can make it challenging to keep up with my virtual classmates and learning environment." (R8)

5. Tiredness

Respondents viewed that having online class lead to low immunity as it requires them to sit in one place without moving for few hours. They also need to spend a lot of times to complete the task given as they received more courseworks. As a result, they have no time to take rest or join other activities. A respondent said:

"There is no rest time for me to release the stress as I always spent a lots of time to keep continuing in doing the works when there are a lots of works. I have also no time to join for extracurricular activities." (R27)

Practical Methods Adopted by Students to Overcome the Challenges

The results showed that there are several practical methods adopted by students in overcoming the challenges. To overcome the internet problem, the methods that were commonly adopted were by finding a place with more stable internet and purchasing internet with high-speed data.

As for the less of focus problem, there are several approaches adopted by students, namely find a quiet place to stay focus, write notes while listening, actively involved in discussion and answering question asked by lecturer and drink coffee and snacks.

With regard to the issue of difficulty to understand during online class, the students manage to overcome the problems by seeking help from friends and asking them after class, stay in touch with lecturer during offline and inform them what happening, ask questions during class, spend more time to watch the recorded video and do exercise.

As for the problem with device, students try to get better device. Meanwhile for tiredness problem, students manage it by drinking water to stay hydrated and try to do stretching.

CONCLUSION

Based on the findings of this study, there are several main challenges faced by students when they are doing online learning. The findings also showed that students adopted several methods adopted to overcome the problems. The findings of this study can provide some information to the relevant parties such as universities and lecturers as to how to support students need in online learning and ensure its effectiveness. This study was limited to 43 students from one (1) course only from Faculty of Management, UTM by using qualitative method of study. The findings could not be generalized to a larger number of higher learning institutions in Malaysia. Hence, future research may conduct study to all higher learning institutions in Malaysia by employing both qualitative and quantitative method of study.

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Sub-Theme 8
Innovativeness, Critical Thinking and Creativity in Writing

THE IMPORTANCE OF INNOVATIVENESS, CRITICAL THINKING, AND CREATIVITY IN WRITING

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ABSTRACT

This paper presents exploratory research conducted with the objective to investigate the important of innovativeness, critical thinking, and creativity in writing. Formal qualitative research through in-depth interviews approach is used to investigate views of the respondents. Three prominent writers among academicians at Faculty of Management, Universiti Teknologi Malaysia who published writings in variety types of genres were interviewed to share their own thoughts and understanding for each question provided. This research found the important of innovativeness, critical thinking, and creativity in variety types of writing. The elements that can boost writing style are innovativeness, critical thinking, and creativity. Read more, research, hardworking, collaboration and exploring new things can improve the innovativeness, critical thinking, and creativity in writing.

Keywords: Innovativeness, Critical Thinking, Creativity, Writing

INTRODUCTION

Creative writing has become very challenging and difficult for many academicians at Malaysian Research Universities because it requires multi skills. Low level of creative writing among academician at Malaysian Research Universities has put forward the important of contribution of creative writing to the Research University Key Performance Index (RU KPI). There is significant increment in publication of scientific writing in Universiti Teknologi Malaysia and other Research Universities. However, in other types of publication, such newspaper, magazine, fiction (novel) etc. is very minimal. Only a few academicians managed to publish in both scientific writing and other types of writing. It is important to identify factors that are related to improve the quantity and quality of publication in scientific writing, as well as in the other types of writing, including fiction writing. Creative writing should be incorporated along with academic writing to develop academicians' creativity and self-expressions.

Creative writing can be explained as an art form and a means of expressing one's thoughts and imagination through the written word. Creative writing places emphasis on using the attributes of imagination and creativity to tell a story through words that may be deemed capable of transporting the reader through the usage of vivid and well-placed words to make him or her feel a part of the story and also relate with the characters in it.

To craft an original work of creative writing such as fiction (novel), poetry, etc., takes time, development of skills, and persistence. While there are no clearly defined rules or creative writing tips, thus this study explores the important of innovativeness, critical thinking, and creativity in writing. A research framework is proposed:
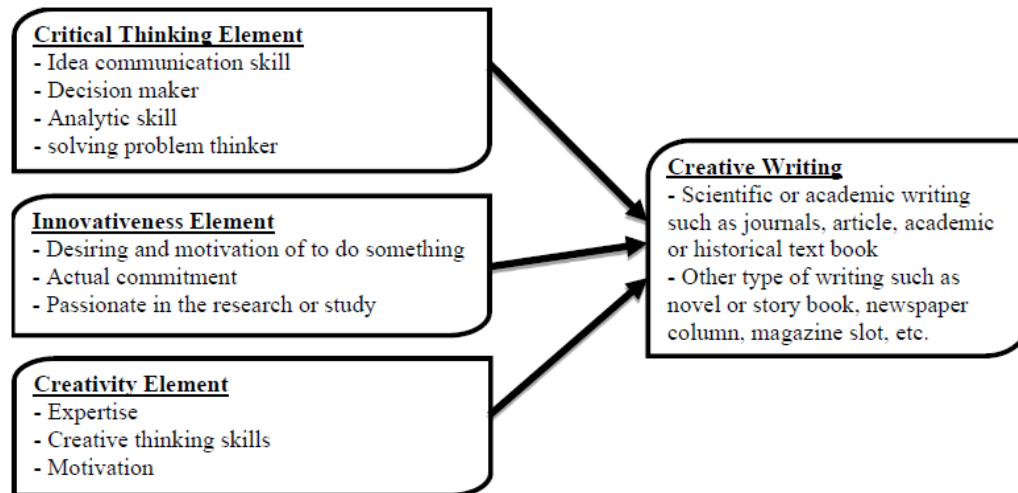
Figure 1. The propose research framework

MAIN RESULTS

The profile of three respondents who are active in academic and creative writing at Faculty of Management, Universiti Teknologi Malaysia is shown in Table 1:

Table 1. Respondent profile

Respondents	Respondent 1 (R1)	Respondent 2 (R2)	Respondent 3 (R3)
Background Study	PhD in Development Economics	Ph.D. (Management) UTM; M.Ed. (Education & Development) UTM; B.A. (Hons.) Ed. USM; Cert. in Journalism, Writers Bureau College of Journalism, Manchester UK.	Ph.D. in Technology Management, University of Western Australia, 2011. M.B.A (Techno-Entrepreneurship), (IBS), UTM (2002). B.A. (Hons) in Economics, University of Arizona, USA, 1994.
Position	Associate Professor	Senior Lecture	Senior Lecture
Writing Genre / Category	Academic Book & Research	Religious Motivation Contemporary	Love Novel.
The successful writing	1 Academic Book 6 chapter in few book 89 Journals	Academic Books – Horizon R&D: *Kreativiti Pencetus Inovasi* Book Chapter: 1001 Invention: *The Enduring Legacy of Muslim*	4 Novels since 2014 - *Faris Love Laila* - *Cinta Boarding Pass* - *Hatiku not for sale*

		Civilization General Books (10 books) bestseller in MPH and PTS.	- *Soulmate Tuan Profesor*
Early involvement	- Start from working as academic staff and one of career requirement	- Start writing since at secondary school. - Join lot of writing competition. - Surrounding influence, i.e., family background.	- Start writing since at secondary school. - Producing one handwriting series novel and hit at school.

The important of innovativeness, critical thinking and creativity

All respondents agreed the important of innovativeness, critical thinking and creativity in writing. Good reading can help the writer improve innovativeness, critical thinking and creativity in writing. All respondents always reading for knowledge, hobbies and entertainment. Table 2 shows the responses by the respondents related to the important of innovativeness, critical thinking and creativity in writing.

Table 2. The important of innovativeness, critical thinking and creativity in writing

R1	R2	R3
"Innovativeness, critical thinking and creativity are very important to guide academic writer to be sensitive with changes in government policies. Innovative to collaborate with international researcher, and love to explore new theories and method." *"Innovativeness is improvement and the unique of writing, and critical thinking is how critical and sensitive the writer with the discussion topic."*	*"Not deny writer personality should be creative and innovative, persistence, open minded, humble and grateful. Short essay, magazine or newspaper slot writing, more serious writing that need to share the real-life experiences. All this must be written with sense of sensitivities"*	*"Once to submit the complete copy, I need to review in one night. This need speed reading skill. Innovativeness a must in novel writing such as trendy and unique of story line how the writer presents her story to be more interesting*

As the academic staff, career development and researcher ranking are the main reasons of writing. R1 claimed that these elements are important to guide the academician in writing style. Critical thinking will make a writer more sensitive on writing information and critical topic which related to government policy or local culture. This will bring more respect and knowledgeable value to other academician. R2 said the elements are very important to ensure the writer has sense of sensitivity when completing a writing, thus to avoid any sensitive issue. R3 is novelist; the elements help her reviewing the draft before submitting to editor. She also said the innovativeness in blending and bonding the roles and storyline with the right scene make her story more trendy, fresh, and unique. This finding suggests that innovativeness, critical thinking and creativity will guide on content and information, help in structure and complete respondent writing before publish.

Publishing requirements

Every draft of writing will be examined by other expertise to ensure the quality of published paper or book. Publishing requirement is based on category of writing. Table 3 show the respondents' feedbacks related to publishing requirements:

Table 3. Publishing requirements

R1	R2	R3
"In economic, there are lot of issues which researcher can write comments and feedbacks. Academician has to analyze and do some research to find theroot cause of certain issue and propose solutions. Each writing is reviewed by publication editor before publish"	*"To start and sustain in publication and writing industries, we need to consider the editor expectations, the readers' needs and perspective from market (editor and readers)"*	*"Once editor get interested and approved the submitted manuscript, there would be much potential for publishing it to the target market."*

In publication industry editor play a bigger role in selecting of manuscript to publish. Editor perspective will effluent writing style. Editor will review and get feedback from expertise or reader on the manuscript quality. This finding suggests that the writer should know the requirements to publish for each writing category. Being the best seller is the benchmark on the writing performance. At this stage critical thinking play it role on how the writer think the critics from the editor's perspective.

Types of personality related to innovativeness, critical thinking and creativity
Writer personality such as perseverance, self-interest, love in reading and love to explore new things are types of personality that respondents think should be naturally possessed by the writer. To make the work published, motivation or rewards make the writer more motivated to complete the study, research and general writing. In academic writing, reward on position, grading and career development are the main factors for writing motivation.

Table 4. Writing motivation

R1	R2	R3
"Start writing because of the academic requirement to befulfilled. Career development, incentive, rewards, and ranking are the inspiration to start and finish the writing."	*"Once your first copy gets hit in the market and readers are satisfied with the writing, this will boost your confident and motivation to write more and more. Feedbacks from the readers that they are waiting for the next publication make the writer feel be rewarded and motivated to write more."*	*"My first published novel Faris love Laila get more than 50,000 likes and reads in social media, which means my writing is accepted in the market. The public or readers' hits received, make editor trust on our writing, and of course will continue to publish our next writing."*

R1 is really motivated to write in academic publication due to career development, rewards, incentive and researcher ranking. The citation of the published writing satisfied them on the effort of writing. According to R2 and R3, for general writing such as discovery, motivation, religious, and infotainment writing, all these are depended to editor perspective and readers acceptance. These findings can be summaries that all writers have their own self-motivation, including self-satisfaction, compliance to the directives of the leadership, ambition, extrinsic rewards, etc.

Ways to improve innovativeness, critical thinking and creativity
Improving these elements are important to improve the writing skill. Innovativeness is innovative behavior. This skill makes the writer be more innovative to write his story line. Critical thinking helps the writer to avoid any cause of critic from editor and readers. The writer must be creative to blend all information and storyline to make a good writing.

Table 5. Ways to improve writing

R1	R2	R3
"Hardworking and networking, but do not rely on internal and local researcher only. Try collaborate with international researcher to get new information. Learn new approachand be innovative, important to avoid repeating the old studies approach."	*"Read a lot and then write. Join writing competition. It will improve your writing skills and recognize your potential."*	*"Need to have perseverance in self, go to writing class, experience and read more because I read start from young."*

All respondents provide feedbacks to improve the innovativeness, critical thinking and creativity in writing, including the writer need to read more readings, have good skills in observation and always make collaboration with others, especially the international researchers to have more information and knowledge. This finding suggests how to improve the elements of innovativeness, critical thinking and creativity in writing. Exploring new thing or place will bring out the fresh idea and unique experience that the readers never have experienced. This makes the writing realistic and accepted by the readers.

Publishing in term of quality and quantity
All respondents said that quality of writing is the most important, though quantity is also measuring performance of academician. Quality writing is the demanded in the market. Innovativeness, critical thinking and creativity are the elements needed in quality writing performance measurement. Without these elements, writing will be meaningless, valueless, and only an imagination from writer.

Table 6. Quality and quantity of writing

R1	R2	R3
"Academic writing is about quality writing; quantity is also counted in the performance measurement, but quality gives more points."	*"Quality is the first assessment in general writing. All publishing book will be checked by editor before published."*	*"Quality is a must; editorwill review the first submission before published the writing."*

All respondents provide the same answer about quality is the first, quantity is depended. For academician, they have to fulfil the requirement to publish articles in journals yearly to maintain the researcher ranking and position. This finding suggests that quality of writing is depend on editor and readers' perspective. Only writing that met editor perspective success to publishing stage. Editor role is very important in the last stage before go to the market. In writing industry, the performance of writing was not measured by quantity of published title or how many book published, but by the quantity of printed copy and sold copy in the market. The best writing performance is the one that is relevant and acceptable for any generation.

SUMMARY AND CONCLUSION

Table 7 shows the summary results with regard to the proposed research framework.

Table 7. The summary results with regard to the proposed research framework

Item	Critical Thinking	Innovativeness	Creativity
Respondent 1	- Sensitive with government policy - Avoid old method of study - Current issue.	- New method of process - Collaboration	- Motivated by rewards, career development & ranking - Love to explore something new - Knowledgeable
Respondent 2	- Local culture - Religious issue and sensitivity.	- Context and language use - Writing and presenting style - Experience and knowledge - Learn from other expertise.	- Family background - Motivated by editor perspective - Feedback from reader.
Respondent 3	- Scene in novel and the storyline must realistic - Every role should have start and ends in thestory.	- Speed reading skill is important for writer - Perseverance in completing the writing.	- Motivated by feedback from editor and reader - Release tension - Imagination.

In conclusion, innovativeness, critical thinking and creativity is very important in writing. Through innovativeness, writer need to develop a few skills to complete and to review their writing such as speed-reading method, collaboration method and the observation method. To publish a successful writing a lot of innovation needed in order to meet the editor requirement and expectation. Creativity in writing help writer think differently compared to others, this resulting their writing is more attractive, interesting, fresh and valuable to the readers.

Sub-Theme 9
IT Courses Syllabus

DIGITAL SKILLS NEEDED FOR EMPLOYABILITY: A PRELIMINARY STUDY

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ABSTRACT

Digital economy waves have caused many companies to move online and transform digitally in order to remain sustainable and gain competitive advantages. It is crucial for businesses to have employees and individuals with recent digital skills. This paper studied digital skills required by companies across industries in order to make individuals instantly employable. The data were obtained from reviewing current reports, web articles and news that can be accessed online. As digital technologies change very quickly, this study only examined the need for digital skills for a period of 5 years from 2021 to 2025. This study has identified the digital skills needed for the workplace, particularly for non-digital occupations. The finding of this study can be used as an initial guide to design information technology courses for non-digital programmes to stay relevant and further empower students' employability.

Keywords: Digital Skills, Management, Web Scraping, Digital Economy

INTRODUCTION

The demand for workers with digital skills is increasing every year as all countries are moving towards the digital economy. The growth of digital skills is no longer limited to information technology students but is also required in non-digital programmes such as management, business, finance and accounting. Across most organisations, there is a demand for employees who are knowledgeable and competent in technology. According to A Global Skills Report published by Coursera (2022), Malaysia has been ranked in the 46th spot in global skills far behind the two higher-ranking ASEAN members, Singapore (10th) and Vietnam (20th) in terms of digital skills. Moreover, a survey conducted by the Social & Economic Research Initiative (SERI) in 2021 reported the two obstacles faced by Malaysia in implementing the MyDIGITAL initiative are the skills gap in the local labour market and the inability to attract specialised employees.

There are various definitions of digital skills based on context and domain. Barreto, Israel B., and Renzo A. (2022) defined digital skills as "knowledge and skills required by individuals for the optimal use of information and communication technologies". Meanwhile, Vergara and Macia (2022) described "skills to use digital devices, communication applications and networks to access, manage and exploit information". Moreover, they described these skills can "enable individuals to produce and share digital content, communicate and collaborate, and

solve problems for effective and creative self-fulfilment in life, learning, work, and wider social activities".

Since digital skills have been necessary for the workplace regardless of industry, many companies expect their employees to have them and not just a select few. Therefore, the role of educational institutions is to produce employees who at least close the digital divide and gap of mismatches in required digital skills between education and companies. This study provides the initial recommendation of digital skills that can be considered to include and expose in the syllabus of IT courses. More importantly, this will foster employability and help transform Malaysia into a digitally enabled and technology-driven high-income nation, and a regional leader in the digital economy.

METHODOLOGY

The methodology used for this study is described below.

i. Searching data online

The data used for the analysis was collected between 2021 and 2022 from reports, web articles, news and blogs. The search action was conducted using the search engine Google with the keywords of digital skills or digital competence. We classified these data into 2 categories of sources as shown in Table 1:

Table 1. Data sources

Sources	No. of Source
Web articles, news, blogs	10
Reports	5

ii. Identifying digital skills

All skills mentioned in the collected sources were listed and found 117 skills. However, 6 skills were excluded from the listing as they are referring to the soft skills and specified domains. In some instances, the name of a skill refers to a broader range of skills than just digital, such as customer centricity, sales and business development, financial budgeting, accounting and content writing.

iii. Refining and classifying digital skills

Some terms were refined particularly if the term had the same meaning and referred to a similar skill. For example, 'web designer' to 'user experience (UX/UI)' and 'encryption and cyber security' to 'Cybersecurity'.

iv. Classifying digital skills

Next, the identified digital skills were grouped into several categories based on their classification and skills taxonomy. For example, 'data visualisation', 'data analytics and data sciences' were included in the category of Data Literacy, 'mobile apps development' was categorised as Web and Apps Development, and 'basic software skills', 'collaborative technology' and 'digital foundation skills' were classified as Digital Literacy. As a result, 14 digital skills were listed as skills that companies needed recently.
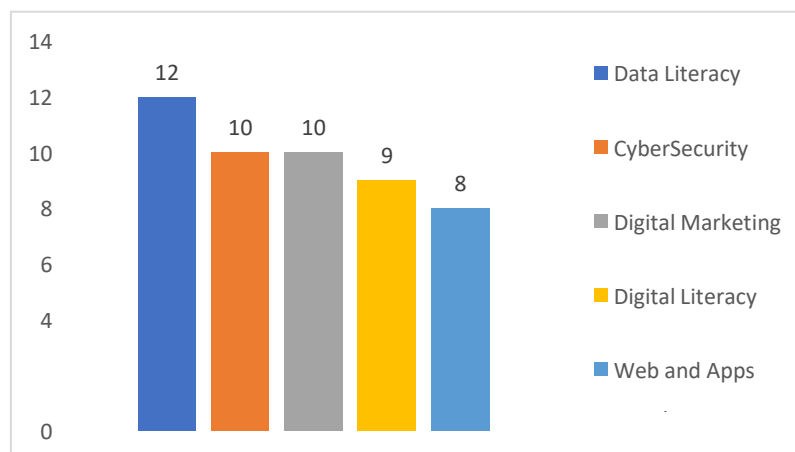
v. Ranking digital skills

The identified 14 digital skills were then ranked on based on the number most stated in the sources as shown in Table 2.

Table 2. The top 10 needed digital skills for workplace

Digital Skills	Most Stated
Data Literacy	12
Cybersecurity	10
Digital Marketing	10
Digital Literacy	9
Web and Apps Development	8
Social Media	7
Cloud Computing	6
Digital Business Analysis	6
Artificial intelligence	5
Technical Skills	4

MAIN RESULTS

Figure 1 shows the top 5 digital skills in demand as mostly stated in the reviews.

Figure 1. Top 5 digital skills needed for workplace

i.   Data literacy

As expected, the demand for this skill is increasing today. This is influenced by awareness of the importance of data in decision-making. In the digital economy, many operational strategies need to be data-driven in order to stay competitive in business. Guler (2019) defined data literacy as the ability to collect, transform, analyse, evaluate, and communicate the results to others. The most demanded data literacy skills are data analytics and data sciences, and data visualisation.

ii.   Cybersecurity

As data is an important asset for companies nowadays, the need for employees with good knowledge and skills in cybersecurity is crucial, specifically for companies with high-privacy databases (Sanchez, 2021). The skills include managing safe transactions work via digital

channels to securing a safe connection in third-party communication. Employees are also knowledgeable in cybersecurity alerts particularly when there is a data breach and are skilful to solve the problems.

iii. Digital marketing

Undeniably the significance of digital marketing for increasing companies' visibility today. Most companies are involved in the business of selling products or services and always compete with their competitors. Companies that are easy to find online are one of the strategies to increase more customers and attract valuable web traffic from the search engine. Accordingly, digital marketing skills have been mentioned in most of the required digital skills web reports and articles. The skills include search engine marketing (SEM), content creation and video editing.

iv. Digital literacy

These days, educational institutions and companies are already aware of the significance of digital literacy. Many courses and training have been offered to ensure the students produced are well equipped with digital literacy skills. According to American Library Association (2020), digital literacy is defined as the "*ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills*". Beyond that, digital literacy requires knowledge and skills in locating and using information and using digital technologies for communication, collaboration and engagement. Among digital literacy skills is the ability to use video conferencing, crowdsourcing, engaging virtual platforms, using photoshop and productivity software e.g., Microsoft Office and Adobe Acrobat respectively.

v. Web and apps development

In the past, web development was only developed by those with a background in computer sciences because it involved complex programming. However, by having new technologies freely available in the market this task can be done with simple coding. As companies move to the digital economy, web and application development skills are essential today to operate their businesses digitally.

CONCLUSION

This initial recommendation of digital skills can be used to expose the students to IT courses to ensure they are well prepared with current requirements across industries. In addition, this study will help educational institutions to design the syllabus of IT courses to remain relevant and close the gap that mismatches between education and company need. In addition, this study will continue with job advertisement mapping. This will be done by using web scrapping tools to extract the data from job search websites specifically in Malaysia. Then, the results will be aligned with this preliminary study to obtain accurate and convincing outcomes for the digital skills needed for the workplace.

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Sub-Theme 10
Hyflex Issues/Challenges

HYFLEX – EXPERIENCES FROM OTHER COUNTRIES

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ABSTRACT

The Covid-19 pandemic brought disruptions in physical activities in various economic activities. For example, employees were forced to work from home and university students had to attend classes online. However, several months after that historic disruption, most universities are open worldwide, adopting different modes of teaching and learning and one of the modes is HyFlex. The purpose of this article is to explore the experiences of universities in various countries in conducting courses using HyFlex, including the issues and challenges.

Keywords: Hyflex, Covid-19, Hyflex Experiences

INTRODUCTION

March 18, 2020 marked the beginning of months of Movement Controlled Order (MCO) in Malaysia, an effort to curb the spread of the Covid-19 virus (Koh and Chua, 2022). All economic sectors were put to a standstill except for those sectors that were classified as highly important to supply the basic needs of the society such as food, agriculture and logistics sectors.

In the education sector, the Covid-19 pandemic has led to the rapid adoption of online teaching and learning activities in all universities all over the world (Kohnke and Moorhouse, 2021; Miyazoe, 2022; Detyna, Sanchez-pizani, Giampietro, Dommett and Dyer, 2022; Rodriguez, 2022). The online modes have altered the way students engage the course content, exams, classmates, teachers and other academic matters (Kohnke and Moorhouse, 2021; Sevak, Shukla, Shukla and Bhavsar, 2021). However, several months after that historic disruption, most universities are open worldwide, adopting different modes of teaching and learning and one of the modes is HyFlex.

According to Miyazoe (2022), the first definition of Hyflex was given by Beatty in 2007, in which he described it as a combinatory concept that was "Hybrid" (combines both online and face-to-face teaching and learning activities) and "Flexible" (students may choose whether or not to attend a face-to-face session with no learning deficit).

Meanwhile, Bartlett (2022) categorised hybrid into three subcategories; parallel (divides the school into separate pathways, one remote and another in-person, alternating hybrid (cycles students in and out the building) and blended hybrid (mixes in-person and remote students in the same class.

This article will review some examples of the implementation of the Hyflex mode in universities from various countries. It will also highlight some of the issues related to the implementation of Hyflex and some of the recommendations to tackle the issues.

Implementation of Hyflex

The implementation of the Hyflex mode in universities varies and at the initial stage of the implementation of hyflex, it was mainly to address the need to deliver the course content as effective as possible.

A university in Hong Kong decided to pilot a Hyflex mode for courses offered in the 2020 summer semester and students were allowed to join courses either online, face-to- face or through combination or both through videoconferencing software (VCS) (Kohnke and Moorhouse, 2021). Meanwhile in Japan students attending face-to-face (F2F) classes were required to wear masks in the classroom and log in to the Zoom class so that both the F2F and online students will be in the same online Zoom sphere (Miyazoe, 2022). In the United Kingdom, courses at Kings' College of London class were required to adopt the two-metres social-distancing. The lecturer was connected to the audio-video system and all participants can be seen and heard. The video conferencing technology that was used in King's included Zoom, Echo360, and MS Teams, but nevertheless, each of this technology has its own issues and weaknesses such as security and licensing (Zoom), live streaming issues (Echo360) and limited interaction and group work (MS Teams) (Detyna et al., 2022).

In Singapore, at the initial stage of the circuit breaker period, the delivery mode of courses was achieved using Blackboard Collaborate and graphic tablet to support teachers in courses that require calculations (Koh and Chua, 2022). Students were not required to turn on their videos to reduce bandwidth during the lecture. To ensure participation in the online class, various activities were conducted such as opinion polls, mini quizzes, and pin-pointing students to answer questions. Laboratory sessions (experiments) were conducted online but later delivered physically with strict safe distancing measures. In January 2021, the Hyflex mode was adopted, in which students attend classes physically and online. In Malaysia, courses were delivered online during the movement control order period but was later turned into Hyflex mode as covid19 cases stabilised (Koh and Chua, 2022). And in India, teachers utilise E-books, journal articles and magazines in classrooms via Microsoft Teams. Students attended the lectures through laptops and mobile gadgets and some courses were recorded to allow viewing by students at their convenient time. Tests were conducted online and scores can be obtained immediately.

Issues and Challenges in Implementing Hyflex
Students' Perspectives

In Hong Kong, Kohnke and Moorhouse (2021) found in their study that (1) communication issues as the dominant issue followed by (2) flexibility and return to normalcy, (3) being actively involved in learning, (4) video conferencing software (VCS) and (5) motivation to

attend Hyflex courses in the future. In communication issues (1), students found challenges between students attending face-to-face classes and those attending online classes. The students discovered that their capacity to interact, evaluate progress, and accept feedback was challenged regarding verbal and nonverbal communication by uncertainty relating to handover and turn-taking which limited their ability to collaborate, monitor progress and receive and act upon feedback. In the context of flexibility and return to normalcy (2), students looked forward to face-to-face because they were not satisfied with online teaching which may be attributable to their teacher's lack of experience and ability in using online platforms. Nevertheless, the students were still concern about infecting their family members when attending face-to-face class and finding the optimal conditions for online classes. Students also perceived that their workloads had increased during online classes to ensure that they are actively involved in learning (3). Additionally, the video conferencing software (VCS)(4) features improved their interactions, helped focus and participate as a team, and enabled them to communicate with peers using various features (poll, breakout room and Google Docs). Students' motivation to attend Hyflex courses in future are mixed. They prefer face-to- face classes but they understood why the university opted Hyflex. They suggest that during future online classes, limiting online sessions of not more than one hour and during presentations to focus more on speaking practice rather than the content, among others (Kohnke and Moorhouse, 2021).

Meanwhile, in the United Kingdom (UK), students said they do not feel engaged online, and feeling ignored while online, mainly due to technology, student equity, acoustics, and pedagogy. In addition, since online students communicate through chat, no resources/individuals are managing the chat initially as lecturer struggle with hybrid learning (Detyna et al., 2022).

Koh and Chua (2022) shared their evaluation on the perspectives of Singapore and Malaysia. The sample courses for their study were courses that were taught in face-to- face (2019) and online (2020-2021). The assessment criteria and lecturers guiding the course remain. The study found that distribution of students' performance and mean, as well as group t-test is consistent between face-to-face and online classes. No significant difference between class delivery of face-to-face students (2019) and students attending online classes was found (Koh and Chua, 2022).

A study in India reported that online students felt disengaged and isolated as compared to their classmates in the classroom. Lecturers also need to consider the different time zone for foreign students. In the context of technology, it was reported that many institutions lack the necessary technology. For students to acquire a top-notch online higher education, they require more than Zoom, webcams, podcasts, or video conferencing. Students attending online classes felt lack of personalized feedback, hence, students have difficulties being motivated, especially concerning students feeling connected with one another while having the same attention from the lecturer (Sevak et al., 2021).

Teachers' Perspectives

Miyazoe (2022) looks at several issues of teachers' teaching time, well-being, and security of Hyflex implementation in Japan. The research concluded that salaries and wages for full-time and part-time employees in education are decided and influence how teacher's workloads are conceived and conceptualised. In Japan, teachers' workloads are considered high ethical standards that teachers are discouraged from discussing in public. Due to the current learning dynamics, diverse roles become a teacher's responsibility, with limited opportunities to prepare

to develop appropriate properties in such teachers sacrifice their private lives to adapt to the new standard. This might lead to disruption to teachers' well-being mentally and physically. Finally on teachers' security; Japan's culture does not openly discuss their choice of work location, at home or commute to campuses. It is quite possible that some teachers sought to teach remotely, as was permitted for students, to keep their social distance from others and save their loved ones from the virus (Miyazoe, 2022).

In UK, the lecturers must test and practise the technology they intend to utilise with the teaching practises they wish to use. Due to limited training and sudden implementation, they must also prepare backup plans if something goes wrong. However, in the early implementation of Hyflex in Kings College (UK), security and licencing issues of the videoconferencing, limiting the usage of live streaming, and breakout room overwhelmed the lecturers. These technical challenges eventually contributed to the lack of clarity for students in the session. Staff also want to move around the room during the session, but this may be limited due to the ability of the camera, making students' online feel ignored (Detyna et al., 2022)

In Mexico, Rodriguez (2022) reported that lecturers struggle with technical issues, work overload, and lack of guidance. Due to unavailable premium virtual meeting tools, classes were limited, and teachers had to set up multiple sessions. The inadequate technical infrastructure with functional cameras and microphones was restricted. Videoconferencing was made worse by the campus's unstable broadband connection, especially when many classes were streaming simultaneously.

In addition, HyFlex planning and logistics management were seen as time-consuming, complex tasks. Lecturers had to plan and deliver two distinct tracks for each class session, significantly growing their to-do-list. Adding to the academic stress, they had to learn quickly and have inquiries they were unsure of (Rodriguez, 2022).

In India, the lecturers have difficulties ensuring that students are motivated as they must establish a learning culture and connectedness feelings and provide online learners with the same attention as those in the classroom. With the limited and proper technology ensuring effective learning outcomes is a challenge to lecturers on how instructors get creative crafting the Hyflex courses (Sevak et al., 2021).

Addressing Issues and Challenges

Several suggestions were put forward to address the issues discussed. For example, Starkey (2020) suggested that institutions and lecturers should appreciate diversity in teaching mode by celebrating F2F and online and considering students' inclination towards their preferred approach. For Hyflex to succeed, instructors must create vibrant online discussion groups (for interaction and commitment purposes). The instructor should also consider integrating technologies into existing pedagogical practices, including providing icebreaker activities at the start and reflection; lecturers must consider the points that they are making, the overall structure of the session, the audience, what and how they want to say, being inclusive (Detyna et al., 2022).

Nevertheless, institutions must consider limitations when switching to online mode and ensure that all students have equal access to these necessary resources regardless of their socioeconomic status (Amiryousefi, 2019). To ensure they are ready to go and at ease during the lecture, teachers should practise whenever possible before the class begins. As such,

Kohnke and Moorhouse (2021) advise offering lecturers suitable technical, pedagogical, and support for audio-visual and digital education.

CONCLUSION

In conclusion, the Covid-19 epidemic has prompted a drive to create novel teaching methods in education. For most of the world, the HyFlex method was new and innovative, bringing challenges and opportunities to the students and the instructors. More research is required to determine how practical this approach is in the context of actual teaching sessions. The delivery method needs to be decided and crafted well by teachers and students, as future creation is a shared responsibility.

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ANALYSING THE PROBLEMS THAT EXIST DURING THE ADOPTION OF FLIPPED CLASSROOMS IN YUNNAN COLLEGE OF FINANCE AND ECONOMICS

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ABSTRACT

The outbreak of Covid-19 disease has forced the Chinese' education system to change to online learning. Traditional teaching models can not adapt to the requirement of the information age. With the arrival of the information age, knowledge updating is accelerating. Cultivating students' autonomous learning ability to cope with complex problems has become a challenge for schools. The flipped classroom teaching model has attracted teachers' attention because it can provide more opportunities for students to participate in learning actively. The objective of this study is to analyse issues that exist based on the flipped classroom; the methodologies used in this research is qualitative research, and respondents of the survey include 215 students from Yunnan college of finance and economics, where the author works. Data has been analysed by Statistical Product Service Solution (SPSS) version 22. The results show that the most obvious problem is students' lack of independent learning ability and motivation. Hence, in order to adopt a flipped classroom, students are supposed to increase their self-discipline. Future studies could consider extending the samples' scope and focusing on the solutions to issues.

Keywords: Flipped Classroom, Teaching Model, Independent Learning Ability

INTRODUCTION

The flipped classroom model as a form of blended learning originated in the United States. With the growth and popularity of the internet, the flipped classroom approach is gaining popularity in the US. Lage et al. (2000) first define an invert classroom is a model which refers to events that have traditionally taken place inside the classroom now take place outside the classroom and vice versa. In 2007, Jonathan Bergmann and Aaron Sams, chemistry teachers at Woodland Park High School in Colorado, USA, adopted the flipped classroom model in their classroom and promoted its use in primary and secondary education in the USA. This new type of education model entered Chinese primary education classrooms in 2011.

Chunmei (2016) states that the broad approach to the flipped classroom is that students work on their own before class at their level and need to work through any content they do not understand in class. Like Dan (2018), this mode changes the dominant position of the teacher in the traditional teaching mode and gives better play to the subjectivity of the students. In early 2020, under the impact of the sudden outbreak of the epidemic, which prevented students from returning to school in most areas of China, online teaching models were widely used by institutions at all levels, and the deep integration of modern information technology theory and practice has pushed the reform of teaching methods to the forefront.

However, the concept of the flipped classroom is new to China as it is a foreign product introduced from the United States; since the introduction of the flipped classroom model in China, it has attracted much attention from education experts and academics in China. There are some issues during the adoption of the flipped classroom. This paper will focus on the students of higher Vocational Education in Kunming city in, China and analyse the issues in the current flipped classroom stage. The next part of this paper will discuss the issues that depend on the flipped classroom and then conclude the results and limitations of the study.

METHODOLOGY
The targeted respondents in this study are students from different classes at Yunnan college of finance and economics. The population is 215 students, including 132 students from the second semester and 83 from the third semester. In convenience sampling, respondents are selected based on the author's convenience and availability.

This research uses a quantitative research method; a questionnaire was distributed to students through one questionnaire survey tool named SoJump. The data will be analysed using descriptive analyses via Statistical Product Service Solution (SPSS) version 22.

MAIN RESULTS
In this study, the total respondents are Chinese from the same college, 61.4% from Year 2 and 38.6% from Year 3. Table 1 shows the frequency results of students' knowledge of the flipped classroom; based on the results, most students have never heard of the flipped classroom. This illustrates that this new kind of education model has not been adopted well in this college.

Table 1. Knowledge about the flipped classroom

	Frequency
1. I have heard about flipped classrooms before.	18.6%
2. I have never heard about the flipped classroom.	81.4%

Table 2 presents the adaptability of students to the flipped classroom. Most of them have never been taught by flipped classroom model, and only 27.4% of students state the teachers have used this new model during the class.

Table 2. The adaptability of the flipped classroom

	Frequency
1. The teachers have used flipped classrooms before.	27.4%
2. The teachers have never used flipped classrooms.	72.6%

Table 3 shows the issues exist related to the flipped classroom. The highest mean is 0.69, which means the students express they lack the ability and motivation to study if the teachers adopt flipped classrooms. Furthermore, it is worth noticing that 39.53% of students state they do not have a smooth network, and the equipment does not allow them to watch teaching videos before face-to-face classes. Meanwhile, the teaching management system is not flexible is also one of the obvious issues, with a mean of 0.39. The lowest means is related to the other answers to this question, such as: "I have no idea about what flipped classroom is", and "I have been taught through this kind of education model for about 3 years, although it is a good way to enhance my self-discipline, I think it is no use for examination".

Table 3. Issues exist in a flipped classroom

	Mean
1. Students lack independent learning ability and motivation.	0.69
2. Teachers cannot control the flipped classroom model.	0.25
3. The teaching management system is not flexible enough.	0.39
4. The content of the teaching video is not attractive enough.	0.26
5. The network conditions and equipment for watching teaching videos are not perfect.	0.4
6. The teacher-student interaction in the teaching process is not enough to reflect the student-centred concept.	0.32
7. Others	0.17

CONCLUSION

The flipped classroom is something new to China; it requires students to watch the teaching videos or work on tasks the teachers release before face-to-face class; when the teachers and students have offline courses, discussion and solutions to the problem will take up most of the class time. The results show that most students do not understand the meaning of flipped classroom, which reflects that this new method of teaching is not adopted well in the author's college. The most serious problem is the students in this college's lack of independent learning ability and motivation; it reveals that if students do not come to class, there is no one to supervise and urge them to finish tasks. Due to the area where the author is, the economic development is relatively behind other areas in China; most of the students in this college lack tuition fees rather than purchase a well- equipped phone or laptop; despite the government grant, the population is huge in China, not every student can afford their tuition fee and living expenses. Additionally, since the flipped classroom is a new teaching model in China, the management system is supposed to be improved to adapt to the model.

STUDY LIMITATION

This study is based on the college where the author works; there are other colleges and students in China. To obtain more complete results, future study is supposed to contain more samples. Moreover, since the flipped classroom is a new model in China, other issues exist during the adoption; it is worth finding solutions to these problems.

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