





# Seminar on Internal-External Quality Assurance (SieQA) 2021

Higher Education as Enterprise — Embedding the Quality Assurance Gulture

16 March 2021
Parallel Workshops
17 March 2021
Seminar
Venue: Zoom

For more information, kindly scan the QR code or visit: https://university.sunway.edu.my/SieQA2021



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#### **About the Conference**

#### Seminar on Internal-External Quality Assurance (SieQA) 2021 Higher Education as Enterprise – Embedding the Quality Assurance Culture

#### 16 & 17 March 2021 | Sunway University, Malaysia Zoom platform

#### Theme

The higher education sector has been undergoing a paradigm shift in recent years with pressure to become more flexible and enterprising to meet the needs of the 21st Century. The COVID-19 pandemic has increased the rate of change and has forced higher education institutions around the globe to quickly adapt their teaching, learning and assessment methods to meet the challenges of these unprecedented times.

The need to make rapid changes and implement different forms of delivery and assessments has created tensions between those tasked with implementing the new techniques and their colleagues charged with maintaining academic standards and quality. However, quality assurance is an integral part of the learning design, development and monitoring processes which ultimately ensures the validity and reliability of higher education learning outcomes. Indeed, when correctly applied, quality assurance processes should provide an effective and flexible framework to support rapid change and enterprise while improving standards in teaching, learning and assessment.

SieQA 2021 aims to share how higher education institutions have been responding during this period of major change and to explore practical strategies that can be used to embed quality assurance processes to create a culture which maximises flexibility, encourages enterprise and raises standards now and in the future.

#### **Objectives**

- To explore how higher education institutions can use quality assurance processes to initiate, support and deliver effective change in teaching, learning and assessment;
- To share ideas, experiences and best practices from quality assurance professionals across South East Asia and throughout the world;
- To present practical quality assurance strategies to support successful higher education enterprise and transformation in the 21st Century.

# **Keynote Address (1): Higher Education as an Enterprise – Embedding and Evolving** the Quality Assurance Culture for a Changing World



**Professor Graeme Wilkinson** *Vice-Chancellor, Sunway University*Email: graemew@sunway.edu.my

Professor Graeme Wilkinson is the Vice-Chancellor of Sunway University. He is from the UK and is a physics graduate of Imperial College London and holds a doctorate from Oxford University. He has worked in management consulting and was formerly an environmental science specialist with the European Commission in Italy. He held senior management positions in three UK universities before coming to Malaysia in 2012. His current research interests are in higher education and in advanced technologies and their impacts on society.

#### **ABSTRACT**

This keynote shares the broad requirements of future quality assurance systems in the context of a rapidly expanding global higher education system which has increasingly diverse models of delivery, evolving virtualization of resources and rapidly changing customer needs. Higher education is now required to equip students for work in a future where many current jobs and career routes may no longer exist and where many new jobs will require knowledge and skills drawn from multiple disciplines. Quality assurance must be adapted to reflect education that is geared towards creating flexible and adaptable thinkers who can play their part in future society as responsible global citizens who are fully able to take advantage of new career opportunities as they emerge. Traditional quality assurance focused on the delivery of fixed subject knowledge and associated learning outcomes has to evolve towards a system that puts trust in institutions and their academics to be creative and to anticipate trends in commerce and technologies ahead of conventional or traditional thinking. Quality assurance has to be future-proofed, not backward-focused.

#### **Keynote Address (2): New Quality Elements in Higher Education post-COVID-19**



Professor Datuk Dr Asma Binti Ismail FASc
Ibnu Sina Professorial Chair in Medicine, International
Islamic University Malaysia, Kuantan Campus, Malaysia
President, Academy of Sciences Malaysia
Chairperson, Malaysian Qualifications Agency Council
Email: asmainformm@yahoo.com

Professor Datuk Dr Asma Ismail is a woman of many firsts. She was the first female Vice-Chancellor of Universiti Sains Islam Malaysia (USIM) in 2012, and the first female Vice-Chancellor of Universiti Sains Malaysia (USM) (2016-2019) making her the first woman to be appointed twice as the Vice-Chancellor of a public university. She had served as the country's first female Director-General of Higher Education (2014–2016) and is currently the first female President of Academy of Sciences Malaysia (2016–2022). She also serves as the first female to be Chairperson of the Malaysian Qualifications Agency (MQA) (1st Jan 2019 – 31st Dec 2021). Her current position is as the Ibn Sina Chair for Medicine at UIAM (2020–2022). She also serves as an honorary Professor at the Institute for Research in Molecular Medicine, USM and Associate Research fellow at the Biotechnology Research Institute, Universiti Malaysia, Sabah.

Her educational background includes having a BSc (Biology) from the University of Nevada, USA, M.A. (Microbiology) from Indiana University, USA and a PhD (Cellular and Molecular Biology) from UNR. Asma has initiated scientific discoveries that have led to the attainment of 15 patents and commercialization of the rapid diagnostic test for typhoid called TYPHIDOT which was advocated by WHO. As a researcher, she has published 131 papers, received more than 213 awards and recognitions, presented more than 425 papers including 376 invited talks/plenaries and 48 keynotes both at the national and international levels. She was elected to the Academy of Sciences Malaysia in 2003, The Academy of Sciences for the Developing World (TWAS) in 2010 and The Islamic World Academy of Sciences in 2016. She was elected as Honorary Member of the Iranian Academy of Medical Sciences in 2017, and in the following year as a Member of the College of Fellows, Keele University and as a Governing Advisory Board Member for Ritsumeikan Asia Pacific University, Japan. In recognition of her leadership in lifelong learning in the Commonwealth, especially for women, and her outstanding service to the advancement of higher education and science in Malaysia, she was conferred as Honorary Fellow of the Commonwealth of Learning in Sept. 2019 and Hon Scholar for IIASA (Institute for Applied System Analysis) Vienna, Austria in Nov 2019. She currently serves on the selection panel for the Merdeka Award and Rhodes Scholarship to select Malaysians to Oxford University. In 2020 she was elected to be a board member of Commonwealth of Learning based in Vancouver, Canada. She also serves as a board member for CREST (Collaborative Research in Engineering, Science and Technology) Center to move STI based companies in the country since 2017.

Her landmark contributions to Malaysia's higher education system include the establishment of the prestigious National Academic Award (Anugerah Akademik Negara), the establishment

of Research Universities in Malaysia and also in co-helming the development and implementation of The Malaysian Education Blueprint (Higher Education) 2013–2025.

For her outstanding contributions and being an exemplary figure in the field of higher education, research, innovation and policy on Science and Technology locally and abroad, she received an Honorary Doctor of Science from the University of Glasgow in 2013; Indiana University's Thomas Hart Benton Mural Medallion in 2015; Honorary Degree Doctor of the University, Keele University and Honorary Doctorate in Literature from Kyoto University of Foreign Studies (KUFS) in 2017 respectively and Tokoh Maulidul Rasul in 2019.

#### **ABSTRACT**

The COVID-19 pandemic has caused a global crisis of an unprecedented nature affecting most of the pillars of modern society. We have seen the widespread physical closure of schools, colleges and universities for an unknown length of time, in almost all countries. With campusand classroom-based learning being unexpectedly disrupted, higher education providers have raced to develop solutions to ensure the continuity of learning. With more challenges expected in the future, there is a need for resilience in providing a more sustainable and inclusive post-COVID-19 recovery plan that will also allow higher education providers to thrive. Quality assurance plays a significant role in shaping how Higher Education Institutions operate and prioritise their resources to satisfy the needs of students and build trust with key stakeholders. Significant efforts have been made to develop internationally harmonized quality assurance measures to facilitate 'objective' benchmarking between institutions. As a result, the local contextualization of tradition and values are often lost; especially so in regions such as Southeast Asia where religion, spirituality and culture play such a significant role in our daily lives. The prioritisation of value for money in a global market context over the values of a given society has resulted in identity conflicts that undermine national or regional unity as well as the successful nurturing of future global-mindset leaders. Quality assurance elements also seem to prioritise the measurement of tangibles over intangibles since the latter is difficult to define, yet so integral in the preparation of the future generation via education. We are at a tipping point and we need to use the ongoing crisis as an opportunity for introspection. In celebrating our unity in diversity, how might we develop new quality elements that support shared purposes at the regional or global level such as the United Nation's Sustainable Development Goals. New quality elements for the Malaysian higher education will be presented based on the National Education Philosophy.

## Programme

## **Pre-Seminar (Parallel Workshops)**

16 <sup>th</sup> March 2021 (Tuesday)						
09:00–10:00	:00–10:00 Online Registration					
	TRACK A	TRACK B	TRACK C	TRACK D		
TRACK AND THEME	Flexible Education Ecosystems towards 21st Century	Efficient and Effective Delivery System with Integrity	Sustainable Curriculum	International Reference		
Moderator	Assoc. Prof. Dr Sim Tze Ying	Mr Danial Rahman	Dr Ooi Pei Boon	Prof. Abhi Veerakumarasivam		
Moderator	Sunway University	Sunway University	Sunway University	Sunway University		
10:00 –12:00	APEL (A), (C) & (Q)	Synchronous versus Asynchronous Online Distance Learning	Fluid and Dynamic Curriculum	Global Standard for International Collaborations		
Speaker	Assoc. Prof. Dr Andy Liew	Dr Fariza Khalid	Dr Thian Lok Boon	Prof. Perry Hobson		
		BREAK				
14:00 –16:00	Micro- Credential	Alternative Assessment	IR 4.0 Education – Convergence Curriculum	Global Quality Assurance Framework		
Speaker	Prof. Dr Abd. Karim Alias	Assoc. Prof. Ts. Dr Aishah Abu Bakar	Assoc. Prof. Dr Wan Marzuki Wan Jaafar	Prof. Dr Hazman Shah Vijayan Bin Abdullah		

## Seminar Schedule 17 March 2021 (Wednesday)

08:30	Online Registration
09:30	Welcome Address YBhg. Professor Dr Ts. Hajah Roziah Mohd Janor President, Malaysian Higher Education Institutions Quality Assurance Network (MyQAN)
09:40	Opening Remarks Professor Elizabeth Lee Chief Executive Officer, Sunway Education Group Chair, SieQA 2021
09:50	Special Address YBhg. Professor Dato' Dr Mohammad Shatar Sabran Chief Executive Officer, Malaysian Qualifications Agency (MQA)
10:00	Keynote Address (1) Higher Education as an Enterprise – Embedding and Evolving the Quality Assurance Culture for a Changing World Professor Graeme Wilkinson Vice-Chancellor, Sunway University
10:30	Break
10:40	Global Quality Assurance Dialogue: Challenges Facing Higher Education Quality Assurance in Managing Disruption: Regional Perspective  YBhg. Professor Dr Ts. Hajah Roziah Mohd Janor (Chair) President, Malaysian Higher Education Institutions Quality Assurance Network (MyQAN)  Professor Sibrandes Poppema, MALAYSIA President, Sunway University  Professor Ir Khairul Salleh Mohamed Sahari, MALAYSIA Deputy Chief Executive Officer, Malaysian Qualifications Agency (MQA)  Dr Kyi Shwin, MYANMAR Myanmar Representative to UNESCO Executive Board A member of the National Accreditation Quality Assurance Committee  Professor Dr Alyssa Peleo-Alampay, PHILIPPINES Vice President ASEAN-QA Association (ASEAN QAA) Assistant Vice President for Academic Affairs (Quality Assurance), University of the Philippines  Dr Choltis Dhirathiti, THAILAND Executive Director, ASEAN University Network (AUN)
12:10	Official Opening of SieQA 2021 and Ministerial Address

12:40	Lunch Break
13:40	Parallel Sessions – Oral Presentation
15:00	Keynote Address (2) Professor Datuk Dr Asma Binti Ismail Chairperson, Malaysian Qualifications Agency Council
15:30	Announcement of Oral Presentation Winners
15:45	Reflections and Concluding Remarks Dr Cheng Mien Wee Deputy Chair, SieQA 2021

## **Parallel Sessions' Topics**

Track	Breakout Room	Topics	
A	A	Education Ecosystems	
В	В	Delivery Systems (1)	
В	С	Delivery Systems (2)	
С	D	Sustainability	
A/B	Е	Education Ecosystems / Delivery Systems	

#### **Scientific Committee:**

No	Name	Designation
1.	Professor Matthew James Sansom	Pro Vice-Chancellor (Education) and Associate Dean – School of Arts, Sunway University
2.	Professor Hanim Salleh	Professor, Department of Mechanical Engineering, UNITEN
3.	Professor Irfan Naufal Bin Umar	Professor, Centre for Instructional Technology & Multimedia, Universiti Sains Malaysia
4.	Tn Hj Jamaluddin B Ibrahim	Senior Manager, Quality Management Unit, Universiti Teknologi PETRONAS
5.	Dr Kiran Kaur AP Gurmit Singh	Associate Professor, Department of Library Science & Information, Faculty of Computer Science & Information Technology, Universiti Malaya
6.	Assoc Prof Dr Sim Tze Ying	Head – Centre for American Education, Sunway University
7.	Dr Jessie Wong Pooi See	Head – Programme & Professional Development, Sunway College
8.	Dr Ooi Pei Boon	Director, Special Projects, Vice-Chancellor Office, Sunway University
		Principal Teaching Fellow – School of Medical and Life Sciences, Sunway University

Note: In the subsequent pages, "\*" indicates "corresponding authors"

### **Track A: Education Ecosystems**

Moderators: Dr Padma Priya K.R Pillai (Department of Communication, School of Arts, Sunway University)

Professor Irfan Naufal Umar (Director, University Academic Quality Centre; Professor, Centre for Instructional Technology and

Multimedia, Universiti Sains Malaysia)

No	Title	Corresponding Author	Co-author(s)	Affiliation	Presenter
1.	Challenges and Opportunities of COVID-19 Pandemic: A Lesson Learnt	Yaacob, Y. <sup>1</sup>	Mahmud, M. M. <sup>2</sup> , Mohamed Shariff, M. N. <sup>1</sup> , Mohd A'Seri, M. S. <sup>1</sup> , Ahmad, R. <sup>1</sup> , Ishak, N. <sup>1</sup> , Saparman, M. S. <sup>1</sup> & Mustamam, N. <sup>1</sup>	<sup>1</sup> General Studies Department, Sunway College (KL), Selangor. <sup>2</sup> CELS, School of Interdisciplinary Studies, Sunway University, Selangor, Malaysia	Saparman, M. S.
2.	Advantages and Challenges of Inter-department Team Teaching: A Case Study	Sim, T. Y. <sup>1</sup>	Ng, B. L. <sup>2</sup>	<sup>1</sup> School of Interdisciplinary Studies, Sunway University, Selangor, Malaysia; <sup>2</sup> Registrar Office, Sunway University, Selangor, Malaysia	Sim, T. Y.
3.	Integrating Active Learning and Content Localisation in the Delivery of Responsible Conduct of Research Education in Malaysia	Chai, L. C. <sup>1</sup>	Chau, D. M. <sup>2</sup> & Veerakumarasivam, A. <sup>3</sup>	<sup>1</sup> Institute of Biological Sciences, Faculty of Science, University of Malaya, 50603 Wilayah Persekutuan Kuala Lumpur, Malaysia. <sup>2</sup> Medical Genetics Laboratory, Department of Biomedical Sciences, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor Darul Ehsan, Malaysia. <sup>3</sup> School of Medical and Life Sciences, Sunway University, 47500 Sunway City, Selangor Darul Ehsan, Malaysia	Chai, L. C.

4.	Transition Due to	Sim, T. Y. <sup>1</sup>	Dewika, M. <sup>1</sup>	<sup>1</sup> School of Interdisciplinary Studies, Sunway	Sim, T. Y.
	COVID-19:			University, Selangor, Malaysia	
	Insights on What				
	is Important from				
	the Management,				
	Faculty Member				
	and Students'				
	Perspective				
	_				

#### Challenges and Opportunities of COVID-19 Pandemic: A Lesson Learnt

Yaacob, Y.<sup>1\*</sup>, Mahmud, M. M.<sup>2</sup>, Mohamed Shariff, M. N.<sup>1</sup>, Mohd A'Seri, M. S.<sup>1</sup>, Ahmad, R.<sup>1</sup>, Ishak, N.<sup>1</sup>, <u>Saparman</u>, M. S.<sup>1</sup> & Mustamam, N.<sup>1</sup>

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#### **ABSTRACT**

**Background:** COVID-19 crisis has compelled the education system to adapt. The traditional and conventional way of teaching and learning has completely shifted to fully online. Like it or not, educators' roles have been abruptly modified to not only become teachers, but also as online instructors. Educators have had to face the challenge and swiftly master various online platforms and tools in order to continue and support the teaching and learning process. The trend of integrating technology in the classrooms is not new. This has led to numerous questions and arguments of the existing concepts and theories of traditional education. This phenomenon also provides new opportunities to educational institutions to explore and leverage on the prospects of online modalities. Nonetheless, the COVID-19 crisis has accelerated the process and this transition has created a unique inquiry.

**Aim:** The key purpose of this research paper is to identify the challenges and opportunities encountered by the lecturers of General Studies Department (GSD), Sunway College, Malaysia during the COVID-19 pandemic.

**Methods:** This research uses a qualitative method where purposeful sampling was utilised. Seven (7) lecturers of the General Studies Department were interviewed specifically on the challenges, opportunities and suggestions to both educators and institutions.

**Findings:** The results of the interviews showed that there are some challenges that GSD lecturers faced; for example, unpreparedness to tackle the new norm of online teaching and learning process, internet connection, and online engagement. The findings from the interview showed that there are opportunities which have emerged from the COVID-19 pandemic such as experimenting with numerous digital tools and platforms, employing different online teaching and learning modalities, and commissioning online assessments to support students' needs and engagement.

**Conclusion**: It is postulated that the findings of the research although preliminary, are able to facilitate vital discussions on fashioning best practice guidelines for asynchronous or synchronous modalities post COVID-19 pandemic.

**Keywords:** online teaching and learning, technology, COVID-19 pandemic, challenges, opportunities

#### Advantages and Challenges of Inter-Department Team Teaching: A Case Study

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#### **ABSTRACT**

Background: Most Institution of Higher Education subjects are delivered by individual lecturers. This is practical from the administrative perspective. However, as the world moves towards interdisciplinary collaboration, it is crucial to have staff contribution from different disciplines to bring further insights to a particular subject. Sunway University had the opportunity to deliver the subject Digital Economy with the Alibaba Business School. The subject covers a wide range of topics ranging from digitalisation, digital marketing, community and business engagement and business plan development. Therefore, the skills required to deliver this subject ranges across a few departments. The project owner recruited faculty members from different departments to deliver the subject, each with their own expertise. The case study is based on the learning experience of establishing the interdepartmental team and delivering the subject for two cycles. Based on the case study, two critical factors for implementation were identified – communication and management support. Even though it may require more effort, but it is a commendable practice for an interdisciplinary subject. The students' response was also positive.

**Aim:** Presentation of a case study of an interdisciplinary team's delivery of the subject Digital Economy. The lessons learnt may assist other institutions that are interested in embarking on this journey.

**Methods:** Observation based on the delivery of an interdepartmental team taught subject. Findings based on the subject evaluation by the students.

**Findings:** The subject evaluation indicated that the students received this subject well, with an average satisfaction level of 75%. The co-ordination work required is higher than an individually taught subject, and the commitment from various departments is required to ensure the smooth delivery of the subject

Conclusion: Sharing of lessons learnt for team-teaching across department for an interdisciplinary subject.

**Keywords:** cross-department team teaching, interdisciplinary subject

# Integrating Active Learning and Content Localisation in the Delivery of Responsible Conduct of Research Education in Malaysia

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#### **ABSTRACT**

**Background:** In response to rising concerns regarding the state of integrity of research ecosystems, there has been efforts to foster a culture of responsible conduct of research (RCR). Many research institutes around the world have begun to integrate RCR education into their training programmes of research professionals. However, such educational programmes are significantly lacking in Malaysia.

**Aim:** This study describes the development of an active-learning based RCR educational module with localised content aimed at fostering a culture of RCR in Malaysia.

**Methods:** A committee was formed by the Young Scientists Network-Academy of Sciences Malaysia to establish the framework, content and delivery approach of an RCR module via a series of module writing workshops. The RCR educational module was then tested and reviewed by a panel of researchers over three review workshops. The feedback sessions were conducted via focus group discussions. The impact of RCR awareness workshops in shaping positive RCR attitudes and behaviour was also measured via pre-post workshop surveys.

**Findings:** The Malaysian Educational Module on RCR, consisting of ten chapters, was developed as an instructor's guide to teach RCR and as a reference material. This module includes many case studies and role plays, which are based on common ethical issues and scenarios faced by Malaysian researchers. These and many other activities in the module were designed to enable ethical reflexivity. Active learning-based RCR workshops were able to affect positive attitudinal and behavioural changes amongst workshop participants.

**Conclusion:** This module potentially encourages researchers to embrace their major role in serving humanity through ethical research and service and it is a valuable resource to foster research integrity in the country.

Keywords: responsible conduct of research; research integrity education; active learning

# Transition due to COVID-19: Insights on What is Important from the Management, Faculty Member and Students' Perspective

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#### **ABSTRACT**

**Background:** COVID-19 was first made known to the world in January 2020, right before the Lunar New Year celebration. The first lockdown was in Wuhan, in the province of Hubei, China, on 23rd January 2020 and was subsequently followed by other cities within Hubei. By March 2020, almost half of the countries around the world enforced lockdowns to curb the spread of the virus. Malaysia's lockdown was announced on 18th March 2020. Classes needed to be moved online. This paper shares the perception on what was important for the different stakeholders. There were three perspectives – the management, the faculty members and the students.

**Aim:** Providing insights from the perspective of management, faculty members and students when moving lessons online due to the COVID-19 lockdown.

**Methods:** Collection of insights from the management, and faculty members based on observation and feedback. The students' feedback was collected via subject evaluation and semester evaluation.

**Findings:** The transition from offline to online was challenging. However, it did not impact the delivery to the students, and the students were supportive to the situation. However, the subject evaluation for the next two semesters continue to decline. The students missed the communication with their peers. The issues that were important to the faculty members was the increased of workload and the need to handle both work and household chores. The management perceive that setting the directions on what the centre needs to do to make the required transition was important. The transition was done with input from other team members.

Conclusion: The case study identified that institutional support and decisions are important, the faculty members delivered what was required and went over and beyond to ensure that services were delivered to the students, and students were also generous and supportive to the changes. It would be interesting to find out more on how the lockdown impacted the faculty members and the students in the long run as the subject evaluation trend continues to decline from the stage when the transition took place to when it stabilized in the August – December 2020 semester.

**Keywords**: COVID-19, online learning, transition to online, management perspective, faculty members' perspective, students' perspective

## Track B: Delivery Systems (1)

Moderators: Dr Teoh Chai Wen, Department of Marketing, Sunway University Business School (SUBS)
Professor Peh Suat Cheng, Professor and Special Adviser on Medical Education Development

No	Title	Corresponding Author	Co-author(s)	Affiliation	Presenter
1.	Internship during COVID-19	Choy, T. Y. <sup>1</sup>	Diana, G. M. J. <sup>1</sup> , Lim, T. H. <sup>1</sup> & Nurul Aini, K. Y. <sup>1</sup>	<sup>1</sup> Sunway Diploma Studies, Sunway College, Bandar Sunway, Malaysia	Diana, G. M. J.
2.	Quality Online Learning for Students' Future Success	Crosling, G.	n.a.	Centre for Higher Education Research, Sunway University, Malaysia.	Crosling, G.
3.	Maintaining Academic Integrity in the Conduct of Online Examinations: A Case Study at Sunway College Johor Bahru	How, P. L. <sup>1</sup>	Lee, S. L. <sup>1</sup> , Ng, K. H. <sup>1</sup> , Sathissan, R. <sup>1</sup> , Shereen, K. <sup>1</sup> & Wong, S. L. <sup>1</sup>	<sup>1</sup> Pre-University Department, Sunway College Johor Bahru, Johor, Malaysia.	Wong, S. L.
4.	Embedding Research Integrity to Ensure the Quality of Higher Education in Malaysia	Chau, D.M. <sup>1</sup>	Chai, L. C. <sup>2</sup> & Veerakumarasivam, A. <sup>3</sup>	<sup>1</sup> Medical Genetics Laboratory, Department of Biomedical Sciences, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor Darul Ehsan, Malaysia. <sup>2</sup> Institute of Biological Sciences, Faculty of Science, University of Malaya, 50603 Wilayah Persekutuan Kuala Lumpur, Malaysia. <sup>3</sup> School of Medical and Life Sciences, Sunway University, 47500 Sunway City, Selangor Darul Ehsan, Malaysia	Chau, D. M.

5.	In Search of	Yaacob, Y.1	Mahmud, M. M. <sup>2</sup> , Mohamed	<sup>1</sup> General Studies Department, Sunway College	Yaacob, Y.
	Meaning about		Shariff, M. N. <sup>1</sup> ,	(KL), Selangor.	
	Digital Teaching		Mohd A'Seri, M. S. <sup>1</sup> ,	<sup>2</sup> CELS, School of Interdisciplinary Studies,	
	and Learning: A		Ahmad, R. <sup>1</sup> ,	Sunway University, Selangor, Malaysia	
	Collective		Ishak, N. <sup>1</sup> , Saparman, M. S. <sup>1</sup>		
	Reflections		& Mustamam, N. <sup>1</sup>		

#### **Internship during COVID-19**

Choy, T. Y.<sup>1\*</sup>, <u>Diana, G. M. J.</u><sup>1</sup>, Lim, T. H.<sup>1</sup> & Nurul Aini, K. Y.<sup>1</sup> Sunway Diploma Studies, Sunway College, Bandar Sunway, Malaysia \*Email: tychoy@sunway.edu.my

#### **ABSTRACT**

**Background:** The global coronavirus pandemic disrupted many, if not all, higher education programmes. Education institutions scrambled to deliver their teaching online. However, the subject of Internship requires students to work under the supervision of industry supervisors in actual organisations and industry environments. The Malaysian Qualifications Agency provided guidelines for internship by allowing higher education providers to 'replace industrial training with other appropriate alternatives that involved both industrial collaboration and supervision by industry practitioners'.

**Aim:** This paper discusses how the Diploma Studies (SDS) organised, supervised and assessed the students' internship subject module during the pandemic.

**Methods:** There is scarce research on the design of online teaching for internship programmes. A review of literature was conducted to identify current research on internship programme design.

**Findings:** This paper reviewed six decisions to consider when designing good assessments; and three proposals for assessments specific to internship. In addition, SDS industrial project for internship showed how the internship subject module could be supervised and assessed online while satisfying current practice requirements. Essentially, industrial projects were proposed by SDS to commercial organisations. This created online internship placements for students during the pandemic when many organisations withdrew internship offers.

**Conclusion:** This paper shows that internship programmes can be organised, supervised and assessed online in collaboration with commercial organisations during the global coronavirus pandemic. Furthermore, online internship placements were created for students.

**Keywords:** internship, pandemic, COVID-19, online teaching, programme design

#### **Quality Online Learning for Students' Future Success**

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#### **ABSTRACT**

**Background:** The rapid technological evolution coupled with COVID-19 has seen an abrupt shift to online learning in higher education worldwide. In the future with ever-increasing automation, graduates will require capacities such as creative, critical thinking and problem solving, underpinned by abilities to communicate and collaborate in teams, often cross-national and cross-disciplinary. In Malaysia, the importance of these capacities is evident in MQA academic programme quality standards. With the pandemic online learning and perhaps with blended learning post-pandemic, the question is whether online learning is preparing students with 21st century capacities.

**Methods:** This paper draws on two collaborative team studies through the Centre for Higher Education Research, Sunway University. The first, implemented pre-COVID-19, explored academic staff's use of blended/online learning tools in their teaching. The second, undertaken during COVID-19's online learning, was on students' experiences and satisfaction with their online learning.

**Findings:** The findings from both studies are that overall, both teachers and students are satisfied with blended /online learning, but there is room for improvement. In the first study, the online tools staff mostly used supported efficient programme management rather than creative and critical thinking. The second study found that students rated less well the communication, interactivity and collaboration in their online learning experience.

**Conclusion**: There are positive features in the findings of both studies, but both indicate that online learning needs to, through curriculum and TL approaches with the various online tools available, support student and team interactivity, communication and collaboration as well as the development of skills in critical and creative thinking as these are vital for nations and their competitiveness globally.

**Keywords**: online learning, graduate attributes, creative and critical thinking, communication, collaboration and problem solving

# Maintaining Academic Integrity in the Conduct of Online Examinations: A Case Study at Sunway College Johor Bahru

How, P. L.<sup>1\*</sup>, Lee, S. L<sup>1</sup>, Ng, K. H.<sup>1</sup>, Sathissan, R.<sup>1</sup>, Shereen, K.<sup>1</sup>, Wong, S. L.<sup>1</sup> Pre-University Department, Sunway College Johor Bahru, Johor, Malaysia. \*Email: plhow@sunway.edu.my

#### **ABSTRACT**

**Background:** Maintaining academic integrity in the conduct of online examinations is a daunting task even for the most reliable educational institutions. Due to the prolonged school closure caused by the COVID-19 pandemic, educational institutions were compelled to undergo drastic restructuring of the teaching and learning (T&L) processes including the conduct of examinations. As examinations serves as an integral part of students' learning, educational institutions promptly adopted online examinations in replacement of paper-based examinations. Maintaining academic integrity and quality in the delivery of online examinations then became one of the priorities at Sunway College Johor Bahru.

**Aim:** This study aimed to investigate whether the four mechanisms identified as best practices in the conduct of online examinations at Sunway College Johor Bahru have helped in achieving the required standards.

**Methods:** An online survey was conducted among 39 academic staff from the Pre-University Programme, focusing gathering feedback on the effectiveness of the four mechanisms which are the use of a secure online examination platform complemented with lockdown browser, online proctoring, and the recording of proctoring.

**Findings:** All 20 questionnaire items focusing on the effectiveness of these four mechanisms received positive mean responses with a mean value of above 3. 84.62% of the respondents also indicated that the use of these four mechanisms interdependently helped to maintain the academic integrity and quality in the conduct of online examinations.

**Conclusion**: This study confirms that Sunway College Johor Bahru has maintained quality and academic integrity in the conduct of online examinations by implementing the four mechanisms.

**Keywords**: online examinations, academic integrity, lockdown browser, secure examination conduct, proctoring, examination quality.

#### Embedding Research Integrity to Ensure the Quality of Higher Education in Malaysia

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#### **ABSTRACT**

**Background:** The Academy of Sciences Malaysia established the Young Scientists Network-Academy Sciences of Malaysia (YSN-ASM) Responsible Conduct of Research (RCR) Programme in 2015 to create awareness on RCR in Malaysia. One of the key objectives of this programme was to facilitate the establishment of a formal RCR education in higher education institutions in Malaysia.

**Aim:** A survey was conducted to provide a preliminary landscape of the RCR knowledge and awareness among researchers in higher education institutions in Malaysia.

**Methods:** A series of three RCR workshops were conducted in 2015 and the participants were invited to answer a pre-workshop questionnaire. The participants were asked a range of questions concerning their knowledge and awareness of RCR.

**Findings:** A total of 62 participants took the survey and the results show that only around 30% of the respondents had previously attended courses related to research ethics. The majority of them attended these courses during their postgraduate studies. Almost 70% of the respondents claimed that their universities did not provide them with a clear guidance on how to report suspicious research conduct. On defining and explaining key concepts of RCR, the majority of the respondents were able to define plagiarism correctly but most of them were not able to describe or explain other terms, especially the concept of Dual-Use Research of Concern.

**Conclusion:** Our study shows that there is a need to create more awareness and improve the level knowledge of RCR amongst researchers in Malaysia. There is also a need to ensure that clear institutional guidelines on detecting and reporting research misconduct are established and communicated to the researchers.

**Keywords:** responsible conduct of research, research misconduct, research integrity, research ethics

#### In Search of Meaning about Digital Teaching and Learning: A Collective Reflections

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#### **ABSTRACT**

Background: The COVID-19 pandemic has affected various sectors especially the education sector. The decision by the government to close down higher learning institutes and school has forced educators and teachers to switch their teaching and learning techniques from 'face-to-face' to completely online. At the General Studies Department (GSD) of Sunway College (KL) Sdn Bhd, the use of E-Learn as a teaching and learning platform began in 2019. On January 2020, 'blended learning' was introduced for the Islamic and Asian Civilization (TITAS) classes in various university's programmes. However, due to the pandemic, the teaching and learning process of all subjects in the General Studies Department transitioned drastically to 100% online. This situation pushed the lecturers from the General Studies Department to master not only the technological tools, but also the pedagogical aspects that drive the entire process, to ensure the teaching and learning process can be carried out properly. Within a short period of time, different methods and modalities were designed and experimented, yet little is known on how such abrupt and rapid modifications affect the overall quality.

**Aim:** Considering the value of experiences and reflections that provide some of the most important lessons, this study probes on the mediated experiences of GSD academics to research on the current circumstance whereby a qualitative-research design was leveraged in a plethora of collective reflections of experiences using E-Learn.

**Methods:** For this study, a reflective writing research was utilised. The reflections of the researched phenomena were from the researchers themselves involving the writers interacting with and interpreting the data and recording their analytical processes.

**Findings:** The findings revealed that E-Learn has a huge potential to be effectively employed for synchronous and asynchronous modalities, specifically in the context of its user-friendly features and capacity to disseminate information, structure virtual lessons, record students' involvement, monitor reports and deploy both formative and summative assessments.

**Conclusion**: This study concluded that the various features of E-Learn had tremendously assisted the GSD lecturers during the online teaching and learning process, and is deemed suitable to be used as a platform or Learning Management System (LMS) for online teaching and learning activities

**Keywords:** teaching and learning, technology, e-learn, COVID-19, collective reflection

## Track B: Delivery Systems (2)

Moderators: Dr Sun Poi Hun, Department of Economics and Finance, Sunway University Business School (SUBS)
Ms Azliza Hassan, Manager – Academic Standards & Quality, Sunway University

No	Title	Corresponding Author	Co-author(s)	Affiliation	Presenter
6.	Assessing Undergraduate Biological Sciences Students' Experiences and Satisfaction with Online Learning amid the COVID- 19 Pandemic	Chew, J. <sup>1</sup>	Reginald, K. <sup>1</sup> , Tong, T. <sup>1</sup> & Veerakumarasivam, A. <sup>1,2</sup>	<sup>1</sup> Department of Biological Sciences, School of Medical and Life Sciences, Sunway University, Selangor, Malaysia. <sup>2</sup> Department of Allied Health, School of Medical and Life Sciences, Sunway University, Selangor, Malaysia	Chew, J.
7.	Evaluating the Perceived Effectiveness of Online Learning among Biological Sciences Undergraduates during the COVID- 19 Pandemic	Tong, T. <sup>1</sup>	Chen, J. E. <sup>1</sup> , Lim, W. L. <sup>1</sup> , Chew, J. <sup>1</sup> & Veerakumarasivam, A. <sup>1,2</sup>	<sup>1</sup> Department of Biological Sciences, School of Medical and Life Sciences, Sunway University, Selangor, Malaysia. <sup>2</sup> Department of Allied Health, School of Medical and Life Sciences, Sunway University, Selangor, Malaysia	Tong, T.
8.	An Overview of Engineering Programme Outcome Assessment Quality	Omar, A. A.	n.a.	School of Engineering and Technology, Sunway University, Selangor, Malaysia	Omar, A. A.

9.	The Analysis on	Mat Som, H. <sup>1</sup>	Abd Rajak, R. F. <sup>2</sup>	<sup>1</sup> Office of Deputy Vice Chancellor (Academic	Mat Som,
	Organisational			Advancement & Quality), University College of	H.
	Integrity in KYP			Yayasan Pahang, Kuantan, Malaysia	
	Group of Education			<sup>2</sup> Office of Integrity Unit, KYP Education Sdn	
	(KESB)			Bhd, Kuantan, Malaysia	
	<u> </u>			·	

# Assessing Undergraduate Biological Sciences Students' Experiences and Satisfaction with Online Learning amid the COVID-19 Pandemic

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#### **ABSTRACT**

**Background:** In response to the public-health threat of rising COVID-19 infections, higher education institutions (HEIs) around the world switched to online learning to limit the negative impact on students' academic progression.

**Aim:** This study aimed to understand the online learning experiences and satisfaction levels of biological sciences undergraduates in a private HEI in Malaysia. The aim supports the academic department's quality assurance process for the enhancement and improvement of existing online teaching and learning approaches.

**Methods:** An anonymous and self-administered online questionnaire containing both Likert scale and open-ended questions was developed. The recruitment of respondents was done via convenience sampling and participation was completely voluntary.

**Findings:** A total of 120 respondents, representing 62% of the existing biological sciences undergraduate population responded to the online survey. Overall, the respondents were satisfied with their online learning experience  $(7.08 \pm 1.88)$  and scored the academic department highly  $(7.88 \pm 1.69)$  in terms of helpfulness in supporting their online learning journey (scale 1 to 10, with 10 being the highest satisfaction level). Despite the respondents having generally expressed their satisfaction regarding their online learning experience, certain areas such as the impact of online classes on students' motivation for their learning warrants further investigation.

Conclusion: The current study provides a benchmark to assess the efficacy of various interventional strategies planned by the academic department in the future. As the realities of the current pandemic continue to impact how HEIs around the world operate, continuous evaluation of online teaching and learning as well as student engagement strategies is necessary to ensure students' satisfaction and ultimately, the delivery of quality education.

**Keywords:** online learning, student satisfaction, undergraduates, biological sciences

# **Evaluating the Perceived Effectiveness of Online Learning among Biological Sciences Undergraduates during the COVID-19 Pandemic**

Tong, T.<sup>1\*</sup>, Chen, J. E.<sup>1</sup>, Lim, W. L.<sup>1</sup>, Chew, J.<sup>1</sup>, Veerakumarasivam, A.<sup>1,2</sup>

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#### **ABSTRACT**

**Background:** Online learning has been at the forefront of how higher education institutions (HEIs) have coped with COVID-19-associated disruptions. The online learning environment varies significantly from that of a traditional classroom and relies heavily on technology. **Aim:** This study assessed the perceived effectiveness of the online learning experience of biological sciences undergraduate students at a private HEI in Malaysia during the on-going pandemic.

**Methods:** A questionnaire was administered to assess the perception of these undergraduates on the effectiveness of online learning. The survey consisted of questions regarding demographics, rating of online learning effectiveness, identification of preferred delivery mode and providing suggestions for continuous improvement. Statistical data analysis was carried out using Microsoft Excel, using one-way ANOVA, two-way ANOVA and Welch's *t*-test.

**Findings:** The majority of respondents agreed that online learning allowed flexible learning and 42.9% of respondents enjoyed online learning from home during the pandemic. However, 45.5% of respondents found that poor internet connectivity affected their online learning experience, while 68.8% found it challenging to study at home during the pandemic. Most respondents preferred hybrid learning over face-to-face learning. Significant associations were observed between perceived effectiveness of online learning and internet connectivity, flexible learning hours and the ability to focus at home.

**Conclusion**: There is a high level of acceptance towards online learning and as the pandemic continues to shape our new normal, online learning is no longer a matter of choice. This study provides insights for the development of strategies to improve the quality of education for a new generation of learners in biological sciences.

**Keywords**: online learning, biological sciences, flexibility, perceived effectiveness

#### An Overview of Engineering Programme Outcome Assessment Quality

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#### **ABSTRACT**

**Background**: Engineering degree programmes in Malaysia are accredited by the Engineering Accreditation Council, Board of Engineers Malaysia (BEM). BEM is a signatory of the Washington Accord, an element in the International Engineering Alliance (IEA) that promotes quality education and practice in the field of engineering.

**Aim**: This paper discusses continual improvement to achieve a truly wholesome engineering programme outcomes (POs) by reviewing current practices and offering new perspectives on this approach.

**Methods:** This is a case study of engineering programmes in Malaysia.

**Conclusion:** Most assessments currently focus on the cognitive POs and lack depth on the assertive POs. IEA had observed in 2017 that BEM assessments have process bias and neglect the graduate-focused outcomes. It is proposed that more instruments and rubrics be targeted in attainment assessments to reflect the wholesome graduate- and programme-focused outcomes.

Keywords: accreditation, programme outcomes, assessment instruments, attainment

#### The Analysis on Organisational Integrity in KYP Group of Education (KESB)

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#### **ABSTRACT**

**Background:** Integrity is integral as a competitive factor for continuous growth in all areas of business, whether it be product manufacturing, services or the education sector. Every employee of a company has the responsibility to uphold the principles of good governance and corporate management, which are integrity, trust, transparency, fairness, and involvement in social and community engagement. KYP Education Sdn Bhd (KESB), is an education-based company which has two higher education institutions: University College of Yayasan Pahang (UCYP) and Kolej Yayasan Pahang (KYP). Accordingly, the UCYP Academic Office and KESB Integrity Unit conducted an KESB Integrity Perception Survey as part of its development of an effective KESB Integrity Strategic Plan for 2021–2025.

**Aim:** The purpose of this study was to measure both the attitudes and perceptions towards integrity among KESB staff. Integrity is one of the working values that needs to be upheld in the KESBs and be embraced as one of its core proficiencies. Thus, KESB hopes to materialize integrity, so that the outcomes of the business, which include talents, knowledge and scholars, will contribute to society and advocate for ethics and good values.

**Methods:** A descriptive analysis was applied to analyse data obtained from 30% of the overall 320 staff members of KESB.

Conclusion: Results showed that 83% of respondents agreed that KESB has executed integrity as one of its core values. Furthermore, 90% and 85% of respondents perceived that KESB staff have moral parity values and productivity values, respectively. It was also shown that supervisory dedication, training support, and resource allocation and management were the top 3 aspects that were perceived to be highly implemented in the KESB Integrity environment. On the other hand, the 3 aspects that were perceived to be the least executed were staff accountability, reporting effectiveness and tone at the top. The data also showed that 92% of their staff were satisfied with their job and job scope, and that there is a significant relationship between Organisational Integrity and job satisfaction, with an r Value of 0.423 (Spearman's rho Correlation Coefficient),  $\alpha$ =0.00. With these findings, KESB shall strive to enhance its lowly-scored dimensions while maintaining or improving its highly-scored dimensions to sustain a good integrity milieu and promote an ethical organisational working culture.

Keywords: organisational integrity, job performance, work ethics, working values

## Track C: Sustainability

Moderators: Dr Catherine Lee Cheng Ean (Department of Communication, School of Arts, Sunway University)
Dr Sally Anne Malar S Paramanath (AUSMAT, Sunway College)

No	Title	Corresponding Author	Co-author(s)	Affiliation	Presenter
1.	Do Higher Education Institutions Prepare Their Graduates with Employability Skills?	Nadarajah, J.	n.a.	Centre for American Education , Sunway University, Selangor, Malaysia	Nadarajah, J.
2.	Roles of Leadership and Non-Academic Staff in Providing Quality Higher Education: A Review Paper	Gan, E.	n.a.	Policy, Planning and Quality Unit, Swinburne University of Technology Sarawak Campus, Kuching, Sarawak, Malaysia.	Gan, E.
3.	Developing Workplace Soft Skills in Students of the American Degree Transfer Program	Sockanathan, S. <sup>1</sup>	Nadarajah, J. <sup>1</sup> ,Yap, J. <sup>1</sup> & Radzali, A. A <sup>1</sup>	<sup>1</sup> Centre for American Education, Sunway University, Sunway, Malaysia	Sockanathan, S.
4.	Carbon Footprint Study on Electricity Consumption of Sunway University During the COVID- 19 Lockdown	Devandran, A. <sup>1</sup>	Dewika, M. <sup>1</sup>	<sup>1</sup> Centre for American Education, Sunway University, Selangor, Malaysia	Devandran, A.

5.	Student Feedback on	Lau, S. L. <sup>1</sup>	Ng, A. L. O. <sup>2</sup> , Sim, T.	<sup>1</sup> School of Engineering and Technology,	Lau, S. L.
	Rapid Adaptation of		$Y.^{3}$ , &	Sunway University, Malaysia	
	Online Delivery		Veerakumarasivam, A. <sup>2</sup>	<sup>2</sup> School of Medical and Life Sciences,	
	Learning During the			Sunway University, Malaysia	
	COVID-19			<sup>3</sup> Center for American Education, Sunway	
	Pandemic: Learning			University, Malaysia	
	Points Towards				
	Better Future Practice				

#### Do Higher Education Institutions Prepare Their Graduates with Employability Skills?

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#### **ABSTRACT**

**Background:** In today's job market, graduates not only need to possess academic knowledge and qualifications, but must also gain skills that can help them adapt and enhance themselves in various jobs or industries. There has been an increasing concern in Malaysia surrounding the quality of graduates that are produced by the country's higher education institutions. Employers have expressed major concerns regarding the lack of employability skills among these local graduates.

**Aim:** Employers and graduates are putting the blame on higher education institutions for producing low-quality graduates. These institutions are expected to take responsibility for the development of basic employability skills among graduates through their courses or academic programs. The objective of this paper was to understand the role of higher education institutions in the development of employability skills and competencies among graduates.

**Methods:** The data collected from fresh graduates was used to identify what types of soft skills they had developed during their years of studies in their degree programs.

**Findings:** The overall findings show that higher education institution helped equipped the graduates with good intrapersonal skills. The graduates also felt that the higher education institution did contribute towards the development of certain soft skills.

**Conclusion**: The study found that the higher education institutions can improve the skills and competencies of the students, which can help them increase their employability and adapt into the job market.

**Keywords**: higher education institutions, employability skills, intrapersonal skills

# Roles of Leadership and Non-Academic Staff in Providing Quality Higher Education: A Review Paper

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#### **ABSTRACT**

**Background:** The 4<sup>th</sup> UN Sustainable Development Goal (SDG) is Quality Education, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. An educated human capital is clearly a stepping stone to achieving several other SDGs, including decent work and economic growth, no poverty and reduced inequalities among countries. To this end, higher education institutions play a crucial role in providing quality education, which must be supported by both academic and non-academic staff.

**Aim:** This review paper aims to provide awareness of the role and importance of non-academic staff in higher education, which currently has not received much research attention. It also aims to highlight the two key factors, namely leadership and job satisfaction, which play a vital role in improving organisational outcomes, especially in reducing turnover intention. Quality human capital will in turn lead to enhancing the quality of education provided.

**Methods:** This is a review paper of the existing body of knowledge on the scope covered in this paper.

**Findings:** The literature clearly shows that non-academic or professional staff play a crucial role in higher education institutions and warrant more research attention due to their critical role and differing job nature from that of academic staff.

Conclusion: It is evident that talent retention among administrative staff warrants more attention, as the operations of the higher education institutions depend heavily on administrative staff. Without efficient operations, the institutions will be unable to provide high quality education to the community. The reasons driving administrative staff turnover intention can be addressed through sound leadership and strategic actions taken by the organisation to retain the administrative staff

Keywords: leadership, non-academic staff, higher education

#### Developing Workplace Soft Skills in Students of the American Degree Transfer Program

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#### **ABSTRACT**

**Background:** Soft skills competency plays an important role in building a successful career. However, to achieve this, critical soft skills, particularly communication and presentation skills, have to be enhanced in students at the tertiary level. The American Degree Transfer Program in Sunway is a program that offers degree programs in various fields with a unique, holistic program that is specially tailored for students.

**Aim:** This study intends to identify areas and types of skills, especially in communication and presentation, in developing students' soft skills.

**Methods:** Data collection was done by comparing assessment results of student from several semesters.

**Findings:** The American Degree Transfer Programs offers up to 133 different subjects for students to take from Year 1 to Year 3 of their degree programs. Two subjects selected for this study was Public Speaking and U.S. History. Both subjects analysed the mean scores for various types of assignments, which includes speech and presentation.

Conclusion: The American Degree Transfer Program provides students with the freedom and flexibility to choose their subjects while enhancing their soft skills in preparation for the working world. Different assessment methods carried out in Public Speaking and US History that encourage different styles of speech and presentation skills, definitely benefited the students in building their personal skills. This paper suggests that the Sunway's American Degree Transfer Program exposes its students to various soft skills that prepares them to fulfil employers' expectations.

**Keywords**: assessment, workplace soft skills, presentation

# Carbon Footprint Study on Electricity Consumption of Sunway University During the COVID-19 Lockdown

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#### **ABSTRACT**

**Background:** The COVID-19 global pandemic has triggered a significant transition in energy use and changes in electricity demand patterns in higher education institutions, leading to a future sustainable framework.

**Aim:** This paper aims to identify the carbon footprint from electricity consumption during the COVID-19 lockdown of Sunway University and highlight the concurrent initiatives taken by the University management to reduce electricity consumption during this pandemic.

**Methods:** This work was performed by analysing the secondary data of monthly electricity consumption bills of 2018, 2019, and 2020 obtained from Sunway University.

**Findings:** Total carbon footprint recorded for the year 2018, 2019 and 2020 were 10,369 tCO<sub>2</sub>eq, 10,005 tCO<sub>2</sub>eq and 7,523 tCO<sub>2</sub>, respectively. A reduction of 25% or 2,483 MTCO<sub>2</sub>eq was recorded from the total carbon footprint calculated for 2020 when compared to 2019. There was an overall reduction in Sunway University Campus's electricity consumption from 2018 to 2020 due to the pandemic and the concurrent university management's sustainable initiatives.

**Conclusion:** The COVID-19 pandemic has reduced electricity consumption, contributing to a lower carbon footprint, together with the success of the concurrent initiatives taken by the University management to create a Green Campus. This global pandemic could be a good plan of action for university management's policymaking towards a greener campus.

Keywords: COVID-19, electricity consumption, carbon footprint, sustainable initiatives

# Student Feedback on Rapid Adaptation of Online Delivery Learning During the COVID-19 Pandemic: Learning Points Towards Better Future Practice

Lau, S. L.<sup>1\*</sup>, Ng, A. L. O.<sup>2\*</sup>, Sim, T. Y.<sup>3</sup>, & Veerakumarasivam, A.<sup>2</sup>
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<sup>2</sup>School of Medical and Life Sciences, Sunway University, Malaysia
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#### **ABSTRACT**

**Background:** The sudden need for fully online teaching at the onset of the COVID-19 pandemic saw higher education institutions (HEIs) scramble to adapt their curricula and delivery methods. Novel solutions were quickly generated and implemented, potentially impacting among other things, the quality of student experience. Reflections from student feedback on the rapid transition to virtual learning platforms resulted in the identification of key areas for improvements in academic practice in the era of online teaching and learning.

**Aim:** Based on student feedback throughout two semesters of teaching at a private university in 2020 during the COVID-19 associated Movement Control Order, this paper reports learning points from the adaptations that were carried out during the initial and later phases of transition to guide continuous improvement.

**Methods:** Qualitative and quantitative data from the feedback survey of more than 450 respondents in each semester across 3 academic departments were analysed. Measures included overall learning experience, quality of teaching and learning as well as communication. Quantitative analyses included word clouds and descriptive statistics based on 5-point Likert scale measures. Qualitative results were derived from simple thematic coding.

**Findings:** Results revealed that the majority of students had positive experiences from the quick adaptation to online delivery coupled with regular communication from the academic departments. Main concerns for students included the lack of face-to-face interactions and active connections between students.

**Conclusion**: This study suggests that the preferred practices for better student experiences during the rapid transition to online curriculum delivery include regular communication sessions, options for face-to-face interactions (when permissible) and improved connections between peers.

**Keywords**: online teaching, student experience, higher education, quality assurance

## Track A/B: Education Ecosystems / Delivery Systems

Moderator: Professor Matthew James Sansom (Pro Vice-Chancellor (Education) and Associate Dean (Education) – School of Arts, Sunway University)

No	Title	Corresponding Author	Co-author(s)	Affiliation	Presenter
1.	Teaching Multiple Subjects Simultaneously through Assignments	Choy, T. Y. <sup>1</sup>	Lim, S. B. <sup>1</sup>	<sup>1</sup> Sunway Diploma Studies, Diploma in Business Administration & Certificate in Business Studies Programme, Sunway College, Malaysia.	Lim, S. B.
2.	A Review of Virtual Teaching Strategies for Gen Z Learners	Teh, Y. Y.	n.a.	Victoria University Undergraduate Programme, Sunway College, Selangor Malaysia	Teh, Y. Y.
3.	Digital and Data Literacy Skills Assessments for the Promotion of Career Readiness	Nadarajah. J. <sup>1</sup>	Shanmugam. V. <sup>1</sup> & Tan, T. H. <sup>1</sup>	<sup>1</sup> Centre for American Education, Sunway University, Selangor, Malaysia	Nadarajah. J.

#### **Teaching Multiple Subjects Simultaneously through Assignments**

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#### **ABSTRACT**

**Background:** Teaching methods are continuously evolving due to the practice and research by dedicated teachers. Assessments have to be well-designed to facilitate learning. However, students may not appreciate the linkage between each of the individually-assessed subject modules.

**Aim:** This paper proposes the use of integrated assignments to simultaneously assess learning in one or more related subject modules; and to assist students to understand the linkage between the different subject modules.

**Methods:** In Sunway Diploma Studies Department (SDS), the lecturers create integrated assignments through a process that embraces the key decisions in Bearman, Dawson, Molloy, Boud, Joughin, Bennett, and Hall's (2014) Assessment Design Decisions Framework.

**Findings:** An example of an integrated assignment for an SDS business management diploma was discussed. In the integrated assignment, students were required to propose a business plan and apply student learning outcomes from five different subject modules.

Conclusion: Integrated assignments facilitate student learning. Students are able to understand the linkage between individual subject modules while simultaneously learning the curriculum of each individual subject module, for more holistic understanding. In addition, integrated assignments help students optimise time and effort. There is scarce research on teaching one or more related subject modules simultaneously. This paper contributed knowledge through presenting integrated assignment practice. Further research could be conducted to examine the effectiveness of student learning through integrated assignments.

Keywords: integrated, group, assignment, linkage, holistic

#### A Review of Virtual Teaching Strategies for Gen Z Learners

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#### **ABSTRACT**

**Background:** Since moving the classrooms to the virtual world due to the recent COVID-19 pandemic was inevitable, a greater emphasis is being placed on improving the teaching approaches to engage students online.

**Aim:** This paper aimed to understand the characteristics of the Generation Z learners, and explore teaching strategies which are suitable and effective to them in the virtual classroom.

**Methods:** An overview of the existing literature around the characteristics of Generation Z is provided with the need to adapt to their learning needs.

**Findings:** This paper proposes recommendations on the possible online teaching deliveries which could cater to the current learners' needs for more effective learning outcomes.

**Conclusion**: The generational theory which identifies different learning styles and preferences could be used as a reference for educators to develop more effective virtual teaching strategies.

Keywords: Gen Z, virtual classroom, online teaching

#### Digital and Data Literacy Skills Assessments for the Promotion of Career Readiness

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#### **ABSTRACT**

**Background:** As digital economy is becoming increasingly important in the global economy. Many countries, including Malaysia is also moving forward with the digitalization agenda. One essential need for digital economy is the knowledge of digital skills and data literacy that is beneficial to the consumer, business and industry.

**Aim:** The purpose of this research was to measure how digital skills and data literacy skills implemented in the university helps to prepare the students for their future career in digital economy.

**Methods:** This research focused on two subjects related to statistics and computer application. The analysis was conducted to identify how the assessment for each subject develops the core digital skills and data literacy knowledge.

**Findings:** The results showed that most of students were able to learn and use the core digital skills and data literacy knowledge through the various type of assessments offered in both the subjects. This subject is offered to all the students in the American Degree Transfer Program.

Conclusion: The development of digital skills and data literacy among students at an early stage in their degree program is effective and beneficial for them. The students can use these skills in their daily activities, education and future career development. It is highly recommended that universities ensure that all students develop core digital skills and data literacy knowledge at the early phase of their education.

Keywords: digital skills, data literacy, career preparedness

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