Facing the unknown: pandemic and higher education in Malaysia

Joseph Kee-Ming Sia and Adamu Abbas Adamu
Department of Marketing, Faculty of Business, Curtin University Malaysia, Miri, Malaysia

Abstract

Purpose – The purpose of this paper is to provide commentary on the challenges and impacts of the pandemic crisis to higher education institutions (HEIs) in Malaysia. It also outlines mitigation plans, innovative strategies adopted and implications and recommendations to HEIs.

Design/methodology/approach – The research study uses a discourse analysis to examine the higher education challenges and impacts of the pandemic in Malaysia.

Findings – The findings reveal that the coronavirus disease 2019 (COVID-19) pandemic has affected the higher education sector in Malaysia significantly. Both lecturers and students in HEIs are faced with multiple challenges in teaching and learning. The effect was more severe in East Malaysia due to poor Internet connectivity for online learning. Nevertheless, COVID-19 also provides an opportunity to HEIs to reconstruct the education system and establish updated programmes and assessments. The success of online learning to mitigate the impacts is still unknown.

Research limitations/implications – The review of the literature and news are not comprehensive as the current pandemic crisis is not over.

Originality/value – This paper is presumably representing a frontier review with more empirical research studies to be conducted to investigate the extent of the current crisis affecting teaching and learning in HEIs in Malaysia. Though there were some commentaries on how the pandemic affects education, to the best of the authors’ knowledge, this is the first commentary paper in higher education realm in Malaysia.

Keywords Pandoraemic, COVID-19, Higher education, Challenges, Impacts, Malaysia

Paper type Research paper

Introduction

The initial outbreak of novel coronavirus disease 2019 (COVID-19) began in December 2019 from the Wuhan city of China, while in early 2020 it appeared in other parts of the world (Sahu, 2020). Due to the human-to-human transmission capability of the disease, the World Health Organization (WHO) declared the COVID-19 plague a public health emergency of international concern (Spina et al., 2020). In the same vein, 107 countries had implemented national school closures in response to the COVID-19 pandemic (Viner, et al., 2020).

Globally, universities have either cancelled all campus events including conferences, workshops, sports and other programmes and have rapidly moved to change many courses and programmes from physical to online delivery mode (Gewin, 2020). Extant review of literature shows that the closure of schools due to COVID-19 has impacted 1,198,530,172 learners in 186 countries (UNESCO, 2020). To slow the transmission and ease the burden of the health system, the Malaysian Government included school closure as part of the physical distancing policy. Some higher education institutions (HEIs) are cut unprepared, while other universities that are proactive have their contingency online learning tools at hand. Nevertheless, the online teaching mode is new and requires an upskill and, in some cases, reskill by the academic sector. Therefore, this paper will provide insights of the journey so far on online teaching from HEIs’ perspectives.

This paper is divided into four sections. Firstly, we start by giving an overview of COVID-19 in the world and how it affects the education sector. Secondly, we explicate the mitigation plan in several Southeast Asian countries and Malaysia. Thirdly, we critically analyse the challenges and impacts of COVID-19 on higher education and innovations in teaching. Thereafter, we conclude the paper by discussing the implications and way forward.
Response to coronavirus disease 2019 by Southeast Asian countries

In the higher education sector, countries in Southeast Asia use different approaches to respond to COVID-19. In Thailand, the government declared a state of emergency on 26 March 2020 when the COVID-19 infection cases rose from 177 to 827 within a week at the end of March 2020 (Crispin, 2020). The government also banned all foreign tourists and ordered the closure of various businesses such as malls, bars, gyms, salons, schools and universities (Techakitteranun, 2020). After about four months of closure, universities were allowed to open partially on 1 July 2020 and fully on 13 August 2020 (Asia News Network, 2020a). With the opening of universities across the country, universities are required to follow five strict measures: self-health checks, ThaiChana check-in, temperature screening, mask wearing and social distancing (Asian News network, 2020b). To cushion the impact of COVID-19, the Ministry of Higher Education, Science, research and Innovation, Thailand, initiated a job creation programme, where 10,000 jobs are created at research institutions and science agencies and allocated THB3,000 m for research funding and upskilling schemes (British Council, 2020).

In Singapore, when the alert level of the Disease Outbreak Response System Condition (DORSCON) was raised from yellow to orange on 7 February 2020, the Ministry of Education of Singapore implemented several precautionary measures such as suspension of large group activities, amongst others, assemblies, camps and mass celebrations. Staggered break times in education institutions were also executed to avoid large gathering and compulsory temperature check for students and staff members (Clydeco, 2020). From 8 April 2020 to 4 May 2020, higher learning institution students shifted to fully home-based learning (HBL) as heightened safe-distancing measures to pre-empt escalating infections of COVID-19 (Singapore Government, 2020). At the moment, HEIs in Singapore have entered the phases of safe reopening with most learning activities still kept online with exception of practical and laboratory sessions which are done on campus (Tan, 2020a, b).

It is important to note that Singapore started to embrace digital learning platforms to facilitate teaching and learning way before COVID-19. For instance, the National University of Singapore launched “Learning Innovation Fund-Technology” in 2012 to redesign classes with integration online learning. Similarly, Nanyang Technological University, Singapore Management University and Singapore Institute of Technology adopted flipped classroom more than five years ago (The Straits Times, 2015). Thus, the early adoption of digital learning eases the transition to online learning during the pandemic.

Response to coronavirus disease 2019 by Malaysia

In the context of Malaysia, the disease appeared at the end of February 2020. On 11 March, 2020, an alarming number of cases were reported after the religious gathering in Seri Petaling, which was attended by 16,000 people including 1,500 foreigners, where this cluster became Southeast Asia’s COVID-19 hotspot (Reuters, 2020). More than 100 cases were reported each day, mostly with the contact with the religious gathering (Abdullah, 2020). In congruent with the WHO guideline, the country implemented a movement control order (MCO) on 18 March 2020. With the implementation of the MCO, all classes in HEIs were moved to e-learning (Menon, 2020). The MCO has been extended over a few phases (See et al., 2020): the second phase of the MCO (1–14 April 2020), the third phase of the MCO (15–28 April 2020), the fourth phase of the MCO (29 April 2020–3 May 2020), the fifth phase of the conditional movement control order (CMCO) (4–11 May 2020), the sixth phase of the CMCO (12 May 2020–9 June 2020), the seventh phase of the recovery movement control order (RMCO) (10 June 2020–31 August 2020) and the eighth phase of the RMCO (1 September 2020–31 December 2020). Refer to Figure 1 regarding the total number of new COVID-19 cases from March till the end of August 2020.
Malaysia successfully flattened the curve and broke the chain of COVID-19 infection at the end of April 2020 (Shukry, 2020). Thereafter, the government imposed more lenient restrictions with strict standard operating procedure (SOP) for the business sector. In the education sector, HEIs in Malaysia are allowed for partial physical reopening with teaching and learning to continue to take place online. At the same time, students who were stranded in the campus since the MCO took effect in March 2020 were sent home in batches (Arumugan, 2020). With the number of COVID-19 cases continuing to improve, on 27 May 2020, the government gave exceptions to a few categories of students to return to the campus (Landau, 2020), which are mentioned as below:

1. Postgraduate students in the “research mode” to resume their studies.
2. Final-year or final-semester students who need to use specific equipment to carry out specific tasks.
3. Final-year or final-semester students who do not have a conducive online methods learning environment.
4. HEI students with special needs in education programmes and technical and vocational training.
5. All new intakes HEI students under the 2020–2021 academic session.

Practically, Malaysia suffered RM63 bn loss since the MCO came into force on 18 March 2020 (Povera et al., 2020). In order to strike a balance between containing COVID-19 and revitalizing the economy, the government has announced three PRIHATIN Rakyat Economic Stimulus packages (PRIHATIN package) totalling RM280 bn. PRIHATIN package 1 was announced on 27 February 2020 by the then Prime Minister, Tun Mahathir, with the total amount of RM20 bn with the objectives of mitigating the impact of COVID-19, spurring people-centric economic growth and promoting quality investment (Bernama, 2020c). A month later, on March 27, 2020, the current Prime Minister, Tan Sri Muhyiddin Yassin
announced PRIHATIN package 2 worth RM250 bn. The package was to safeguard the people’s welfare, support businesses including small and medium enterprises (SME) and to strengthen the economy (Yassin, 2020b). Under this package, the government allocated a total of RM270 m for students who are studying in HEIs of which every student was given RM200 one-off assistance (Yassin, 2020b). In the same token, the government also postponed the National Higher Education Fund Corporation (Perbadanan Tabung Pendidikan Tinggi Nasional [PTPTN]) payments for six months. PRIHATIN package 3, also known as Additional PRIHATIN SME Economic Stimulus Package (PRIHATIN PLUS), was announced on 6 April 2020 by the prime minister. The additional package, valued at RM10 bn was aimed to ease the financial burden of SMEs and ensure that two-thirds of workforce remain employed (Yassin, 2020a). However, as this paper is written (September, 2020), the actual impacts of PRIHATIN package are yet to be known.

Challenges and impacts
The COVID-19 pandemic and its far-reaching implications will continue to unfold in many sectors globally. Education has changed dramatically with distinctive rise of online learning, where teachings are done remotely on digital platforms. In Malaysia, the implementation of the MCO in the middle of March 2020 resulted in HEIs to fully switch to online learning with unprecedented challenges. However, it has also brought opportunities to HEIs which will be discussed below.

The mental stress amongst lecturers in Malaysia who have to migrate to online learning is beyond comprehension for four reasons. Firstly, they have to learn to use the learning management system before conducting online class in the shortest possible time with little training and preparation (Bernama, 2020a). No weighing pros and cons, no strategies – lecturers just switch to online teaching. Hence, the quality of teaching and learning may be compromised. Secondly, some lecturers do not subscribe to strong Internet services at home (Albukhary International University, 2020), they use their phone network to do teaching preparation, online tutorial and stay connected with students. This hinders the effectiveness and efficiency of online learning. Thirdly, lecturers need to change the assessments to suit to online learning environment. For instance, converting the final exams to coursework (Albukhary International University, 2020) or take-home exams. What about practical and laboratory tests? How are the lecturers going to change the work-integrated learning which is part of the assessment embedded in the degree course? Will the change of the assessment still be able to achieve unit learning outcomes? Fourthly, marking assessments online exposes lecturers to computer vision syndrome (Forster, 2020) as lecturers have to use computers for long hours to read and provide feedback electronically. Besides, answering endless students' questions via email have been a daily routine since the pandemic outbreak. All the above cause much anxiety, panic and stress to the lecturers.

Nevertheless, there are universities and colleges in Malaysia that are caught flat-footed due to inadequate infrastructure and sources to support online learning. This raises a question of how the students can complete courses on time, especially those who are being offered a scholarship or loan. A press release dated 27 May 2020 from the Ministry of Higher Education, Malaysia, indicated that all classes in both public and private HEIs are to be conducted online till the end of December 2020 (Bernama, 2020b). This worsens the scenario as students who are enrolled in the HEIs with limited learning management system facilities will not able to continue with their studies online. Switching to other HEIs may seem to be a good solution but the unavailability of the course, location and fees could be a hindrance to the students.

Even though Malaysia has over 80% Internet penetration, the infrastructure gap between West and East Malaysia is huge (Jalli, 2020). For instance, people living in the capital city (West Malaysia) are enjoying high-speed Internet up to 800 megabytes per second compared with
Sabah and Sarawak (East Malaysia) with slower speed with some areas without access to the Internet (Jalli, 2020). Given the economic strength of Sarawak that produces oil and gas, why is Sarawak so far behind? Very briefly, this is mainly due to size of the Sarawak state (biggest state in Malaysia) and political reasons. A student representative of University Malaysia Sabah reported that the Internet connectivity in rural areas is weak (Wong, 2020; cited in Lim, 2020a, b). The unequal Internet infrastructure between East and West Malaysia brings discrepancy to students’ access to online education and performance. A study conducted by Hampton et al. (2020) indicated that students in the United States of America who have no access to broadband and mobile device performed poorly compared to students with broadband access. In the same context, a research study conducted by Shahibi and Ku Rusli (2017) amongst students in the Faculty of Information Management, MARA University of Technology, Malaysia, revealed that the use of online media in education helps in improving academic performance.

Online learning has brought significant challenges to students. The University of Malaya Association of New Youth president noted that some students struggle with e-learning as lecturers tend to give students more assignments (Yap, 2020, cited in Lim, 2020a, b). Students do not have the flexibility to interact with lecturers and friends as compared to classroom learning (Rafidi, 2020). In face-to-face learning, students and lecturers can see each other’s body language and maintain eye contact. However, in the online setting, this is replaced by audio and video which can be disruptive when the line connection is not good. Student consultation can only be done at a predetermined time, that is, when lecturers and students are logged in to the learning management platform concurrently. In short, promoting students’ engagement through active learning can be a huge obstacle as online learning limits group discussion integration during the online class.

The recent research trend demonstrates that 50% of Malaysians underwent negative mental health during the MCO (Loheswar, 2020). When the MCO entered the third phase, it is estimated that there were almost 80,000 students who were still on campus nationwide excluding those renting outside the campus in Malaysia (Yunus, 2020). The use of hashtag (#stayatcampus) to encourage students to stay in the campus was not easy for them. Running a stay-at-campus campaign using short videos in social media portraying smiling students did not reflect a true feeling of the students. Their living conditions have changed drastically and are faced with many emotional effects such as stress, loneliness and increased depression occurrences (Sundarasen et al., 2020).

On the contrary, the pandemic also brought some positive impacts to education. The current crisis provides golden opportunity for universities around the world to test remote learning approaches and at the same time provide students with full experience of using technology-supported learning (Chin, 2020). In addition, it provides a chance for both lecturers and students to learn and use the many functions of e-learning systems and applications. Furthermore, the usage of papers is reduced significantly as all assignments are submitted online.

Increasing graduate employability rate to more than 80% is one of the aspirations of Malaysian higher education blueprint 2015–2025 (MoHE, 2015). The COVID-19 crisis gives HEIs in Malaysia an opportunity to rebuild the education system and relook into course learning outcomes. This calls for HEIs in Malaysia to re-examine the purpose of higher education beyond exam. Ya (2020) noted that “traditional learning and cramming of knowledge for examinations would not prepare students for the work in the future”.

Mitigation plans
Despite the pandemic, universities in Thailand have laid down measures to adhere to by all stakeholders for teaching and learning to proceed. For example, students and staff members of Chulalongkorn University are banned from travelling abroad or inviting foreigners for any university-related activities (Eua-arporn, 2020). The use of blended teaching, that is, online
and face to face was employed by Mahidol University based on the nature of programmes and in line with procedures to prevent and control the spread of COVID-19 (Mahaisavariya, 2020). In Thammasat University, the time-lapse technique was used for non-academic staff members, where they rotate working hours to ensure safety protocols are being followed (Witoonchart, 2020). These policies have provided a window for the universities to safely reopen and continue their teaching and learning under the new norm. To help students affected by COVID-19, universities in Thailand set up funds totalling THB150 m (US$4.7 m) (English, 2020). Also, tuition fees are reduced by 20% (English, 2020). A recent empirical study was conducted on the perception of students regarding online learning in Thailand, and it was reported that students could learn online. However, the majority of the students preferred face-to-face classrooms and believed that face-to-face classrooms were more comfortable than online classrooms (Imsa-ard, 2020).

As noted above, most of the higher learning institutions in Singapore are embracing technology-enhanced learning way before the current pandemic. With this regard, some faculty members in higher learning institutions in Singapore already had competencies in online teaching such as live streaming, pre-recorded teaching sessions, facilitating discussions in a digital platform and providing feedback online (Lim, 2020a, b). When the pandemic struck the country in February 2020, Singapore Institute of Technology converted classes of more than 50 students to online learning (Lim, 2020a, b). This allows lessons to continue without the necessity for university closures. An offshore branch campus, James Cook University, Singapore, also has taken a mitigation plan to combat COVID-19. This can be seen by the protective measures implemented, that is, offering blended learning for students (James Cook University Singapore, 2020). The blended learning enables students to continue with their studies and minimize disruption. While the National University of Singapore makes it mandatory for all staff members and students to use NUSafe application which is embedded within the uNivUS mobile platform (National University of Singapore, 2020), all academic staff members are required to show their “Green Pass” in NUSafe application before entering the class. Similarly, students must do the same before attending classes in person (National University of Singapore, 2020).

HEIs in Malaysia responded with great agility to the sudden change in teaching and learning with regards to the challenges faced above-mentioned. For instance, Universiti Sains Malaysia is amongst the first HEIs in Malaysia to come out with comprehensive guidelines and action plans to reduce the impact of COVID-19 on its stakeholders (Tan, 2020a, b). The guidelines include SOP for staff members and students. On training lecturers to use the learning management system, Taylor’s University has an e-learning academy team to train the lecturers to use various platforms and software for recording of lectures, sharing resources, online collaboration and creating virtual laboratories (Sani, 2020). In Quest International University Perak, the technical support system is in place to troubleshoot technical issues for those who do not subscribe to strong Internet services (Sani, 2020). In ensuring academic integrity for online exam, Monash University Malaysia uses Moodle Quiz software for their e-exam (Monash Malaysia, 2020). Similarly, Curtin University, Malaysia, uses Intelligent Remote Invigilation System software to monitor the computer screen activity during the online test or exam. The paragraphs below discuss on the transformation to students online learning in HEIs.

**Innovation to students learning**

The transition to online delivery mode has initiated the utilization of several online tools for the teaching purpose. More specifically, some HEIs have subscribed to various online teaching platforms like Cicso Webex, Blackboard collaborate, Canvas, Moodle cloud, Edmodo LMS to soon meet up with this new challenge (Lee, 2020). They are robust and fully functional synchronous web-conferencing systems, providing a variety of tools, such as
whiteboard, video streaming, ability to share screens as well as a text chat field, Internet resources and multiple audio and video connections (Yusuf, 2020). They also provide a multidevice-ready platform which can be used with headphone, laptops and tablets (Morrison et al., 2020). By the same token, there are free online video call tools for meeting and teaching purposes such as Skype, Zoom and Microsoft Teams. Concomitantly, they support in creating easy communication between genuine and digital learning resources and at the same time offering personalized learning opportunities (Aljawarneh, 2020). This has significantly provided a new space for teaching and learning. Evidence to support this position can be found in the study of Blankley et al. (2019), indicating that the use of online technological tools enhances the student learning experience. This is a transformation that has a positive impact on the education sector and requires a closer understanding to utilize it efficiently.

In order to help peer-to-peer learning, students utilize user-generated content tools such as Wikis, discussion boards, blogs, WhatsApp and social network platforms. This helps in creating a conducive space for students to interact and have a sense of belonging in the absence of going to the campus. In particular, WhatsApp serves as a platform to update the students and to share challenges with their peers as well as lecturers. Other social network sites that are used to create and build connection with students in different campuses include Facebook and Twitter. During class activities, students are asked to create and share collage or infographics of their work, where their peers can view and comment. This creates a funny and engaging learning environment.

Similarly, HEIs will no longer be placed as a diffusion of knowledge but to become spaces for creation, creativity and production of new applied and contextualized knowledge (Grandisoli and Jacobi, 2020). The traditional flipped classroom has been indicated to be more effective in the digital space. Lecturers are able to prepare interactive slides and conduct classes without much difficulties. In fact, in this new space, lectures are able to allocate feedback sessions for their students and online consultations. In regards to students’ assessments, oral presentations are now conducted in the form of PowerPoint narration, where students record that presentation and submit online. Although, some HEIs in Malaysia have embraced online marking assessment, some are using this new marking technique for the first time. As highlighted by many lecturers as well as students, online marking serves as an asymmetrical form of communication regarding the assessment. Lecturers give their feedback to students using feedback studio. Students find it beneficial as they are able to directly identify the areas they need to improve and the areas in the assessment where they have achieved good performance. This is unlike the traditional system where the lecturer will only insert the marks in the assessment sheet and give a general feedback to students who are concerned about their performance.

The innovation in learning does not only affect the face-to-face class delivery mode but has also transformed students’ internship. As a result of COVID-19, students who are doing internship are asked to move their practice to online. It is now called virtual internship in some places, where the employers are now asked to provide the students with work schedules that are to be done from home. In some cases, the internship-employing organizations are asked to provide students with check-in time, within which the students will contact the supervisor to ensure the tasks are ongoing or have been completed. Equally, it has become mandatory for the employers to provide the students with a virtual colleague, so that they will not be working in loneliness. Virtual internship provides an opportunity for students to obtain work experience with international employers, despite their mobility limitations (Mohd Daud Razak, 2020, cited in Bernama, 2020d).

Recent research trends have indicated that more efforts need to be put in so as to improve teachers’ online teaching capability as both the synchronous and asynchronous online teaching and learning platforms are new to majority of the lecturers (Huang et al., 2020). Synchronous learning necessitates the attendance of both parties at the same time for teaching and learning to take place (Chen et al., 2005). In particular, synchronous learning is a
real-time and live online social interaction, where responses are given to students immediately. On the other hand, asynchronous interactions refer to online communications that are not happening in real time (Dahlstrom-Hakki et al., 2020). The lecturer–student communication is happening mainly at an "anytime, anywhere" basis, though most also include other media such as synchronous chats, recorded lectures, limited face-to-face meetings or computer-assisted modules such as tutorials or simulations (Wu et al., 2019). As a matter of fact, the technical requirements of online teaching are higher than that of face to face, especially for the new faculty members (Bao, 2020). In most HEIs in Malaysia, series of online webinar are conducted to put those new cohorts on board in the online learning space. Similarly, there is a high need and demand for the literature that provides educators with more insights on coping with online classes – what are the best techniques to engage with students online in order to improve their learning experience?

Redesign of course assessment and the course content structure to suit online learning are also part of the new norm. In particular, this helps to determine the parts of the standard curriculum on which they will focus as well as their aims in including other topics (Daniel, 2020). For instance, centralized end-of-semester examinations in some universities have been changed to take-home exams (Mustafa and Abu Karim, 2020; University Selangor, 2020). It is entirely a new innovation that allows students to have more flexibility of writing an examination under less pressure and free space. As a result of this, we may see a new breed of performing students. Equally, some courses are now using i-Lectures as another channel of providing students with pre-recorded lectures. All this innovation is providing students opportunities to explore the new learning space. Overall, to fully utilize the online teaching and learning approach in universities, there is a need for continued evaluation and re-strategizing from the lecturers and students’ feedbacks and this area of research has to be given more attention. Moreover, necessary skills in the use of these technological tools are needed. Therefore, educators need to continue to improve themselves and develop a need to share experiences with different parts of the Association of Southeast Asian Nations (ASEAN) countries and the world at large, which will prove to be beneficial. Having provided insights from the Malaysia’s education system perspective in this section, the next part will discuss on the implications and recommendations of COVID-19 and propose future research works where teaching and learning should go from this stage.

Implications and recommendations

As it has been noted, Thailand, Singapore and Malaysia have adopted e-learning to navigate through this pandemic and continue providing effective teaching and learning in their HEIs. Nevertheless, universities need to step up by providing e-learning training to lecturers because it is not easy to manoeuvre an online teaching application for a lecturer who has been familiar with using slides and chalkboard. On the other hand, HEIs need to equip and upgrade their technology infrastructure for learning. This is because the effectiveness of e-learning is boosted by establishing proficient e-learning infrastructure as well as making continuous standardization efforts (Teo et al., 2020). From the lecturers’ dimension, there is a need to devise means to evaluate the engagement of students in an online class. As highlighted in this commentary, to improve engagement, students must learn to use video and speak with lecturers using their microphone during an online class session. Moreover, sufficient technical support, good Internet services and availability of user-friendly teaching pieces of software are the key ingredient to support an effective online teaching environment (Vershitskaya, et al., 2020). Synchronous learning must be encouraged and emphasized to make sure students attend online classes instead of viewing lectures in their leisure time. Barr and Miller (2013) noted that a successful online delivery environment requires technology devices, design of the programme, choice of instructors, responsive curriculum and supportive stakeholders.
As discussed above, delivering content poses a huge challenge in the online learning environment. Thus, meeting lecturers on appointment basis in the campus should be allowed. It is to enable students to clarify doubts or ask questions pertaining to assessments and lessons. This will certainly help students who are struggling with online learning. Nevertheless, the meeting should be held in open space and follow the SOPs such as social distancing and wearing mask at all times.

HEIs are expected to demonstrate responsiveness, effectiveness and efficiency to the stakeholders because they demand evidence of their claims of excellence in providing quality education (Toquero, 2020). This is especially more critical during this pandemic period. In light of the above, HEIs should set a task force team to collect documentation and evidence-based practices and services that are offered to the students (Toquero, 2020). For instance, HEIs can conduct a survey to find out the challenges faced and needs of the students. Thereafter, the task force team can take action based on the outcomes of the survey. All the actions are to be properly planned and documented in order to enhance evidence-based practices. The ultimate aim is to improve students’ learning experience and document evidence-based practices for future references and accreditation purposes.

A way forward: post-pandemic teaching and learning
At the present moment, it is uncertain whether HEIs will be able to weather this storm and there is no official data showing the success of online learning amongst HEIs in Malaysia. Will HEIs in Malaysia revert to strong presence of face-to-face learning after the pandemic or will they continue in offering online courses? Will e-flipped classroom approach be replacing flipped classroom in HEIs in Malaysia in the future? The answers to the questions above are very much dependent on the stakeholders, particularly HEI management, lecturers and students’ experience during the crisis. Future qualitative and quantitative research studies should be conducted in Malaysia to evaluate the current online learning approach and to what extent the online learning is preferred by lecturers and students.

References


Further reading


Corresponding author

Joseph Kee-Ming Sia can be contacted at: joseph@curtin.edu.my

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm Or contact us for further details: permissions@emeraldinsight.com