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# Business Continuity Plan in the Higher Education Industry: University Students' Perceptions of the Effectiveness of Academic Continuity Plans during Covid-19 Pandemic

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**Abstract:** The Covid-19 pandemic is one of the most disruptive, life-changing events that had brought the world to a perpetual standstill in 2020. Schools and institutions of higher education were impacted badly, resulting from the lockdowns and movement restrictions imposed by the governments of numerous countries. Students and faculty found themselves in virtual classrooms, with many caught unaware of what they needed to do, having to learn new things at lightning speed and feeling a sense of despair. While many online learners had frustrations and concerns regarding their online learning experience, there were those who had a good learning experience. The students' observations and perceptions of the difficulties and opportunities they encountered in their online learning experience were assessed through grounded theory using textual thematic qualitative analysis of their reflective feedback. The findings reveal that most students had a good online learning experience and found that the academic continuity plans implemented by the universities were effective. The concerns that some students had with online learning were related to technological drawbacks such as poor internet connections, and personal concerns about academic ability and time management skills, among others. This study concludes by offering insights and recommendations to institutions, faculty, and students on how best to conduct online learning and teaching for all.

**Keywords:** academic continuity; business continuity; e-learning; Covid-19; student's perception; online learning; learning experience; higher education institutions

## 1. Introduction

The Covid-19 pandemic is one of the most disruptive life-changing events that had brought the world to a perpetual standstill for a couple of months in the year 2020. What was believed to have started in Wuhan, China, spread like wildfire engulfing many countries and causing untold damage to the global economy in terms of loss of life amounting to a shocking 1.161 million deaths as of 28 October 2020 [1], shutting down of businesses, scaling back of both production and consumption [2], increasing unemployment, closing schools and institutions of higher education [3,4], reducing the levels of sentiments and increasing perceived uncertainty [5], and increasing suicide rates [6,7] among others, following the massive movement control orders and lockdowns across the world to support physical distancing efforts and combat the spread of the deadly virus.

Higher Education Institutions (HEIs) were severely impacted resulting from the lockdowns and movement restrictions, as not all HEIs had effective academic continuity plans (as part of their overall business continuity plans) that could ensure seamless and effective learning continuity.

Academic continuity planning, as Day [8] argued, “is an emerging tool for dealing with class cancellation associated with natural disasters, acts of violence and the threat of pandemics” (page 75). Without effective academic continuity planning, the main stakeholders of HEIs comprising of students and academics would be in distress, as lessons would be disrupted. Many HEIs had to respond rapidly to the crisis by switching the mode of learning from face-to-face to virtual learning. Sunoqrot et al. [9] argued that the rapid response to the virtual model of learning “came at a price: Having to transition to remote teaching and learning without the proper tools and technological support” (page 3129).

As far as Malaysian HEIs were concerned, many students and faculty members were caught unaware of what they needed to do, when the HEIs were closed during the lockdown period. This uncertainty was further accentuated by the instructions given by various ministries in Malaysia, including the Ministry of Higher Education (MOHE), which essentially overrode decisions taken by University officials. The initial stages of the implementation of several instructions by MOHE and other ministries had caused some confusion among the main stakeholders of higher education comprising of students and academics, in the initial days of the movement control order (MCO). Students and teachers were completely caught off-guard with the sudden shift in the educational system [10] from in-person physical classes to fully online classes within a matter of days [11,12], akin to entering a dark tunnel in which they could not see the light. Many feared the unknown, because they had never experienced a pandemic situation of such nature, and this fear further intensified the calamity that many students and teachers experienced. The Covid-19 pandemic was a crisis that needed swift and effective academic continuity planning, so that lessons could go on as seamlessly as possible.

There was a slowdown in learning in the initial stages of the pandemic lockdown, as many students and faculty were not well versed with the various new tech tools they needed to use in the virtual classroom, with not much time to practice, leaving a sour taste in the mouths of students and faculty [3]. As the pandemic occurred unexpectedly, university faculty members had to hurriedly switch to online courses without reflecting on how best to transform the curriculum to align well with the online learning platform. There was also the “digital divide” issue of disparate accessibility to technology that has disadvantaged some students who did not have access to technology or good internet connections from their remote locations. Yet another more pertinent divide had appeared, i.e., the “learning divide”, a content-divide where students faced major disparities in accessing effective classroom learning experiences that fostered creativity, problem-solving, and critical thinking. The “learning divide” was more pronounced during the pandemic period, because many academics had insufficient technological expertise and did not go through enough in-depth professional development, thereby constraining their effective use of educational technology in classrooms [13]. The learning divide was further propagated by the lack of ability on the part of the academics to effectively handle online classes, and in some cases the lack of empathy they displayed in understanding the different online learning abilities of their students. As a result, the online learning experiences of students in some universities have been rather poor [3], leading to reputational damage of these institutions. In some cases, the universities assumed they were fully prepared for online learning, being fully equipped with the necessary education technology tools, but faced with the “learning divide”, these institutions were “technology rich, but expertise poor”, leading to a possible loss of reputation. It is therefore imperative that HEIs are well-prepared with an effective academic continuity plan failing which, its very existence becomes unsustainable.

The Covid-19 pandemic was an eye-opener and a not-so-gentle reminder to institutions of higher education that they need to develop effective and sustainable crisis and emergency planning, as it is increasingly becoming an expected feature of all institutions. Regehr, Nelson and Hildyard [14] in their study on academic continuity planning in higher education, emphasized that “any crisis strategies should include three components comprising of (1) procedures for addressing the immediate situation, generally referred to as emergency planning; (2) procedures for ensuring ongoing business and administrative operations, generally referred to as business continuity management (BCM);

and (3) procedures for ensuring the academic integrity of all academic programmes, which this paper will refer to as academic continuity planning.” (page 75).

The pandemic forced most students, academics and education administrators into an uncomfortable position, requiring them to have a high level of resilience in facing significant disruptions in the education system. Resilience is the epitome of survival among individuals, organisations and society when faced with such an unprecedented economic and global shock [2]. Liu, Lee, Lee [2] aptly mentioned that “In tackling a global health crisis, resilience requires not only psychological readiness but also organizational support and system-level preparation.” (page 278). Being prepared not only means having an extensive set of educational technology tools, but more importantly, having an eco-system that provides supportive mechanisms for the students and staff, besides having academics that will go the extra mile to support students’ learning in an online or remote environment. Having discussed the issues surrounding the Covid-19 pandemic and the need for academic continuity planning, this study seeks to explore university students’ perception of the effectiveness of the university’s academic continuity plan, in terms of their learning experience during the Covid-19 pandemic, with the hope of addressing what works and what doesn’t in virtual classrooms. The study aims to examine and document the academic continuity efforts of private universities in Malaysia and the resulting learning experiences and lessons gained from the students’ perspective, during the COVID-19 pandemic period. The study hopes to provide insights to policymakers and other HEIs on managing future disruptive events.

## 2. Literature Review

### 2.1. Learning Experience

The impact of the Covid-19 pandemic changed students’ learning, as they had to learn new technologies [15] and were exposed to new modes of learning, thus increasing their anxiety and stress [16,17]. In addition, the pandemic affected student’s application for abroad studies, with the cancellation and/or delay of the main exams such TOEL, IELTS, [16] and Cambridge A-Levels [18].

For students to have a successful online learning experience, universities need to act swiftly in implementing alternative learning mechanisms during periods of crisis. This is where universities need to have effective business continuity systems that can be rolled out whenever any crisis happens. An important aspect of the business continuity management is the academic continuity plan which will ensure that HEIs are well-prepared to face any challenges by ensuring classes continue seamlessly, and that students and faculty are prepared to learn using different non face-to-face platforms. This will ensure that students’ learning experience is not compromised, even when they no longer have face-to-face lessons. One must note that the students’ online learning experience can only be effective if the students have high levels of self-efficacy and are self-regulated. However, studies have found that even though flexibility and autonomy are offered in online learning, students devote a small portion of their time to learning tasks and are often found to be completing their assignments right before the due dates, highlighting students’ lack of self-regulation skills’ to organize and manage their time well [19,20].

Another noticeable challenge faced by students, is having to deal with different technological user interfaces [21], due to the evolution of a broad variety of operating systems, computer hardware and software technologies. A study done by Szeto and Cheng [22] found that students felt uncomfortable using microphones or video projection, or being the center of attention in a synchronous learning mode, and this could be due to a lack of confidence, lack of communication cues, poor writing skills or language barriers, especially among students in Asian countries.

Students at different levels of education and different majors of studies face different challenges during the Covid-19 pandemic. The learning processes of primary and secondary school students were affected as they were not well prepared for online learning with insufficient or no knowledge, skills, access to internet connection and devices for e-learning purposes [23,24]. This was the case in

rural areas in Malaysia where there was either no or poor internet accessibility, as was reported in a study that revealed that 67.1% or 385 users surveyed in East Malaysia were dissatisfied over Internet access due to weak, slow, and unstable connectivity—with some being unable to log in at all [25]. Medical students, on the other hand, were unable to experience being a part of the hospital environment and to resolve this, students were assigned to a mentor to experience telemedicine visits [26]. On the contrary, students found that online learning was not only convenient, time-efficient and flexible but also allowed better interaction with their peers and faculty members, especially through the chat functions, making classes more engaging [27].

University students on the other hand, were found to have higher anxiety than normal before the start of the semester during the Covid-19 period, especially among the females [16]. Many of them had negative perceptions [28] and endured psychological distress [29,30] due to the sudden change to online learning during this unprecedented time. In contrary, Lall and Singh [31] concluded that majority of the university students preferred studying online as they could study anytime anywhere, but the setback was the lack of co-curricular activities from this mode of study. The discussion thus far clearly shows that there exists a gap in the business continuity management of the education industry, as academic continuity was not seamless in the cases mentioned.

## 2.2. Academic Abilities

Covid-19 has had a tremendous impact on educational institutions, academics and students. Educational institutions at a global level were forced to close during the implementation of the lockdown or movement controls [16,32,33], requiring all staff to work from home [23,31,34] and to switch their modules or courses to online mode in a short period of time, with little or no formal training [35,36]. Many educational institutions opted for a combination of synchronous and asynchronous modes of instruction [33] and it was a challenge to the academics who had insufficient or no skills or experience using software tools or teaching online.

Academics faced huge constraints and challenges in preparing their students for learning in an online environment. One of the greatest hurdles was students' lack of knowledge and skills on e-learning tools, access to internet connection and devices [23], which disrupted the process of learning. In addition, during the online sessions, students did not participate or rarely talked, unlike the face to face sessions, but instead, they preferred using the text chat [33], creating a big task for educators to ensure that learning took place. As a result, academic staff had to use various strategies to engage students' participation while teaching asynchronously [17]. In certain cases, academic staff had to develop e-content for modules that lacked e-resources besides marking and giving feedback on student's work online, leading to longer screen time and higher internet bills [24].

Another significant challenge faced by the academics, was the need to use of various technology tools and the effectiveness of these tools in the implementation of e-assessments. Assessments can be classified into formative and summative assessments where the purpose of formative assessment is to assist learning whereas a summative assessment explores if the students have accomplished the learning outcomes at the end of the learning instruction [37,38]. Academics had to create e-assessments using higher-order thinking skills which included critical thinking and problem-solving, using different digital tools to enhance student learning. Online tools such as Kahoot, Socrative, Quizlet Live, and Nearpod among others were used by academics in their lessons [39] with the hope of developing students' cognitive, motivational, emotional and social skills. Another hurdle faced by faculty staff was in providing good feedback to students to optimize students' success and achievement [40].

## 2.3. Technology

Due to the closure of schools and higher education institutions during the pandemic, different modes of teaching and learning were implemented using different platforms to achieve the goals suggested by the education ministries around the world [16,23]. In Indonesia, the government arranged free online learning platforms during this crisis such as Rumah Belajar, for school students and teachers,

and SPADA for Higher Education Institutions, partnering with different providers of online learning applications to further support the implementation of online learning [23]. WhatsApp application was used to implement online teaching in several countries, as this application was available on gadgets owned by teachers, students and their parents [41,42].

Perić, Grubišić, and Tijan [43] argued that although the environment for e-learning in many universities exists, it is not sufficiently functional for all learning activities. The success of e-learning during the pandemic era is highly dependent on “technology knowledge management, support from management, increased student awareness of utilizing e-learning systems and demanding high levels of information technology from instructors, students and universities” [44]. Students from lower-income families suffer from the resources of information technology, as they have limited or no access to modern technology [30] and if they do, they face the barrier of excessive internet cost [45].

E-learning, has enhanced the knowledge of academics and students in various ways, including through the recorded and live events webinars offered by national specialty industries and societies, which may be better than “conventional in-classroom” experiences, as webinars expose students to the research done by people who are experts in their fields and this will enhance their knowledge [46].

### 3. Methodology

The research was conducted between May and July 2020 involving 74 university students across three private higher education institutions in the state of Selangor in Malaysia. The main objective of the research was to ascertain how effective academic continuity plans of universities were, when learning and teaching was disrupted during the onset of the Covid19 crisis in Malaysia in March 2020. The data was collected based on the feedback given by university students who reflected on the effectiveness of the academic continuity plans implemented by their respective higher education institutions, based on their online learning experience during the Covid-19 pandemic period. The participants of the study were selected from 2 groups of students comprising of undergraduate and post-graduate students, using purposive sampling. The undergraduate students are business majors undertaking several 4-credit modules, while the post-graduate students were taking 4-credit business modules in the Masters programmes offered by the institutions of higher education. The feedback captured the students’ qualitative and quantitative perceptions of the effectiveness of the fully remote or virtual environment in enhancing their learning experience and competences. Textual analysis was used to analyze the qualitative statements provided by the students. This study focuses on the qualitative aspect of the students’ feedback by employing textual analysis to analyze the qualitative feedback, while the quantitative feedback was analyzed via the use of a bar chart.

The data was collected using a self-administered questionnaire comprising of two sections that were developed to obtain the students’ perception of their online learning experience and the effectiveness of the universities’ academic continuity plans. The first section of the questionnaire measured the students’ perception of their online learning experience based on a five-point Likert scale. There was a total of 14 items that were adapted from validated survey questions, based on previous empirically tested research on online learning experience [47,48]. The scales from previous research were adapted to suit the objectives and context of the current research. For the second section of the questionnaire, the students were invited to answer three open-ended questions in the form of a reflective writing exercise, requiring the students to reflect on their learning experience in terms of the effectiveness of the university’s academic continuity plan, their perception of their own learning experience of fully online lessons during the pandemic period, the skills that they had gained, the effectiveness of the online learning tools and technology that they used. The open-ended questions were adapted based on a study [49] (Berry, 2018) on online learning experience. This section was extremely important as it provided an opportunity for students to provide their own reflections and thoughts about their academic experiences, opinions or feelings that kept them going in a “new normal” situation, where they were not constrained by Likert-scale statements which did not provide

them with much room for their own thoughts about the situation. This paper provides evidence of the richness and depth of thought and reflections that were manifested by the students caught in a pandemic situation they had never experienced before. This reflective section encouraged a way of thinking that enabled the students to dive deeper into their thought processes, to explore their learning experiences and their perceptions of how effective the academic continuity plans of the universities were. This reflective section provided the students with a way of giving meaning to what they had to go through or experience when learning and teaching underwent a rapid transformation from a fully face-to-face environment to a complete virtual world. The qualitative aspect of this study involved an inductive process, as it provided an interpretive understanding of the contextually bound social phenomena [50,51] within the context of online learning. The qualitative feedback of the students provided detailed information on their perceptions of the effectiveness of fully online/remote lessons during the pandemic period, in enhancing their learning experience and competencies. The textual analysis technique was used to make inferences by objectively and systematically identifying emerging constructs and specific characteristics of the learning experiences of the students, as expressed in their qualitative feedback. Consent was obtained from the students and they were informed that their feedback would be used for this study.

The qualitative data was analyzed using an analytic induction process to generate emerging themes and codes, with the aid of an Excel database used for organizing the data. Grounded theory was employed in this study, based on the work of Glaser and Strauss [52]. The qualitative perceptions of the students were read through individually to develop a system of categorization. An appropriate categorization model was developed through a repetitive process that took several rounds, after which the expert assessment by two lecturers was sought through a series of intensive discussions. The data was analyzed based on the student's learning experience in a fully online semester. In the final analysis and report, general themes and findings are discussed in the results section. This study, therefore, seeks to capture the students perception of the effectiveness of academic continuity plans that HEIs rolled out during the pandemic period, through their online learning experiences and to document the developmental process they went through in the fully online classes.

The quantitative aspect of the survey was carried out to complement and further authenticate the inferences made in the textual analysis.

#### 4. Results and Discussion

This study utilizes a mixed-mode method that uses both quantitative and qualitative questions to elicit information regarding online learning experience from the students' perspective. The quantitative information was derived using Likert-scale questions developed to specifically track the students' online learning experience.

Figure 1 provides the findings of the students' online learning experience. The quantitative results as shown in Figure 1 reveals that students in the selected private HEIs had a positive learning experience, which reflects that the academic continuity plans implemented by these universities were rather effective. To check on the robustness of the quantitative findings of this study, we thematically analyzed the qualitative feedback given by the same set of students to analyze the possibility of deeper insights that may emerge from the thematic analysis that would be much needed by the universities to implement improvements in the business and academic continuity plans for any future disruptive crises that could unexpectedly happen.

The students' qualitative feedback was analyzed to examine the effectiveness of HEIs' academic continuity plans in the form of online lessons during the Covid-19 pandemic. A pattern of commonalities was based on the broad-based, thematic analysis of the students' reflective journals. The pattern of commonalities gave rise to a total of four emerging constructs, which comprised of Academic Continuity, Learning Experiences, Academic's Abilities, Attainment of Soft Skills or Graduate Capabilities, Perceived Benefits of Technology, and Technological Drawbacks of Technology.

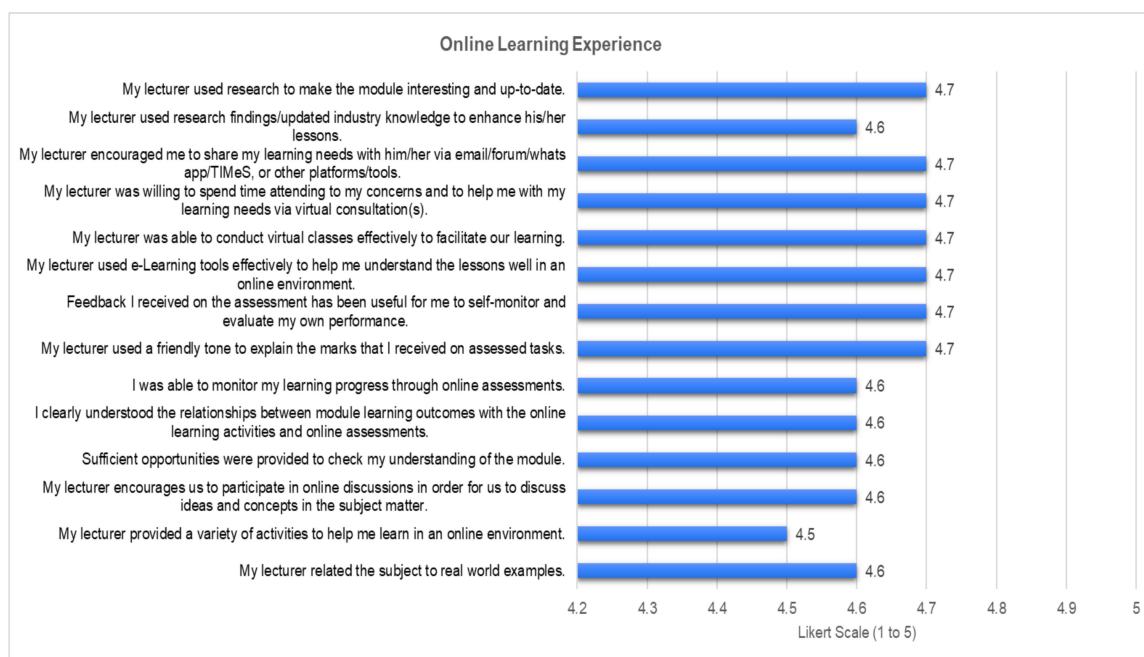


Figure 1. Students’ online learning experience during the Covid-19 pandemic period.

#### 4.1. Construct I–Academic Continuity

The COVID-19 pandemic is one of the most challenging global crises experienced worldwide in recent times, causing tremendous disruptions across all industries. One major industry that has seen such unprecedented levels of upheaval is the education industry, with schools and HEIs in numerous countries being shut down as an early measure to curb the spread of the virus and mitigate the untold damage it was causing to humankind. HEIs worldwide had to quickly respond to the unexpected crisis by rolling out their business continuity plans, which included the academic continuity plans, but this came at a price: Having to transition to remote teaching and learning without the proper tools and technological support [9]. Were HEIs in Malaysia prepared with their academic continuity plans? This study presents a glimpse of the efforts undertaken by certain HEIs in Malaysia to ensure academic continuity, from the students’ perspective of their online learning experience and educational outcomes during these unprecedented times.

The HEIs involved in this study comprise of several private universities in Klang Valley in Malaysia. Based on the thematic analysis of the qualitative feedback given by both undergraduate and post-graduate students, it can be concluded that these private HEIs were generally prepared to face the crisis, as they were quick in responding to the crisis by rolling out their academic continuity plans that ensured their students were able to seamlessly continue receiving academic lessons, despite not having face-to-face classes.

As far as academic continuity was concerned, an interesting feedback was reflected by a student, who emphasised the benefit of the University having an effective Academic Continuity Plan whereby lessons did not pause or stop during the pandemic period as mentioned in his/her feedback . . . .

*“ It’s going really well, much satisfied that Taylor’s was so smart, thoughtful, modern and cooperative that our course didn’t pause or stop for a while otherwise international students would be in a big trouble; Learning the tools will be really helpful for us in our workplace in coming future too; We got to be more connected to our lecturers with this; Response rate among students & lecturers was too high; Mock exams was really good experience; didn’t find any difficulty so far; In crisis like this, such measures need to be taken to keep the course and process going else our academics will remain shut for sometime and we might lose touch and interest from academics; Also with today’s digitalization, everyone working in today’s world need to be updated and be tech-savvy, this will not*

*just help in self-improvement but also in running out businesses in new, creative and innovative approaches.” (Student 1, 2020).*

This was echoed by another student who was thankful that the university was prepared and lessons were not suddenly disrupted at the height of the pandemic when the university shutdown, as he/she indicated that the university’s academic continuity plan was effective when he/she gave the following feedback.

*“Generally excellent for keeping the learning momentum going leading to the final exams.” (Student 2, 2020).*

The aforementioned feedback revealed the effectiveness of the academic continuity plan of the said university. These are extremely important feedback coming from the main stakeholder of the education industry. The feedback reflected the important role played by HEIs in ensuring education never ceases, despite the gravity of the crisis and the ensuing challenges faced. This was re-iterated by Liu, Lee, and Lee [2] who asserted that managing an unprecedented crisis of this nature is tedious and complex, requiring a holistic multi-stakeholder approach and large-scale interdisciplinary and multidisciplinary coordination. Designing, developing and implementing academic continuity plans, as a component of the business continuity management must include designing for resilience; planning processes when risk is perceived; and ongoing implementation [14].

While the students had generally provided positive feedback on the academic continuity plans of the HEIs, there were however some pertinent issues they faced with internet connectivity and their own preference for on-campus learning, as reflected in the following feedback by some students:

*“My learning was not stopped. The online tools are very useful. However, the basic things like the connectivity issue plays a major drawback at times.” (Student 3, 2020).*

*“The online learning allows us to continue our course during MCO without much hurdle. This is a good business continuity plan and kudos for being well prepared. This resulted a very minimal negative impact to all the students. However, my personal preference is still on-campus learning as more interaction and intellectual exchange can happen when people see each other physically.” (Student 4, 2020).*

While the feedback mentioned above revealed the effectiveness of the HEI’s business and academic continuity plan, the students nevertheless faced issues with internet connectivity, and their own preference to have face-to-face classes that they were used to. As far as internet connectivity was concerned, this problem has been highlighted by several studies in Malaysia that mentioned technical problems, such as poor internet connectivity and limited data plans [53–55], and these issues are not only faced by rural students and academics, but also by people living in urban areas in Malaysia.

#### 4.2. Construct II—Learning Experiences

Learning Experiences, as defined by UNESCO, refers to “A wide variety of experiences across different contexts and settings which transform the perceptions of the learner, facilitate conceptual understanding, yield emotional qualities, and nurture the acquisition of knowledge, skills and attitudes. In educational settings, learning experiences are ideally challenging, interesting, rich, engaging, meaningful, and appropriate to learner needs. Previous learning experiences are considered to be key factors predicting further learning” [56] (p. 36). In analyzing the students’ feedback on their learning experience during the covid-19 pandemic, there appeared a general consensus that pointed towards a positive learning experience even though there were some challenges. The majority of the students reflected on their positive learning experience, clearly indicating the effectiveness of the university’s academic continuity plan in which these private universities were able to continue higher education in the form of online lessons, which seamlessly took over face-to face classes, without causing much disruptions.



This was reflected in many of the qualitative feedback that the students provide as indicated in the following feedback.

*“Learning experience was pretty good considering the circumstances and Miss XXX really took the time and effort to ensure all of us understand the topics. One of the best modules among the others taken this online semester as other module lecturers may not have spent this much effort on teaching.”* (Student 5, 2020).

The fully online learning was a new experience to students as mentioned in one feedback.

*“It is a new experience for me learning thru online, and i gain alot of new knowledge thru online study.”* (Student 6, 2020).

The academic continuity plan as part of the bigger business continuity plan was successful in creating an effective educational environment that facilitated student learning and a sense of togetherness during a global pandemic that had forced social distancing. The students’ feedback aligned with the findings of Palancia, Esposito and Sullivan [57] who mentioned that the use of technology enabled the continuity of a productive teaching-learning experience.

Students did acknowledge that online classes were far from perfect, but given the Covid-19 pandemic situation, they found themselves in unfamiliar territory having fully online classes, as mentioned in the reflection of another student . . . .

*“Online learning is difficult but Dr XXX does everything she can to provide the best learning experience. Never have I been excited for a 6 pm class. She makes everything understandable and her efforts is undeniable. She gives research tips and personally, motivates me a lot. The best lecturer I’ve had in TU, as she makes economics actually interesting and makes us understand the humanity in economics. (If that doesnt make sense, you need to ATTEND her class, to ‘feel’ it). I still hate corona haha.”* (Student 7, 2020).

The students’ reflections on their learning experience gave fresh insights into how effective online lessons could be if delivered well by integrating technology into the curriculum, as it connected students to their peers and lecturers, ensuring knowledge acquisition continued in the comforts of their homes, through engagement using flexible and scaffolded online resources. Most students were motivated to learn in a new environment, having the flexibility to learn anytime anywhere, a phenomenon that Muljo, Perbangsa, and Pardamean [58] mentioned in their article on the flexibility of online learning in that “Online learning has become a model, learning strategies, and the preferred channel in education around the world because it is not restricted by time and place” (pp. 36). Aside from knowledge acquisition, the students also developed new technical skills that will certainly come in handy when these students graduate and go into a new post-pandemic working environment that will require them to work from anywhere at any time, in a borderless working world, that requires knowledge on technical skills. The positive online learning experiences perceived by most of the students align with the findings of the majority of scholars who found online education to have a positive impact on the students’ learning experience [59–61]. This aligns with Dewey’s constructivist view of learning where the learner is an active agent in the process of knowledge acquisition.

While a majority of students perceived their online learning experience to be positive (60 positive feedback on learning experience), there were a few who were not comfortable with virtual lessons (17 negative feedback on learning experience) as they perceived the need to be more disciplined, have more self-control and being more self-directed in an online class compared to a face-to-face class, as aptly revealed in one student’s reflections:

*“Online learning really required high self-control, with Microsoft teams, it was more organised than zoom in term of scheduling me up. However, MCO still demotivated me a lot.”* (Student 8, 2020).

While the students appreciated that classes went on seamlessly with the various online tools, they found themselves in a new online learning environment which required them to learn new technical skills, with some of them being disadvantaged due to the inconveniences of different time zones as clearly mentioned in the reflection below:

*“The various online learning tools ensured classes still went on, and I personally was enlightened on how the different platforms can be used. However, I found it a bit difficult and unfair on my end-time wise, as I travelled back to my home country during the outbreak, and I am 6 h behind. So when conversations would occur on any of the online learning tools in the morning hours, say 9 am—I couldn't partake much as I would be sleeping, or I would have to wake up really early. Which I found a hassle. So basically, the time difference is what affected me the most. However, everything else like the course content was delivered effectively.”* (Student 9, 2020).

Some students felt that the online learning was tiring and not efficient as reflected in the following:

*“I still prefer face to face learning, online learning make feel tired easily, and not as efficient as learning through lecture. It is also advantage which there are no interference from noisy friends.”* (Student 10).

There was also the concern of online learning being less effective as reflected by a student who mentioned that

*“Its more flexible for me as i can adjust my own timing. However, it is less effective when it comes to group discussions especially during our tutorials. Overall, its an interesting module with a good lecturer/tutor, i actually enjoy this class! Hehe.”*. (Student 11, 2020)

While there were only some students who perceived online learning in a negative light, these very students also mentioned some positive aspects of their learning experience, as shown in the feedback by Students 9 and 11. The majority of students had a positive learning experience as it recorded the most number of feedback in the category of learning experience (60 feedback), reflecting the effectiveness of online classes during the pandemic period.

#### 4.3. Construct III—Academic's Abilities

In planning and implementing effective academic continuity plans, it is imperative that HEIs strategize how education can best continue not only for the students, but how effective the academics are in delivering the lessons in the new platforms suggested during crises, as these make up a crucial part of the effectiveness of the academic continuity plans. In this study, the students were asked to reflect on their learning experience during the covid-19 pandemic period and many of them provided reflections that emphasized the abilities of their academics in delivering online lessons. The students were generally pleased with the efforts of some academics, while they made comparisons between those they perceived as effective with the others whom they perceived were not as competent in delivering online lessons as shown by the following feedback:

*“Dr. XXX is literally the epitome of perfect. One of the best teachers ive had in my entire life. just that the assessment submissions are late in the semester so she doesnt have enough time to mark provide feedback for us to monitor progress.”* (Student 12, 2020).

*“Learning experience was pretty good considering the circumstances and Miss XXX really took the time and effort to ensure all of us understand the topics. One of the best modules among the others taken this online semester as other module lecturers may not have spent this much effort on teaching.”* (Student 5, 2020).

*“As for this module, so far everything is very good and Dr XXX is very helpful in many aspects. 11/10 teaching style and method compared to other modules lecturer.”* (Student 13, 2020).

*“Motivational. The level of efforts are amazing- whiteboards at home, personally email students to give feedback (each one), repeat a lot of times if students dont understand, always gives real ideas and inspiring. Truly one of its kind- the best <3.” (Student 14, 2020).*

While the students had provided much positive feedback on the academics’ abilities to effectively conduct online lessons, they nevertheless made comparisons with other academics whom they perceived as less effective in their online pedagogical abilities. This is a rather important finding that HEIs must pay attention to, as effective academic and business continuity plans must be cognizant of continuous quality improvements not only in terms of infrastructure, but more importantly, in terms of the human capital development aspects. HEIs must focus on preparing their academics to be crisis-ready by providing ample workshops, training education courses, and certificates that can be delivered entirely online for their academics so that they can adapt to the newness of online-learning environments to better prepare them in crises periods. Academic staff need to be well-trained to effectively use various online strategies to engage students’ participation while teaching asynchronously as suggested by Taha, Abdalla, Wadi, and Khalafalla [17]. Sunoqrot et al. [9] argued that academic staff must be resilient and self-reflect to break out of their comfort zones and challenge existing teaching paradigms, so as to utilize out of the box ideas and pedagogy and achieve learning outcomes with minimal resources. Academic staff of HEIs must be ready for online learning before they can be ready to conduct effective online teaching. They need to attend as many online courses as possible which can help them to pick up some skills that can make them effective online facilitators, as it is an integral aspect, and a popular tool, in the broader landscape of higher education. Rajak et al. [62] aligned with the positive findings of this study that the teacher’s ability enhances online learning among students. The teachers/academics are after all the human agents that can be considered one of the most important factors that makes information systems run more smoothly [63]. Sun et al. [64] further re-iterates the important role played by academics when they emphasized that the positive attitudes of academics in the overall e-learning eco-system, contribute to the success of e-learning. The educators are the catalyst that transforms the way the students learn in the virtual platform and it is their way of conduct and ability that can engage and inspire the students in embracing digital education [65].

#### 4.4. Construct IV–Attainment of Soft Skills or Graduate Capabilities

In a conventional face-to-face classroom, the soft skills attained would include among others, communication skills, social skills, mastery of the English language and thinking skills [66]. However, in an online class, social and collaborative skills are rather difficult to develop, especially when academics are new to online pedagogy and do not know how to engage with the students virtually, nor encourage collaboration among students. In most cases, students do not even want to turn on their cameras, making the socialization process even more tedious. This study revealed that online lessons enhanced certain soft skills among students. The online classes using google collaborative slides, allowed students to hold discussions and present their ideas of the subject matter through interactive exchanges. The online lessons conducted through Teams or Zoom had enhanced peer-to-peer engagement, as reflected in the following excerpt:

*“It enables collaboration between peer for assignment and presentation. Lectures are also being delivered smoothly despite some minor glitches due to internet connection and high traffic volume of users.” (Student 15, 2020).*

Students also perceived that the online lessons had enhanced their graduate capabilities (thinking skills, digital literacy skills, and adaptability skills) that they believed would be of help in their future undertakings.

*“The knowledge we have learned is not only taught on the module, the teacher also continues to expand our thinking.” (Student 16, 2020).*

*“It’s going really well, much satisfied that Taylor’s was so smart, thoughtful, modern and cooperative that our course didn’t pause or stop for a while otherwise international students would be in a big trouble; Learning the tools will be really helpful for us in our workplace in coming future too; We got to be more connected to our lecturers with this; Response rate among students & lecturers was too high; Mock exams was really good experience; didn’t find any difficulty so far; In crisis like this, such measures need to be taken to keep the course and process going else our academics will remain shut for sometime and we might lose touch and interest from academics; Also with today’s digitalization, everyone working in today’s world need to be updated and be tech-savvy, this will not just help in self-improvement but also in running out businesses in new, creative and innovative approaches.” (Student 1, 2020).*

*“It is a good chance to adapt to new world problems.” (Student 17, 2020).*

Quite a number of students revealed how they gained self-discipline, self-control and self-reliant skills as they had to deal with the online learning setting, as reflected in the following excerpts:

*“During MCO, self discipline is most important because lecturer can’t really push your progress in online, so I really need to find ways to motivate myself and keep on track with every module I taken. Although online learning is far different than face to face class, but everyone have to deal with it and keep learning or else you will be left out.” (Student 18, 2020).*

*“Online learning really required high self-control, with Microsoft teams, it was more organised than zoom in term of scheduling me up. However, MCO still demotivated me a lot.” (Student 19, 2020).*

*“Online learning let me know the importance of self-discipline, it is very convenient but also many disadvantages. If I don’t study independently, I will miss a lot of knowledge. But the good thing is that we have more time to do our own things and also to do our studies. I think the pros and cons are about the same.” (Student 20, 2020).*

Studying in a virtual environment can be challenging to students as they take ownership of their own learning, as the control of learning is shifted from the HEIs to the often-isolated students [67]. In a face-to-face lesson, the educators would be responsible for many tasks, such as setting learning goals, evaluating progress, checking whether the students are focusing on their study, etc., but as a result of the covid-19 pandemic, students have had to take responsibility over their own learning, which many students find overwhelming, especially when the students are unprepared and are not self-reliant and self-directed, in an autonomous learning environment [68]. Finding themselves in a new learning environment with minimal guidance, some students may feel a sense of despair, if the academics do not address the students’ fears. Therefore, online lessons must be carried out using pedagogical strategies that can enhance student engagement and develop students to become self-directed, self-regulated and self-reliant, and make learning less threatening. Adam, Alzahri, Cik Soh, Abu Bakar, and Mohamad Kamal [69] argues that “Self-regulated learning (SRL) is an academically effective form of learning, which learners must set their goals and make plans before starting to learn” (page 143).

#### 4.5. Construct V–Perceived Benefits of Technology

One of the challenges of e-learning is the lack of engagement that takes place in online lessons, as many academics are not well versed in facilitating online lessons that are engaging. However, during the Covid-19 pandemic crisis, there were teachers who remained resilient and understood the need to provide additional pastoral care, as they realized that the students needed to feel their presence and support, even when classes were no longer face-to-face. De Michele [70] elucidated that the students’ perceived levels of anxiety and stress could be reduced if they had some interaction and relationships with their teachers and peers.

Studies [27,71,72] have also revealed that students will only continue to be motivated to use E-learning systems if they perceive online lessons to be beneficial and to increase their satisfaction.

The results found in the study by Callan, Johnston, and Poulsen [72] acknowledged the perceived benefits of online learning in promoting greater flexibility, improvements in teacher–student communication and interpersonal relationships, higher levels of student satisfaction and cost savings for employers. These findings were different from the perceived benefits of online learning that the students in this study had reflected:

*“It is very convenient to study even just woke up from bed hahahaha.”* (Student 21, 2020).

*“Its more flexible for me as I can adjust my own timing. However, it is less effective when it comes to group discussions especially during our tutorials. Overall, its an interesting module with a good lecturer/tutor, I actually enjoy this class! Hehe.”* (Student 22, 2020).

*“It is easy and convenient, also it helps to learn from the recording video.”* (Student 23, 2020).

The above reflections reveal how the pandemic changed the perceptions of the students in terms of the convenience and flexibility that online learning provided them with, as never before were these learners ever exposed to fully online lessons, as prior to the pandemic, they were used to having face-to-face classes with the occasional online lessons. This was the first time that students in many parts of the world had to sit in their homes and have online lessons throughout the semester. These students finally experienced different types of benefits that online learning allowed.

Though there are people who are skeptical about the benefits of online learning, the evidence thus far does reveal the positive aspects of online learning, which aligns with the findings of Callan, Johnston, and Poulsen [72]; Ahmed and Seliaman [71]; and De Michele [70]. However, online learning platforms can only be effective if the academic staff transforms their pedagogical methods in ensuring high levels of student engagement and pastoral care are provided in these less-personal virtual platforms. However, one must be cautious that even though students and academics may try their best to have meaningful and engaging online lessons, there can be technological drawbacks that can dampen the positive spirit of these stakeholders, as discussed in the next section.

#### 4.6. Construct VI—Drawbacks of Technology

Despite the perceived benefits of common e-learning systems, Muli, Opiyo, Oboko, and Okelo-Odongo [73] found the existence of several limitations of online learning, such as limited information filtering mechanisms, low levels of interaction between students and academics, and the lack of effective profiling mechanisms of students. This could also be seen in the reflections of some students who were participants of this study, who made comparisons between academics they deemed as effective as opposed to those they perceived otherwise, as shown in the following student’s reflection:

*“Learning experience was pretty good considering the circumstances and Miss XXX really took the time and effort to ensure all of us understand the topics. One of the best modules among the others taken this online semester as other module lecturers may not have spent this much effort on teaching.”* (Student 5, 2020).

The reflection above aligns with the position taken by Callan, Johnston, and Poulsen [72], on the importance of removing major barriers, including the attitudes of many teachers to the use of new technologies in the classroom, and the associated strategies of the recognition of prior learning and e-portfolios, to support e-learning delivery.

Aside from the lack of interaction in online classes and the attitudes of many teachers, there were also several technological drawbacks of online lessons, as there were a number of students who were not adjusting well to the idea of attending fully virtual classes. Some of the students in this study brought up the issue of intermittent internet disruptions, being one of the most pertinent technological drawbacks of online lessons, as reflected below:

*“The biggest problem on my e-learning using those APP was Wifi connecting problem. Once the connection is poor, I will lost some important points of those chapter.” (Student 24, 2020).*

*“It cause me to do a lot of self learning due to poor network. I often lost connection and it makes me harder to catch up the class.” (Student 25, 2020).*

Based on the students’ reflections, the issue of poor internet connections impacted their learning experience in a negative way and these findings aligned with those mentioned by Almanthari, Maulina, and Bruce [23], and Putri, Purwanto, Pramono, Asbari, Wijayanti and Hyun [24] in their respective studies. It is indeed a wake-up call to all HEIs that they need to invest in better business continuity strategies to ensures that “no one is left behind” in ensuring higher education is available to all.

## 5. Conclusions

This study provides the much-needed qualitative and useful insights on the students’ perception of the effectiveness of the business continuity plans of some private universities during the Covid-19 pandemic, in how seamlessly these universities rolled out their academic continuity plans in the face of a disruptive crisis that saw HEIs shutting down and moving learning to fully online lessons. The students reflected on the effectiveness of the academic or education continuity plans of the universities in terms of how these continuity plans had impacted their learning experience, the perceived benefits and issues they faced during the pandemic period which saw both students and academics being practically forced into virtual classrooms. The findings of this study are pertinent in informing policy-makers of the higher education industry (at the Ministerial level as well as at the University management level) to redesign higher education curriculum, so that online lessons can seamlessly and successfully deliver educational content during crisis times, while taking into account device preferences, common problems and the importance of group interaction, as De Michele [70] proposed.

Academics in higher education institutions must be well prepared to face the challenges of online classes, by being provided specific guidance or instruction classes and simulation, so as to ensure seamless e-learning becomes the backbone of their teaching. Students must be encouraged to reflect on their learning experience in online or virtual classes. Rasiah, Kaur and Nagaratnam [74] argued that the “whole learning process becomes a meaningless exercise when one doesn’t reflect on their learning to truly understand the theories and concepts that they pick up along the way”.

A key take-away from this study is a set of recommendations in the form of a decalogue for online learning and teaching during periods of crisis, as listed below.

### (1) Academic Continuity Plan.

Institutions of Higher Education must establish effective and sustainable Academic Continuity Plans as a key platform of their institutions’ risk management process. These plans must be effectively implemented to deal with class cancellations associated with natural disasters, acts of violence and the threat of pandemics, where HEIs must respond rapidly by seamlessly switching the mode of learning from face-to-face to virtual learning. The policy-makers in the Ministry of Higher Education need to provide swift and clear instructions that will ensure educational disruptions are kept at a minimum. This involves the establishment of strong and effective risk management processes and business continuity plans at a National Level where the policy-makers and the government display resilience and leadership, paving the way forward in crisis times.

### (2) Preparing Students and Academics.

Taking the cue from Berry [49], it is pertinent that both students and academics are provided with ample training in the effective use of computer-mediated or online learning, as virtual classrooms are simply not the same as face-to-face classrooms. The whole classroom eco-system changes in an online class, and it is therefore imperative that institutions recognize these changes, and not expect their

students and academics to automatically fit into the new eco-system without the necessary scaffolding in the form of support systems that include training, equipment, and counseling. The support mechanisms must include the provision of adequate and effective technology in terms of hardware and software that has enough capacity to allow effective and seamless learning and teaching. In order to carry out quality online teaching, training is required for all the teachers and an institutional strategy must be put in place to cover the different actions that need to be carried out.

### (3) Being Human.

While it is pertinent that universities are well prepared with effective academic continuity plans, being prepared not only means having an extensive set of educational technology tools and an eco-system that provides supportive mechanisms for the students and staff, but also having academics that will go the extra mile to support students' learning in an online or remote environment. The most important quality that any teacher must have is the ability to be human, more so during a crisis period filled with uncertainty and fear. Taking the cue from Ginnot [75] (p. 13), "I have come to a frightening conclusion. I am the decisive element in the classroom. It is my personal approach that creates the climate. It is my daily mood that makes the weather. As a teacher, I possess tremendous power to make a child's life miserable or joyous. I can be a tool of torture or an instrument of inspiration. I can humiliate or humor, hurt or heal. In all situations, it is my response that decides whether a crisis will be escalated or de-escalated and a child humanized or dehumanized." Ginnot's quote must resonate well with all academics, more so in a crisis period where uncertainty prevails, and resilience is expected from the institutions and their academics.

### (4) Enhancing Online Presence and Personality.

The importance of effective teaching is clearly explained by Reupert, Maybery, Patrick, and Chittleborough [76] (page 47) who aptly pointed out that "Literature on the role of higher education distance instructors mostly focuses on their teaching role, involving tasks such as curriculum design, instruction, and facilitating student learning. What is missing is the role of the "person" of the instructor, defined as his or her personality, identity, integrity, emotions, thoughts, beliefs, and values." The focus is on the importance of the academic whose online presence and personality must be able to permeate through the online lessons so that students do not feel that they are missing that personal touch and pastoral care that they get in a face to face class. There must be an attempt on the part of the academics to be more engaging, approachable, and passionate about their subject matter, to keep students engaged and connected [77].

### (5) Respecting Student Diversity and Learning Abilities in Online Classrooms.

Being human brings the realization that academics need to respect student diversity and learning styles by being flexible in the learning and teaching methods employed in online classes to cater to this diversity. Academics must provide ample pastoral care, display high levels of compassion, patience, and resilience, in dealing with students who may not feel comfortable learning in online classes, as they may find online classes unengaging, not enjoyable and not stimulating. This could lead to absenteeism or worse yet presenteeism (where students attend online classes through their mobile devices but are busy elsewhere doing something else at the time they are supposed to be learning). Academics spend precious time reflecting on how best to transform the curriculum to align well with the online learning platform, forgetting the "digital divide" and "learning divide" that exists in online classes. Academics must be mindful that there will be students from different parts of the world or even the country, who face disparate accessibility to technology and internet connections for online learning. It must dawn on academics that they must empathise with students who face the "learning divide" a content-divide where students face major disparities in accessing effective classroom learning experiences that foster creativity, problem-solving, and critical thinking, as this divide is more glaring

during the pandemic period. Academics need to upgrade their technological expertise so that they can become effective online educators, lest the universities they work in are accused of being “technology rich, but expertise poor”. For online learning to be effective, there must be a deep sense of empathy on the part of the academics in understanding the different online learning abilities of their students, to ensure no student is left behind or made to feel isolated or discriminated.

(6) The Power of Humour.

Studies [78–80] have revealed that humor brings warmth into a quiet and cold online learning environment, as students are not able to sense the persona of their teachers in a virtual environment. Online learning environments can incite boredom which is known to be a major obstacle to learning and teaching [80]. Virtual classes are different from traditional physical classes, as the educators must put in a greater amount of effort and time in preparing for online lessons, and even then there is no guarantee that students will engage in virtual classes where they can hide from the teacher’s view. Academics must understand that not all students place their lessons as the main priority, more so during online classes as opposed to traditional face to face classes. There must be an effort on the part of the educators to cut through the thick virtual jungle of online mayhem to get to the students and enable them to enjoy the lessons and forget that they are not physically with their teachers, but are still able to enjoy a sense of belonging. Educators should consider the use of humor as a mechanism to ignite students’ enthusiasm and reduce their stress and tension by creating a less threatening learning environment, enabling the educator to motivate, inspire and engage students in the learning process [78]. In a review of the findings of previous literature on humor in education by Wagner and Urios-Aparisi [79], it was revealed that humor was perceived to enhance teaching effectiveness, create a positive learning environment, enhance students’ motivation to learn, and enable better evaluation of teachers by students.

(7) Nurturing Resilience.

The global scale and speed of the disruption in the education system caused by the pandemic, lead to uncertainty and anxiety among students and faculty. University students, especially those in their final year, experienced uncertainty, panic, sense of loss, stress, fear and other mental health issues [81,82], as they missed face to face classes in their final semester or year and were facing difficulties in managing their assessments. In addition, the economic deceleration caused by the pandemic had increased the level of negative physiological consequences as students and faculty had to endure additional stressors such as financial problems, job security, health safety and increased debts. One of the greatest threats that students and teachers faced in fully online learning environments was their lack of resilience. While higher educational institutions focused on ways to increase student numbers and student retention, most institutions did not give enough thought into student and staff resilience, a very significant factor that can help students sustain their learning and teachers their teaching. In the midst of the unprecedented changes that took place in the learning and working environment during a crisis period, how students and academics work and live, and how resilient and adaptable they are to such changes, are ultimately very critical. Resilience is the ultimate survival kit that individuals, organizations and society must equip themselves with, in the face of such an unprecedented economic and global shock [2]. There is a need to create a platform that will allow students and faculty to access online mental health intervention easily, thus reducing the symptoms of anxiety and improving their resilience during this pandemic period.

(8) Build Alliances with the Industry.

With the “new normal” pandemic situation the world is faced with, it has become particularly important for students to learn “new normal” skills that they will need to hone as they enter a “new normal” work environment. Organizations the world over are increasingly facing economic stress



as a consequence of the Covid-19 pandemic, and it has become clear that more and more organizations are enhancing their dynamic capabilities by purposefully creating, extending or modifying their resource base to adapt to the “new normal” environment that requires utilizing online platforms for a greater portion of their day to day activities. The pandemic forced millions to work from home, with a future that will see a seismic shift in work culture. Employees will likely face challenging times ahead, as a sizeable number of them will lose their jobs, and the rest will go back to a very different office as organizations downsize their workforce and also their office space. Fresh graduates will have to learn new skills that will need to suit the ‘new normal’ organizations. Educators would need to think of ways to bridge the gap between educational theory and practice, so as to equip students with the necessary “new normal” skills to ensure their employability. It is therefore extremely important for faculty to liaise with the “new normal” employers. They need to build alliances with members of the industry to enable their students to have various training opportunities.

(9) Community of Borderless Learners.

One of the main issues faced during the pandemic was the asymmetric information that uncertainty created. This resulted in bounded rationality on the part of the faculty in effectively delivering the lessons, as many of them did not have the expertise nor the skills to solve technical problems that they faced during their online lessons. This was also the case for the students, especially those who were staying away from home and could not get much help during the lockdown period. This situation requires the creation of “borderless” communities of learners in an online environment, that can help support those in need, especially during periods of chaos caused by the sudden and unexpected lockdowns and movement controls in a pandemic period.

These “borderless” academic and social learning communities would provide students and educators with a perpetual helpdesk, that would provide technical advice to troubleshoot the problems that students and academics faced in the virtual classrooms. This would ensure that students and faculty remain connected and motivated, as they are provided with the much-needed advice and solutions to clear any doubts or concerns that they may face.

(10) Balancing knowledge and practice through repetition and reflection.

One of the main emerging feedback that appeared among the respondents was how important it was that the academics repeated some aspects of their lessons to make sure concepts were understood by diverse sets of learners, especially in the online class environment where academics may not be able to physically monitor their students’ learning in a virtual setting. It is therefore imperative that academics make it a point to enquire about their students’ learning during online lessons by either asking them to answer questions or using certain online educational tools that can engage the students and make them comfortable in the virtual classes. Research has shown that “practice yields highly specific perceptual learning of simple visual properties such as orientation and contrast” [83] page 4). One of the most important pedagogical tools that all academics must use in online classrooms is the reflective exercises that will ensure students reflect on past experiences and repeat lessons learned in real-life situations, so that they progress forward through the different stages of learning, developing skills and knowledge. As Seymour [84] concludes that repetition and reflection provide students with the ability to quickly develop a mental database of understanding of concepts that they can then apply in future similar circumstances.

Finally, the study provides insights into the future direction of research in the area of e-learning strategies in teaching and learning. The results shown in the reflections of the students must be examined in-depth to understand the psyche of the students in fully online platforms, where peer-to-peer and student-to-teacher interactions will not be as engaging as one would expect in a face-to-face class. This in itself can affect the emotions of the students, as future studies must investigate the impact that the Covid-19 pandemic had on the mental health of the students and faculty, as there are limited studies in this area of research [85–87].

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