

The Impact of COVID-19 on Students' Preferences of Learning Mode: A Basis for Consideration

Yem Bunthorn

INTRODUCTION

The impact of the COVID-19 pandemic has been harmful and widespread. The regrettable loss of so many human lives worldwide and the incalculable damage caused by this novel coronavirus is one of the most tragic disasters in human history. There have also been many associated changes to work practices. One of the drastic changes caused by this pandemic in countries around the world has been the change in education, and in particular, the changes in teaching and learning modes. Li and Lalani (2020) predicted that COVID-19 has changed education forever. When a change in teaching and learning modes happens so quickly, it can be hard for both the teachers and students to prepare themselves in order to adjust to the new and unexpected environment. It can be even harder for any educational institutions or schools to prepare themselves, quickly organizing the infrastructure, supporting facilities, human resources and the like, in order to cope with the new environment and to ensure a successful and rapid transition. There are so many things that the institutions have to do during this process. Cadungog-Uy (2020) proposed that schools and universities should have an important role in supporting the learners to alleviate the potential negative impact of the quick transition. However, schools and universities should do even more to prepare the stakeholders for more changes during this unpredictable situation—both as the crisis continues and when it is over. After the pandemic is over, it is uncertain whether things should go back to 'normal' as they used to be before the pandemic. In their study, Lau *et al.* (2020) noted that observers pondered whether the future might just have become the present. It is questionable whether the present online learning environment will become the future or revert to the traditional learning mode of in-classroom teaching, or whether there will be a mix of the two, and scope for unpredictably beyond this.

According to the United Nations (2020), "The COVID-19 has created the largest disruption of education systems in history, affecting nearly 1.6 billion learners in more

than 190 countries and all continents.” This policy document of the United Nations suggested a few recommendations to educational stakeholders to do in order to mitigate the potentially devastating consequences that can be resulting from the pandemic. Two of these recommendations are “Build resilient education systems for equitable and sustainable development” and ‘Reimagine education and accelerate change in teaching and learning.’ The online learning mode, however, plays the first and most important role during this pandemic. Only if the stakeholders—especially the academics, students and support staff—are prepared ahead of time, can resilient education be ensured and change in teaching and learning be accelerated? The risk that productive societies cannot be sustained when education systems collapse, as submitted by the UN policy document, can be alleviated by the transition to online learning. What remains now is the question of the student preferences of learning modes affected by the transition. Schools need to have the capacity to respond to this requirement for flexibility.

Considering the case of Cambodia, in response to the measures to tackle COVID-19 and in compliance with the order of the Ministry of Education, Youth and Sport (MoEYS) of the Royal Government of Cambodia, well prepared higher education institutions tried to move their face-to-face physical class mode to online learning mode. The school culture plays an important role in shaping the teaching and learning habits among the academics and students within an institution, and with sufficient facilities and infrastructure, the school culture can really mold the student’s preferences of learning modes. This has been reflected in the case of a well-equipped institution in the Phnom Penh city of Cambodia—CamEd Business School. With the latest infrastructure in hand, all classes at CamEd Business School were immediately switched from physical class mode to online distance learning mode. Prior to the COVID-19 pandemic the student learning mode was entirely on campus, meaning that the students were attended classes physically face-to-face in classrooms with the lecturers. The drastic change of class mode, however, did not hinder the regular operation of classes and did not stop or delay the general operations of the school. Thus, the change from physical classes to online distance learning mode was undertaken with no disruption to classes at CamEd. In terms of the delivery of classes, it appeared to be only a matter of pressing a click on a button to switch from physical learning mode to online and the change was immediate. The management meeting to discuss the capacity in order to swiftly adjust to the change was made in a quick and straightforward manner. The meeting and discussion about the change together with a capacity building orientation among the faculty members and the president of the school was also fixed and carried out without any lapse of time. No classes were cancelled or delayed due to the change of class mode affected by the COVID-19 pandemic following the restrictions imposed by the MoEYS. Thus, the teaching and learning culture contribute to the success of the transition from the face-to-face to online learning mode.

LITERATURE REVIEW

Several studies have been made in various parts of the world about the impact of the COVID-19 on education, especially focusing on students' learning habits from lower to higher education learning levels. These studies aim at providing solutions to the educational institutions/education service providers in order to respond to the demand for learning preferences that has been affected by the novel coronavirus.

The Impact of Covid-19 on Education

According to Li and Lalani (2020), the sudden shift away from traditional classroom to online learning affected by the COVID-19 pandemic has made some wonder- whether the adoption of online learning will continue to persist even after the COVID-19 is over and how it will affect the education sector around the world. The authors have predicted that hybrid learning resulting from the online learning affected by the COVID-19 will emerge with great benefits. This can mean that online learning is going to be permanent post-COVID-19 pandemic, and as such it is inferred by the authors that schools focusing on critical thinking skills and adaptability can be more important for the future success. Zhao (2020) pointed out that COVID-19, if viewed from a different perspective, can be an opportunity to rethink education, meaning that the focus should not be on improving schooling but on what, how and where the learning can occur. "The chance of large-scale and long-term changes is largely dependent on how we treat COVID-19 in education" (Zhao, 2020). Treating the COVID-19 pandemic as an opportunity to reimagine education in terms of where the learning can take place, Zhao (2020) has concluded that online learning should replace the traditional in-class learning as students can learn from anyone anywhere, where access to sources, experts and expertise are unlimited. In addition to the demand for change for online learning, Deloitte (n.d.) pointed out that the shift to remote learning due to COVID-19 is eroding the value of place, as some students will decide to live with their parents while attending the community college and others will consider institutions with robust and established online academic offerings. The study has also warned that the institutions should be clear about which requests made by the students can be accommodated and which cannot, and after all suggested that the higher education community should catalyze the online learning experience driven by the COVID-19 to enhance their digital operations that have been long discussed. This can be in line with one of the recommendations suggested by the United Nations in its 'Policy Brief' document (United Nations, 2020), which stresses the strengthening of articulation and flexibility across levels and types of education and training in order to make the system more flexible, equitable and inclusive, a new way that can bring about a set of sustainable solutions to education. Olivier (2020), claimed that customized blended learning is urgently needed for post-COVID-19 education. The

author defined what he called customized blended learning as an integration of computer-assisted online activities with traditional face-to-face teaching, and asserted that it would add a valuable new dimension to the learning process and promote self-paced learning for the students with teacher support to fill the content gaps. Similar to the idea of blended learning, Lederman (2020) also suggested a thoughtful mix of flexibility and structure.

Learning Mode versus Online Learning

Why is learning style such an important factor? Fleming and Mills (1992) in a study that focused on the student preferences of study methods found that learners are divided into auditory, visual, reading and writing, and kinesthetic. The University of Kansas, School of Education and Human Sciences, (University of Kansas, 2020) identified those four learning styles suggested by Fleming and Mills (1992) be referred to as the VARK model, also mentioned by Harada (2014) in his study on 'Modes of Learning.' VARK is an acronym for 'visual, auditory, read and writing, and kinesthetic'. This reference to different learning styles has introduced the idea that the university should take it into consideration in terms of how to prepare the infrastructure including the design of learning spaces in order to best benefit the students according to their different learning methods. The preferences of study methods suggested by the two authors are usually referred to as "learning styles."

The culture of delivery mode may contribute to shaping the receiving mode of the students which, to some extent, indirectly shapes their learning style. Confirming to this notion, the New South Wales Government (NSW, 2020), wrote that space, future and technology can enable learning modes that coexist or that can be quickly and easily transitioned. In contrast to the learning styles known as the VARK model, however, NSW (2020) has listed learning modes as collaboration, discussion, feedback and reflection, guided learning, explicit learning, demonstration, experiential learning, and independent learning. "When we are aware of, and can identify how we want learning to occur, it guides the decision making on the design of learning space and technology requirements that will best support the desired learning" (NSW, 2020).

Will the Same Conventional Classroom Mode Resume after the Pandemic?

Since March 2020, distance or online learning and teaching were made compulsory for all the teachers and students across the country due to the COVID-19 pandemic. Other countries around the world could also be affected by this drastic switch 'from traditional to online mode' earlier. However, online learning (or e-learning in other words) has been there since before the pandemic. The literature reports the trend in strengths in it and also describes its weaknesses.

According to Zhang *et al.* (2004) the e-learning has emerged as a promising solution to life-long learning and also assured that it is becoming a real alternative to the conventional classroom learning in a way that it is learner-centered, self-paced, time and location flexible, archivable, reusable and shareable. As reported by Gaebel (2020), the European University Association (EUA) in 2013 surveyed higher educational institutions that offered some kind of digitally enhanced learning and interestingly found that 82 percent already offered online courses, 39 percent had online degree programs, 91 percent provided blended learning courses, 55 percent had blended learning degree programs, and 40 percent already joint online learning with other higher education institutions. With reference to this survey, online learning has been around for a long time. It just waited for an opportunity to boom, which is very unpredictably provided by the COVID-19 pandemic. However, online learning may have some disadvantages. Zhang *et al.* (2004) mentioned that it can create anxiety and confusion, increases the preparation time for the instructors and there is a lack of feedback in asynchronous e-learning. It is true that the first time they experience e-learning or online learning, anxiety and confusion may occur, but when this learning mode becomes repetitive for a short while, they will become used to it and will probably find it more convenient. The disadvantage of online learning that is commonly known, so far since the pandemic has started has been about the unstable internet. Witze (2020), noted that when universities in Pakistan closed down in March 2020 due to the pandemic, while many instructors faced a big challenge in terms of tools to teach online, many students did not have reliable Internet.

Nevertheless, according to Witze (2020), some educators believed that the pandemic would lead to more and better online teaching and learning in both rich and lower-income countries. Regarding the transition affected by the pandemic, Klomp (2020) claimed that the COVID-19 will change the world forever, saying that it is especially true for university sector and the way higher education is delivered. He mentioned that online education was already beginning to get recognition even before the pandemic for being as effective as the conventional classroom. With public and private investments in the network infrastructure and advancements in innovative new digital learning technologies, the author was confident that online learning is viable, cost-effective and is improving ways of empowering students regardless of their location, age, gender and socioeconomic status.

The Way Forward with Online Distance Learning Mode

At the time of the research, the pandemic was still not under control. As such, as per the guidelines of the government, the way forward was to carry out the teaching and learning activities through online mode. With the prevailing uncertainty, the present

online distance learning mode might be how the future education will be structured. However, to that extent, the question may arise: “How can online learning be strengthened to ensure the productivity of both teaching and learning?”

The conclusion made by Goyal (2012) some years before today’s boom of online learning mode suggested that the day was not far away when e-learning would become the future popular method of education throughout the world. The World Bank (2020) stated “The use of Information and Communication Technologies (ICT) in education can play a crucial role in providing new and innovative forms of support to teachers, students and the learning process more broadly.” The challenges for countries that invest in remote learning lay the foundation for re-imagining education. Nevertheless, the study acknowledged that the major challenge for remote learning is that the inaccessibility to technology infrastructure among countries around the world is rampant. Nonetheless, according to the European Commission (2020), COVID-19 has impacted education and training that has accelerated the change and provided a learning experience. The online learning experience has always been positive (Lim, 2020), although the author mentioned some common concerns such as the effectiveness of online lectures, change in assessment methods and self-discipline. The European Commission (2020) also mentioned that the education and training system is increasingly part of the digital transformation and can harness its benefits and opportunities. To make it fit for the digital age, however, the European Commission initiated some guiding principles such as an appropriate investment in connectivity, development of high-quality content, digital literacy and so on. Pednekar (2020), however, expressed his concern that e-learning is out of reach for many disadvantaged students, yet, according to him stopping online education during post-COVID-19 is not a good idea. As stated, technology increased automation but would never replace the role of the great teachers. It could provide tools to support excellent teaching and raise the student attainment (Department of Education, 2019). In addition, as pointed out by Li and Lalani (2000), according to a professor at The University of Jordan, technology enabled him to reach out to his students more efficiently and effectively through several electronic ways including video conferencing and document sharing, and he preferred to stick to the online platform even after the pandemic and suggested that the traditional and online learning methods could go hand by hand. Butnaru *et al.* (2021), however, viewed otherwise. The authors mentioned that the online learning driven by the COVID-19 is expected to be temporary and that the format of the instructional activities will return to its original state once the crisis ends. Arnove (2020), however, argued that the pandemic offers a unique chance to imagine more equitable education systems and so, meaningful action should be taken to bring about the desired future.

STUDY METHODOLOGY

The methodology chosen to address the research question of student learning preferences in the period of the switch from in-class to online learning uses a cross-sectional survey of students at CamEd Business School, Phnom Penh, Cambodia. The following sections describe the rationale for using a survey at the selected institute and also the characteristics of the business school and relevant factors that may influence students' learning preferences.

Background to the Survey

CamEd Business School in Phnom Penh, Cambodia, provides two study programs—first is the 'Bachelor of Accounting and Finance' program and second is the 'Association of Chartered Certified Accountants (ACCA) and Certified Accounting Technician (CAT) programs. The active population in both the programs in the academic term of July-December 2020 was 2,392, among whom only 485 students (20.3 percent) were in the second program while the rest were in the bachelor program. The study applied a purposive 'Google Form' online survey with all the students in the Bachelor of Accounting and Finance Program and also those in the ACCA/CAT program. The reason for applying this online survey is that the whole population can be reached in a timely manner because of the technology-friendly environment in the teaching and learning provision at CamEd Business School. The online survey was conducted in September 2020. However, only 38.4 percent (919) out of the population (2,392) responded to the survey, among whom 66.6 percent were female and 33.4 percent were male. Data analytics of the Google Form and spreadsheet were applied in order to present the data collected by the survey and to report the findings accordingly.

Administration of the Survey

The research instrument/tool consisted of nine items in total, many of them asked the respondents to rate the level of agreement on a scale of 'strongly agree, agree, somewhat agree, neither agree nor disagree, somewhat disagree, disagree and strongly disagree.' One of the items that asked the respondents to rate the level of agreement contains 15 other sub items. There was one item that asked the respondents to rate the level of importance on a scale of '0–10'. While zero means not important at all, 10 means the most important. There was also one item that asked the respondents to mention the level of likelihood on a scale of 'extremely likely, likely, more or less likely, neutral, more or less unlikely, unlikely, extremely unlikely'. The last two items were open-ended questions intended to collect additional feedback on the change in preferences of learning modes from the respondents.

RESULTS AND DISCUSSIONS

Number, Gender Ratio and Current Academic Status of Respondents

Out of the whole population of 2,392, the survey managed to collect 919 voluntary responses which is 38.4 percent of the total. The responses from female respondents were 66.6 percent, about twice as many as those male respondents, whose responses made up 33.4 percent as mentioned earlier. The fact that more respondents were female can be expected as the respondents were students in the field of accounting and finance, the area of which the job market in Cambodia is commonly popular with females. Among the 38.4 percent of the respondents, only 8.5 percent were from those respondents in the ACCA/CAT program, while the rest were from those in the Bachelor program. Interestingly, the respondents in the first and second year in the bachelor program already accounted for more than 50 percent of the total of the respondents. Less responses were received from the third- and fourth-year students respectively. The reason is the total number of students in the third and fourth year were less than that in the first and second year. Another reason is most of the fourth-year students were studying and already working at the same time. They could have intentionally ignored the survey due to their own priorities at work as well as study loads, although a second and third reminder was sent to them. The current academic status of the respondents is shown in Figure 11.1.

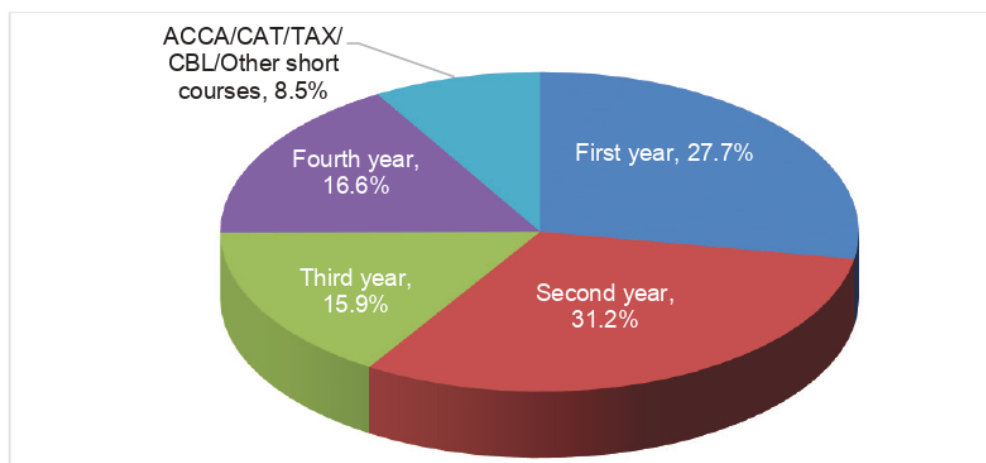


Figure 11.1: Current Academic Status of the Respondents

Source: Primary data.

The Switch to Online Teaching

The culture of delivery mode may contribute to shaping the students' learning style, which to some extent reshapes their preferences of learning mode. That can be assured

by the fact that moving from a physical to distance learning mode was not found to be a problem at the selected study school. The main reason, argued in this paper, is that the level of students' preparation for the change had been ensured through the teaching and learning culture.

All the students in the study selected school are required to have a personal laptop upon enrollment. This is the fact that can be a preliminary message to the students about their possible learning mode when they start attending classes. In line with one of the areas described in the school educational philosophy, technology-enriched environment, all classrooms are equipped with free Wi-Fi in order for every student, faculty member and staff to use. This is not to mention the technology equipment in the classroom such as Stylus tablets, LCD projectors, computers, sound systems and the like. This is also one of the ways that can benefit the students and assists in preparing students for the online learning mode. For convenience, the Wi-Fi in each classroom does not even require any password. Everyone only needs to click in order to automatically connect. Since the year 2015, the school has required the students to use an online learning management system of the Google Suite, the 'Google Classroom'. In 2017, the school president started to officially encourage the faculty members to require their students to always bring their personal laptop to class for use in classroom activities. Since 2019, the school has become more environmentally friendly by having no paper-based handouts or materials. All class materials including handouts have been distributed and shared electronically and online. All internal examinations including midterm exams and final exams have been converted to computer-based and online. Although the students were still required to have a physical presence in the exam room, they had to do it online on their laptop. From then, all class activities including practices, exercises or quizzes have been prepared and conducted online. Before the pandemic, during their class, the instructors required their students to access class materials on the Google Classroom and do practice tests or quizzes, group work, or group discussion online using the online platforms such as Google Forms, Google spreadsheet, Google Docs and Google Slides. For the online learning and online communication platforms, the school has been using the Google Suite for education, and so all the students are provided with a free email account with ... @cam-ed.com as an extension upon enrollment. Everyone including staff, faculty members and students are provided with unlimited storage on their Google Drive.

With sufficient infrastructure, the learning system and culture at the study school helped shape the students' learning habits to be very familiar with and used to the online learning mode and environment. All of these factors made a major contribution to making the transition successful and easy, switching from the traditional to online learning without any delay. And because of this culture and every possible effort, hardly there were any difficulties to carry forward the online distance learning mode during the COVID-19 pandemic. The students were informed of the change and they simply accepted and followed the instruction of the new learning mode.

Response to Learning Mode Before, During and After the Pandemic

As mentioned earlier, the students' learning mode before the pandemic was physical or face-to-face. When asked to level their agreement to this statement: "You used to enjoy the physical learning mode very much before the COVID-19 pandemic," while the expectation was that everyone would say 'strongly agree' to 'some extent,' 101 respondents (11 percent) did not say if they agree or disagree at all. On top of that, 55 respondents (6 percent) said they either somewhat disagree, disagree or strongly disagree. Thus, the remaining 763 respondents (83 percent) used to enjoy the physical learning mode before the COVID-19 pandemic. It was also presumed that there are learners who enjoy online learning mode. To confirm that, the respondents were asked to provide their agreement to the next statements: "The impact of the COVID-19 has changed your preference of learning mode. You are not interested in the physical learning mode anymore." A total of 453 respondents (49.3 percent) did say that they either somewhat agree, agree and strongly agree, while the number of respondents who disagreed were less (33.6 percent). More impressively, the same 453 number of respondents (49.3 percent) preferred to choose the agree-side supporting the statement: "You will still prefer the online learning mode even when the COVID-19 is over." However, 334 respondents (36.3 percent) disagreed to that (Table 11.1).

Table 11.1: Response to Learning Mode Before, During and After the Pandemic

<i>Questions Relating to Learning Mode</i>	<i>Number of Responses</i>		
	<i>Somewhat Agree, Agree, Strongly Agree</i>	<i>Neither Agree Nor Disagree</i>	<i>Somewhat Disagree, Disagree, Strongly Disagree</i>
You used to enjoy the physical learning mode very much before the COVID-19 pandemic.	763 (83.0)	101 (11.0)	55 (6.0)
The impact of the COVID-19 has changed your preference of learning mode. You are not interested in the physical learning mode any more.	453 (49.3)	157 (17.1)	309 (33.6)
You will still prefer the online learning even when the COVID-19 pandemic is over.	453 (49.3)	132 (14.4)	334 (36.3)

Note: Figures in the parentheses indicate percentage to total respondents (919).

Source: Primary data.

Importance of Learning Modes

Since the start of the pandemic back in March 2020, it was almost two academic terms until the survey was conducted for the present study. The students must have weighed

fairly well between their personal preferences of online distance learning, traditional classroom and hybrid class modes (combination of the first two). When asked to scale the importance of online distance learning, physical classroom, and hybrid learning modes during the pandemic period, 157 respondents (17.1 percent) fascinatingly said physical/traditional learning mode is not important to them. More interestingly, 52 respondents (5.7 percent) gave it zero score, which means they do not prefer the physical learning mode at all. In online learning mode, 85 respondents (9.2 percent) said it is not important and only 19 respondents (2.1 percent) gave it zero score, which means they do not prefer the online learning mode at all. However, the majority, 712 respondents (77.5 percent), have shown that they do prefer the online learning mode. For hybrid learning mode, 191 respondents (20.8 percent) said it is not important, among which 74 respondents (8.1 percent) gave it zero score. Since the hybrid learning mode is a combination of the two other modes, 579 respondents (63 percent) provocatively considered it important and scored between 6–10 (Table 11.2).

Table 11.2: Level of Importance of Different Learning Modes

<i>Question Relating to Importance of Learning Mode</i>	<i>Number of Responses</i>		
<i>During the present COVID-19 situation, if options are provided, how important to you is each of the following learning modes?</i>	<i>10–6 Important</i>	<i>5 Average</i>	<i>4–0 Not Important</i>
1. Online learning mode	712 (77.5)	122 (13.3)	85 (9.2)
2. Physical learning mode	638 (69.4)	124 (13.5)	157 (17.1)
2. Hybrid learning mode (Combination of 1 and 2)	579 (63.0)	149 (16.2)	191 (20.8)

Note: Importance on a scale of 0–10 (0: not important, 5: average, 10: most important)

Figures in the parentheses indicate percentage to total respondents (919).

Source: Primary data.

Considering the study findings, it can be concluded that COVID-19 pandemic has brought along with it the change in the learning mode, and as revealed, a large percentage of respondents shown their preference in favor of online learning mode against the physical face-to-face and hybrid mode of learning.

Advantages of Online Distance Learning Mode

The online distance learning mode has just been gaining significant favor and popularity among educators and learners since the outbreak of the COVID-19 pandemic, although research has identified some challenges involved in it.

To confirm the trend in online distance learning mode, the study also sought to find out the positive side of it by assessing the 15 strengths as listed in Table 11.3. The respondents were asked to state their level of agreement with each of the 15 statements, from ‘strongly agree to strongly disagree.’ The first interesting point is in statement #3 “Online distance learning assures more safety” that attracted the highest

Table 11.3: Strengths of Online Distance Learning

	<i>Issues Relating to Strengths of Online Distance Learning</i>	<i>Number of Responses</i>		
		<i>Somewhat Agree, Agree, Strongly Agree</i>	<i>Neither Agree Nor Disagree</i>	<i>Somewhat Disagree, Disagree, Strongly Disagree</i>
1.	It saves more time.	790 (86.0)	60 (6.5)	69 (7.5)
2.	It saves more money.	622 (67.7)	120 (13.0)	177 (19.3)
3.	It assures more safety.	821 (89.3)	59 (6.4)	39 (4.3)
4.	It removes discrimination.	649 (70.6)	183 (19.9)	87 (9.5)
5.	It protects privacy.	667 (72.6)	133 (14.5)	119 (12.9)
6.	It ensures anonymity.	629 (68.4)	191 (20.8)	99 (10.8)
7.	It is more student-centered.	638 (69.4)	167 (18.2)	114 (12.4)
8.	It provides more chances to participate.	583 (63.4)	147 (16.0)	189 (20.6)
9.	It gives unending access to class videos and materials.	726 (79.0)	128 (13.9)	65 (7.1)
10.	It promotes self-discipline.	669 (72.8)	123 (13.4)	127 (13.8)
11.	It encourages independency in learning.	716 (77.9)	104 (11.3)	99 (10.8)
12.	It provides flexibility in learning.	734 (79.9)	91 (9.9)	94 (10.2)
13.	It enhances basic technology skills.	755 (82.2)	107 (11.6)	57 (6.2)
14.	It improves communication with the professor and classmates.	541 (58.9)	141 (15.3)	237 (25.8)
15.	It boosts concentration.	492 (53.5)	152 (16.5)	275 (30.0)
	Average number of responses	668.8 (72.8)	127.1 (13.8)	123.1 (13.4)

Note: Figures in the parentheses indicate percentage to total respondents (919).

Source: Primary data.

821 respondents (89.3 percent) who all agreed with the statement, with only 39 respondents (4.2 percent) who disagreed to it. As the students are studying online from their comfort zone, zero risk of harm is expected. The second interesting point is in statement #13 "Online learning enhances basic technology skills." Altogether, 755 respondents (82.2 percent) agreed with the statement, while only 57 respondents (6.2 percent) disagreed. However, statement #15 "Online learning boosts concentration" attracted only 492 respondents (53.5 percent) in the agreed-side, which is the lowest percentage of positive response compared to the rest. Further, on this statement, 275 respondents (29.9 percent) were in the disagreed-side, which is the highest among all. This simply means that just above half of the respondents agreed that online learning support them in increasing their attention. Similarly, more than 25 percent of the respondents disagreed with the statement #14 "Online learning improves communication skills with the professor and classmates." In summary, impressively, the study collected an average number of 668.8 responses (72.8 percent) who either strongly agreed, agreed or somewhat agreed with all the 15 statements. Only an average number of 123.13 responses (13.4 percent) either somewhat disagreed, disagreed or strongly disagreed with all the statements. The average number of responses who were neutral is only 127.06 (12.8 percent).

Choices of Learning Modes

In anticipation of the future approach to education after the pandemic, the study also sought to find out how likely it is after the pandemic the learners would prefer to come back to the conventional class modes, or expand the online distance learning mode, or would prefer a hybrid one. The respondents were asked to rate their likelihood on a scale of 'extremely likely, likely, more or less likely, neutral, more or less unlikely, unlikely, extremely unlikely' against the statement raised. The likelihood for 'physical learning mode' received 671 responses (73 percent) compared to the likelihood for the other two learning modes such as online and hybrid that received 503 responses (54.7 percent) and 536 responses (58.3 percent) respectively (Table 11.4). Nevertheless, the number of responses to the physical learning mode as shown in Table 11.4, if compared to the number of responses to the physical learning mode in Table 11.1, remarkably decreased from above 700 down to only 671. In contrast, the number of responses to the online learning mode as shown in Table 11.4, if compared to that in Table 11.1 responded to the statement "You will still prefer online learning mode when the COVID-19 is over," fascinatingly increased from 453 (49.3 percent) up to 503 (54.7 percent). Similar trend is being maintained for the hybrid learning mode, 536 responses (58.3 percent) as shown in Table 11.4 and 579 responses (63 percent) shown in Table 11.2. Thus, a comparison shows that the online learning mode is trending upwards.

Table 11.4: Likelihood for Choices of Future Learning Mode

<i>Question Relating to Choices of Learning Mode in Future</i>	<i>Number of Responses</i>		
<i>Once the COVID-19 is over and if options are given, how likely or unlikely will you choose each learning mode?</i>	<i>More or Less Likely, Likely, Extremely Likely</i>	<i>Neutral</i>	<i>More or Less Unlikely, Unlikely, Extremely Unlikely</i>
Physical learning mode	671 (73.0)	142 (15.5)	106 (11.5)
Online learning mode	503 (54.7)	172 (18.7)	244 (26.6)
Hybrid learning mode	536 (58.3)	178 (19.4)	205 (22.3)

Note: Figures in the parentheses indicate percentage to total respondents (919).

Source: Primary data.

Likes and Dislikes about the Online Learning Mode

The study also gave an opportunity to the respondents to express their personal opinions on what they like and dislike the most about the online learning mode. The responses gathered from the respondents are summarized below:

The most frequent appreciation for online learning mode was its time and cost saving nature (365 responses; 39.7 percent) followed by its characteristic of safeness in learning (117 responses; 12.7 percent). However, a lower percentage of respondents (less than 5 percent) valued its benefits in terms of encouraging communication with the instructor, building confidence, ensuring privacy in learning, creating more freedom in learning and ensuring self-discipline, and so on (Table 11.5).

Table 11.5: Preference for Online Learning Mode

<i>Questions Relating to Preference for Online Learning Mode</i>	<i>Responses</i>
It saves time and money on travelling.	365 (39.7)
It is safe.	117 (12.7)
Recorded class videos and materials are accessible.	77 (8.4)
It is convenient, flexible and accessible from anywhere.	71 (7.7)
It is good for concentration/focus attention.	64 (7.0)
It encourages class participation/engagement.	45 (4.9)
It is comfortable and relaxing.	45 (4.9)
It creates more freedom/independency and self-discipline.	22 (2.4)
It is quiet and private.	22 (2.4)
It builds confidence.	9 (1.0)
It encourages the students to communicate with the professor.	9 (1.0)

Note: Figures in the parentheses indicate percentage to total respondents (919).

Source: Primary data.

Online learning, however, has been known for its negative side that results from the unstable Internet/Wi-Fi connection. As shown in Table 11.6, the study found that the most important reason to dislike the online learning by the respondents was their difficulties to concentrate or focus attention (342 responses; 37.2 percent) followed by poor Internet/Wi-Fi connection (236 responses; 25.7 percent). A lower percentage of respondents, however, expressed some other reasons for their dis-likeness toward online learning such as difficulties in interaction/communication, no motivation to learn, feeling loneliness and so on.

Table 11.6: Dislikes for Online Learning Mode

<i>Questions Relating to Dislikes for Online Learning Mode</i>	<i>Responses</i>
It is dependent on Internet/Wi-Fi connection.	236 (25.7)
It is difficult to concentrate/focus attention.	342 (37.2)
Sometimes communication is lost.	34 (3.7)
It is difficult to interact and participate in the discussion.	31 (3.4)
Sometimes motivation is lost.	24 (2.6)
Sometimes the feeling of loneliness appears.	6 (0.7)
It is very noisy.	2 (0.2)

Note: Figures in the parentheses indicate percentage to total respondents (919).

Source: Primary data.

CONCLUSION

From the findings of the study, the conclusion is that although there are some negative sides of the online learning, the positive ones almost outweigh them. There has been a significant change in the students' preferences of learning mode for the past several months since the beginning of the online distance learning impacted by the COVID-19 pandemic. Taking this change into account, ensuring enough infrastructure and support should be in place in order to benefit the students' learning in any university or higher learning institution. The trend is proving to be true, that the change in how education is continuing during the pandemic and will continue on after the pandemic is likely to be permanent to some extent. Therefore, ensuring that online learning mode and physical or face-to-face learning mode are ready in place will satisfy learners with different preferences of learning mode. This hybrid mode will most likely be the best option that future learners may seek. That caring manner of any higher education institution will partly contribute to the learning quality of the students and will somewhat create a good flexibility for its own institution to further think about how to extend its reach to students outside the area, country and region.

Also, the implication is that the possibility of online learning will continue to be expanded even after the COVID-19 pandemic is very likely. Therefore, it is of crucial importance for any educational institution to invest in technology infrastructure. Such investment should not wait till the COVID-19 pandemic is over but should start as early as possible. Only by doing so, the loss-of-learning risk during this critical period as far as it is concerned can be somewhat mitigated. Also, such investment in technology will contribute to the effort that any institution may make in order to create a more inclusive and more equitable learning program. Moreover, online learning can be better assured and largely promoted if close attention is paid by the key stakeholders such as the educational policy makers, regulators and relevant decision makers at the higher or top levels, in terms of intervening to facilitate a better connectivity experience and a more inclusive and equitable curriculum or learning program.

Our study is not free from certain limitations. In addition to the response of 38 percent of the target population, the study was limited to only one private university and restricted to only those students in accounting and finance related majors. Consequently, to generalize on the basis of these results could lead to biases. First, the students in the university where the study was conducted were largely known to be those children from affordable families in the area whose access to good quality computers, smartphones, and good Internet connectivity is not the concern. Secondly, the university where the study was conducted is very technology-oriented. The school infrastructure including the facilities that are necessary for the online distance teaching delivery purposes and other technical support is very well ensured and ready ahead of time prior to the pandemic. With these limitations in mind, however, the study did not expand its scope to cover students from other universities. Therefore, further study with a larger scope may be taken into account in order to generalize the results in a broader context.

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