"*I'll See You on Zoom!*" International Educators' Perceptions of Online Teaching Amid, and Beyond, Covid-19

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Introduction

"*Novel Coronavirus is not just a public health crisis; it is a crisis that will touch every sector*"

("WHO Director-General's opening remarks at the media briefing on COVID-19" 2020).

"The COVID-19 outbreak is also a major education crisis" (UNESCO 2020).

More than 1.5 billion students worldwide are affected due to the sudden closure of educational institutions caused by this pandemic (International Association of Universities [IAU] 2020). As a result, the higher education sector worldwide embraced an e-learning platform of unprecedented scale and range to ensure learning never stops (Tamrat and Teferra 2020). Many universities around the world exerted extraordinary effort, to facilitate a smooth transition from traditional classroom teaching and learning to digitally-based teaching and learning. This digital switch, as Hall (2020) explained, begets mixed feedback from academics and had mixed results in the field of education at large. This emergency period's uncertainty raises multiple questions, and gives rise to both commonalities and differences in educational experiences and teaching modes (Zhang et al. 2020).

With the advent of COVID-19, online platforms became the most prevalent ways to deliver education. However, this has had its pros and cons, based on the country, culture, technology, and personal circumstances, as discussed by Crawford et al. (2020). This study illustrates the potentials and limitations of this sudden shift to online teaching, amid the COVID-19 pandemic, as perceived by a diverse group of international educators. It also sheds light on these international educators' future recommendations, in light of this new "paradigm shift" in higher education, and what it means, why it is crucial, and what it tells us about the future of higher education in the post-pandemic phase.

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Research questions

I. What are the most important potentials of the shift to online teaching amid the pandemic, as perceived by the interviewed international educators?

II. What are the most critical limitations of the change to online education amid the pandemic, as perceived by the interviewed international educators?

III. What are the suggested future directions in online teaching in the post-pandemic phase, as indicated by the interviewed international educators?

Methodology and sample

This study relies on an innovative and creative "audio-visual communication research" approach (Allen 1956), which involved video recording 12 in-depth interviews with international educators from diverse backgrounds. Each in-depth conversation lasted between 30 to 45 minutes, on average, and the interview was recorded via Zoom or Skype. The conversational style allowed the participants to open up and to share personal experiences and unique anecdotes. With their permission, short snippets of the interviews were shared on various social media platforms, including LinkedIn, YouTube, and Facebook, while the full interviews constituted one comprehensive and creative audio-visual project. This approach adds to this study's uniqueness. It provides both rich data for theoretical analysis, while allowing for equally rich conversations and a useful exchange of knowledge with the broader public, thus expanding this study's reach and strengthening its impact.

The participants were selected based on their LinkedIn professional profiles, and the criteria for selection included a minimum of five years teaching experience at the university level and/or full-time leadership roles at the university level. Thirty-five academicians were invited to take part in this study, but only twelve of them agreed to participate. The authors considered the WHO Coronavirus Disease Dashboard (2020), listing the most to the least affected areas with COVID-19, as the basis for the selection of the interviewees' countries.

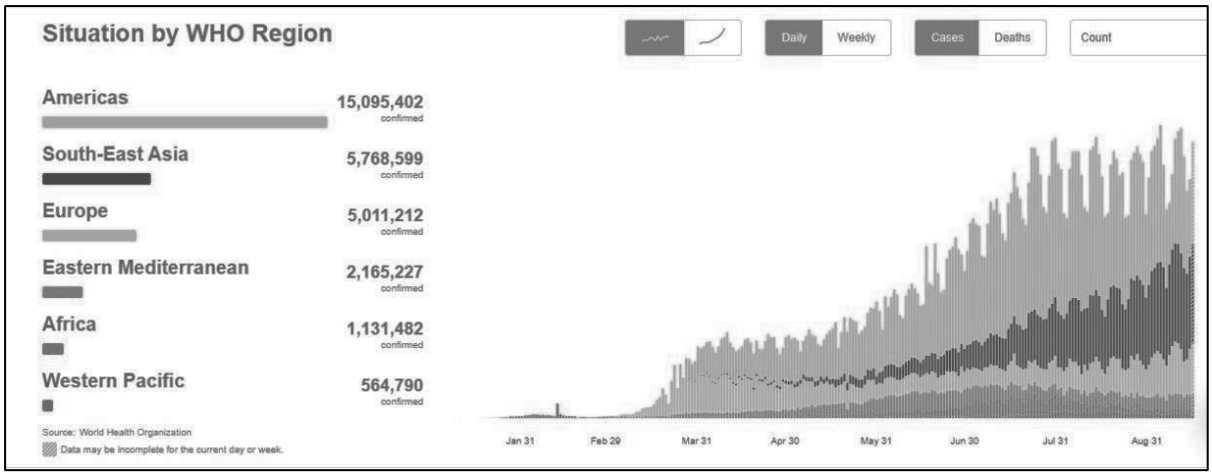

Figure 1. Situation by WHO Region (Source: World Health Organization)

Table 1: Sample details

	Male	Female	Total			
Gender	6	6	12			
Academic Rank	Dean/Vice Chancellor/ Director	Professor	Associate Professor	Assistant Professor		
	4	3	4	1		
Region/Country	Americas	Europe	South-East Asia	Eastern Mediterranean	Africa	Western Pacific
	USA	Sweden	Bangladesh	United Arab Emirates (UAE)	Egypt	Australia
	Canada	UK	India			Japan

Table 2: Participant Details

	Name	Rank	University	Date of Interview
1.	Dr. Colin Clark	Professor	Victoria Business Confucius Institute, Victoria University, Australia	April 5, 2020
2.	Dr. David Dunne	Professor	Peter B. Gustavson School of Business, University of Victoria, Canada	April 7, 2020
3.	Dr. Mohammad Sahid Ullah	Professor	Department of Communication & Journalism, Chittagong University, Bangladesh	April 14, 2020
4.	Dr Ezaz Ahmed	Dean	Division of Business, Entrepreneurship and Technology, Columbia College, South Carolina, United States	April 17, 2020
5.	Caroline Molloy	Assistant Professor	School of Media and Performing Arts, Coventry University, United Kingdom	April 21, 2020
6.	Dr. Pontus Wärnestål	Associate Professor & Design Director	School of Information Technology, Halmstad University, Sweden	April 22, 2020
7.	Dr. Bozena Mierzejewska	Associate Professor, Area Chair, Editor of JMM	Fordham Gabelli School of Business, Fordham University, United States	April 25, 2020
8.	Dr. R D Patidar	Vice Chancellor	OP Jindal University, India	April 26, 2020
9.	Dr. Sylvia Tzvetanova Yung	Department Head	3D Design Department, Kingston University, United Kingdom	April 27, 2020
10.	Dr. Kumiko Aoki	Professor	Department of Informatics, The Open University of Japan	May 1, 2020
11.	Dr. T. Serra Gorpe	Professor	College of Communication, University of Sharjah, United Arab Emirates (UAE)	June 6, 2020
12.	Kim Fox	Professor of Practice	Department of Journalism and Mass Communication, The American University in Cairo, Egypt	June 10, 2020

Perceptions of the Potentials of Online Teaching

Flexibility in Online Education: Anywhere-Anytime

"The *Anywhere-Anytime* feature of e-learning is beneficial in times of crisis-like situations, for instance, man-made disasters, natural disasters, or pandemics, such as COVID-19" (Dhawan 2020).

One of the most successful adaptations to COVID-19 is the frequent use of video platforms such as Teams, Zoom, or others to hold meetings. Lee and McLoughlin (2010) stressed the value of the "Flexible Learning" model in a digital environment: "Flexible learning is a series of approaches in the education system that provides students a variety of choices, and convenience, to meet their educational needs. Specifically, flexible learning gives students choices as to where, when, and how learning occurs using various technologies to support the teaching and learning process." According to Dr. Pontus Wärnestål, Associate Professor in the School of Information Technology at Halmstad University in Sweden, "Productivity actually increased, since scheduling a quick Zoom meeting is much easier than fixing a time to meet in person." This emphasizes the significance of flexibility in online education, as discussed by Brammer and Clark (2020).

Caroline Molloy, Assistant Professor in the School of Media and Performing Arts at Coventry University in the United Kingdom also shared her experience creating a personalized weekly session to help one of her students who was unable to come to campus due to an illness. David Dunne, Professor at the Peter B. Gustavson School of Business, University of Victoria, Canada echoed the importance of accessibility in online learning and teaching, and encouraged striking a balance between flexibility and effectiveness, "I took more time to prepare than a regular class. Yet, it seemed to be worthwhile, as it offered an intimate, and flexible, experience for my students. Zoom, for example, which seems to be the most popular platform right now, turned out to be quite adaptable to classroom learning." This element of flexibility in online teaching is further discussed by Daniel (2016). Milovanović et al. (2020) discussed the findings of a timely study, which revealed the online workshop's immense capacity, in terms of allowing an endless number of participants, despite students' varied locations and spatial distances, during the pandemic.

Cooperation & collaboration: the key to success during the pandemic

In line with the argument made by Milovanović et al. (2020) that, "the online learning environment created new linkages and collaboration opportunities, through different programs, expanded communication modes, dynamic discussions, and communication channels, simultaneously." Caroline Molloy remarked: "Our strength was our strong team, as we worked out an online platform very quickly. When I say 'we,' I want to give credit to all my colleagues, who were very good at handling this crisis." This highlights the value of adopting a proactive attitude in a time of crisis, and the importance of pandemic-initiated cooperation between faculty members from various departments.

Dr. R. D. Patidar, Vice Chancellor at OP Jindal University in India, said: "Initially, we faced more resistance from senior faculty members, rather than junior faculty. Over time, senior faculty members gradually became more comfortable with the new transition to virtual teaching and learning. They started taking all the required

classes, and even began guiding and training junior faculty members themselves." This is in line with the findings of Dhawan (2020) which indicated that resistance to change will not help any academic unit across the world, and that success in academia will be judged on the basis of the pace of adapting to change quickly, while maintaining high educational quality and excellent academic standards.

Kumiko Aoki, Professor in the Department of Informatics at the Open University of Japan, discussed the assistance extended by the Open University of Japan to support traditional universities, which have less resources and no online teaching experience:

> Universities that never offered online courses have to suddenly do so now, and we are trying to share with them all the things we learned from our own experience, while allowing them to share their experiences too. We have a good network of collaboration in Japan. We are trying to share our difficulties and challenges, as well as how other universities were able to solve their problems and to overcome their obstacles.

This is in line with some of the findings of Chick et al. (2020), in the context of analyzing the educational landscape, and its complexities among surgical residents.

The role of the "Center for Learning and Teaching" and the "Pedagogical Center" at the university level remarkably increased during the pandemic outbreak, as highlighted by Kim Fox and Pontus Wärnestål, respectively. "We have a 'Center for Learning and Teaching,' and they are outstanding, and have always been. We did a decent job of keeping in touch with them in the midst of this transition," said Kim Fox, Professor of Practice in the Department of Journalism and Mass Communication at The American University in Cairo, Egypt. Likewise, Pontus Wärnestål remarked:

> The 'Pedagogical Center' at our university is collaborating with the IT department. They have formed a taskforce that helps teachers and researchers transition to digital learning. They hold daily workshops, for example, teaching professors how to manage Zoom, how to create, and join, breakout rooms, and what tools they can use for digital white boarding, etc.

Multinational companies, like Microsoft, Adobe, IBM, and Pearson, are extending their support to the higher education sector during this global health crisis. They empower teachers and students alike by providing free software, free digital learning webinar series', and e-content to make this transformation easy (Govindarajan and Srivastava 2020). Moreover, Adobe offered free access to their software from March to May 2020 across Europe, and this was extended further until July 2020 (Kunert 2020). Sylvia Tzvetanova Yung, Head of the 3D Design Department at Kingston University in the United Kingdom, discussed how Abode free learning software helps their students and faculty members overcome the

challenges of not having a personal software that can be used for remote learning: "We had to provide more software, and it's good to know that a lot of companies, such as Adobe, for example, allows students to have that software for free."

Ezaz Ahmed, Dean of the Division of Business, Entrepreneurship, and Technology at Columbia College in the United States said that publishers, such as Pearson, Cengage, and McGraw Hill, had increased their support mechanisms in the United States. "I think that together we have pulled out well. So far, I can report that I haven't seen, as Dean, any negative developments recently," Ezaz Ahmed remarked.

The COVID-19 crisis boosted higher education's adaptability

The COVID-19 pandemic acted as a catalyst for change in the higher education sector. However, most universities have not been taking sufficient advantage of the affordances of technology, which are required to rethink their traditional operations and to develop their practices. According to Pontus Wärnestål, "This pandemic has shown us that it's possible to adjust quickly. Universities are traditionally very conservative in the way they operate, but we, as global actors affiliated with these universities, need to change, adapt, and accelerate."

Likewise, Ezaz Ahmed shed light on, namely resistance to change, one of the deeply-rooted challenges in many societies, in general, and in the education sector, in particular. "It is tough to change a system from the grassroots level, unless you have a big push. I think the coronavirus pandemic acted as this big push for a new way of life and a new way of thinking, compelling us to accept new practices, which we have been either ignoring, or underutilizing, for a long, long time," he explained. This is in line with the findings of Brammer and Clark (2020) that the education sector witnessed how COVID-19 enhanced, and accelerated, the scale, scope, speed, and quality of adopting new innovative approaches in teaching, learning, communication, and daily operations, to an unprecedented degree.

Perceptions of the limitations of online teaching

COVID-19 revealed gaps in infrastructure & accessibility

Mohammad Sahid Ullah, Professor in the Department of Communication and Journalism at Chittagong University in Bangladesh, expressed deep concerns about internet availability and accessibility issues at his university, and a lack in the needed infrastructure. He further stated that thirty thousand students are away from the university physically, and do not have enough internet access or digital tools for online learning. "It is a difficult time for us to manage online teaching, because the students don't have enough access, and we do not have enough capacity," he explained.

As Adnan and Anwar (2020) discussed, in underdeveloped countries, like Pakistan, most students cannot access the internet due to technical and financial issues, so

online learning cannot provide the desired results. Hasan and Bao (2020) confirmed that college students in Bangladesh suffer from anxiety due to inadequate E-Learning systems and fear of losing an academic year.

In contrast to the challenges witnessed by professors in underdeveloped countries, many western universities are well-versed in offering online and offline courses, so this transition was not difficult or new for them. For example, David Dunne said, "The transition was not as difficult as one might imagine." Both David Dunne and Ezaz Ahmed indicated that their schools have been offering MBA programs online and on campus, before the COVID-19 pandemic, so this transition was not challenging or unprecedented for them.

On an individual level, Bozena Mierzejewska, Associate Professor at the Fordham Gabelli School of Business at Fordham University in the United States, stated that moving online was not difficult for her, due to her prior teaching experience on Massive Open Online Courses (MOOC) platforms with many students. However, it was a first-time experience for many of her colleagues at the same institution, she stated. Dr. T. Serra Gorpe, Professor in the College of Communication at the University of Sharjah in the United Arab Emirates (UAE), expressed her concern about older faculty members' lack of technological competency. "I am over fifty years old, and I don't know if faculty members in my age group experienced this shift to online teaching as smoothly as faculty members who are in their thirties," she remarked.

The flip side of flexibility: increased stress, timing challenges, and techno-complexity

Despite the previously mentioned advantages of the shift to online teaching, including increased flexibility, some challenges related to this new mode of teaching and learning emerged. This included an escalation of emotional and psychological stress, difficulty accommodating different time zones, and barriers to online teaching and learning among some students, such as those with disabilities.

"I don't know about other faculty members, but I have been under enormous psychological pressure. I even had slight panic attacks related to online teaching," T. Serra Gorpe explained.

She also highlighted the flip side of online education's flexibility by saying, "This flexibility creates a mindset that educators are available 24/7, even on weekends." She added, "I think that in the context of this new online teaching mode, we forgot that we should have personal time and private lives, as the boundaries between the private, home space and the official, office space disappeared."

This is perfectly in line with the findings of Christian, Purwanto, and Wibowo (2020), who highlighted the role of 'techno-complexity' in producing 'technostress' that affects teaching performance, as well as the findings of Besser, Lotem and

Zeigler-Hill (2020), who discussed perceived psychological stress symptoms among Israeli college professors. Their study revealed that 30.4 percent of the sample reported psychological stress since shifting to synchronous online teaching.

Sylvia Tzvetanova Yung also expressed concerns about the challenges faced by international students, when attending online synchronous sessions from different time zones around the world. She said, "It is difficult to accommodate these different time zones. We also experience a lot of miscommunication; we have to repeat more; it takes longer time to teach and explain; and it takes more effort on both sides to understand each other." This provides evidence that communication with students has been more complicated in the online setting because of their idiosyncratic study pathways and the need for individualized attention to ensure ongoing support (Brammer & Clark 2020).

According to Ezaz Ahmed, students with learning disabilities do not prefer learning through technology-enabled distant education, as Lynn et al. (2020) also discuss in their study on "Teaching Chemistry to Deaf and Hard-of-Hearing Students." This remark has also been echoed by other interviewees who highlighted the importance of one-on-one, individualized attention and support, especially for students with disabilities, which is much harder to accomplish through distant, online teaching.

Students' shifting expectations

The shift to online teaching has also been accompanied by a shift in students' mindsets and expectations from the educational process, and how much they should pay for it. According to Bozena Mierzejewska, "most students' expectations changed, as we shifted to online-based teaching. Many of them expect to get more out of their digitally-based learning experience, but to pay less for it. If this situation goes on for a long time, they will probably expect to pay discounted tuition fees." She added, "Many of them think that digital education should be free, or at least offered at a discounted rate. However, the reality is it takes the same effort, or even more, to prepare for online teaching, and to deliver it in the best possible content and format. Yet, the students' willingness to pay for it is less." Kim Fox shared a similar experience, "Once the shift to online teaching took place, some students started complaining, asking to get their money back, and saying that they didn't sign up for this."

Ezaz Ahmed attributed the students' changing mindsets and expectations to the sudden, unexpected shift to online teaching, "Students started the semester receiving regular, face-to-face, classroom-based instruction, and all of a sudden they were asked to go online. So, their mindsets and expectations also suddenly shifted. I think it is a big challenge for them!" These remarks were echoed by Jackson (2020), who discussed the findings of the Pearson/Wonkhe students' expectations survey, covering a sample of 3,461 students. The survey revealed that 47 percent of the students think they should receive a fee reduction refund to compensate for the shift to online instruction, while 59 percent of the students stated that universities should offer "high-quality online teaching" to meet their high expectations.

Face-to-Face vs. online instruction: less interaction and engagement

Some of the interviewees expressed concerns over the decreased level of interaction and engagement with their students, in the context of the online-based instruction mode. T. Serra Gorpe said, "When you are teaching online, it can be asynchronous, without immediate interaction with your students. Even in synchronous sessions, however, a lot of students prefer to turn their video off, which means you cannot see their faces! When I am teaching in the classroom, we are all using all our five senses." Caroline Molloy made a similar remark, "In online teaching, it is easy to forget that there is an audience. Even though you may have a large group online, many of them choose to be passive online, with very little interaction, engagement, and participation."

Some of the interviewees also expressed concerns over the quality of online education itself, "We cannot replace a six-feet [*sic*] blackboard with a six-inch monitor. Can online education really substitute face-to-face instruction? This is an often-discussed topic during this global health crisis, for good reasons," remarked R D Patidar. Pacheco, Noll and Mendonça (2020) stated that face-to-face education is still the most reliable and most effective method to guarantee students' success in the teaching-learning process. Likewise, Figueroa et al. (2020) concluded that the brick-and-mortar system of education we used to have, based on face-to-face communication, remains to be the prime, and best way to teach and learn. However, the findings of Chatziralli et al.'s (2020) study, based on surveying students in ophthalmic education, concluded that e-learning will be the future, and that embracing these changes and digital shifts will ensure high-quality education in the future.

Abundant tools, resources, and guidelines: the challenges of selecting & benchmarking

Some interviewees also expressed concerns about the massive flow of information from top administrators. Some of them described it as an information overflow that accompanied the shift from the classroom to online instruction on one hand, while others saw it as an abundance of resources and materials to sort out, and to choose from, which some of them remarked can be equally confusing for both faculty and students.

In terms of the first concern, some faculty stated that the number of e-resources, links, and videos, which flooded from top management to faculty and coworkers, all of a sudden, was overwhelming. "Having lots of links, instructing me on what to do, sent to me at once, was very confusing. It made it difficult for me to select the best resources, or to determine the most appropriate benchmarks," Caroline Molloy stated.

In terms of the second concern, some professors stated that, initially, the selection of digital tools and platforms was a bit impulsive and abrupt, without the luxury of

having enough time for prior planning, taking into account the urgency and immediacy of the transition. Kumiko Aoki stated: "I think teaching is more than just delivering materials and sharing resources. Teachers have to come into play to communicate with their students, to determine what kind of problems they are having in this kind of situation, and to help them solve them. This hasn't been easy in the midst of this pressing crisis."

Kim Fox also expressed her concern about the challenges faced by students in this multi-platform learning environment, "Some professors are using blackboard, Moodle, or WhatsApp, while others are using email, and the students are just like 'what is where?' I think that is one of their biggest challenges."

Johnson, Veletsianos, and Seaman (2020) conducted a survey covering 897 faculty and administrators at 672 U.S. institutions to provide an early snapshot of the impact of COVID-19 on higher education, and they found that over two-thirds of faculty reported using three, or more, online teaching techniques. Dhawan (2020) concluded that there are several technologies available for online education, but sometimes they create challenges, in terms of selection and application, partly due to their abundance and diversity, and partly due to the immediacy of their adoption.

Less control over the academic process: assessment, internship, placement, & admission

The shift from classroom to online teaching was so agile, leading to less control over many aspects of the educational process, including the assessment of students' performance; helping them find the best, and most suitable, internship and job placement opportunities; and the admission of new students, especially from overseas. Pontus Wärnestål expressed concerns over conducting examinations in this new online teaching and learning environment:

> One of the challenges facing us now is making sure we can administer assessment techniques online, including exams, which can fairly, and accurately, reflect the students' skills, abilities, and performance, while avoiding new forms of cheating and plagiarism. We should view examinations and assessments now as new learning opportunities, rather than just requirements for graduation. These are big challenges, and we haven't solved them all yet.

Caroline Molloy raised similar concerns about practical courses, which require both mastering new skill sets to best understand the relationship between theory and practice, as well as having the needed resources and equipment to be able to apply such skills effectively and successfully. "The one area that was affected very negatively was practical courses. Students might have different equipment, but they don't have access to dark rooms, for example," she explained. Sylvia Tzvetanova Yung shared similar concerns in terms of teaching practical courses in the virtual mode:

> Final year students' thesis and projects were abruptly cut off, in many cases. I'm in the design department, where most of the work is highly technical and specialized, and, in most cases, relies on the heavy use of university-based workshops, where we can have access to special, large equipment.

This resonates with Moyo's (2020) study in Zimbabwe, which illustrated how universities quickly shifted to online teaching. Teachers still needed to find ways to use the same technology to solve their challenges when it comes to teaching practical courses, solving practicum assessment problems, and coming up with innovative, technologically-driven, alternative assessment models and techniques.

Kim Fox, on the other hand, shared a success story, in terms of teaching a practical course, involving audio production, online:

> At the beginning of the semester, I asked my students how comfortable they were with producing high quality audio, without the standard tools they had, and they expressed concerns about that. At the end of the semester, however, I asked them the same question, and they were very positive about the whole experience. We did not have access to our studio and our professional equipment. Yet, we got it done, and it was pretty good quality.

Another area of concern expressed by most professors was the ability to build successful industry connections and interactions, which is an integral part of higher education. This applies to cases such as those of thesis students' interviews with industry professionals, internships for practice-based courses, and job placements for final year students. They gave examples as to how the COVID-19 outbreak disrupted many of these efforts and activities, or, at least, negatively impacted them. Pontus Wärnestål clarified:

> Companies are currently undergoing a lot of transformations and doing significant permutations. Therefore, many of them are not eager to spend time talking to students about their thesis work, because they need to focus more on their own businesses and operations.

Bozena Mierzejewska concurred that, "a lesser percentage of the student population will get an internship, compared to before the pandemic," while also highlighting the importance of coming up with alternative online apprenticeships. However, there are exceptions to this rule, across both sectors and countries. For example, Colin Clark, Professor in the Victoria Business Confucius Institute at Victoria University in Australia, indicated that in some sectors in Australia, like the health sector for example, hospitals are happy to use the students' services, particularly medical students, so it is easier for them to find good training and internship opportunities.

As for job placements, most of the respondents expressed concerns about job placement opportunities, especially for final year students, amid a shrinking job market and escalating unemployment rates. Others, however, shared David Dunne's view that, "Universities are not responsible for providing job placement. We offer good programs that will help students find good jobs, but we don't find jobs for them. This is true both before and after the pandemic."

Another area of concern was the lack of control over the admission process. The tight constraints restricting international travel, extreme uncertainties, heightened fears, economic recession, and escalating unemployment were some of the red flags raised by international educators, in this regard. This was especially truer in some countries, like Australia and Canada, which depend primarily on international students. "The impact on admissions in our program, where 75 percent of the students are international students, has been simply devastating. The same could be said about many other academic programs across Canada," David Dunne stated.

Likewise, Bozena Mierzejewska expressed a similar concern about the declining graph of admission in her academic program in the United States, especially among international students. However, she explained, "We did not see a decline in demand or interest in joining the program, but we predict that many of the international students who would like to come, or were recommended to join the program, will not be able to make it, due to many travel, financial, and health constraints."

Most of the interviewees agreed that, due to these new trends, there is a growing need to focus more on recruiting domestic students, rather than focusing primarily on international students. They predicted that, as a result of the fewer job opportunities and the shrinking employment market, many domestic students will invest more in upskilling themselves, through joining academic programs and earning more degrees, to become more competitive. This trend, coupled with the decline in international students' enrollment, ushers a new era of expected exponential growth in domestic students' enrollment, according to most respondents.

Future directions in online teaching in higher education

The mixed effects of COVID-19 on distance learning

The COVID-19 crisis has driven universities towards sudden online and distance education, and many of them were encouraged to expand their capacities in this new domain, and to invent new tools, tactics, and techniques. Toquero (2020) pointed out that the global pandemic opened up possibilities for countries to enhance their educational modes of delivery, and to shift their attention to emerging technologies.

All the interviewees highlighted the significance of adequate online instruction to broaden learners' horizons (Keeton 2004), and they agreed that institutions must

focus on pedagogical issues and emphasize collaborative learning, case learning, and project-based learning through online instruction (Kim and Bonk 2006). There were variations, however, between academic institutions in different countries around the world, in terms of their type of response, and their degree of preparedness, depending on the level of economic development, infrastructural capabilities, and prior experience. For example, Pontus Wärnestål described the level of preparedness at Halmstad University in Sweden by saying, "We did some distance education before, so it was not entirely new to us, but we developed our tools and methods significantly, after the pandemic. We had to make several adjustments and modifications, of course."

Yet, this was not the case in other parts of the world. According to Ezaz Ahmed:

> In less developed countries, there are many obstacles confronting distance learning. In addition to the obstacles impacting internet penetration, availability, and accessibility, in some countries in South Asia, such as India and Bangladesh, for example, distance education is not perceived to be equivalent to face-to-face education, and, therefore, applicants who hold online degrees are discriminated against when they apply for jobs. This situation will change, for sure, as more prominent universities, such as Harvard and MIT, started offering excellent online programs. Online education is a fantastic opportunity for this generation, and the next, because we can deliver accredited and high-quality programs and courses to our remote populations.

Still, one of the key obstacles which persist in this regard is the lack of sufficient infrastructure in many underdeveloped and developing countries. Particularly in remote and rural areas, where internet accessibility and availability remain a concern along with the lack of the needed digital literacy skills and capabilities contributing to the growing "digital divide." This is defined as the gap between the technological haves and have-nots, globally, regionally, and locally (Hussain 2020; Khamis and Campbell 2020).

Another challenge highlighted by a number of participants when commenting on the field of education more generally, not just higher education, was the absence of recognition, and the lack of clear mechanisms and structures, for homeschooling (Basilaia and Kvavadze 2020). This is expected to gradually change, over time, as most of the interviewees stated.

This new situation also created the birth of new competition for open universities, which deliver distance learning. Describing the situation in Japan, for example, Kumiko Aoki commented, "Shortly, our Open University will face fiercer competition, because many traditional universities will start offering online courses, therefore, we will not be the only distance learning university in the country."

Moreover, most interviewees stressed the need to have maximum support from

strong and organized leadership in their own institutions, during this crisis (Charoensukmongkol and Phungsoonthorn 2020), and they explained that the absence of such leadership creates a real vacuum, and a major impediment on many levels. "This is the best time for leadership to be tested. We need to see how they can best support us, on every level," Ezaz Ahmed stated. Likewise, David Dunne also commented, "There's a real need now for people who can think creatively, innovatively, and resourcefully, more than ever before, especially in top leadership positions."

One of the most important advantages of having strong leadership, as mentioned by some interviewees, was resolving conflicts and overcoming uncertainties, especially during this crisis. This would be done through reducing the perceived distance between top leadership, on one hand, and faculty members, on the other hand (Brammer and Clark 2020), thus, enhancing communication and boosting trust between both parties, and better coordinating their response efforts to this crisis.

More personalized communication to reduce stress and increase connection

Most interviewees stressed the need to relieve students' anxiety, during this quickly implemented online teaching "migration" phase (Bao 2020). Many of them reported adopting new techniques to reduce their students' level of stress and anxiety, such as making adjustments to their assignments, lowering the expected volume of work for students, and shifting to a pass/fail grading system, instead of letter grades. For example, David Dunne remarked, "Students are very stressed right now, and there's a huge emotional impact on them, so I don't want to enforce very rigid deadlines, and I give them a bit more time and more flexibility."

Moreover, many respondents emphasized the need for better connection with their students. Kim Fox, for example, discussed how she incorporates a personal touch in her communication with her students, "I connect with my students mostly through individual video conferences, in a one-on-one online conversation. Sometimes, there can be quick phone calls just to ask how they are doing. Other times, we can have a detailed discussion about their projects, or just a casual chat about any issue they would like to discuss, in general." She appreciated her university's innovative communication approach, which includes organizing campus community conversations on important topics, such as "returning back to campus."

Another important point raised was maintaining good connections with the students' parents too, as much as possible. R. D. Patidar said.:

> The important thing in our institution is that many of our faculty members are also in touch with the students' parents, because currently most students are at home, so they interact more extensively with their parents. Therefore, it is very important that we receive

> feedback from the parents, and maintain this open channel of communication with them at all times.

This is in line with Aliyyah et al.'s (2020) findings that education must be viewed as a collaborative community effort, involving governments, teachers, parents, students, and educational institutions This is to increase the efficacy of teaching and learning methods, which have been adversely affected by the pandemic, and to ensure that students do not fall behind.

A Surge in upskilling, hybrid learning, and sustainability

All participants agreed that the world will never go back to where it was before COVID-19 in many fields, including higher education. They agreed that today's students will have to exert more effort to develop and polish their skills. The higher education sector will witness many developments through the adoption of new tools and techniques, and will steadily shift in the direction of a more digitalized and hybridized teaching and learning environment. Many interviewees emphasized the fact that young people are more likely to exert more efforts nowadays to polish their technical skills, obtain more degrees, and receive further training, a phenomenon commonly referred to as "upskilling." This is directly related to the shrinking job market and the limited job opportunities, which increase the pressure on these young people to become better prepared, and, therefore, more competitive. This high level of competitiveness, flexibility, and adaptability is also expected from many organizations, including higher education institutions.

As Mishra (2020) points out, the current pandemic crisis might be a welcome opportunity to invest in technology platforms to foster better quality higher education, and to boost lifelong learning, upskilling, and certification. Ezaz Ahmed agrees, "I would like to emphasize that those institutions, and people, who are well-trained, will be better equipped to overcome any challenges in a much smoother way, compared to others who are not trained, because training makes us better, and more adaptable, in the face of challenges."

Moving forward, the expectations for the higher education sector's paradigm includes becoming more hybridized and digitalized, in the post-pandemic era. As Bozena Mierzejewska remarked, "We have two options for offering classes at my institution. Each faculty member has been informed that they have to be fully-prepared and well-trained for both, namely the hybrid version and the online version."

Most interviewees agreed that online programs should be designed in a format which ensures that they are creative, interactive, relevant, student-centered, and group-based (Partlow and Gibbs 2003). Kim Fox stated that she prefers synchronous sessions, which are more similar to face-to-face communication. However, she always ensures that the recorded versions of her sessions would be available to the students who could not attend the session. Kumiko Aoki compared

the online education model to the traditional distance learning model, which indicates that, "Synchronous teaching is real-time, spontaneous, and adds more value to the conversation, but with asynchronous teaching, students expect higher quality, and better-prepared, content." Mastering both modes of delivery requires boosting teachers' competency and skills, through ICT-related teachers' training (König, Jäger-Biela and Glutsch 2020).

An important challenge facing many academic programs is sustainability, or the ability to survive and stay in the market. Caroline Molloy said, "I think that some academic institutions will not survive, because they cannot adapt well. You have to be flexible and open to change, because the way we did things before this pandemic, no longer exists." She added, "As the virus continues, we can expect to see more challenges in technology that we did not see in the past. Online learning is a good example. The industry is going to rely more on artificial inelegance, and this increased use of artificial intelligence (A.I.) will eventually replace human workers."

Likewise, R D Patidar stated, "I feel that this crisis will have far-reaching effects on the economy, and, hence, there will be a significant impact on higher education, in turn." This is in line with the findings of Dua et al. (2020), as well as Brammer and Clark (2020), who indicated that COVID-19 might result in the closure, merger, and restructuring of universities, as funding challenges surge.

Concluding remarks: a paradigm shift in higher education

This paper concludes with a number of important observations regarding the potential, limitations, and future directions of the shift to online teaching and education. It elaborates on the COVID-19 pandemic-related transition to virtual learning as perceived by twelve international educators representing different countries, and reflecting diverse perspectives. The most important findings of this study could be summarized in the following points.

First, the online education strategies adopted during the outbreak were a mix of online and distance education, combining synchronous and asynchronous modes of delivery. So, there is a need to define the best method(s) of teaching-learning in the succeeding stages of the outbreak, and beyond. As Brammer and Clark (2020) discussed, adjusting to a prolonged pandemic will require universities to develop flexible, and resilient, models of education to meet the students' high expectations and changing mindsets, as well as implementing enough adjustments in the curriculum to increase flexibility and technological readiness (Aliyyah et al. 2020).

Second, the higher education sector witnessed growth in the domestic market in many countries, due to international students' restricted travel. According to "The Impact of Coronavirus on Higher Education" survey, which was released in 2020, in the United States alone, 33.7 percent of the foreign students' population are Chinese and 18.4 percent are Indian. Countries like Canada, Australia, New Zealand, and others mainly depend on international students, who are admitted to

their graduate programs. Right now, many of these countries will have to revisit and (re)strategize their business model through shifting their focus to the domestic market to overcome the current financial emergency (Schleicher 2020).

Third, the increasing acceptance of online or distant education, and the accompanying flexibility in modes of learning, empowers learners to control their educational needs constructively. In addition to increasing, and expanding, the universities' outreach to the students' global communities, through their online courses and educational platforms.

Fourth, the swift shift to e-learning, which was triggered, and accelerated, by the pandemic, exposed long-standing disparities, especially the "digital divide," which must be addressed by future education and digitalization policy experts. The preliminary findings of this study reveal that digital inequalities and technological disparities are global phenomena that are not only restricted to underdeveloped countries. Rather, they exist "between" developed and underdeveloped nations globally, as well as "within" all countries around the world, including the more affluent nations, as is the case between urban and rural areas (Hussain 2020; Khamis and Campbell 2020).

It is especially important to analyze such disparities, as they impact particular groups in various societies, particularly those suffering from different experiences of marginalization. This includes immigrants, minorities, refugees, those with disabilities, and women, especially those in rural or traditional communities, who are more prone to suffer from the "gender digital gap" (Khamis and Campbell 2020).

Finally, the findings reveal a correlation of issues, variances in responses, and a double-edged sword effect for this new transition and transformation to online, digitally-based teaching and learning. The many positive outcomes include creating new opportunities to realign instruction strategies away from conventional comfort formats, while accelerating adaptability, flexibility, innovativeness, innovation, and collaboration on an unprecedented scale.

The downsides, however, primarily relate to the negative effects on faculty and students' mental health and well-being due to the accompanying stress, as discussed by Figueroa et al. (2020). Moreover, having to deal with inconvenient time-zones, online fatigue, lack of sufficient resources and training, as well as the resistance to change and adaptability from older generations among faculty members, and the incompatibility of many of these new modes of online teaching and learning with the needs of students with disabilities, in many cases.

Moving forward, it is absolutely crucial to design new educational strategies, tactics, and techniques which can help maximize the benefits, and minimize the drawbacks, of this newly emerging phenomenon. This is done through a varied set of complex factors, individually, socially, economically, and in terms of infrastructure, based on

the lessons learned from the present shifts and transformations. The experience of agility in response to the COVID-19 crisis poses questions as to whether the current layers and sets of discretions are sustainable; whether their processes permit the degree of flexible future thinking and resilience-building required; and whether they can iteratively reimagine the future to create sustainable institutions (Brammer and Clark 2020; Milovanović et. al. 2020).

To conclude, we have to admit that we are only seeing the tip of the iceberg, when it comes to assessing the pros and cons of these highly intertwined, and closely interlinked, complex phenomena, which accompanied this global health crisis, and created its parallel new waves. There is certainly much more that remains to be discovered and detected, both positively and negatively, moving forward.

In every case, however, we cannot afford not to be prepared anymore. As the current crisis of the COVID-19 pandemic, and its effects on many fields including higher education, illustrates, we need to learn from the mistakes of the past. We must also deeply analyze the present in order to safely and successfully plan for and build the future for ourselves and for future generations of students everywhere.

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