Accessing Online Instruction amidst COVID-19 in Bangladesh: Barriers and Coping Strategies

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Abstract

With the sudden onset of the COVID-19 pandemic and disruption of the education systems worldwide, private universities in Bangladesh transitioned to online classes to ensure continuity of education. Therefore, it was important to investigate the private university teachers’ and students’ perceptions regarding various dimensions of accessing online instruction and coping strategies used by teachers. A mixed-methods approach was used to collect data from 208 teachers and 674 students through questionnaires and focus group discussions. The findings indicate that teachers and students encountered several barriers, including unstable internet connection, costly internet packages, minimal support for teachers, issues with online assessment, and an unsuitable home environment. To combat existing problems related to assessment and to increase interaction in the classroom, teachers used a small range of coping strategies. Measures are suggested to ensure access to stable internet connectivity, financial support to students and teacher training on online pedagogy and assessment.

Keywords: Online Instruction, COVID-19, Access, Barriers, Perceptions

Introduction

The sudden onslaught of COVID-19 jarred the education system worldwide, and educational institutions shifted to an online mode of teaching and learning. Policymakers and administrators perceived the abrupt move to the online mode of delivery necessary to keep education going. This sudden transition to online teaching has been labelled as ‘emergency response’ by Williamson et al. (2020). Hodges et al. (2020) further clarify that emergency remote teaching is a stop-gap delivery, and the purpose is to continue the flow of education during COVID-19. In Bangladesh, educational institutions remained in a state of inertia for several months following the pandemic outbreak in March 2020. Official permission for starting online classes and assessments was announced by the Ministry of Education (MOE) and the University Grants Commission, Bangladesh, on 7 May 2020 (Abdullah, 2020). Online classes started at private universities in early June 2020 with trepidation as, at the outset, there were apprehensions regarding access and the affordability of online delivery.

Access has been broadly conceptualized by Tomaševski (2001) as comprising the interrelated notions of availability, accessibility, acceptability and adaptability. Under the “Right to Education”, access has been defined by her as the removal of “legal, administrative and financial barriers” (p. 12), particularly obstacles caused by fees, schedule, distance, unavailability of fundamental infrastructure, and “discriminatory denials of access” (p. 14) also need to be addressed to ensure smooth access to education. Lewin (2015) points out that the key dimensions of access to education include regular attendance, a safe learning environment, and opportunities to learn that are equitably distributed. Some of the factors associated with access, such as infrastructure and affordability, as highlighted by Lewin (2015) and Tomaševski (2001), are crucial for a successful transition to online instruction in Bangladesh.

The global Affordability Report places Bangladesh in the 45th position globally in terms of one’s ability to purchase 1GB of mobile prepaid data with less than 2.0 per cent of their average monthly income (Alliance for Affordable Internet, 2020). It is also to be noted that Bangladesh ranks 99th out of 177 countries concerning broadband internet bandwidth in the Speedtest Global Index (Speedtest Global Index, 2021). The same index puts Bangladesh in the 136th position out of 140 countries for mobile internet bandwidth. These facts and statistics put Bangladesh in a vulnerable position concerning accessing and affording online classes.

While planning this study on the state of online instruction in higher education in Bangladesh, the current researchers chose to focus on private universities because no large-scale study had been conducted previously in this context. The main objective was to document teachers’ and students’ views regarding access to the internet, digital devices, online instruction, materials, learning environment, training opportunities, and assessment. Another objective was to explore the major barriers faced and coping strategies used by teachers. The purpose was to identify the problems faced during this transitional phase to gather insights for future directions. The following research questions guided the study:

**RQ1.** To what extent were the teachers and students of private universities in Bangladesh able to access online classes during COVID-19?
RQ2. What barriers did the teachers and students report facing in online classes?

RQ3. What coping strategies did the teachers report using for online teaching and assessment?

Literature Review
In recent times, we have witnessed a significant rise in the amount of research on the use of digital technologies, in general, and, with specific reference to the COVID-19 situation, in particular. This section briefly provides an overview of selective literature related to access and barriers to technology integration, views on online pedagogies, assessment, and coping strategies.

Barriers to Technology Integration
The success of online teaching is dependent on the teacher’s willingness plus ability to integrate technology effectively into their teaching, assessment, and feedback practices. However, the literature on technology integration highlights barriers and the presence of extrinsic and intrinsic influences on teachers (Ertmer et al., 2012). Extrinsic barriers include access to reliable resources, internet connection, institutional factors, subject curriculum and assessment, low student to device ratios, and an infrastructure that can support wide-scale student usage (Ertmer et al., 2012). Intrinsic barriers mainly involve teachers’ beliefs and attitudes toward technology. Teachers’ insufficient level of technological, pedagogical, and content knowledge also impacts classroom educational technology integration (Mueller et al., 2008). Teacher confidence in using technology and their perceived values of technology integration seem to have an important place in technology integration for student learning. Jacinto and Alieto (2020) have identified teacher training and technological knowledge as important factors determining teachers’ attitude towards virtual teaching in the Philippines context. They found that both teachers’ and students’ positive attitudes towards e-learning are prerequisites for successfully integrating technology into teaching online courses in higher education. Dhawan (2020) suggested that the courses should be designed in such a way that will motivate and engage learners.

The studies cited above are mostly conducted in developed world contexts and when institutions could decide whether to integrate teaching technologies. In the current COVID-19 climate, especially in developing country contexts, for instance, Pakistan, and Sri Lanka, additional barriers have been identified, which include issues of access, affordability, lack of digital devices, and unstable internet (Adnan & Anwar, 2020; Hayashi et al., 2020). Scarcity of learning resources, inadequate training opportunities, and unfamiliarity with online assessment tools and software add to the challenges. Furthermore, online teaching and learning have taken a toll on the mental health of teachers and students (Whittle et al., 2020) and added to their existing workload extra worries and uncertainties about their future. Another worrying dimension of technology use is widening educational inequities (Hayashi et al., 2020). This is perceived as a major threat in developing countries like Bangladesh, which have uneven and varying levels of internet connectivity (Bhuiyan et al., 2020). In the context of Bangladesh, these pressures are serious barriers and may work as impediments in enabling teachers to concentrate
on remote teaching and redesigning pedagogical activities, online assessment formats, and feedback strategies.

Access and Affordability
Issues of access and affordability hold a prominent place in the literature on integrating new technologies. According to Husu (2000), the access view presupposes the technical and instructional prerequisites that make the virtual classroom possible and accessible enough to the teachers and pupils involved. Instefjord and Munthe (2017) also emphasize some prerequisites for technology use. For instance, they highlight the need for access to pertinent equipment, workplace support, and positive attitudes to technology. Besides, teacher preparation, teacher training, and providing required institutional support to faculty members are other pre-conditions for successfully implementing virtual teaching and learning (Palvia et al., 2018).

It has been reported that in the South Asian context, it is difficult to integrate technology as large numbers of people do not have access to digital devices, and the cost of affording internet data packages is a major challenge (Jalli, 2020). Bao (2020), referring to existing research in the context of China, contends that challenges regarding technology do not stem only from “technical operations” but also from “lack of self-discipline, suitable learning materials, or good learning environments when they are self-isolated at home” (p.114). Beaunoyer et al. (2020) and Kummitha et al. (2021) suggest that the institutions must arrange maximum access to technology, devices, and the internet to narrow the digital divide in this pandemic.

Online Pedagogies and Assessment
Effective online pedagogy requires attention to effective course design, interaction amongst participants, instructor preparation, and support, amongst other factors (Wiest, 2012). Geith and Vignare (2008), emphasizing the importance of teacher support, state that access to successful online learning can take place through a “structured and supported instructional experience” (p. 119). In drawing guidelines for online pedagogy, Bao (2020) suggests some strategies, like preparing emergency plans, condensing the syllabus, integrating traditional and online learning for helping students to cope with online instruction.

A significant concern for educators during COVID-19 is the issue of cheating in online assessments (Alfiras et al., 2020). Since assessment in remote teaching is not proctored, there are more chances of cheating, affecting test scores’ reliability. The literature on online assessment shows student dissatisfaction regarding feedback quality in course evaluations and research studies (Forsythe & Johnson, 2017). Akimov and Malin (2020) recommend the use of oral tests as a reliable format for assessment. Lee et al. (2020) suggest that test-takers hand in a signed test ethics pledge in conjunction with written tests under camera coverage to prevent cheating practices and ensure fairness.
Coping Strategies

In China and Pakistan, Bao (2020) and Mahmood (2021) forward specific instructional coping strategies for online learning. They emphasize that teachers should develop students’ critical thinking abilities by assigning real-life tasks. Mahmood (2021) recommends that teachers modulate their voice and speech, raise the level of interaction, share necessary materials, and use creative and innovative teaching techniques to facilitate and engage learners. Mahmood (2021) also echoes Bao’s (2020) strategy of having backup plans and further suggests dividing broad teaching contents into considerably shorter units, keeping recorded files of the classes, and assigning teaching assistants. Furthermore, Bao (2020) highlighted the importance of appropriate relevance, effective delivery, and adequate support for faculty members with timely feedback. Gao and Zhang (2020, p. 12) suggested that language teachers need “to be flexible, resilient, and ready to learn new skills” for coping with the unpredictable threats posed by COVID-19.

The above section has outlined selected research related to issues of accessing and implementing online instruction. Based on the salient features of these studies, various dimensions of access to online teaching and learning, pedagogical techniques, assessment tools, teaching and learning environment and coping strategies have been explored in this paper.

Methodology

The study used a mixed-methods approach, and data were collected through online survey questionnaires and Focus Group Discussions (FGDs) from both teachers and students. This research design allowed us to get a general picture and achieve an in-depth understanding of the issues which emerged in quantitative analysis (Creswell & Clark, 2017).

Participants

Two hundred eight faculty members from the English departments participated in the survey; 35% (n=73) of the teachers were male. The teaching experiences of the faculty members ranged from 3 to more than 20 years. 64% (n=131) of these respondents taught undergraduate courses, and 36% (n=74) of them taught both undergraduate and master’s level courses. Six hundred seventy-four students also participated in the study, and there were more female students (n=389, 58%) than males. The majority of the student respondents were from undergraduate programs (n=655, 97%). The majority of the student population (n=551, 82%) participated in online classes from metropolitan cities, districts, and towns, and the rest, from villages.

Instruments

Data were collected using a survey questionnaire from 208 teachers from 28 private universities and 674 students from 17 private universities over two months (June-July 2020). 5 FGDs with 24 faculty members (Female n=16, Male n=6) of 11 private universities and five FGDs with both male (n=10) and female (n=9) students from 7 private universities were conducted to collect qualitative data. The FGD groups comprised 3 to 6 participants.
Procedure

Both teacher and student survey questionnaires were prepared via Google Forms and were randomly sent to the teachers. They were requested to fill in the teacher survey forms and share the link of the student questionnaire with their respective group of students. All the researchers were involved in the preparation phase of the survey questionnaires. Both teacher and student survey questionnaires were piloted and modified. Ethical issues, including confidentiality, anonymity, and purpose of the research, were duly taken care of. For the FGDs, consent letters were sent through the collected emails, and permission for recording responses was obtained. The FGD questions were finalized through discussion, peer-review and revision. The items included in the questionnaires focused on the major concerns related to online teaching and learning. The FGDs focused on gathering in-depth information regarding the issues which surfaced from the survey findings. FGDs were conducted by 6 of the researchers separately via Google Meet and Zoom. The duration of the FGDs ranged from 60 to 90 minutes. The survey data were processed using SPSS (Version 26), analyzed using descriptive statistics, and presented using frequency and percentages. The qualitative data were transcribed and analyzed according to major themes.

Results

The findings of the study based on survey data and FGDs highlighted the extent of teachers’ and students’ access to online education during the COVID-19 pandemic. The major problematic areas were related to issues of accessing the internet, affordability, logistics and technology, teacher training, use of pedagogical strategies, materials and assessment. Other factors highlighted include an unsuitable home environment and overall discomfort with the teaching/learning scenario. In addition, coping strategies adopted by teachers were shared. With regard to obtaining information about student’s access to internet connectivity and affordability, it was important to collect data about student attendance, as this information could shed light on the extent to which students were able to attend online classes. The majority (n=170, 81%) of the teachers reported that the attendance rate of the students was more than 50%. On the other hand, two-thirds (n=422, 63%) of the students reported that they had 76-100% attendance in their courses, but a good number (n=236, 35.9%) of them stated that they had irregular (less than 75%) attendance in their courses. It was perceived from the FGDs that the most recurring factors affecting attendance included unstable internet connection, insufficient mobile data, expensive data packages, and remote locations. The teachers identifying reasons for poor attendance pointed out that a huge majority (70%) of the students joined from remote locations, suffered from the erratic power supply, showed a lack of seriousness to continue classes, complained of sickness in the family, and expressed fear of being affected by the disease. Two teachers mentioned that “getting recorded lectures” and “considering COVID-19 as a short-lived phenomena” made them reluctant to attend classes seriously. Though around two-thirds (n=144, 69.3%) of the teachers agreed that online learning is affordable for learners, slightly less than
half (n=317, 47%) of the total student respondents disagreed with this opinion of the teachers. Additionally, two-thirds (n=448, 66%) of the students stated that they experienced interruptions in internet connectivity. In the FGDs, the majority of the students mentioned that whenever there was the “slightest rain”, the internet connection got interrupted. Most of them reported high internet costs. For instance, one student reported that “the cost of broadband is high, we have to buy mobile data, which is not within our means”, and another noted that “using a mobile phone is very challenging.” Some informed that they did not have the bandwidth to keep their cameras on.

Regarding having access to logistic support for teaching online, the majority of the teachers (n=182, 87%) and students (n=521, 78%) pointed out that they had necessary logistic support. As reported by the students, the most frequently used device was smartphone (n=572, 86%). Students also used laptops (n=182, 27%), desktops (n=58, 9%), and tablets (n=15, 2%). However, teachers in FGDs reported that their students faced practical problems regarding access to logistics and technology, such as unavailability of personal computers, minimal internet connection in remote areas, and restricted power supply in most areas of Bangladesh. One teacher mentioned that students had to get out of their homes and go to an open field or space to get a stable internet connection. Another teacher stated that students often took a photo of their handwritten assignments and sent those to the teachers as they did not have computers. However, another teacher commented that students were often found to turn off their video, and it became difficult to understand whether they were attending the classes or not. Highlighting the poor internet connectivity situation, one student commented:

...our internet connection is not always working, I mean when the weather is bad and stormy the net connection gets weak, so it takes a lot of time to connect and a lot of friends cannot even attend the class because of poor network connection.

Regarding the use of digital platforms, the survey data revealed that many teachers preferred using Google classroom (n=386, 57%). They seemed to be fond of Google Meet (n=366, 55%). Zoom (n=316, 52%) and Facebook (n=207, 31%) appeared to be less popular than Google classroom and Google meet. In the FGD sessions, the students confirmed that their teachers used various apps for teaching online. The teachers also reported similar information in the FGDs. However, some of the students were not satisfied with the use of different combinations of apps. A couple of them said that though attending classes was easier through Facebook (FB), they were dissatisfied with FB classes and commented that they were not very “interactive”. These findings reveal that although the teachers were able to use a variety of online platforms, they did not have adequate digital devices. The students also complained about not having available logistics and devices, unsteady connectivity and dissatisfaction regarding the uses of the apps and technological devices.
With regard to teacher training, almost half (n=119, 57%) of the teachers reported that they started online classes without receiving any training, while around one-third (n=74, 36%) of them stated that they received training. The rest of the respondents (n=15, 7%) did not provide any responses. In the FGDs, most of the teachers reported that they received one-day-long training once only. Other teachers mentioned that they depended on their previously self-taught ICT skills for online teaching. For instance, a teacher commented that “as the lockdown came all of a sudden and the university declared to give a break to fight the pandemic . . . there was no time to take preparation for online teaching.” In FGDs, the teachers who reported to have received training from their universities on using different platforms for online instruction had varying levels of understanding regarding the training. This variation was probably due to the different types of training programmes offered to the teachers. Teachers from only two private universities had an orientation to online teaching before COVID-19, while other private universities arranged a short training session for the teachers for the first time during COVID-19. Some of the faculty members had prior experiences and skills in using digital devices. Concerning pedagogical strategies, the survey findings revealed that around half (n=120, 57.8%) of the teachers believed that their online classes were interactive, whereas an equal proportion (n=391, 59.2%) of the students perceived that online teaching and learning was not as interactive as face-to-face classes. Student FGD findings also revealed mixed opinions regarding this issue. A couple of students expressed their sentiments about online classes by commenting that “classes are useful to some extent but not very interactive” and, “Google classroom was helpful but in FB classes interaction is missing.” Student FGDs further showed that few students asked questions and the majority said that they “preferred to keep the microphone mute”. On the other hand, data from teacher FGDs highlighted the constraints of making classes interactive. The teachers reported that due to limited digital literacy among students, there was less scope for assigning group tasks to them in short duration classes. They stated that it was problematic to engage all students in online classes especially, the quiet ones. One participant commented: “Online classes have become teacher-centered owing to the barriers.”

As FGD data revealed, in order to make classes interactive, teachers in Google classroom and WhatsApp encouraged students to ask questions repeatedly and also kept the comment section open for students to post their views. They allowed students to ask questions and seek clarifications in their mother tongue for increasing participation. Besides, they were supportive and patient in solving student problems in class and beyond class hours. They also gave students extra time to submit assignments. Student responses regarding group and pair work during online classes varied: a third (n=253, 38.2%) of the students stated that there was ample scope for engaging in group and pair work activities, whereas two-thirds (n=409, 61.8%) of them held opposite views.

Regarding the effectiveness of online teaching, the majority (n=167, 80.3%) of the teachers agreed that online teaching was effective. Therefore, according to an overwhelming majority of teachers, online teaching is considered to be effective. Contrastingly, the majority of the students
(n=352, 53.3%) stated that they were not happy with the online classes. In the same vein, over half (n=363, 55.4%) of the students reported not to have learned effectively from the online classes, whereas less than half (n=292, 44.6%) of them reported otherwise. In FGDs, both students and teachers expressed reservations regarding the effectiveness of online classes. Concerning student’s achievement of the stated learning outcomes, almost two-thirds (n=83, 59.6%) of the teachers agreed that students could achieve the stated learning outcomes through online learning whereas two-fifths of the respondents (n=125, 40%) disagreed with this point.

With respect to online materials an overwhelming majority (n=199, 95.6%) of the teachers reported that the online materials they used were effective; however, a third (n=222, 32%) of the students did not find the online materials and contents to be effective. FGD data revealed that the teachers frequently used PowerPoint slides and PDF texts as teaching materials. They also prepared “course packs” for students. Some of them also followed a flipped-classroom approach in which they gave students materials to read/watch in advance. Regarding the kind of materials and their effectiveness, the teachers also mentioned the heavy price students had to pay to download large video files, and complained that it increased their workload and taxed their time. These findings show that both teachers and students did not have access to appropriate online teaching and learning materials and expressed concern about the high cost and extra time spent to download the materials. In relation to assessment, the findings showed that teachers used a variety of test formats for assessment purposes. Written assignments were used by the majority (n=188, 92.8%) of the teachers, followed by quizzes (n=151, 72.8%), short questions and answers (n=138, 66.5%), oral tests, (n=119, 57.3%), presentations (n=79, 38.1%) and reading tests (n=45, 21.7%). In the FGDs, some teachers expressed reservations against lengthy assignments as many students did not have computers to compose assignments. They also perceived that these test tasks were time-consuming and facilitated cheating i.e. copying and pasting. In this regard, in the FGDs, teachers highlighted the lack of assessment training as a major drawback. A few teachers expressed concern regarding the selection of assessment techniques and fairness issues. One teacher stated that “…teachers are not sure if the tasks selected are appropriate for assessing students’ and ensuring fairness in assessment”. Many of the teachers stated that online assessment was “quite laborious”, “exhausting” and “time-consuming”. Evaluating students’ online class participation was also perceived to be problematic as one teacher commented that “some students remain silent during the class or often get offline.” Another teacher expressed doubts about the assessment system and students’ integrity by remarking that “online assessment is difficult, we cannot trust students”. In this regard, more than half (n=111, 54%) of the teachers reported that they did not use any software for checking plagiarism. In the FGDs, the issue of cheating and plagiarism was also highlighted by a few students. For instance, a student shared a serious concern about online assessment being unfair, evident in the following comment, “...I had to give proxy for my friend...For the sake of friendship I did it but I know it is not fair.”
Student FGDs further highlighted additional difficulties associated with online assessment. Students in the FGDs considered “internet breakdown” and “power-cut” as the biggest threats to online examinations. Some of them also expressed dissatisfaction regarding feedback, “…earlier, mid-term scripts were shown but now I have no idea about my problems”.

The data revealed that the teachers did not have access to appropriate online assessment tools and struggled with a number of issues related to assessment. Similarly, students also faced numerous problems in handling online assessment. Despite the above constraints, the teachers in the FGDs reported using several coping strategies and different software to ensure fairness in online assessment. For instance, some used Moodle “for preventing cheating and plagiarism” as it offered many advantages such as “the option for setting a time frame to answer a question paper and the scope for reshuffling the questions to avoid cheating”. Several teachers mentioned that they used “time-bound quizzes as it seemed to be a better option for ensuring fair assessment”. Some teachers reassigned the same marks to different students when they detected traces of plagiarism in candidates. One teacher believed that the problem of plagiarism can be minimized by “limiting the references for writing assignments” and “designing creative questions.” As one teacher commented, the strategies they adopted “made students cautious and extra careful while submitting assignments”. A few teachers reported that they provided feedback on the discussion forum while others involved students in delivering PowerPoint presentations.

As for the teaching-learning environment at home, the survey data showed that a clear majority (n=176, 84.6%) of the teachers agreed that they had a suitable home environment for conducting online teaching, whereas slightly more than half (n=393, 59%) of the students agreed with that opinion. FGD data revealed that half of the student participants were not satisfied with their home environment, as one of them said that “…giving exams from home is difficult”, and another noted that “…no one understands that we need a soundless environment to concentrate.” Teachers also faced numerous problems at home, for instance, juggling household chores, managing children and simultaneously teaching and counselling students. They also struggled to find suitable space at home for conducting classes. These findings indicate that both teachers and students were not satisfied with the home environment as they did not have a conducive teaching-learning ambience at home.

As regards the overall feeling of being comfortable during online teaching and learning, although most (n=167, 80.3%) of the teachers indicated that they were comfortable with online teaching, more than half (n=371, 55%) of the students expressed the opposite opinion. In FGDs, the teacher’s responses revealed that they were uncomfortable initially but managed to gradually adapt to the technological demands as they had no choice. Additionally, teachers found online teaching uncomfortable due to irregular student attendance, “unwillingness to submit assignments” and “lots of students talking at the same time”.

The majority (n=173, 83.2%) of the teachers reported that online teaching increased their workload. The FGDs revealed that some teachers were “very much stressed and burdened with online teaching”. Teachers put forward different reasons for the increase in workload. For
example, one teacher said, “I get phone calls 24/7.” and another said that “more preparation time and continuously sitting in front of the computer is resulting in multiple physical discomforts”. The teachers noted that they had to work hard and had to spend extra time and effort to make the lessons engaging. In short, the findings show that the teachers were not completely happy with the online teaching-learning situation due to a variety of reasons.

**Discussion**

The study investigated teachers’ and students’ opinions regarding access to online education at Bangladeshi private universities during the pandemic. It also reported on the barriers they encountered as well as the coping strategies they adopted to overcome these challenges. In terms of accessing the internet connectivity and the affordability of purchasing data packages, this study revealed that internet access and affordability were considered to be major roadblocks and a huge challenge to online instruction in Bangladeshi private universities. The findings regarding teachers’ and students’ access to the internet, speed, and cost of the internet suggest that the contextual and financial constraints and students’ attitude towards online classes affected their attendance and participation to a great extent. The findings further indicate that students had difficulties accessing online classes mainly due to unreliable internet connectivity and high data costs. These findings were corroborated by the findings of other studies (Adnan & Anwar, 2020; Hayashi et al., 2020; Jalli, 2020), which mentioned similar challenges in accessing digital technologies. Similar findings were reported in the context of public universities in Bangladesh by Bashir et al. (2021). Alamgir (2020) also pointed out that online education is inaccessible to many students living in remote areas, and affording the internet costs and data packages for online classes has placed an extra burden on parents in Bangladesh.

Concerning access to logistics and technology, the findings indicated that a vast number of students in the private universities did not have the required technology, internet connectivity and logistic support for accessing online teaching and learning. This was echoed in studies by Khan et al. (2020, 2021), which identified a similar lack of access to proper devices and unreliable internet connectivity in Bangladeshi public universities. This lack of access might exacerbate inequalities in students with fewer resources and facilities in remote areas. Thus there is a fear that students from rural and remote areas will be doubly disadvantaged, which will further widen the inequalities in education (Jahan, 2021). Moreover, these learners might also need the training to participate in online classes and examinations (Beaunoyer et al., 2020; Kummitha et al., 2021).

This study also revealed that private university students require suitable devices such as tablets, laptops, or desktops with broader screens than mobile phones to see the lecture materials and to write answers during examinations. Similarly, the teachers also need access to a proper learning management system to facilitate online learning because the social media apps that they are using are not made for teaching and learning purposes. Ertmer et al. (2012) and Hansson (2021) previously identified similar barriers to technology integration. As the study showed, the teachers did not have access to adequate training and most of them started teaching online

without proper training, which affected their class performance. This is supported by the findings of studies conducted in the contexts of Bangladesh (Khan et al., 2021) as well as India and Ethiopia (Kummittha et al., 2021). These findings are also in line with the research study findings of Mueller et al. (2008) and Palvia et al. (2018).

The study further demonstrated that online classes in the private universities in Bangladesh were not fully interactive. Although teachers perceived online teaching to be effective, students were not completely convinced about the effectiveness of the online classes. The teachers highlighted the constraints of making online classes interactive. It may be said that teachers were not used to practicing online pedagogical strategies and were struggling to convert traditional instruction into online instruction. These findings also align with the results of a study in the Saudi Arabian context where it was found that the tertiary level learners were passive during the online textual reading-based lessons (Alkhudiry & Alahdal, 2021).

Findings further showed that a majority of the teachers attempted to make their classes interactive, applying various pragmatic coping strategies for enhancing classroom interaction, such as providing opportunities to students in Google classroom and WhatsApp to ask questions repeatedly, encouraging them to post comments regarding their views, allowing them to ask questions and seek clarifications in their mother tongue, and giving students extra time to submit assignments. These findings align with the findings of the study by Mahmood (2020) where teachers reported similar strategies. It may be said that despite the difficulties in increasing interaction in online classes, teachers worked hard to overcome the challenges by using different techniques and keeping in mind student needs.

This study also found that although teachers expressed positive opinions about access to online teaching and learning materials, students expressed the opposite views and stated that they were not satisfied with the online materials. However, teachers expressed concern regarding the costs students had to bear in using internet data to download materials. Regarding the overall effectiveness of online teaching, this study found mixed opinions from teachers. This may indicate that the tertiary level teachers of Bangladeshi private universities need support and training to enhance their technological skills and develop suitable online pedagogical strategies to make their classes effective and increase classroom interaction. Again, the study found that the students unanimously voiced their dissatisfaction about the ineffectiveness of the online classes. It may be commented that students also need training and need to learn to work collaboratively with their peers to learn from each other. Students’ need for training was also highlighted by Barrot et al. (2021).

As regards assessment, the study found that both students and teachers found this facet of online teaching and learning to be problematic. Although they used a number of formats for assessing students online, they expressed concern regarding the submission of lengthy assignments. This task was perceived to be time-consuming and posed difficulty for students who did not have computers. Overall, the teachers were worried about cheating issues as a considerable number reported having no access to software for checking plagiarism. Students also expressed worries about the unfairness of online exams as there is scope for students giving
proxy during online examinations. These views reveal that teachers and students were seriously concerned about the issue of maintaining fairness and transparency in online examinations. These findings are in consonance with those of a large-scale study conducted by Khan et al. (2021) in the public university context in Bangladesh. A similar kind of concern about cheating during the online examination was reported in some other studies (Alfiras et al., 2020; Alghamas, 2020) in the Saudi Arabian and Gulf contexts. As the study found, although the teachers were not trained in online assessment and had minimum access to plagiarism checking software, they tried to cope with this new online assessment challenge during COVID-19 with their limited capacity. Teachers in this study suggested strategies for overcoming the challenges of online assessment, including using more oral presentations than written assignments to ensure fairness of assessments. A similar strategy for combating cheating was suggested by Akimov and Malin (2020) in their study.

Although the survey results in this study indicated that a clear majority of teachers opined that they had a suitable learning environment at home, the FGD findings revealed that the teachers faced challenges finding an appropriate space at home for their professional responsibilities as the duties of the home-front were demanding. This suggests that if online teaching and learning is continued for a longer period, it will be necessary to ensure a congenial home environment for facilitating teaching and assessment processes. These findings share similarity with the findings of the studies conducted in the contexts of China (Bao, 2020), and the Philippines (Barrot et al., 2021).

The study also found that online learning was a source of discomfort for most of the teachers as it caused extra anxiety and increased their workload to a considerable extent. The same message was echoed in the study by Whittle et al. (2020). Students found the fluctuations of internet connectivity and recurrent power failures extremely stressful and demotivating for continuing the tempo in online classes. They also suffered from technophobia and lost sleep at night before the tests were due. Moreover, they stated that sickness in the family and neighbourhood also had a negative impact on their mental health during this pandemic. These findings suggest that online teaching is taking a toll on teachers and students and they are paying a high price as it is negatively affecting their physical and mental health. The findings related to students’ mental wellbeing are corroborated by the study findings of Barrot et al. (2021).

**Conclusion**

This paper reported on the findings of a study conducted to explore the state of online instruction in the private universities in Bangladesh during the early phases of the COVID-19 pandemic. The findings of this study indicate that the private university students had limited access to online classes during the pandemic. They reported facing major obstacles in continuing with the new mode of delivery mainly due to issues connected with unstable connectivity, power outages, and lack of digital devices. Teachers also encountered problems in managing materials, assessing students, and controlling cheating and plagiarism. Regarding classroom instruction, teachers reported limited student engagement and interaction. Pedagogical techniques were also deemed to be inadequate as teachers had little preparation and training. Teachers were overworked, and
both teachers and students were discontented with the unsuitable home environment. Students expressed concerns about the fairness and transparency issues of online assessment. Despite the limitations, teachers tried to cope with the situation to the best of their ability using various available techniques and strategies. To achieve a sustainable impact, it is suggested that students need to be supported financially for accessing online classes to minimize the digital gap. Additionally, training teachers and setting up appropriate assessment policies is necessary for successful online learning. The insights emerging from the study may feed into the pandemic and post-pandemic action plans of concerned stakeholders for the effective implementation of online instruction at private universities in Bangladesh.

References


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**Ethics Declarations**

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