



Emergency Online Instruction at Higher Education in Bangladesh during COVID-19: Challenges and Suggestions

Rubina Khan

University of Dhaka, Bangladesh

Ahmed Bashir

University of Dhaka, Bangladesh

Bijoy Lal Basu

University of Dhaka, Bangladesh

Md. Elias Uddin

University of Dhaka, Bangladesh

Introduction

Teachers play a key role in enacting educational change. Whatever decisions are taken by educational leaders, it is the teachers who have to be at the forefront in implementing them. As the outbreak of the COVID-19 pandemic continued, public universities in Bangladesh began to take tentative steps towards online classes after an initial period of institutional closure and class suspension. Teachers had to embark on emergency remote teaching without much preparation. In this backdrop, this study was designed to explore teachers' perspectives on online teaching and learning in the context of the pandemic situation. In particular, the study aimed to identify the major challenges faced by teachers during this sudden shift to remote online teaching. In addition, the purpose was also to seek their suggestions for the smooth implementation of online instruction.

The study was guided by the following research questions:

1. What major challenges do teachers of English departments at Bangladeshi public universities face in implementing online teaching during the COVID-19 situation?
2. What recommendations do teachers offer to overcome the challenges for successful implementation of online instruction?

Literature Review

Research on online instruction has focused on ‘external’ and ‘internal’ barriers (Snoeyink & Ertmer, 2001) that teachers encounter. External barriers include resource constraints such as lack of equipment and lack of training or technical support while internal barriers include both institutional factors such as school cultures and teacher-level factors such as beliefs and attitudes about teaching and technology and openness to change (Snoeyink & Ertmer, 2001). Recent studies reveal the persistence of these factors in many contexts (Kelly, 2015; Kopcha, 2012; Nikolopoulou & Gialamas, 2016). However, the pandemic has brought additional and unique challenges for the teachers (as well as the students) in its wake (Hodges, Moore, Lockee, Trust, & Bond, 2020). This section reviews the literature on the challenges of online teaching-learning with specific focus on the changed circumstances following the outbreak of the pandemic.

Access and Costs

Lack of access to gadgets, online resources, materials and training pose a major challenge to remote teaching. In contexts such as the USA where computers and internet connectivity had already been integrated in most classrooms, it was relatively easy to introduce remote teaching by signing contracts with Zoom and other online platforms (Ndambakuwa & Brand, 2020), but the scenario is very different in the developing countries. A large segment of the population in South-East Asia still does not have access to electronic devices and the internet (Jalli, 2020). There are infrastructural gaps between different parts of a country resulting in discrepancy of internet speeds (Jalli, 2020). It has been reported that teachers and students staying in the rural areas of Bangladesh have limited or poor access to the internet (Bhuiyan, Sakib, Pakpour, Griffiths, & Mamun, 2020).

The costs of internet data packages are reported to be a challenge for students as well as teachers in many developing countries (Broom, 2020). In Bangladesh, teachers are paid modest salaries and they find it very difficult to bear the expenses of online classes (The Daily Star, 26 July 2020). Using older and outdated devices might cause delays in accessing online resources and also create a less satisfying experience for the participants (Beaunoyer, Dupéré, & Guitton, 2020). Instefjord and Munthe (2017) point out that the availability of resources does not automatically lead to satisfactory integration if the devices do not work properly or if teachers and students do not have access to relevant learning resources. Ease of use as well as flexibility are also important factors because they determine the user’s attitude to the use of technology (Petko, 2012). It has been argued that institutions must ensure that the population has optimal access to technology, both in terms of equipment and network connectivity (Instefjord & Munthe, 2017), which will also serve to reduce the impacts of digital inequalities in the current COVID-19 context (Beaunoyer et al., 2020).

Redesigning the Curriculum

Many higher education providers around the world have responded to the current crisis through rapid redevelopment of the curriculum to suit the remote teaching mode (Crawford et al., 2020). In the absence of normal face-to-face interaction and observation which most teachers are used to, teachers are expected to come up with practical strategies to make online classes engaging and effective (Whittle, Tiwari, Yan, & Williams, 2020). Judicious use of synchronous and asynchronous learning strategies, collaborative writing exercises and teacher social presence are recommended (Whittle et al., 2020). Similarly, there is a need to redesign appropriate synchronous and asynchronous assessment tools (Akimov & Malin, 2020) and feedback strategies. There have been reports of a lack of trust in online tests as cheating may be facilitated (Whittle et al., 2020). Researchers have experimented with various assessment tools and techniques. Lee, Kim, Park, and Henning (2020) asked their students to sign a ‘Test Ethics Pledge’ before the exams and used video cameras to monitor student performance during the test. Akimov and Malin

(2020) argue that oral examinations have met all three criteria of validity, reliability and fairness in her experiments in online contexts.

To redesign the curriculum and to teach and assess successfully online, teachers need to possess general skill sets. In contexts such as Bangladesh where pre-service training is rare, particularly in universities (Anwaruddin, 2012; Rony & Awal, 2019), it can be assumed that this will present a massive challenge for many teachers. Teacher training can be seen as a critical factor for enabling teachers to cope with the demands of online teaching. However, research suggests that little or no training has proved to be a major barrier to technology integration. Without training, teachers will feel inadequately prepared to integrate technological resources into their curricula and instruction (Snoeyink & Ertmer, 2001). When available, training has to meet the needs of the teachers. When training focuses on technical skills rather than on how to implement technology in the actual classroom, it does not serve its purpose (Kopcha, 2012). Studies suggest that there is often a mismatch between the digital demands that newly qualified teachers meet in their profession and the training in use of instructional technology provided in teacher education programmes (Instefjord & Munthe, 2017).

Mental Readiness

The COVID-19 pandemic has impacted negatively on the mental health of a large segment of the population (Beaunoyer et al., 2020; Ornell, Schuch, Sordi, & Kessler, 2020). During the current crisis, pandemic-induced restraints such as social distancing, home quarantine, and isolation are impacting on family income and general well-being (Bhuiyan et al., 2020). These effects are reported to have been seriously felt among the students (Whittle et al., 2020) as well as the teaching professionals in a range of contexts (MacIntyre, Gregersen, & Mercer, 2020). The pandemic has added additional stressors like health concerns, travel restrictions, shortages of daily necessities and uncertainties about the future to their existing workload (MacIntyre et al., 2020). In such an environment, teachers in Bangladesh are likely to find it a challenge to focus on teaching and developing materials and assessment tools.

Methods

In this qualitative study, data were collected from 22 teachers (12 female and 10 male) from 17 public universities across the country in mid-June 2020. The four members in the research team contacted potential participants over the phone and selected them based on their availability, gender, years of experience and regional spread and conducted interviews with their respective groups via Zoom. There were 5-6 members in each group. Most of the teachers had just started online classes while some of them were about to begin their online classes. The aim was to gain in-depth insights of teachers' experiences and perceptions of challenges and their suggestions for the implementation of online instruction. The data were transcribed and coded separately. Later the researchers compared and peer checked their codes and a number of common themes emerged. The findings are presented based on these themes.

Findings and Discussion

Challenges to Online Instruction

The participants were asked about the challenges they were facing while conducting online classes. Six major themes emerged from their responses, which relate to access to resources and affordability, equity, technological competence, pedagogy and materials, assessment, and psychological factors.

Lack of resources and affordability

Students' lack of access to proper devices, unstable internet connectivity and high cost of internet were reported as major challenges by participants. Regarding students' lack of access to proper devices for online classes, one participant commented:

Some students do not have necessary electronic devices like laptops or desktop computers. Though most of them have smart phones, many curriculum activities like writing term papers and making presentations can be challenging with only smart phones. (Teacher 5)

Students without laptops or desktop computers will find it difficult to engage, with only smart phones, in online activities like submitting assignments, taking examinations, and reading lengthy articles.

Unreliable internet connectivity was perceived to be another serious impediment to emergency online instruction. The majority of the students in the public universities hail from the country's rural areas with inadequate electricity and internet services. As one teacher mentioned, "Poor connectivity, low bandwidth and power outages are fairly regular outside the big cities" (Teacher 10). Likewise, another participant from the country's hilly regions noted:

Things are digitized now, right? It's a myth. Nothing is here in places like Bandarban. If there is no electricity, then there will be no internet- simple equation! Oh, by the way, you don't expect Wi-Fi here, not at all. Only mobile data. And you don't know who's gonna pay for your data packages. (Teacher 19)

Besides, the high cost of internet data was considered by all participants to be another obstacle to smooth functioning of online instruction. Participants expressed concerns that many students would not be able to afford internet data due to their disadvantaged economic background. As one participant commented:

Most of the students come from not-so-sound economic backgrounds and they would be hard-put to afford the required devices and internet data. Now the challenge is how to create these facilities for all. (Teacher 7)

Issues of inequity

Teachers were apprehensive of the overwhelming number of students, mainly from rural areas, who did not have the required devices for joining online classes. They also pointed out that power failures and low affordability posed serious threats. They believed that ensuring equity would be a major challenge as a significant number of students may lag behind. This reflects the digital divide in many developing countries (Beunoyer et al., 2020; Instefjord & Munthe, 2017; Warschauer, 2004). As one teacher remarked:

The exclusion of a sizeable number of students who cannot access the facilities needed for online teaching will further aggravate digital inequity. (Teacher 15)

Lack of technological competence

Another major challenge was teachers' and students' lack of training and technological skills. Most participants reported that they neither had any exposure to online teaching nor received any institutional training. One teacher pointed out her lack of readiness and training, stating:

... see, we teachers need training. We don't really know how to operate these things. I am totally a novice teacher who knows nothing about online teaching at all. And universities are not bothered about that. And all on a sudden, they have started pushing us for online teaching. Come on ... how? Did I know what Google Meet was before COVID-19? (Teacher 9)

However, some participants believed that they had the required skills and that teachers' lack of competence could be overcome, which is evident in the following quote:

It's true that some teachers have limited or no experience, but you can always learn if you are willing. Teachers can learn from one another. Even before the pandemic, I had conducted tutorials and assessments online. What is needed is a positive mindset. (Teacher 8)

Barriers to pedagogy and materials

Data revealed a number of challenges related to online pedagogy: monitoring students, getting feedback from all, ensuring students' active participation, and overall class management. Unfavourable home environments were reported to be another barrier. These challenges are further aggravated by the typically large class size in public universities in Bangladesh. Some participants stated that online classes were one-sided with very little interaction between teachers and students. They found group work and pair work to be difficult to organize. Supporting this, one participant commented:

It is difficult to read students' faces and how would you know if things are going okay? Most of the time, it is like one person talking to many. It's hardly interactive and engaging. (Teacher 13)

Regarding class management, one teacher expressed her concern: "A teacher is very unlikely to have control over the class. Students' active participation cannot be ensured. They might be engaged in other activities, keeping the teacher online" (Teacher 21). As students have the option to switch off their microphones and video cameras during online classes, it is difficult for teachers to ensure their presence. Questioning students' integrity, one participant commented:

Any student can switch off the camera willingly and can complain that it is not working. They can also leave the class on the pretext that they got disconnected. (Teacher 20)

Data also revealed that finding suitable materials online is time-consuming and adds to teachers' workload. It is not easy to find the right materials from an astounding number of materials available online. One teacher commented:

A lot of online materials are available for free, but it is a lot of labour for the teacher to customize these for their respective classes. There is no doubt that online teaching [puts] extra demands on the teacher. (Teacher 17)

Given the pandemic situation, students cannot visit libraries, nor can they access their library websites as all books are not available online.

Having a congenial home environment also emerged as an important factor. For conducting or attending online classes, a quiet environment is a must. But the participants claimed that "*ensuring a work-friendly environment at home*" (Teacher 14) was difficult. They reported that they often got distracted by voices and noises from the household. This is consistent with Bao (2020) who identified lack of 'good learning environments' as a major challenge in the Chinese context.

Barriers to online assessment

Challenges related to online assessment included construction and administration of online tests, providing feedback, issues of reliability and validity, plagiarism and the existing examination system. Focusing on the challenges in online test construction, one teacher stated:

Assessment of learning outcomes will be difficult. Designing online tests without technical support, testing software, web security, etc. will really be challenging. (Teacher 13)

Hinting at the difficulty in ensuring test reliability, another teacher commented:

I cannot ensure test reliability. To give an example, I have just conducted a simple MCQ class test online and 9 out of 10 students scored 10 out of 10. I had to reject the scores. Because those very students did not even get 50% marks in their previous class test which I proctored in person. (Teacher 3)

Majority of the participants mentioned cheating and plagiarism as barriers to successful delivery of online tests in the COVID-19 climate. One teacher raised the issue of “*proxy submission of assignments*” as “*students can hire volunteers*” (Teacher 19). Teachers also stressed that “*there is no proper access for the teachers (in most public universities) to quality plagiarism check software*” (Teacher 6).

The participants expressed uncertainties regarding the semester final examinations which typically are long sit-down written tests held in strict proctored conditions and marked by two examiners. A teacher remarked:

The existing double-examiner system [is] to be reconsidered. Scoring and grading will be challenging too as we do not have any clear idea regarding this. (Teacher 21)

Psychological barriers

The findings revealed that the sudden shift to online classes created a negative psychological impact on both teachers and students. One teacher commented:

It is creating mental pressure since it has come all on a sudden. I was initially scared as I had no idea about online classes. I can imagine the faces of my students as they are also not mentally, culturally, and technologically there 100% but I think gradually things will improve. (Teacher 2)

Some participants were also apprehensive about their low confidence and threats to their self-esteem due to lack of technological skills. As one commented:

Holding real time online class will show how technologically unprepared I am as a teacher. That would lower my confidence, and immature students might take it as a chance to troll. (Teacher 5)

Managing the teachers’ and students’ level of stress caused by the COVID-19 and lack of mental support was repeatedly stated by the participants as a key challenge. One teacher noted:

Many students are facing uncertainties, many might be struggling with a family member who has tested positive for the coronavirus. How would I motivate them to participate? (Teacher 12)

Suggestions for Overcoming the Challenges

Teachers were asked to offer suggestions for overcoming the challenges they mentioned. Their responses are presented under seven thematic categories:

Ensuring access to resources and affordability

Teachers emphasized that all students need to have access to devices and connectivity, and those who cannot afford these should be provided with financial assistance. They emphasized the need for supporting the poor students with gadgets and internet packages as well as financial assistance. They stressed the necessity of “*negotiating with operators and internet providers to ensure affordable internet packages*” (Teacher 10), and “*ensuring stable internet connection, if possible, make it free for teachers and students....*” (Teacher 21)

Ensuring equity

Teachers suggested that to ensure full-fledged participation, the universities take measures to make sure that all students can get access to digital devices and internet data. One teacher (Teacher 2) commented that the universities should “ensure inclusion of all students as equity matters most.” Another teacher highlighted the need for a concerted effort to minimize disadvantages faced by some students:

In the name of online learning we do not want to create a digital divide. This issue needs to be addressed seriously by the government and concerned authorities and department/institutions.
(Teacher 16)

Enhancing technological competence

Participants suggested giving training to both teachers and students to increase their technological competence. More specifically, they suggested training teachers on “*how to use different technology resources/interfaces for teaching and testing purposes; how to give better lectures online; how to design online tests, quizzes, open-source tests for students at home; how to minimize subjectivity in scoring*” (Teacher 17). They also emphasized providing “*students with training on using online platforms, apps, interfaces for educational purposes*” (Teacher 3).

Developing infrastructure

Participants also stressed the importance of developing the appropriate infrastructure for online instruction. Teachers suggested that universities should develop ‘*necessary infrastructure*’ (Teacher 6), ‘*their own online platforms to facilitate online education and register all students before beginning serious online teaching*’ (Teacher 13) and ‘*provide teachers and students with institutional email addresses*’ (Teacher 19). Another participant commented:

Overhauling of the current system is a must. ... creating student, teacher portals, and automation of student admission, readmission, promotion, course registration, exam form completion, and creating a strong database for students. (Teacher 20)

Devising appropriate pedagogical strategies and materials

Participants provided suggestions with regard to class size, class duration, modes of delivery, activity types, learner engagement and interaction, and study materials. Teachers suggested splitting the large classes, giving students reading materials and tasks beforehand to facilitate participation in discussions, providing pre-recorded audio/video lectures, involving students through innovative activities such as mini impromptu presentation, expanding institutional subscription to e-resources, and increasing interaction between teachers and students.

Formulating guidelines for online assessment

Participants suggested formulation of guidelines for streamlining assessment modalities, test techniques, test administration, and scoring. Specific suggestions include reforming the existing assessment system by scrapping the double-examiner system; introducing open book examination and oral tests; and providing access to professional plagiarism check software like Turnitin to assess the students' assignments. This suggests a move from traditional assessment to alternative assessment types including oral tests, e-portfolios and projects.

Addressing psychological issues

Participants suggested that students need to be provided with emotional and psychological support, for example, individual and group counseling. They also emphasized the need for motivating students to join in online classes as this is a new mode of learning for most of the students. One participant commented:

An all-out effort to motivate our students should be our top priority; otherwise, every attempt will surely fail. (Teacher 4)

Conclusion

In the context of Bangladesh, this is probably the first study to report on the challenges experienced by public university English teachers during the transition to emergency online instruction. It also presented a set of suggestions from teachers to address the challenges they highlighted. Findings show that teachers encountered numerous challenges involving access to resources, equity, affordability, technological competence, pedagogy and materials, online assessment, and psychological issues. The major suggestions included ensuring access to resources and training, adapting pedagogical strategies and reforming assessment modalities.

This study was conducted when the public universities in Bangladesh were just at the initial stage of online instruction. Therefore, it provides information only on the challenges the teachers initially faced. A follow up study may be conducted to probe teachers' and students' experiences of online teaching and learning to see which challenges have been successfully overcome and what remains to be addressed.

The Authors

Rubina Khan (corresponding author) is Professor at the Department of English, University of Dhaka. She has a PhD in ELT from the University of Warwick and an MA in TESOL from the University of Northern Iowa. She is the President of the Bangladesh English Language Teachers Association (BELTA).

Department of English
University of Dhaka
Dhaka 1000, Bangladesh
Mobile: +88 01713-464213
Email: rkhan@agni.com

Ahmed Bashir is associate professor at the Department of English, University of Dhaka. He has an MA in Applied Linguistics & ELT from the University of Dhaka and a second MA in TESOL from the University of Nottingham.

Department of English
University of Dhaka
Dhaka 1000, Bangladesh
Mobile: +88 01819132594
Email: abashir@du.ac.bd

Bijoy Lal Basu is associate professor at the Department of English, University of Dhaka. He has a PhD in Curriculum and Pedagogy from King's College London and an MA in TESOL from the UCL Institute of Education.

Department of English
University of Dhaka
Dhaka 1000, Bangladesh
Mobile: +88 01817597691
Email: bijoybasu@du.ac.bd

Md. Elias Uddin is assistant professor at the Department of English, University of Dhaka. His areas of interest include Educational Assessment, Materials Design and Development, Educational Technology, Teacher Education.

Department of English
University of Dhaka
Dhaka 1000, Bangladesh
Mobile: +88 01912346810
Email: eliasuddin@du.ac.bd

References

- Akimov, A., & Malin, M. (2020). When old becomes new: A case study of oral examination as an online assessment tool. *Assessment & Evaluation in Higher Education*, 1-17. doi:10.1080/02602938.2020.1730301.
- Anwaruddin, S. M. (1 November 2012). Demanding rigorous teacher education programmes. *The Daily Star*. Retrieved from <https://www.thedailystar.net/news-detail-255687>
- Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behaviour and Emerging Technologies*, 2, 113-115. doi:10.1002/hbe2.191
- Beaunoyer, E., Dupéré, S., & Guitton, M. J. (2020). COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies. *Computers in Human Behavior*. doi: 10.1016/j.chb.2020.106424
- Bhuiyan, A. I., Sakib, N., Pakpour, A. H., Griffiths, M. D., & Mamun, M. A. (2020). COVID-19-related suicides in Bangladesh due to lockdown and economic factors: Case study evidence from media reports. *International Journal of Mental Health and Addiction*. doi: 10.1007/s11469-020-00307-y

- Broom, D. (2020). Coronavirus has exposed the digital divide like never before. Retrieved from <https://www.weforum.org/agenda/2020/04/coronavirus-covid-19-pandemic-digital-divide-internet-data-broadband-mobbile/>
- Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, P. A., & Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching*, 3(1), 1-20.
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*, 27 March. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>.
- Instefjord, E. J., & Munthe, E. (2017). Educating digitally competent teachers: A study of integration of professional digital competence in teacher education. *Teaching and teacher education*, 67, 37-45. doi: 10.1016/j.tate.2017.05.016
- Jalli, N. (2020). Lack of internet access in Southeast Asia poses challenges for students to study online amid COVID-19 pandemic. *The Conversation*. Retrieved from <https://theconversation.com/lack-of-internet-access-in-southeast-asia-poses-challenges-for-students-to-study-online-amid-covid-19-pandemic-133787>
- Kelly, D. P. (2015). Overcoming barriers to classroom technology integration. *Educational Technology*, 55(2), 40-43.
- Kopcha, T. J. (2012). Teachers' perceptions of the barriers to technology integration and practices with technology under situated professional development. *Computers & Education*, 59(4), 1109-1121. doi:10.1016/j.compedu.2012.05.014
- Lee, J., Kim, R. J., Park, S. Y., & Henning, M. A. (2020). Using technologies to prevent cheating in remote assessments during the COVID-19 pandemic. *Journal of Dental Education*. doi:10.1002/jdd.12350
- MacIntyre, P. D., Gregersen, T., & Mercer, S. (2020). Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions. *System*. doi: 10.1016/j.system.2020.102352
- Ndambakuwa, S., & Brand, G. (2020). Commentary: Many students in developing countries cannot access education remotely. <https://harris.uchicago.edu/news-events/news/commentary-many-students-developing-countries-cannot-access-education-remotely>. Accessed on 22 August 2020.
- Nikolopoulou, K., & Gialamas, V. (2016). Barriers to ICT use in high schools: Greek teachers' perceptions. *Journal of Computers in Education*, 3(1), 59-75. doi:10.1007/s40692-015-0052-z
- Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). "Pandemic fear" and COVID-19: mental health burden and strategies. *Brazilian Journal of Psychiatry*, 42(3), 232-235. doi: 10.1590/1516-4446-2020-0008
- Petko, D. (2012). Teachers' pedagogical beliefs and their use of digital media in classrooms: Sharpening the focus of the 'will, skill, tool' model and integrating teachers' constructivist orientations. *Computers & Education*, 58(4), 1351-1359. doi:10.1016/j.compedu.2011.12.013
- Rony, H. A. Z. & Awal, S. T. (2019). University teachers' training on online teaching-learning using online platform during COVID-19: A case study. *Bangladesh Education Journal*, 18(2), 57-64.
- Snoeyink, R., & Ertmer, P. A. (2001). Thrust into technology: How veteran teachers respond. *Journal of Educational Technology Systems*, 30(1), 85-111. doi:10.2190/YDL7-XH09-RLJ6-MTP1
- The Daily Star. 26 July 2020. Editorial. Retrieved from <https://www.thedailystar.net/editorial/news/ensure-affordable-internet-students-teachers-1936121>
- Warschauer, M. (2004). *Technology and social inclusion: Rethinking the digital divide*. Cambridge, Massachusetts: The MIT press.
- Whittle, C., Tiwari, S., Yan, S., & Williams, J. (2020). Emergency remote teaching environment: A conceptual framework for responsive online teaching in crises. *Information and Learning Sciences*, 311. doi:10.1108/ILS-04-2020-0099