

DOI: <https://doi.org/10.5281/zenodo.6528901>

Pedagogical Research and Development

RESEARCH
ARTICLE

OPEN ACCESS

Freely available online

Received: 21 March 2022

Accepted: 23 April 2022

Corresponding author:

Mohammad Jashim Uddin

Assistant Professor

Department of English

Northern University

Bangladesh

E-mail:

jashimuddin@gmail.com

Reviewing editor:

Professor Dr Leonardo F. Cada

Far Eastern University

Philippines

*Mohammad Jashim Uddin

Assistant Professor

Department of English

Northern University

Bangladesh

Disclosure statement

No potential conflict of interest
was reported by the
author(s).

Citation information

Cite this article as: Uddin, M. J. (2022). Online Education in Bangladesh: Challenges and Opportunities in the New-normal Situation. Pedagogical Research and Development, 1(1), 9-20. DOI: <https://doi.org/10.5281/zenodo.6528901>Online Education in Bangladesh:
Challenges and Opportunities in the New-
normal Situation

Mohammad Jashim Uddin*

Abstract: Because of Covid-19, the education sector in Bangladesh has been affected mostly since March 2020. Students are insisted to be engaged with digital devices now and then for learning. But a good number of students have failed to meet the challenges in the new-normal situation for various reasons and they have been out of education. The paper aims at examining the immediate and longer term impact of the Covid-19 pandemic on education up to the tertiary level in Bangladesh, and to focus on meeting the challenges in educational crisis in and after the new-normal situation. Besides these, the paper will analyse the government policy to overcome the crisis. It will try to indicate the future crisis in every level of education. It is an analytical research in nature. It will use mostly the secondary resources from every possible source so that it can give a guideline for future. The paper will also incorporate the teachers', students', and parents' roles during and onward pandemic situation.

Keywords: Online education, digital/online learning platform, challenges, opportunities

1.1 Introduction

This paper finds challenges and opportunities of online education as one of the most popular means of education due to the unexampled new-normal situation caused by COVID-19 pandemic across the globe. One of the tragedies of the epidemic, beneath the death circle and economic cost, is the human cost on our students and on their education. As the virus is spreading across the country, more than 90% of enrolled students were affected by some kind of limitation posed by the educational institutions, with more than a billion impacted around the world. The miniature-term fight versus the virus is about health. But its lengthy-term effects can only be controlled by a digital education system which is comprehensive and rapid. This is the mere way to eliminate a lost generation due to COVID-19 outbreak, and in an “epidemic-aware” earth could be a stable positive step towards educational inclusion. In this paper an online education system in Bangladesh during COVID-19 pandemic has been discussed. The current scenario of education in Bangladesh during COVID-19 has been investigated. This paper also includes the discussion of digital education methods in Bangladesh, possibilities of digital education system and challenges for online education system.

The whole world is fighting the coronavirus, which has spread to nearly every point of the globe over the first three months of 2020. At the end of May, 2020, the death toll crossed 369,124, and 40,17,32,130 till 9 February 2022 across the world (“[WHO Coronavirus](#)”).

To control this quick spread, “many countries were prosecuted for lockdown that caused a significant impact on all aspects of our daily lives” (Abdulmir & Hafidh, 2020). In Bangladesh, the first Covid-19 patients were tracked on March 8 in the capital, and as a result, the country went into general lockdowns from March 26. After that, people had kept themselves at home except for emergencies, but everything is almost normal while educational institutions and most industries and business centers remain shut.

Aside from the economy, the sector which is harmed worst by the outbreak of Covid-19 is the education sector. The disease launched spreading from China at the closing of 2019, and infection became quicker in March, 2020. Consequently, by this time, different educational institutes across the globe began to shut gradually as well as Bangladesh shut all its educational institutions from March 17, 2020, and the student shall be un-peopled instantly. Few private universities initiated online classes from April, 2020, where public universities and other educational institutions are at bay from it until now. There are economic reasons as well as humanitarian reasons for ensuring the continuity of education through technology. A break in education for a lengthy period, or the long part of two academic years, is a receivable loss for late-stage economies in a slow-growth phase. However, Bangladesh does not have time to miss.

1.2 Problem Statements

Online education is “a sort of education where students use their home computers or laptops or smartphones through the internet, staying away from their academic institutions” (Anastasiades et al., 2010). In the present time, “online teaching-learning has become a buzzword in the sector of education because no other substitutes provide education to the students in the institutes” (Baiyere & Li, 2016). Due to the uprising of the coronavirus epidemic, the entire world is perceiving a massive death toll with extensive fear and dubiousness. Many countries worldwide

are “tempting to knock off the gap and reduce the damages of students due to the current situation” (Asdasd Archambault & Crippen, 2009). However, online education results are not always a boon for the educational community as they pose many opinions in the context of online teaching and learning, leading to widespread concern over the controversial issue of teaching education. The current survey seeks to portray the challenges and opportunities of countries that are not as technologically advanced as those blessed with previous modern-tech technology.

1.3 The Current Scenario of Education in Bangladesh during COVID-19

The reaction Bangladesh showed to COVID-19, in general, was too disorganized, uncoordinated, and chaotic. Responses pointed towards the educational department amid the epidemic conveniently kept their speed on with that dis- order. The State declared on 26 March 2020 a countrywide lockdown in the name of “general holiday” shutting down all educational institutions including schools, colleges, and universities, among others. After that, this lockdown was lifted on 31 July 2020 conditionally after more than two months. The bewildered calculations which are being made by the country are difficult to be perceived or understood. The elevation of lockdown is being excoriated in circumstances while social distancing could not be ensured in an overpopulated country like Bangladesh. However, for the education institutions, the lockdown remains the same until September, creating the realization that unlike other major sectors that need to open gradually, the educational institutions can wait. Amidst these calculations, the country selected for remote knowledge, which is a reality per- fusing the education system across the country at the time of writing. Figure-1 shows the percentage of participation in distant learning (Brac.net, 2020; & Khan et al, 2021).

In the center of the country’s administration, teachers have just started using a combination of real-time interactive courses and classes, with a combination of pre-recorded materials and homework wise digital sessions on a small measurement. However, this is not the scenario for the whole country. As an opening response, pre-recorded lists for primary school students were transmitted by a state-run tv channel for the children across the entire country. Putting aside the usefulness of this non-interactive education method, the fact that 50% of the nation’s households do not have a tv set means that a massive number of people have been kept outside its ambit. Subsequently, the Government was expected to make the lists for every primary and secondary student accessible online (via YouTube). This policy precondition that there is access to broadband services across the whole country. Figure 2 shows the causes of not participating in on- line classes (Brac.net, 2020; & Khan et al, 2021).

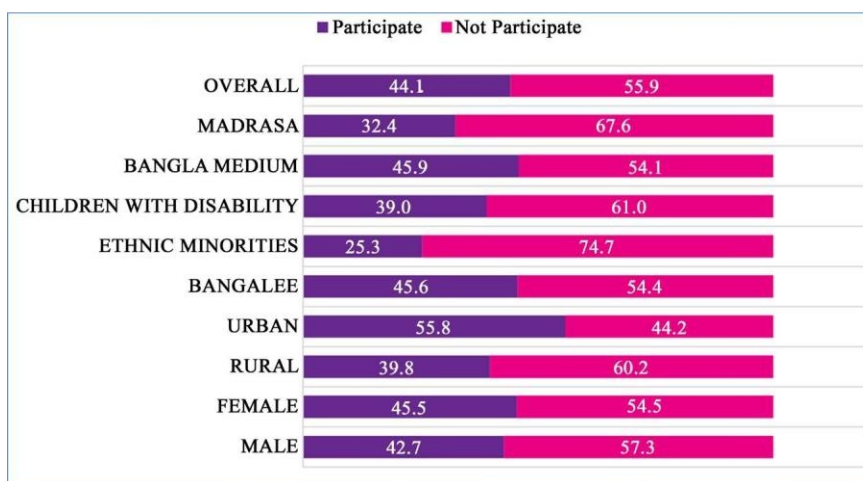


Figure 1. Participation in distant learning by different categories (percentage) (Brac.net, 2020; & Khan et al, 2021)

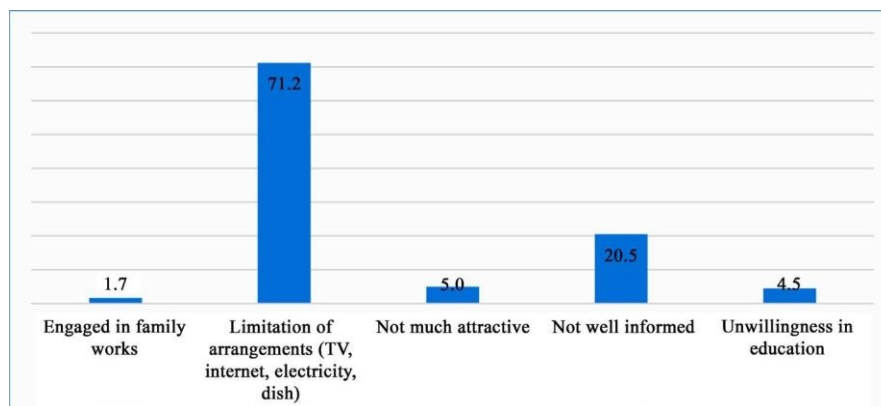


Figure 2. Causes of not participating in distant learning (percentage) (Brac.net, 2020; & Khan et al, 2021).

According to Government guesstimate, the whole number of internet users has reached 103.253 million at the end of March, where the whole number of mobile phone users has reached 165.337 million (Khan et al, 2021). But this total number does not express the digital divide in the nation and does not talk about whether the entrance is equal across the various intersections and classificatory contrast (for sex, gender, socio-economic class). So actually, they mask the real state of “en- trance” to the internet within the country. Among 42 countries across Europe, Asia, Africa, the Middle East, South and Central America, and North America, the broadband speed for Bangladeshi users is one of the poorest speeds. “Bangladesh’s position in the Ookla Mobile Internet Speed Index has always been at the tail-end places. Like in June, Bangladesh was at number 135 in July. However, in the June report, Bangladesh was at 135 out of 137 countries, and in July, it was out of 139 countries” (“Mobile internet speed”). However, none of the mobile companies can assure the people of threshold internet connection and speed outside the capital. For students outside the central, interactive virtual acknowledgment does not seem very expected. Figure 3 shows the perception of distance learning (percentage) (Brac.net, 2020; & Khan et al, 2021).

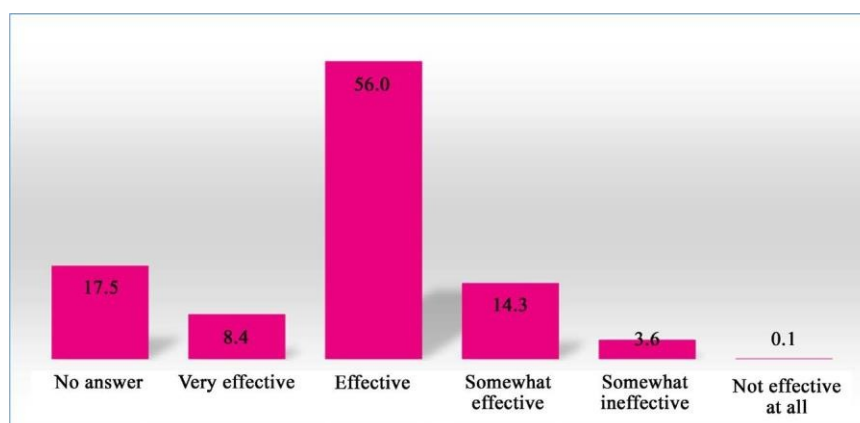


Figure 3. Perception of the effectiveness of distant learning (percentage) (Brac.net, 2020; & Khan et al, 2021).

Only 23% of the students were in the goodwill of taking classes online in this circumstance, while the other 77% opposed the project. The hard dissent’s underlying fact came out clear when it is found that only 55.3% of the students have entrance to a laptop operator, PC, or tablet to join an online class. It represents us 44.6% of the students cannot attend online classes because of lacking logistics. One most important factor for online classes is an internet connection. The survey shows that about 55% of the students are not privileged by proper internet speed to continue their online education. Also, that survey found out that 40% of the students are already joining online classes, among whom around 70% are from private universities. The most astonishing figure is that 87% of the students believe online assignments will not be realizable. Likewise, 82% think that the online classroom is not as constructive as an actual classroom. The survey may not show the actual situation because the sampling wasn’t random. This survey had to conveniently amid this nationwide general shutdown. Anyway, it gives an idea about the circumstances. Figure 4 shows the Current scenario of Bangladesh

student's enrolment to online class (Islam, 2020). Figure 5 shows the Ownership of mobile phone handset by type in Bangladesh in 2019.

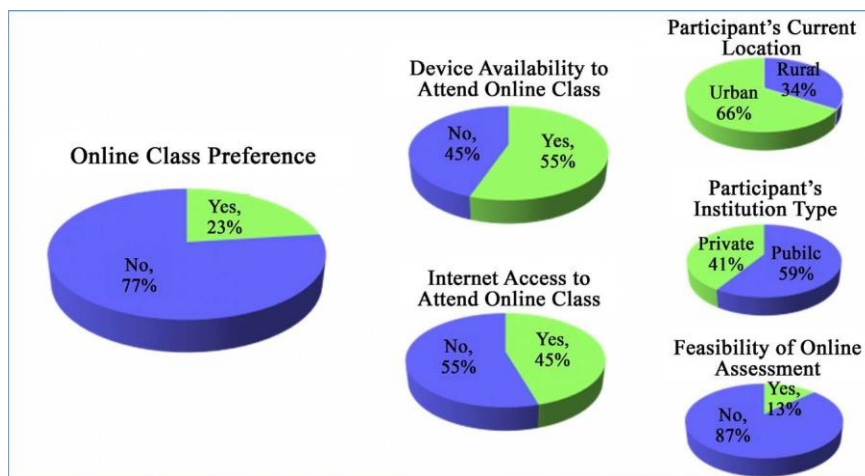


Figure 4. Current scenario of Bangladesh student's enrolment to online class (Islam, 2020)

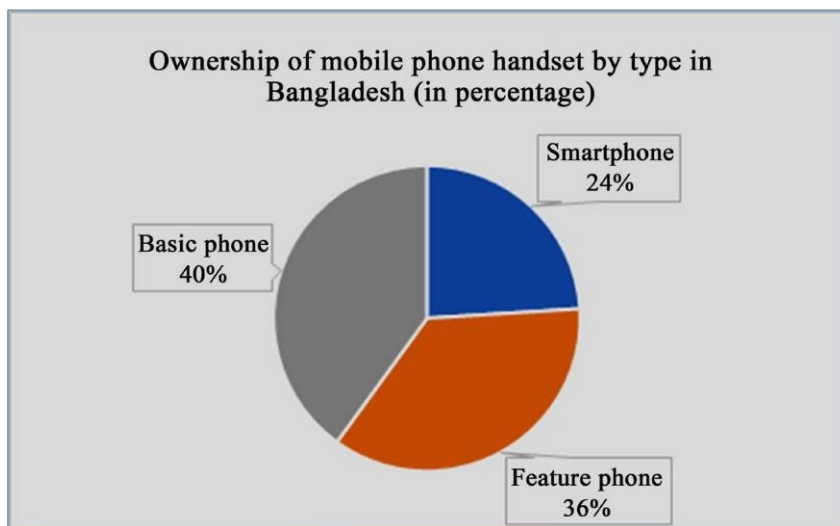


Figure 5. Ownership of mobile phone handset by type in Bangladesh in 2019 (in percentage)/(Source: LIRNEasia; Khan et al, 2021)

2.1 Digital Education Method in Bangladesh

All educational institutions in Bangladesh (school, college, university) have been closed like other countries where social distancing is an issue. To ensure an uninterrupted education system among the students, the Ministry of Education has supported the teachers in continuing online classes and the free flow of knowledge. The concerned authority has begun telecasting distant learning shows for schools, colleges, and universities. Online education has been mostly focused on the greatest level of education in our country. There are 46 public and 105 private universities in Bangladesh that are offering higher education for their students. Moreover, almost 1500 colleges affiliated with Bangladesh's national university are also offering a vast range of classes and programs in higher education. So, these days online teaching-learning is the only way of solving the educational crisis, which is happening throughout the globe due to the epidemic of COVID-19 (Basilaia et al., 2020). In this circumstance, distance learning has achieved so much priority in the education system; media, like Zoom, Google Meet, video communication systems, has gained massive popularity during these lockdown days.

2.3 Challenges for Digital Education System

For the first time in Bangladesh, the online education trend has been widely introduced. Still, in the field of evaluation and teaching, this online trend has already encountered some unintended situations, which have also been mentioned in the previous literature. According to Cameron, William, and Morgan (2012), the amounts and methods assigned to the Internet environment are limited to exercises on the evaluation of online learning. The data that students and teachers have posted on the online classrooms reveals that they face several challenges. Firstly, connecting with online classrooms is their first experience, so it has been observed that they have difficulty adapting appropriately to this trend because creating learning and learning experiences in virtual classrooms from traditional classrooms to computer-based training is very different for them. Second, with most students staying home in different parts of the country during the lockdown, internet facilities are still scarce in rural areas, as students use mobile internet that disrupts Internet communication due to poor internet signals. Plus, the internet is still very expensive in our country. Third, there are some technical problems related to computer and smartphone management, such as low literacy. In addition to that, students and teachers are required to download some apps like Google Meet, Zoom, FoxFi, Audiobook, etc. Due to the lack of experience, sometimes it appears to be a challenge, and there is limited internet connection time for these apps. Fourth, time management is an important topic; for example, Zoom can connect people online for 40 minutes, but due to some technical hurdles, students take time to respond in class. Students will have a chance to understand something as they join in the middle of the semester. Fifth, it is difficult for teachers to manage everyone's notes and employ them in their materials.

Previous literature showed that technical problems, complexity, and sequencing activities were major barriers to including multimedia applications in learning (Brooks et al., 2020).

2.4 Mental Health among Students during the COVID-19 Pandemic in Bangladesh

This exceptional involvement of “home quarantine” beneath lockdown with the uncertainty of academic and proficient career has multifaceted impacts on the mental wellbeing of students. For case, a Canadian study centering on the implications of isolation after the severe acute respiratory disorder (SARS) plague found an affiliation between the longer length of quarantine with a tall predominance of uneasiness and sadness among individuals (United News of Bangladesh). The ongoing COVID-19 widespread is making a psycho-emotional chaotic circumstance as nations have been reporting a sharp rise of mental wellbeing issues, counting uneasiness, discouragement, stretch, sleep disorder as well as fear, among its citizens (Gritsenko et al., 2020; Savitsky et al., 2020), that in the long run expanded the substance use (Ahorsu et al., 2020) and now and then self-destructive behavior (Mamun & Griffiths, 2020; Goyal et al., 2020).

2.5 Remedies to Combat the Challenges and Mental Health Issues

With the introduction of online education in Bangladesh, especially in the time of the COVID-19 pandemic, several issues have increased. Several rises in mental health issues, challenges faced in conducting online classes, exams, etc. As the concept of online education is still new, these challenges are rising and it is to be expected. However, this paper finds some probable solution through which some of these issues can be solved or at least, reduced. Expensive internet connection, connection loss is one of the most common issues faced both by the students and the instructors. In order to reduce these issues, pre-recorded video lectures are one way to follow through. During exams, it becomes tough for the students to upload their script on time due to several internet issues. On the other hand, the instructor needs to ensure that everyone has followed through all protocols with the right intention and everyone has participated in the exams by fair means. In order to solve both the issues, time could be adjusted so that the questions are not that long to answer. As for the instructors ensuring fair exams, several online class monitoring software could be used so that it could detect any sort of plagiarism or illegal steps, if any, taken by the students. Even after solving these problems, another issue is still at large. Mental health has become a serious issue in terms of online classes. Students are being depressed and there is nothing anyone could do about it. Regarding this, the approach should be more lenient in favor of the students. Assignment and home task loads should be reduced by a bit. As it is a tough time and everyone is facing trouble adjusting, this is the least the Educational Institutions could do to make sure that the students are not being pressurized or given extra assignments as they are taking the courses online. A slight change in policy from the Educational Institutions could actually help reduce stress for the students and everyone can have safe, fun, and proper ways of learning and gaining education and knowledge during the pandemic.

2.6 Possibilities

Online media can ensure multiple benefits for both students and teachers in supporting teaching and learning (Graham & Misanchuk, 2004). Different studies reveal that online courses have been found to be conducive to students who favor self-regulated learning (You & Kang, 2014). The most important thing to discuss that there is an ample opportunity to make students have cognitive and metacognitive strategies to accomplish their learning goal. Besides, they need not have additional

preparation to get themselves connected online and so at any circumstances they can be ready to attend class disregarding their time and place. As there is an uncertainty everywhere in regard to reopening educational institutions, the minimum outcomes can easily be found that can make students keep standing in the right track of learning. Students in Bangladesh who attend classes online giving their opinions that attending class online has helped them finish their courses timely getting them confident to appear at online examinations though for the first time they are heading to online class and exams. Online class amid the crisis has established a strong communication between students and teachers that creates good impression rendering a positive result which helps students to avert from all kinds of anxieties they have usually while passing the unprecedented corona crisis. According to Thomson (2010), students and teachers alike expressed the importance of prompt and supportive feedback when working to “establish a rapport of trust and level of comfort”. In the same vein, students have the flexibility to provide increased options for interaction and participation (Broadbent, 2015). Besides the more the country digitalized the more the possibilities contributing to creating digital native and to them online exposing and managing everything standing on virtual platform is always easy-going (Orlando & Attard, 2015).

2.7 How to Utilize the Opportunities

All the educational intuitions (school, college, madrassha, polytechnic, universities, medical college) have been operating their activities online without taking a plan seriously. Even the Education Ministry fails to give a clear idea when to go back class physically and how to continue their online class. But it is a great opportunity for all to accept it to build up a global citizen overcoming the drawbacks.

The research has suggested some ways to make online learning more effective: a) Help students get online; b) Learn about the uses of online platform, and different levels of technological proficiency; c) Take care in setting up a teacher’s home environment; d) Provide different learning options (Better applying OBE Curriculum), and add flexibility into the curriculum; e) Create shorter content; f) Assign group and pair work; g) Mix up the lessons; h) Create a community; i) Be proactive and optimistic; j) Create individual learning plans; k) Provide office hours; l) Let parents know how they can get involved; m) Develop curriculum around shorter content and divide the lessons; n) Integrate face-to-face virtual interactions turning on video; p) Learn by doing; q) Communicate, communicate, communicate; r) Proctoring quizzes and tests; s) Use the whiteboard as many as possible and visual aids; t) Fun icebreaker questions to bond with your students; u) Turn lessons into quests; v) Let students level up; w) Develop achievement badges and so on.

Sometimes we see that some teachers don’t show their interest to record their classes, and even if they give any class through facebook live, they restrict the lecture so that students cannot record or share it.

2.8 How to Create Online Classes an Opportunity

Teachers are the professionals who directly facilitate studentss learning. Basically, “the inner idea of teaching is to support the students to learn” (Mullick & Sheesh, 2008). According to Joyce and Weil, teachers teach students to develop concepts, to teach themselves skills, to use metaphorical thinking, to solve problems, and to inquire as the scientist does (Joyce and Weil, 2004). Teaching

quality of a teacher also can be said significant if s/he has the ability to inspire students, facilitate mastery of a field, mentor young intellect, help students find their voice and finally help students articulate and follow their values (Stanford University, 2004).

On the word of the Ahmed et al study, teachers had serious deficiency in their knowledge of teaching content and basic pedagogic techniques. Even the better-trained GPS teachers are mechanical and failed to inject enthusiasm and energy in what they are doing (Ahmed et al, 2005 p.93). That means “the content pedagogy of teachers is not sufficient” (Mullick & Sheesh, 2008). So, the online teaching can assure getting the quality teaching because a qualified teacher can deliver a good number of students at a time using online platform from a remote area. Moreover, educational institutions can exchange their teaching-learning process and approaches with materials. It is also a great opportunity for following the same lesson plans at a time.

3.1 Conclusion

The possibilities of digital education system with online tools are massive. It can bring many benefits for both teachers and learners to aid in teaching and learning. Students are more interested in self-learning and they agree that online courses are more suitable to them (Brazendale et al., 2017). The most important thing to discuss is that students have ample opportunity to create cognitive and polygonal strategies to achieve their educational goals. They also do not need additional preparation to join themselves online, and thus in any situation, they can be ready to join the class regardless of their time and location. In the Co-vid-19 situation the opening of educational institution is still uncertain. But the leaning path are there to enable students to gain more knowledge and not lack behind. Learners in Bangladesh who attend online lessons note that participating in online classes has helped them be confident in taking online exams on time even though they are taking online lessons and exams for the first time. Amid crisis, the online class has created a strong bond between students and teachers, completing good ideas as a positive outcome that helps students avoid all kinds of fears that remain when they are going through an unprecedented coronary crisis. The more digital the country becomes, the easier it becomes to create digital citizens and contribute to the management of everything published online that stands on virtual platforms.

Although there are several challenges that students and teachers face in teaching online learning, the good news is that there is no doubt that conducting classes online is a commendable initiative taken by the current government to reduce the loss of students' academic activities. For the correct implementation of this task, students and teachers must be encouraged and viewed as a challenge to carry out appropriately. Students should be mindful that they are the primary stakeholders and must be self-motivated to have a greater interest in getting a response to the digital classes with all their endeavors.

Acknowledgements

The authors would like to thank Professor Dr, Nazrul Islam, Pro-Vice Chancellor, Northern University Bangladesh as he assigned me to conduct some training and workshop for college teachers virtually, I have attracted much in this area.

References

- Abdulmir, A. S., & Hafidh, R. R. (2020). The Possible Immunological Pathways for the Variable Immunopathogenesis of COVID-19 Infections among Healthy Adults, Elderly and Children. *Electronic Journal of General Medicine*, 17, Article No. em202. <https://doi.org/10.29333/ejgm/7850>
- Ahorsu, D. K., Imani, V., Lin, C.-Y., Timpka, T., Broström, A., Updegraff, J. A. et al. (2020). Associations between Fear of COVID-19, Mental Health, and Preventive Behaviours across Pregnant Women and Husbands: An Actor-Partner Interdependence Modelling. *International Journal of Mental Health and Addiction*, 1-15. <https://doi.org/10.1007/s11469-020-00340-x>
- Ahmed, Manzoor and et al. (2005). "Quality with Equity: The Primary Education Agenda", Dhaka: Campaign for Popular Education.
- Anastasiades, P. S. et al. (2010). Interactive Videoconferencing for Collaborative Learning at a Distance in the School of 21st Century: A Case Study in Elementary Schools in Greece. *Computers and Education*, 54, 321-339. <https://doi.org/10.1016/j.compedu.2009.08.016>
- Asdasd Archambault, L., & Crippen, K. (2009). K-12 Distance Educators at Work: Who's Teaching Online across the United States. *Journal of Research on Technology in Education*, 41, 363-391. <https://doi.org/10.1080/15391523.2009.10782535>
- Baiyere, A., & Li, H. (2016). Application of a Virtual Collaborative Environment in a Teaching Case. *22nd Americas Conference on Information Systems*, San Diego, 2016, 1-8.
- Basilaia, G. et al. (2020). Replacing the Classic Learning Form at Universities as an Immediate Response to the COVID-19 Virus Infection in Georgia. *International Journal for Research in Applied Science & Engineering Technology (IJRASET)*, 8, 101-108. <https://doi.org/10.22214/ijraset.2020.3021>
- Brac.net (2020). *A Rapid Assessment Impact of COVID-19 on Education in Bangladesh*. <http://www.brac.net/program/wp-content/uploads/2020/07/Rapid-assessment-impact-of-COVID-19-education-in-Bangladesh.pdf?fbclid=IwAR0gptxwHSBLBsiii5HLsGzFfr oELwt-XnCgLL1EIJBJvufYJBhLw7siWIYA>
- Brazendale, K. et al. (2017). Understanding Differences between Summer vs. School Obesogenic Behaviors of Children: The Structured Days Hypothesis. *International Journal of Behavioral Nutrition and Physical Activity*, 14, Article No. 100. <https://doi.org/10.1186/s12966-017-0555-2>
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The Psychological Impact of Quarantine and How to Reduce It: Rapid Review of the Evidence. *The Lancet*, 395, 912-920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)

- “Center for Teaching and Learning: Teaching at Stanford: An Introductory Handbook for Faculty, Academic Staff and Teaching Assistant”, (2004). Stanford University.
- Goyal, K., Chauhan, P., Chhikara, K., Gupta, P., & Singh, M. P. (2020). Fear of COVID 2019: First Suicidal Case in India! *Asian Journal of Psychiatry*, 49, Article ID: 101989. <https://doi.org/10.1016/j.ajp.2020.101989>
- Gritsenko, V., Skugarevsky, O., Konstantinov, V., Khamenka, N., Marinova, T., Reznik, A. et al. (2020). COVID 19 Fear, Stress, Anxiety, and Substance Use among Russian and Belarusian University Students. *International Journal of Mental Health and Addic- tion*. <https://doi.org/10.1007/s11469-020-00330-z>
- Islam, D. M. (2020). *Online Classes for University Students in Bangladesh during the Co- vid-19 Pandemic—Is It Feasible?* 1 June 2020. <https://tbsnews.net/thoughts/online-classes-university-students-bangladesh-during-co-vid-19-pandemic-it-feasible-87454>
- Jahirul Islam Mullick, and Sameeo Sheesh, 2008 “Teachers’ Quality and Teacher Education at Primary Education Sub-Sector In Bangladesh” BRAC University Journal, vol. V, no. 1, pp. 77-84
- Joyce, Bruce and Weil, Marsha: Models of Teaching, 5th ed, New Delhi: Prentice-Hall of India Pvt. Ltd. . (1996)
- Mamun, M. A., & Griffiths, M. D. (2020). First COVID-19 Suicide Case in Bangladesh Due to Fear of COVID-19 and Xenophobia: Possible Suicide Prevention Strategies. *Asian Journal of Psychiatry*, 51, Article ID: 102073. <https://doi.org/10.1016/j.ajp.2020.102073>
- ‘Mobile internet speed increases only by 15 percent in Bangladesh, one-fourth of global average’, *The Business Standard*, February 9, 2022, <https://www.tbsnews.net/bangladesh/mobile-internet-speed-increases-only-15-percent-bangladesh-one-fourth-global-average>
- Savitsky, B., Findling, Y., Ereli, A., & Hendel, T. (2020). Anxiety and Coping Strategies among Nursing Students during the COVID-19 Pandemic. *Nurse Education in Prac- tice*, 46, Article ID: 102809. <https://doi.org/10.1016/j.nepr.2020.102809>
- Uddin, M. (n.d.). *Effects of the Pandemic on the Education Sector in Bangladesh*. <https://www.thefinancialexpress.com.bd/views/effects-of-the-pandemic-on-the-education-sector-in-bangladesh-1592061447>
- United News of Bangladesh. <https://unb.com.bd/category/Bangladesh/educational-institutions-to-remain-shut-till-june-15/52155>
- WHO. https://www.who.int/docs/default-source/searo/bangladesh/covid-19-who-bangladesh-situation-reports/who_covid-19-update_40_20201130.pdf?sfvrsn=3bb2e6fb_24
- WHO Coronavirus (COVID-19) Dashboard, <https://covid19.who.int/>