জার্ণাল অব ইএলটি এ্যান্ড এডুকেশন | JOURNAL OF ELT AND EDUCATION
ISSN: 2618-1290 (Print), 2663-1482 (Online), Volume 5, Issue 2, June 2022, Page: 36-42
Published by, Hello-Teen Society & Center for Academic Research and Development (CARD)

[**Citation:** Ferdous, M. T., Rohim, M. A., & Nabi, A. (2022). Strategies for Sustainable Digital Higher Education in Bangladesh and Post-pandemic Issues. *Journal* of *ELT and Education*, *5*(2), 36-42.]

Empirical Study

STRATEGIES FOR SUSTAINABLE DIGITAL HIGHER EDUCATION IN BANGLADESH AND POST-PANDEMIC ISSUES

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Abstract

This article discusses the pandemic's impact on Bangladesh's education sector. The spread of the Covid-19 epidemic has wreaked havoc on all spheres of human life, including education. It has created scopes to conduct a novel experiment in online higher education. Despite various challenges, higher educational institutions responded aggressively. They attempted to ensure the conduct of teaching-learning, research, and compensation to society through various technology tools and approaches. Through a survey on the impact of the pandemic on the education sector, the study collected 238 samples from students currently pursuing higher education at several universities in Dhaka. This study discovered that the pandemic has positive and negative consequences for the education sector. According to the informants, due to the Covid-19 pandemic, despite difficulties in obtaining internet access, numerous new modes of education, new prospects, and new keystones have emerged. Thus, the same may continue and allow for the development of new teaching-learning methods in Bangladesh's digital higher education. Specific beneficial recommendations are made to continue operating sustainable digital higher education activities in the current environment. Nonetheless, the study's findings are hampered by the study's sample size and the analysis's robustness.

Keywords: Pandemic, Impact, Digital Higher Education, Sustainability

1. Introduction

Coronavirus was first identified in Bangladesh on March 2020. Infected people were Bangladesh's Nationals and were hospitalized. For increasing suspected people, Bangladesh government officially announced lockdown all over the country. Amid March 2020, the government confirmed to remain closed to all the educational institutions. Later, it had been extended more times increasing new cases and deaths. On April 27, the Bangladesh Prime Minister declared that all educational institutions might remain close if the pandemic did not improve. In this situation, country is taking various strategies, techniques and steps to moderate the inverse effects of covid19 on education. Though online education may be suitable for students, it has adverse effects on students' academic study like interruptions of learning, stress for teachers, and rise in dropout rates. According to the UNESCO, the educational

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institutions' countrywide closure is adversely impacting over 60% of the world's student populations. Considering the health and mental issues, the authority also decided to use online education sessions during the long time closing of institutions. Therefore, the study has focused on the impact of Covid-19 on higher education in Bangladesh from the students' perspective. However, the objectives of the present study are focusing on challenges by Covid-19 situations and other possible solutions to sustain digital education by using online tools.

2. Literature Review

The Covid-19 pandemic has had a significant impact on higher education (HE) globally, including in Bangladesh. According to Shohel et al. (2021), the Bangladeshi higher education system has been going through an abrupt transition and transformation to cope with the covid-19 crisis. Moreover, they found that some universities quickly switched to online distance teaching and learning during this period in Bangladesh, and others lagged in this regard.

Covid-19 has impacted global education sectors by closing several institutions to lessen the current outbreak and potentially forcing most students out of educational institutions entirely. The effect of Covid-19 on low-income countries such as Bangladesh has been disastrous. Bangladesh is not a coronavirus free country, and almost 40 million students remain out of school until the outbreak returns to a more manageable level of infection (Emon et al. 2020).

Numerous forms of study have been conducted to ascertain the issues and options confronting the education sector in the fight against pandemics. the effects of Covid-19 on STEM education (Sintema, 2020), the effectiveness of and impediments to online learning (Adarkwah, 2020), and so on. It's worth noting that the Covid-19 pandemic has unique issues in comparison to past outbreaks, as it impacts a larger, frequently multinational geographical territory. The Covid-19 pandemic is expected to produce the largest disturbance in education opportunities globally in a decade in the absence of a deliberate and successful education solution (Reimers and Andreas 2020). Appropriate flexible strategies must be considered to alleviate the challenges and threats generated by the pandemic. Flexible strategies can be described as a competence to continuously improve institutional efficiency and productivity by introducing and implementing specific initiatives (Shukla et al., 2019; Evans and Bahrami, 2020).

On the other hand, according to Aleksander Aristovnik (2020), students were mainly concerned about issues to do with their future professional career and studies, and experienced boredom, anxiety, and frustration. The pandemic has led to the adoption of particular hygienic behaviours (e.g., wearing masks, washing hands) and discouraged certain daily practices (e.g., leaving home, shaking hands). Students were also more satisfied with the role played by hospitals and universities during the epidemic compared to the governments and banks.

3. Methodology

The online questionnaires were dispersed randomly around the country. It was built automatically using replies from students to an online poll. The replies of various pupils were analyzed to understand better the new issues associated with pandemics. To obtain sufficient data to answer the research topic, 238 participants were chosen for the study using convenience sampling. They were students from Bangladesh's public, private, and national universities. Among the 238 pupils, 175 were male and 63 were female, and their academic backgrounds ranged from bachelor's to doctoral. There were 188 students enrolled in bachelor's degree programs, 40 in master's degree programs, and 10 in other programs. The students represented a variety of disciplines. Among the participants, 34% are rural and 66% from city areas.

Table 1. Demographic Information of the Participants

Gender	n	Percentage	Education Level		Regional Background	
Female	63	26.47%	Bachelor's	188	Rural	34%
Male	175	73.53%	Master's	40	City	66%
Total	238		Others	10		

Three categories were established for the sample population. Representatives of public and private universities responded to the majority of them. Respondents from public and private universities were 26.05 percent and 52.52 percent, respectively. Another group was discovered at a rate of 21.43%. It has been discovered that most students who live in urban areas have their own devices. Graduating students accounted for 78.99% of the total, while post-graduate students accounted for 16.81%. Other subgroups of students who reside outside of the city lack economic stability.

4. Results

4.1. Average responses of the sample population

Students suffered many problems, significantly financial broaden caused by the increasing cost of internet usage during the pandemic. The majority of the students use an online data pack (almost 49.5%). During the use of online data pack, the most common problems faced by the students were low speed of internet, recurrent loss of internet connection and internet buffering. They were not satisfied at all. More than 42% of the students were facing obstacles to avail the technical issues during online lessons. 71% of the students were reluctant to purchase data and wanted to get financial support from their educational institutions. The students were worried about their quality of study and felt uncertainty regarding completion of graduation or post-graduation on time. In these circumstances, the strategies of the teachers have changed to conduct the online classes. Now the teachers are using different latest online tools to conduct the classes more effectively.

4.2. The Scenario of Bangladesh during pandemic crises

Bangladesh's response to Covid-19 was excessively disrupted, ungraceful, and turbulent. The distant learning system has become a reality in the country's education system. Teachers have quite recently begun utilizing a blend of continuous courses and classes, with a mix of pre-recorded materials and assignment astute online meetings on a little estimation. Nonetheless, this isn't the situation for the entire country. As an initial reaction, pre-recorded records for elementary school were communicated by a state-run television slot for the children across the country. Online education methods have several benefits, although 50% of the families of its country don't have any online tools or TV sets. As a result, many students have been kept outside the ambit of online education.

Several questions were asked to the participants and got responses. Among them, 23% of the students were happy with online classes in the present situation while the other 77% were dissatisfied with online classes.

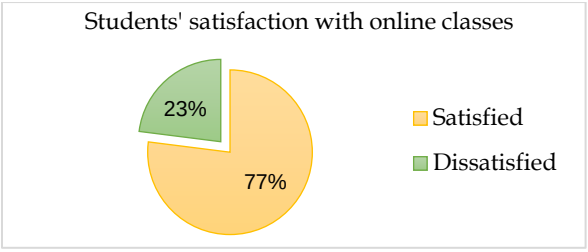


Figure 1. Students' Satisfaction regarding online classes

Shifat et al. (2021) also found 50% of their participants dissatisfied though they only dealt with private institutions. It is vital to raise the rate of conducting tests and giving homework or assignments through the internet as formative assessment, which makes students more collaborative, cooperative, and communicative (Rabbani et al., 2020). But it is almost impossible to implement as the hard dispute's basic reality came out clearly when it is seen as that just 55.88% of the students have access to a PC or tablet to join an internet-based classes. It addresses us 44.12% of the students can't go to online classes on account of lacking co-ordinations.

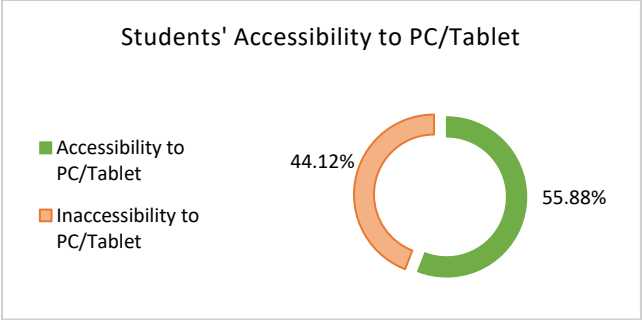


Figure 2. Students' Accessibility to PC/Tablet

The study shows that around 55% of the students are not favored by high speed of internet to proceed with their training. Additionally, that overview discovered that 40% of the students are joining online classes, among whom around 70% are from private universities. The most shocking figure is that, 87% of the students accept that online tasks are not feasible. Khan (2021) found that many poor and lower-middle-class learners cannot use online applications due to proper familial or institutional support.

4.3. Digital Education Method in Bangladesh

A wide range of educational institutions in Bangladesh have been shut where social distancing is a fact. To ensure continuous education among the students, the government has provided the teachers with online classes and the free progression of information. The authority has started broadcasting far off learning for students. Internet based education has been focused on the greatest level of education in our nation. There are 53 public and 105 private universities in Bangladesh that are offering advanced education. Besides, just about 1500 colleges associated as national university are likewise offering a tremendous scope of classes and projects in higher education. Nowadays, this learning is the significant method of addressing the instructive emergency, which is going on through the globe because of the plague of Covid-19. In the present situation, distance learning has accomplished such a lot of need in the instruction framework; media, similar to Zoom, Google Meet, video correspondence, has acquired gigantic prominence during these lockdown periods.

4.4. Prospects of online education in Bangladesh

The prospects of digital education by online tools are huge. The most significant thing to examine is that way has adequate freedom to make intellectual and polygonal methodologies to accomplish their educational objectives. Students who go to online sessions that taking an interest in online-based classes has assisted them with being positive about taking online-based tests on schedule despite the fact that they are taking online-based lessons and tests interestingly. The class has made a solid connection among students and teachers, finishing smart thoughts as a positive result that assists students with staying away from various types of fears that remain when they are going through an uncommon coronary emergency.

4.5. Challenges for online Education System

This online method has experienced some unintended circumstances in terms of assessment and teaching. First and foremost, associating with online study is their first experience and it is totally different for them in virtually. Second, most of the students remaining at home during the lockdown, they utilize portable web that disturbs internet correspondence because of weak online signals. Besides, this is still costly in our country. Third, some significant issues were identified with PC and cell phone usages, for example low proficiency of internet connection, internet buffering, disconnecting from classes.

Furthermore, students and teachers are needed to download some applications like Google Meet, Zoom, Skype, etc. There is restricted web association time for these applications. Fourth, using time effectively is a significant theme; for instance, Zoom can associate individuals online for 40 minutes, yet students take time to respond in class activities because of some specialized obstacles. Fifth, it is hard for trainers to avail with everybody's notes and utilize them in their materials.

5. Findings

5.1. Closure of Educational institutions for a long time

Coronavirus had spread all around the world. When a few cases began coming up in Bangladesh, the authority declared that all levels of institutions ought to be shut to stay free from this virus. All were expressed that right away though they were ill-equipped and stunned by this sudden declaration of conclusion. Because of the closing declaration, all things in campuses were shut right away based on emergency. The students residing in the campus lobbies needed to leave the grounds and surge towards the places where they grew up without prior warning. So, they couldn't take every one of the essential things with them. The students were despondent, uncertain, and stressed over their classes, assessments, and results They focused and worried about study gaps.

5.2. Interruption in learning

The respondent was found experiencing several learning interruptions because they were totally out of motivation in online actively, facing more problems in their classes. In these circumstances, the strategies of teachers have been changed to conduct the classes. One participant opined that online class is not real process to learn properly. At least, many of them were not satisfied to do the classes online due to lack of high-speed internet facilities across the country. Students could not gain study properly & could not give full attention in online classes.

5.3. Physical and mental Health Problems

Covid-19 caused significant adjustments in pupils' daily schedules. Their sleeping, eating, and working habits changed, resulting in weight increase or corpulence. They felt inadequate, tired, etc. Stress was the most commonly mentioned psychological condition. Their schooling and Covid-19 situation caused greater tensions. They feared the post-pandemic situation. Finishing the course material quickly once the pandemic was dealt with would be extremely difficult. Some students were saddened about their future. They were nervous and disappointed for not finishing their final year of high school on time. They feared crossing the age limit for job in Bangladesh without one.

5.4. Loss of Social interaction

Practically every student reacted about missing their campus grounds and social communications with companions and teachers. Because of the current situation, they had not seen their companions and cohorts for quite a while. They couldn't communicate with their friends, which hampered the learning process. However here and there they talked via telephone or social locales, every one of them conceded that absence of actual appearance made the discussions dreary. It was observed that less friendly connections with companions and teachers upset their inspiration to consider.

5.5. Financial crises

The Coronavirus has made it harder for students to connect online by buying new internet data and new devices, making it even more challenging to rely on their families to study. In this situation, it is much easier for all the students of private universities, but it is not easy for the majority of students of government universities.

5.6. Moving to Digital Education

After closing educational facilities, the government switched to an online learning platform. The university administrators decided to take online classes as ordered by the government. Initially, all Bangladeshi students opposed it. They maintained that the digital system was unsuitable and that their

universities lacked sufficient teaching resources, such as computers, laptops, smartphones, and tablets, to conduct online classes. Due to a lack of expertise, they have issues implementing modern technologies for online classes. They also complained about internet connection issues when presenting on Zoom, Google Meet, Classroom, Skype, etc. Most students think online classes are useless because they are not participatory, and teachers don't know how to conduct them effectively.

6. Discussion

The study found that online classes were utterly unsatisfactory. The survey found a shortage of learning tools at home, trouble recalling read themes, a loss of inspiration and attention to concentrate on subject substance at home. Students are wasting time on Facebook and Instagram, watching TV, movies, YouTube, and playing video games. They worked from home on graphic design, app development, or soft skill development tasks. During this pandemic, online education has evolved as a viable option to higher education offered in Bangladesh. This study found some prevalent issues about digital education in Bangladesh. Issues including lack of desktops, smartphones, laptops and tablets essential for online education are included. Also worth highlighting are high charges for portable internet bundles or broadband connections, low-speed break-in classes, and frequent power interruptions in rural or urban regions. Following online class schedules, scheduling time for schoolwork, locating learning materials (online access obstructs many libraries), learning lab-based or real-world work-based examples, persuading relatives to maintain a legitimate home climate (online tests), associating with peers (online tests), and tea (according to the review's students). Decreased income for guardians owing to the Covid-19 and inability to complete the semester due to lack of cash also significantly impacted students' mental health.

Bangladesh, a developing country, has little online education potential. Active online learning is difficult without addressing the study's online education concerns in Bangladesh. During the Covid-19 pandemic, pupils should be provided with required resources such as electronic gadgets and a reduced internet data pack. Also, increase internet speed, institutional learning management systems, and student and instructor online education training. Some students claim that covid-19 has significantly influenced a few university-level practical courses, such as lab and numerical-based courses. Online education is still new in industrialized countries. The students and universities here are still on a budget. Dynamic web-based learning is impossible without addressing the shortcomings mentioned in the review. During the Covid-19 pandemic, supply upper-level students with vital resources like electronic gadgets and a free or low-cost online bundle. Similarly, immediate actions should be done to improve internet speed, expedite university learning, and train students and teachers in digital education. Students in online study groups can be encouraged to collaborate and pleasantly learn lessons.

7. Recommendations

The government should take the necessary steps to reduce the internet price and give students short-term loans without interest. They can get help from private organizations supporting the students and teachers. Teachers need to be trained up more and made expert in new technology. Everyone must follow the successful international systems which have already been launched for online education. For reducing students' anxiety and depression about their career in this pandemic situation, the government, family and society should come forward to overcome this. Moreover, to develop the students' mental and physical health, all educational institutions need to arrange special programs, including motivational classes, group and individual counselling sessions, social campaigns, social awareness, and social gatherings.

8. Conclusion

Covid-19 episode has spread its unfriendly consequences for education sectors. It broke students' relationships with each other, stability of the economy, and health issues. The current review sheds

light on the effects of Covid-19 pandemic on the tertiary level in Bangladesh, according to the viewpoints of university students. It showed that the learning disturbances, challenges in friendly association, physical and emotional wellness issues, monetary emergency, brought about by the flare-up of Covid-19, had discrepant outcomes on higher education and learning practices. This concentrate likewise featured that moving to online training for proceeding with tertiary education made pressure, uneasiness, disillusionment because of some unavoidable issues concerning virtual learning methodology. The study findings would help the students, teachers, educationists, and government authorities related to higher-level education in Bangladesh acquire an inside and out comprehension of the various effects of Covid-19 on education. Upholds from the family, companions, and government are expected to limit the social, physical, mental. It is suggested that critical advances should be taken to support and develop internet-based education in Bangladesh to satisfy the instruction needs of tertiary level students in this emergency time of the Covid-19 pandemic.

References

Adarkwah, M. A. (2020). I'm not against online teaching, but what about us?: ICT in Ghana post Covid-19. Education and Information Technologies, https://doi.org/10.1007/s10639-020-10331-z.

Aristovnik A, Keržič D, Ravšelj D, Tomaževič N, Umek L. (2020) Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective. *Sustainability*, *12*(20), 8438, 01-34, https://doi.org/10.3390/su12208438

Emon, E. K. H., Alif, A. R., & Islam, M. S. (2020). Impact of COVID-19 on the institutional education system and its associated students in Bangladesh. *Asian Journal of Education and Social Studies*, *11*(2), 34-46, https://doi.org/10.9734/ajess/2020/v11i230288

Evans, S., & Bahrami, H. (2020). Super-flexibility in practice: Insights from a crisis. *Global Journal of Flexible Systems Management*, *21*(3), 207–214, https://doi.org/10.1007/s40171-020-00246-6.

Khan, M. E. I. (2021). Deploying Blended Learning in the New Normal Pedagogy: Challenges and Prospects in Bangladesh. *International Journal of Asian Education*, *2*(4), 531-538, https://doi.org/10.46966/ijae.v2i4.215

Rabbani, K. M. M. G., Raihan, M. A., & Khan, M. E. I. (2020). Constraints of Using Internet in Technical and Vocational Education: Bangladesh Context. *Journal of ELT and Education*, *3*(2), 34-43.

Reimers, F. M., & Andreas, S. (2020). A framework to guide an education response to the COVID - 19 pandemic of 2020. In Oecd (Vol. *14*), https://oecd.dam-broadcast.com/pm_7379_126_126988-t63lxosohs.pdf.

Shifat, N. F., Khan, M. E. I., & Chowdhury, M. S. A. (2021). Learner Acumens of Online EFL Classes at the Private Universities in Bangladesh. *European Journal of Open Education and E-learning Studies, 6*(2), http://dx.doi.org/10.46827/ejoe.v6i2.3838

Shohel, M. M. C., Ashrafuzzaman, M., Alam, A. S., Mahmud, A., Ahsan, M. S. and Islam, M. T. (2021), Preparedness of Students for Future Teaching and Learning in Higher Education: A Bangladeshi Perspective, Sengupta, E. and Blessinger, P. (Ed.) New Student Literacies amid COVID-19: International Case Studies (*Innovations in Higher Education Teaching and Learning*, *41*, 29-56, https://doi.org/10.1108/S2055-364120210000041006

Shukla, S. K., Sushil, & Sharma, M. K. (2019). Managerial paradox toward flexibility: Emergent views using thematic analysis of literature. *Global Journal of Flexible Systems Management*, *20*(4), 349–370, https://doi.org/10.1007/s40171-019-00220-x.

Sintema, E. J. (2020). Effect of COVID-19 on the performance of grade 12 students: Implications for STEM education. *Eurasia Journal of Mathematics, Science and Technology Education*, *16*(7), 01–06, https://doi.org/10.29333/EJMSTE/7893