

Research Article

Online Education in the Higher Study of Bangladesh: The Challenges and Way Forward

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ABSTRACT

The COVID-19 situation created disaster in the education sector of Bangladesh. Meanwhile, online education system was initiated in different universities to reduce the session jam. It attracts the attention whether this online class system has been effective or not considering various factors. This study has been conducted to find out the ongoing situation regarding online education and the challenges as well faced by the stakeholders. The study has been conducted using a mixed method along with systematic sampling procedure. The current situation of online classes held in the universities in Bangladesh is not as satisfactory as we expect from both the students' and teachers' perspectives. Classes are being held but not as regular as physical classes while the participation level of the students is not up to the mark. Though the students have access to the required items needed for online classes, teachers do not have that access. University help is quite low for both teachers and students. Lots of challenges are faced by the stakeholders like unstable Internet connection, expensive mobile data, lack of concentration and lack of proper evaluation. Cheap and stable Internet connection must be provided to the teachers and students while the university administrations must be helpful in ensuring these facilities to the teachers and students. A well-defined evaluation is also needed to develop in assessing the students.

Keywords: Online education, Current situation, Class schedule, Evaluation, Stable Internet connection

INTRODUCTION

The year 2020 will highly be remembered for the deadly and infectious disease which is known as COVID-19. The disease has been posing a threat till now since the introduction. Most of the infected countries went down for strict lockdown to tackle this disease and prevent the mortality rate. These lockdowns have a significant influence on the overall situation of a whole country. Along with the economy, education is one of many sectors which are heavily influenced by COVID-19 (Tarik and Fami, 2020). This seems to be normal that the guardians of the students of different level will be worried to send their children to the institutions during this pandemic. The threatening disease may further be spread if the students are allowed to move freely in the educational campuses (Kufi *et al.*, 2020). As the educational institutions have been remained closed till date, the decision-makers desperately have been looking for new techniques for education and the first thing that came to our thinking is the online or virtual medium of education (Majed *et al.*, 2020). This virtual education system thinking is not very new though, the term has gained prominence while we think about education after any disaster (Ayebi-Arthur, 2017). Online education refers to the use of a system that includes Internet connection, development of the contents which are to be delivered and the delivery through selecting a delivery method (Adedoyin and Soykan, 2020). Online education does not need practical or face to face classrooms and contact. Rather, virtual communication is important. The participant and the deliverer of the contents must have a two-way interaction. The participants are needed to be assessed after the lecture in a proper manner to ensure effective learning. But first of all, all the stakeholders of online education must have all the requirements. Otherwise, online education cannot be properly implemented.

Bangladesh is no exception to that. The educational institutions have been declared to keep closed to stop the spreading of COVID-19 through the students since 17 March 2020. Authorities from various universities took decisions to organise online classes since July (RU, JU to begin online classes, 2020). But the fact is that, are really these classes effective? Our country does not have adequate facilities for a full-fledged online class even in the universities. Most of the students do not have access to the required devices or services. Internet facilities do not cover the whole country. Moreover, the teachers who must teach through online medium and sometimes have no idea about online classes as they have no past experiences (Asjad, 2020). These factors have serious impacts on online classes taken at the university levels. Unless we overcome these problems, the online education will never succeed in Bangladesh. It is crucial that the educators in online education system must provide the necessary things to the participants. The students will not only participate but also enjoy and engage to sustain their attraction and obviously the chance to assess themselves. Some universities and the experts have been saying that the virtual classrooms should be continued even after

the pandemic situation. So, it can be assumed that online classes will take place even the educational institutions start physically. The main focus of this research is to find out the current situation along with the problems and solutions regarding doing/conducting online classes.

METHODOLOGY

The research will be mixed in nature, a mixture of quantitative and qualitative research. The research has been conducted based on primary and secondary data. The source of primary data is mainly the questionnaires that are of various types. The secondary sources of data are various acts, ministry websites, the policy regarding the topic, research articles, articles of newspapers, etc. The study area is within the universities of Bangladesh. This study area has been selected purposively. Data will be collected from the teachers and students of different universities including public and private universities. There will be 200 questionnaires, among them 170 questionnaires for the students, 30 for the teachers. Data have been collected from the officials, students of different universities and academic experts. The sampling procedure that we followed was the Systematic Sampling procedure. Secondary data provided in the study have been collected from various reports, articles of newspapers, etc. The questionnaires are focused on the above-mentioned objectives. The questionnaires have a mixed orientation. They are a mix of open and close-handed questions. Both qualitative and quantitative modes of analysis have been considered in this research.

LITERATURE REVIEW

According to Majed *et al.* (2020), a massive structural reform has taken place in tertiary education systems all over the world as well as in Bangladesh due to COVID-19. In the first place, it was a bit challenging to adjust to online education both from the demand side and the supply side. Over the course of time, most higher education institutions coped with the transformation. However, many public universities are still facing challenges to overcome shortcomings of online pedagogy such as unaffordability of devices of many students, unavailability of Internet access, lack of IT knowledge and adaptability difficulties of both students and teachers.

Tarik and Fami (2020) described that there are many hindrances towards transformation to the online education system. Forty million students, including from primary, secondary and tertiary levels, across the country cannot continue their academic curriculums. To attend an online class at least a mobile phone and a stable Internet connection are required. However, the Household Income and Expenditure Survey indicated that around 12.70% of poor families do not have a single mobile phone. Many families are facing

financial crisis because of prolonged lockdown and they are unable to support the cost of education of the family member.

According to the research from Kipp (2018), online education allows both the teacher and the student to set their training time, with the added benefit of scheduling flexibility, which makes finding a good work–study balance easier. Moreover, in a huge and vast place like the Internet, here online learning methods are not limited to one place. And this education method offers online versions of their programmes for various levels and disciplines and different countries. Furthermore, anyone could study or teach from anywhere in the world with online education. This eliminates the need to drive from one location to another or conform to a tight schedule. In addition, online education is flexible for each student’s requirements and level of ability. There’s often access to very diverse material such as videos, photos and eBooks. He also found out that many students could be subject to discounts or scholarships, so the price is rarely high and saves money from the commute and class materials, which are often available for free.

Zaman (2020) found out that to remain connected with the students, online classes will be a possible solution. But the problem is that both our teachers and students are mostly habituated with the physical classroom. Moreover, the institutions are also not well prepared to cope with the new phenomenon. Availability of digital devices, proper Internet connectivity and user-friendly learning platforms are required to make the idea of online classes a feasible one. Proper orientation, expertise, integrity and a mindset of learning are also required to make the online classes more interactive and engaging. Again many students think online assessment will not be feasible. Along with the theoretical classes, practical classes and lab works are equally important for the Science related subjects. But here in Bangladesh, it is quite impossible to conduct practical classes and lab work online. Persons with disabilities need special attention and care. But there is no guideline to make online classes an inclusive one. Moreover, students’ mental health should also get priority before making any broad decisions because many of them are under mental pressure about their academic future and to adjust themselves with the new method.

THEORETICAL FRAMEWORK

The theory that we used here is the online collaborative learning theory. This theory was first given by Linda Harasim who was the first woman to teach a totally online graduate course. To quote, Harasim OLC is ‘a new theory of learning that focuses on collaborative learning, knowledge building, and Internet use as a means to reshape formal, non-formal, and informal education for the Knowledge Age’ (Harasim, 2012, p. 81). It is a social interaction process where teachers and students obtain and share experience and knowledge through idea generation, idea organisation and intellectual

convergence (Picciano, 2017). The idea of online education is not a new theme, but for Bangladesh, the rate of online education gets its momentum when pandemic hits. This theory replaced the face to face learning by online learning. For many scholars, OCL has a positive influence on the academic achievement of students. This online collaborative learning process promotes deep understanding and discussion among the teachers and students of Bangladesh.

DISCUSSIONS AND FINDINGS

In this discussion part, we intended to assess the current situation regarding online classes. Though pandemic influence reduced significantly throughout the country, offline education started to be taken place, there are still options to conduct online classes till the next announcement. So assessing the real situation and the problems are significant to find out.

CURRENT SITUATION

COVID-19 has been spreading from China since December 2018. This spreading rate increased at such an alarming speed, many European and North American countries decided to maintain a strict lockdown. The developing countries were in a fix about lockdown as a large portion of people in these countries is poor. They earn their livelihood on a daily basis. However, a strict lockdown was maintained in 2020 in Bangladesh and the educational institutions remain closed from then till date. Online classes were held from 9 July to till date in each of the universities in Bangladesh. As students are one of the significant stakeholders, it is important to understand their perceptions regarding online classes. Another important stakeholder is the faculty members. Without faculties, there will be no teaching–learning method practically available. So understanding the perceptions of both the teachers and students are very important.

Student Perspectives

Regularity of the classes

The respondents were asked about the continuity of the online classes. Surprisingly, 57.7% of the students agree that the classes have been conducted on a regular basis. Meanwhile, 42.3% of the students answered that the classes were not regular. There is a significant difference while the teachers who are also respondents here.

Participation in the classes regularly

Table 1 depicts the participation percentage of the students in online classes. The students were asked whether they participate in the classes regularly or not.

Table 1: Regularity of the Classes

Regularity of classes	% of the students	Total number of the respondents
Yes	57.7	98
No	42.3	72
Total	100	170

Source: Made by the researcher from Survey Data

Table 2: Participation of the classes regularly

Participating classes	% of the students	Number of the students
Yes	72	122
No	28	48
Total	100	170

Source: Made by the researcher from Survey Data

Among 170 respondents, 122 (72%) of the students answered that they participate in their classes regularly. Meanwhile, a large number of students which is 28% of the total respondents cannot attend the classes due to various reasons.

Conducting the classes at the university level without 28% of the total respondents can be a huge blow for the total education system in Bangladesh.

Access to the required devices

Table 2 illustrates a significant issue. We intended to know how many of the respondents of us have access to the required items to attend the online classes among the respondents. The necessary items here means laptop, smartphone, Wi-Fi router, broadband connection, mobile data and so on those are required. The feedback is really positive. It is seen in the Table 3 that almost 99% of the respondents who are students have the least necessary items which have significant impacts on the online education system. Only 1% of the respondents who are students lack the required items.

Lots of reports and articles said that many families of the students do not have proper access to the required items of the online classes. The answer is expected to be negative which contradicts the sources describing lack of access to the devices and Internet connections (Daily Sun, 2020).

Table 3: Access over the required items

Access to the items required	% of the students	Number of the respondents
Yes	99	168
No	1	2
Total	100	170

Source: Made by the researcher from Survey Data

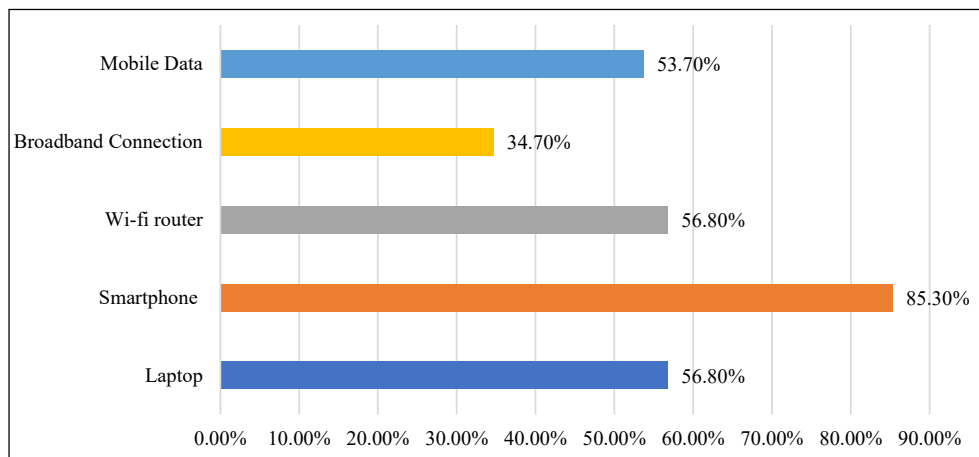


Figure 1: Access of the Required Devices

Source: Made by the researcher from Survey Data

The respondents who are students were asked about which required items they basically own. Figure 1 depicts that most of the students own at least a smartphone and the number is 85.30% of the 170 student respondents while 53.70% of the students use mobile phone data connection to attend the online classes. Laptop is owned by 56.80% of the students who participated in this research work while another 56.80% of the students own Wi-Fi routers at their homes. Some students agreed that though they have routers but do not have access to broadband Internet lines. Some other students said that they do not own routers rather got passwords to be connected from the neighbours. The same happens with the case of broadband Internet connections. Only 34.07% of the students have access to this and not all of them have pure access. Many students have broadband Internet access from the next-door neighbours.

University assistance

The starting of the online classes was a critical decision because it was thought that many students do not have the necessary requirements for participating in the online classes. The universities then decided to provide a soft loan system for the students with a view to purchasing at least a smartphone. But the pie chart above shows that most of the students do not know about this university loan system. This is mainly because most of the students who are respondents had primary access to the required items of online classes. By the way, Figure 2 illustrates that 86% of the respondents from the students decided that the universities did not assist with online classes while 14% of them properly knew about the university assistance, though little in number. The respondents who know about university assistance pointed out soft loans.

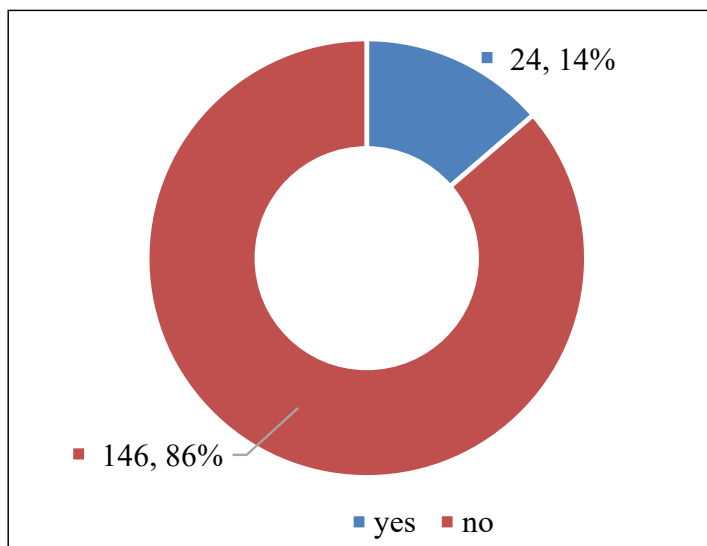


Figure 2: University Assistance to Get the Desired Facility

Source: Made by the researcher from Survey Data

Those who know about the university assistance were asked about the support. Almost 69% of the students were supported by the university administration financially to buy a smartphone which is known as a soft loan for the students. Taka 8,000 was provided to the students in Jahangirnagar University; who applied for this loan. Some other students also said that the university administration had an agreement with the operators to ensure cheap mobile data.

Teachers Perspective

Regular class schedule

As the faculties are integral members of ensuring online classes along with the students, it is significant that they have been taking classes regularly. The respondents were asked whether they have been taking classes regularly or not. It can be seen in Table 4 that a pleasant 93% of them answered that they have been taking classes regularly while

Table 4: Maintain scheduled class routine

Regular class	% of the teachers	Number of the respondents
Yes	93	28
No	7	2
Total	100	30

Source: Made by the researcher from Survey Data

only 7% have not. As they have to take classes of different years and semesters, sometimes the faculties reschedule the class times in accordance with their feasible time. This results in the students' thinking that teachers are not fully regular.

Access to the required devices

All of the respondents who are faculty members have been asked about the requirements they have access to. The requirements include a laptop, Internet connection and smartphone or anything that is least needed to conduct online classes.

Table 5: Access of the required devices

Access over the items required	% of the respondents	Total number of the respondents
Yes	67	20
Moderate	20	6
No	13	4
Total	100	30

Source: Made by the researcher from Survey Data

Table 5 shows us that almost 67% of the respondents have full access to the required items while 20% of them agreed that they do not have access to everything. This clarifies that some of the faculties have a smartphone but no Internet connections and vice versa. Unfortunately, 13% of the respondents have no access to these items and they had to borrow the items from various sources.

University support for teachers

As the faculty members need to take classes and assessments regularly, it is important to have all the required items by them. The previous chart showed us that they do not have all the accessories required. So, it was asked whether the university administration gave them any support or not during conducting online classes. Among the respondents, Table 6 shows us that 12 of them told that they got support from the university while 18 of them answered that they did not get any support from the administration.

Table 6: University support for teachers

Support of the university administration	Number of the respondents	% of the total respondents
Yes	12	40
No	18	60
Total	30	100

Source: Made by the researcher from Survey Data

The support of the university administration can be divided into several parts:

- a. Financial support
- b. Technical support

The first one is the support when the university administration gives the faculty any option to provide the necessary items or give loans to them to buy. Some universities provided their faculties with laptop or at least soft loan opportunities. The second support is the technical support important for conducting the classes regularly. Many of the faculties have all the devices but some of them are not experts on it. In many universities, there are technical committees but they did not act properly.

From the above analysis of the students and the teachers' oversights, it can be said that the virtual classes are being taken almost on a regular basis. The number of classes may not be a source of high satisfaction, but in a time of pandemic, at least the classes have been started. By the passage of time, the classes will be taken more than the present. The university support for the students and faculties can be treated as very formal. The support has no great advertisement. It can be seen that financial support is not that much needed for the stakeholders in this situation.

CHALLENGES

Internet-Related Issues

One of the main challenges is Internet instability in online classes. Internet connection problem remains both in broadband connections and mobile data connections. This problem has been faced by both the students and the teachers. As the Internet connection is not smooth, even after taking proper classes many students did not understand a lot of things from the class. Meanwhile, teachers who have been taking classes failed to judge whether the classes have been conducted properly or not.

Almost 61% of the respondents who were students suffer from this problem. The network issue has a deep impact on the overall process. If the network is not okay, both parties will not be able to communicate properly. The teachers may deliver the lectures but students may not listen. Finally, a proper interaction will never happen.

Lack of Concentration

The respondents could not concentrate properly in the online classes due to many reasons. A home environment is not always standard for education or doing a job. From the perspective of the students, it has been told that they are not prepared to attend classes in the home environment. They also pointed out that during the classes, several

issues diverted their concentrations which do not usually occur in the classrooms. This exact point has also been focused on by the teachers too.

Ambience of the Online Classes

The ambience of the classes was so disturbing according to many of the faculties. Many students do not know how to keep them silent during the classes. As a result, disturbing sounds come and hampers the whole class. Sometimes sound pollution disturbs a lot. This may happen due to lack of technical knowledge on how to keep the virtual classrooms silent and proper.

Students also agree with this problem. They stated that home is not always a standard place to participate in the classes. Many students claim that they reside in such surroundings where they failed to keep the people around them silent. Problems occur when the students do not have a separate room for participating in the classes. At the same time, some students had to go out of home to attend the classes due to unavailability of Internet connection.

No Evaluation

A very critical issue is to evaluate the students by any means, say, examination after a certain amount of classes. As most of the universities have been postponing their examinations except Jahangirnagar University (Correspondent, 2020), many faculties are worried about the evaluation process. Both of the stakeholders do not know how and when the examinations will be held. This made the faculty specifically less comfortable to take classes.

Later on, some of the universities decided to take online examinations to avoid session jams. This was organised in such a way that the examinations should be taken just to avoid session jams, not to evaluate properly. Most of the students and faculties think that the evaluation systems which were introduced in some of the universities cannot properly judge the students. That is why; this had an impact on the teaching–learning situation in the universities.

Less Interactive

While the classes are less interactive, teacher found it quite distressing and frustrating. There should be a very direct and close interaction process during a teaching–learning method. The online classes which were started in the middle of the year 2020, seems less interactive because of Internet instability, boring classes and so many reasons. Moreover, many students were absent just after reporting to the teachers that they

participated. Almost all of the students agreed that the gestures teachers use in the classrooms are helpful for them to understand any certain issue.

As online classes are new phenomena, our faculties are not well trained. That is why some of them could not make the class interesting and interactive. This is one of the main problems faced by the students.

Expensive Mobile Data

As many students do not own a Wi-Fi router as well as a broadband connection, they use mobile data for participating in online classes. There are four mobile telecom services that provide mobile data packages. The network operators are Grameenphone, Robi, Banglalink and Teletalk. These operators provide Internet data packages in exchange for recharging money. The data packs usually have limited time and are costly in nature. The respondents were asked about the cost of the mobile data which they use for participating in online classes. Only 16% of them responded that the data packs are cheap while a large number of students denied it. According to 64% of the students, the data packages are quite costly. Meanwhile, another 16% of the students believe that the costs of the data packages are moderate and 4% of the respondents have no answer. Teachers also agreed to the comments of the students regarding the costing of the data packages. But one thing is some of the mobile network operators finally offered some data packages especially for Zoom and Google classrooms and exclusively for the students. Hence, the cost must be reduced to be availed by everyone.

Mentality

Another significant challenge for the students and teachers was the mentality problem. As most of the faculties were not trained for taking online classes, they thought that they would not be able to take classes properly. This thinking destroyed their positive mindset. Many faculty members still feel weak while taking online classes. The faculties were asked whether they feel comfortable doing online classes or not. The result is not satisfactory though. Only 6 of the 30 respondents feel comfortable during the conduction of online classes while 24 of them do not feel comfortable. The same thing happened to the students too.

Absence of the Students

If the students do not participate in the classes, a classroom is not actually a classroom. The absence rate of the students in the online classes is significantly higher than in the physical classes. This made the teachers problematic in delivering the lectures. They have to think about whether they may have to take the same classes again for those

who missed the classes. This significantly minimised the quality and effort for an effective class which meanwhile is a hindrance to ensure quality online classes.

CONCLUSION AND RECOMMENDATION

Online classes are nowadays not anymore an imagination; it appears as a feasible way of the education system in Bangladesh too. COVID-19 forced us to start virtual education and it can be said that even after all the physical classes will be started in Bangladesh, online education will not be left out. Many universities of Bangladesh already started physical classes with options to take online classes and many students and faculties have been taking online classes till date. After so many days of the educational institutions being closed, they started working virtually and both the teachers and students were not comfortable in taking online classes during the early days. Teachers got themselves in tough condition to maintain the schedule along with the students. Internet speed was not that good throughout the whole country and the data connections seem to be expensive. Assessment of the students was another problem found. Anyway, for a successful online education system, we need a proper Internet connection, a smartphone or a computer along with the online platform. Without these facilities, online classes will not be a proper way of giving education to the students. The teachers also should be given the required facilities along with training to conduct the online classes well.

All the stakeholders must have a positive mindset regarding online classes. As this is not usual in Bangladesh to take online classes, we have been suffering to manage this efficiently. A positive mindset will reduce this frustration. The stakeholder must be given a smooth Internet access along with the devices and logistics by the government. Internet availability must be ensured. A smooth Internet connection and a cheap cost for the Internet will boost the online education system throughout the country. The teacher must follow a routine structure to take the classes. The teachers should be trained for taking online classes and making the classes more attractive. Moreover, the classes should be recorded and provided to all of the students who even did not participate in the classes. The classes should be more interactive; both the parties should come forward to ensure this at anyhow. There should be a specific evaluation process after taking the classes. It may be the examination through an online process or anything. A well-defined evaluation will accelerate the virtual education system in Bangladesh with a positive impact. There should be a management committee to supervise the whole online education thing in each of the universities or colleges formed by the faculty members and obviously a central one by University Grant Commission to supervise the online education system throughout the country. They will supervise whether the students and teachers are facing problems or not.

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