

Emergency Online Teaching-Learning Model in the Context of Higher-Level Education due to the COVID-19 Pandemic

Md. Alamgir Hossain^{1*}, Farhana Yasmin²

Department of Computer Science and Engineering, Prime University, Dhaka, Bangladesh^{1*}

Department of Sociology, University of Barishal, Barishal, Bangladesh²

alamgir.cse14.just@gmail.com^{1*}, farhana.soc.bu@gmail.com²



Article History

Received on 11 April 2022

1st Revision on 8 May 2022

2nd Revision on 27 May 2022

Accepted on 8 June 2022

Abstract

Purpose: The study aims at determining a new and complete picture of the ongoing online teaching-learning model based on the university student's perception of online learning and university teachers' experiences with their online teaching.

Methodology: This study followed a mixed-method approach where both qualitative and quantitative methods are applied. In total 335 university students of both males and females are selected randomly using a questionnaire through Google format.

Results: Online platform is the best option to save students from collapsing the academic world in the pandemic situation and so this study developed a new teaching and learning model analysing the practical situation of respondents. It is the main result of it.

Limitations: We started this research in 2021 during the horrible COVID-19. Due to which we could not go to the field and collect the data, we have collected the data through the online platform. These are the major limitations of the study.

Contribution: However, we mentioned a model for maintaining a graduate-level educational system if any kind of pandemic will come in the future.

Keywords: COVID -19, Online Teaching-Learning, Perceptions and Experiences

How to Cite: Hossain, Md. A., Yasmin, F. (2022). Emergency Online Teaching-Learning Model in the Context of Higher-Level Education due to the COVID-19 Pandemic. *Journal of Social, Humanity, and Education*, 2(4), 327-341.

1. Introduction

The world is faced an invisible situation of COVID -19 pandemic from the year since 2019. It is still now around the world. As a result, higher education has switched to an online educational system, often known as the online teaching-learning system. There is no physical interaction in this system which is why it is called also remote education ([Aguilera-Hermida, 2020](#)). In this stage interaction between students and teachers is regulated by technology. Due to COVID -19, The Ministry of Education of Bangladesh gave instructions for the online education system in the year 2020. From then on, the online education system was introduced from primary to higher-level education. The estimated 264 million children and adolescents are unable to go to school due to various problems, and the pandemic has exacerbated this scenario ([L. G. Mishra, T. and Shree, A., 2020](#); [S. S. Mishra & Pradhan, 2020](#)). For analysing this situation, online education has been invented to overcome this problem. And through this, students are easily able to keep themselves connected to their studies as well as their extra-curriculum activities. Therefore, this online education is called a sudden solution during a period like a pandemic.

2. Related Literature Review and Hypothesis Development

2.1 Background of the Study

2.1.1 Scenario of the Outbreak of education in Bangladesh and other Country's Context

The situation is similar in Bangladesh; 63 of the 133 universities have begun offering online classes as of April 29, 2020 (including private and public universities). The number is rapidly increasing (mainly in private universities). However, when it comes to the outcomes of online classes and hence learning,

there is a distinct divide between academics and public universities. The University Grants Commission of Bangladesh conducted an online survey on the effectiveness of online higher education to prepare future online education policy as well as the existing condition and projected outcomes. There is much more to be done ([Report, 2020](#)).

According to the report, 36 million children in Bangladesh and about 800 million children in Asia, including South Asia, Southeast Asia, and East Asia, have been deprived of education due to academy closures since the morning of the Covid-19 epidemic in early 2020, SitAn Report analysis of the impact and Response of COVID-19 to the Asian Education Sector', published moment by UNICEF and UNESCO. In some countries, for illustration, in the Philippines, seminaries have been closed to date throughout the epidemic, leaving an estimated 27 million scholars without any particular education in primary to secondary education, with a continued period of one time from early 2020 to the present, over time and counting. In Bangladesh, seminaries were closed throughout the epidemic until September 12, when they restarted ([UNICEF, 2020](#)).

Because education is the cornerstone of any country's development, it is also the key to all countries' development and growth. Various obstacles have harmed the school system, ranging from changes in the education curriculum to the closure of the system due to the epidemic ([Owusu-Fordjour, Koomson, & Hanson, 2020](#)).

COVID-19 has an impact on not only the economy and our everyday life, but also on our mental, emotional, and physical health, as well as the loss of national and international business, the market's cash flow, and national and worldwide travel. In addition, cultural and festive celebrations are disrupted, and hotels, restaurants, religious, and recreational areas are closed due to population pressure ([Evans, 2020](#)).

The economic collapse has hit many developing countries first since governments have clamped down on their economy to impede the change. As a result, emerging countries are enduring their worst economic downturn in history, with education and transportation infrastructure shutting down as a result ([Haleem, Javaid, & Vaishya, 2020](#)).

Parents, students, and teachers all take benefit from distance learning solutions, which include platforms, educational software, and resources. Massive open online course platforms, digital learning management systems, and self-guided learning content ([UNESCO, 2020](#)).

Distance learning of information technology, teaching materials, and digital technology skills is difficult for instructors, students, and families in underdeveloped nations due to a lack of internet connectivity ([Tadesse, Mihret, Biset, & Muluneh, 2020](#)). Some developing countries offer classes through radio, television, and online platforms. However, the poorest families and students do not have the radios, televisions, and other devices to access resources and learn at home. Therefore, some developing countries provide resources such as textbooks, radios, tools, and study guides to the poorest students ([Mustafa, 2020](#)).

In developing country, governments have advised students to learn from radio and television lessons that can be accessed at home. Radio and television lessons may work for some children and students in urban areas, but most parents in rural areas do not have access to radio and television lessons. In Ethiopia, for example, more than 80% of the population lives in rural areas where there is limited or no access to electricity, so learning from radio and television lessons is challenging for students in rural areas ([Tiruneh, 2020](#)).

Schools in urban areas are teaching their students remotely by uploading assignments, books, and reading materials through Google Classroom, e-mail, social media, and other applications. In some urban areas, distance learning is provided due to a lack of observation techniques, but some students are unable to use it properly. Private schools are sending learning materials directly to parents through

social media platforms. There is a difference between rural and urban schools and public and private schools so that their students can learn at home. Also, public school teachers and students have limited or no access to the Internet ([Tzifopoulos, 2020](#)).

However, in Covid-19 more privileged students are going to school to take online education. Disadvantaged, rural schools lack the necessary digital infrastructure for teaching in remote areas. In addition, there is a huge gap in technology and instructional resources between universities. Private universities are more effective than public universities in most nations. In most countries, private schools are more effective than public schools. Students do not have equal access to digital technology and educational materials ([Tadesse et al., 2020](#)).

2.1.2 Challenge to Online Education

Due to Covid-19, the shutdown period of schools, colleges, universities and other educational institutions started on March 17, 2020, and will continue till 2021, touching about 38 million students and about one million teachers. The government's root response was through TV-based educational programs instead of physical education programs. However, within months of the school closing, it was clear that students' education and study pattern, especially among adolescents, was in danger ([The World Bank, 2021](#)).

A bank survey conducted in May 2020 explained that about 55 percent of Grade 9 stipend recipients do not have available access to TV channels. Even among those who do, only 43 percent of children prefer to watch TV-learning programs, the primary of distance learning when school is locked. There was no apparent difference between male and female students in whether they watched the broadcast of the previous week's class lecture and the guidelines that were given by teachers. However, there were significant differences in resources. Of those who have access to TV-based education, 45 percent of the richest students (a quarter of the highest wealth) watch TV-based lessons, compared to only 36 percent of the poorest students (a quarter of the lower wealth) ([The World Bank, 2020](#)).

About 34 percent of households interviewed in June 2020 had to cut back on food for adolescents. Also, nearly half of teens report that they are spending less time on educational activities or performances than before the lockdown period that happened due to the Covid-19 pandemic, with 94 percent reporting increased housework or childcare time.

Although the difference is not numerically significant, there is a record that younger girls are three percent more likely to spend more time on household chores and childcare since the introduction of the Covid-19 restriction. Also, the focus is that 25 percent of mothers worry that adolescents will not return to educational institutions like schools and colleges if these educational institutions are restarted, and this is equally true for mothers of boys and girls ([Baird, Seager, Sabarwal, Guglielmi, & Sultan, 2020](#)).

Students describe feelings of alienation from their teacher, the content of their course, and their classmates. The course participants explained how their online interactions were text-based lectures and completed several reading and writing tasks. Many of these tasks limit students' capacity to develop high-level cognitive abilities and imaginative thinking ([Alawamleh, Al-Twait, & Al-Saht, 2020](#)).

John, a student, for example, has said that most of our subjects are usually created as part of the curriculum, and so it is usually very simple what is being asked or what information is being given. Another student, Pamela, replied that her course consisted of reading and studying only. And read and study it until it falls on my ears and then you had to repeat it in an initiative way ([Boling, Hough, Krinsky, Saleem, & Stevens, 2012](#)).

2.2 Literature Review of the Study

COVID -19 is a highly infectious virus that was first identified in China and spread to all subsequent countries. Controlling the adverse effects of Coronavirus, govt. of the different countries implemented an emergency protocol that is a lockdown system. The whole educational system from root level to the

upper level of education and all developed, developing, and underdeveloped has deteriorated after the implementation of lockdown life ([Remuzzi, 2020](#)). Like, The President of Uganda established a nationwide lockdown on March 30 and came up with a set of 13 interventions, and was declared President of the country on March 18, 2020. And since then, the educational institutions have been closed. As a result of the COVID-19 lockdown, schools for more than 168 million adolescents worldwide have been completely stopped for a year, and nearly 214 million young people have lost more than three-quarters of their physical education ([Mwesigwa, 2021](#)).

The lack of physical meetings between instructors and students is the limitation of distance learning emphasizes. This can be influenced by digital and internet-based communication in the form of visual media, display of textual material, images, and pictures in real-time or on a delayed basis ([Griffiths, 2016](#)).

Over the years, the Philippine education system has evolved to meet the needs of traditional but new generations. Teachers and students were already using the Internet, computers, and other technologies in the classroom long before this “new normal” became obvious. The Department of Education has established three delivery methods for new normal learning. It includes blended learning, distance learning, and homeschooling ([Caratiquit & Pablo, 2021](#)).

The first mode of instruction of distance learning, comes in three types. The first is distant learning in modules. A module is a unit of teaching that incorporates subject-specific knowledge, focuses on learning activities, and concludes with a comprehension assessment using a defined form ([Sweet, 2020](#)).

The second is online distance learning, which forces students to access the Internet. In this mode, teachers and students will virtually connect and perform their work either synchronously or asynchronously. Synchronous learning can be through online classroom lessons, instant messaging, and online education, whereas asynchronous learning can be through blog readings, documented videos, and dialogue boards ([Lawless, 2020](#)). The third one is Blended Learning. It includes a variety of strategies, such as face-to-face instruction, online strategies, and technology ([Graham, 2018](#)).

Teachers and students both are being retrained and reused to assist in adopting school distance learning delivery methods ([Department of Education, 2021](#)). Through the classroom, observation teacher can examine the performance level of the student. Due to online platforms that is ignored. The main purpose of classroom observation was (offline class) to assist classroom teachers in improving the quality of their teaching. This is one of the purposes of the offline class. Teachers can develop a broader understanding and knowledge of how their classroom works by conducting reviews and implementing desired changes. In addition, teachers are concerned about their strengths and weaknesses and constantly focus on improving their teaching-learning patterns ([Halim, Wahid, & Halim, 2018](#)).

University students perceptions of online learning performances and the differences in their gender, place of residence, devices used, and the type of network used to access internet-based learning. The study was conducted following a survey procedure through collecting data among students at Islamic University, Kushtia, Bangladesh. We know that the education system in Bangladesh follows the traditional face-to-face learning method, and it was the only system before the pandemic period of Covid-19. In a developing country like Bangladesh, the online education system is a very unusual, young, and new method. According to the results of this survey, most students say that they do not compete equally in the online class, and they do not learn as much in the online class as they do in traditional or offline classes. Most students say that the content and topic of the class were not clearly understood and could not take class notes about the content and topic of class during an online class. They also found that most of the online assignments were not helpful and fruitful ([Sarkar, Das, Rahman, & Zobaer, 2021](#)).

Distance educational learning is a solution for continuing educational structure, but in developing countries, it is difficult because many parents do not go to school on their own and lack the necessary

information and communication technology (ICT) infrastructure, computers, radio, and television, or other channels to provide distance education. Computer access and Internet access are fundamental to successful distance teaching and learning. This is not a guaranteed and sustainable educational method for all students in developing countries ([Zhang, 2020](#)).

Every vocational curriculum must have a standard for each country which also becomes a feature of the country. Using the national curriculum, an industrial curriculum for vocational education needs to be implemented that determines the quality of meeting its needs and wants ([Zulaikha, Hariri, & Rini, 2021](#)). Due to Covid-19, this curriculum was also disrupted. But the online platform also starts to continue.

In the context of Bangladesh, this distance learning platform is not entirely young, but it was not widely adopted before entering the Covid-19 juncture. Before the epidemic, some universities had their distance learning management systems, but somewhat less so. Therefore, the COVID-19 crisis addresses policymakers in the higher education institutions of Bangladesh to reconsider distance-learning platforms as well as online-based education ([Khan & Hossain, 2021](#)).

To maintain educational life authorities of the educational system of the world countries decided to follow an online approach. That is called online education or e-learning/ distance learning method. However, it is a well-established assumption that is developed as an alternative form of formal education ([S. S. Mishra & Pradhan, 2020](#)). At this time, the educational system of classroom-based on modern elements. Such as: Zoom Apps, Google Meet, MS Teams etc.

Technology is a blessing for us if it is used properly. But practically it is seen that many students use it negatively ([Kemp, Palmer, & Strelan, 2019](#)). The more successive outcomes from online education are implemented by the user's attitudes and impressions. Similarly, high effectiveness of the online learning method depends on the acceptance of the students and the appearance of the teachers ([Tarhini, Hone, Liu, & Tarhini, 2017](#)).

Moreover, this is important to develop a friendly model of online teaching and learning. This study tried to represent an effective and suitable model of e-learning in the higher-level educational system in the context of Bangladesh.

2.2 Operational Definitions

2.2.1 Emergency

The emergency is a term that is related to immediate response during a disaster or hazard or any vulnerable situation. Its meaning is:

- ✓ Sudden steps
- ✓ Immediate response
- ✓ Action for an unseen event
- ✓ Instant programs etc.

Source: Processed by Researchers (2022)

In this study, emergency refers to instant action during this Covid-19 pandemic situation to the continued educational system with the help of technical power.

2.2.2 Online Teaching-Learning

Teaching and learning are a process that is based on teacher-student relations. Teachers provide guidelines and lectures and students receive them. This process is called the teaching-learning process. In this study, a new way of teaching-learning process is developed focused on the online platform.

2.2.3 Higher-Level Education

Higher level of education is the 3rd level education after you leave school. It includes undergraduate and postgraduate studies. This study indicates the educational status and stages of the university level.

2.3 Conceptual Framework

Normally online teaching and learning process means online education that implies the students are physically distant from the instructors and guidelines (Tiruneh, 2020). Here the interactions between teacher and students are mediated by technology. Effective and sustainable online education depends on the result of careful instructional design and planning (Hodges, Moore, Lockee, Trust, & Bond, 2020). A conceptual framework for effective online education based on the online teaching and learning process is given in Figure-1.

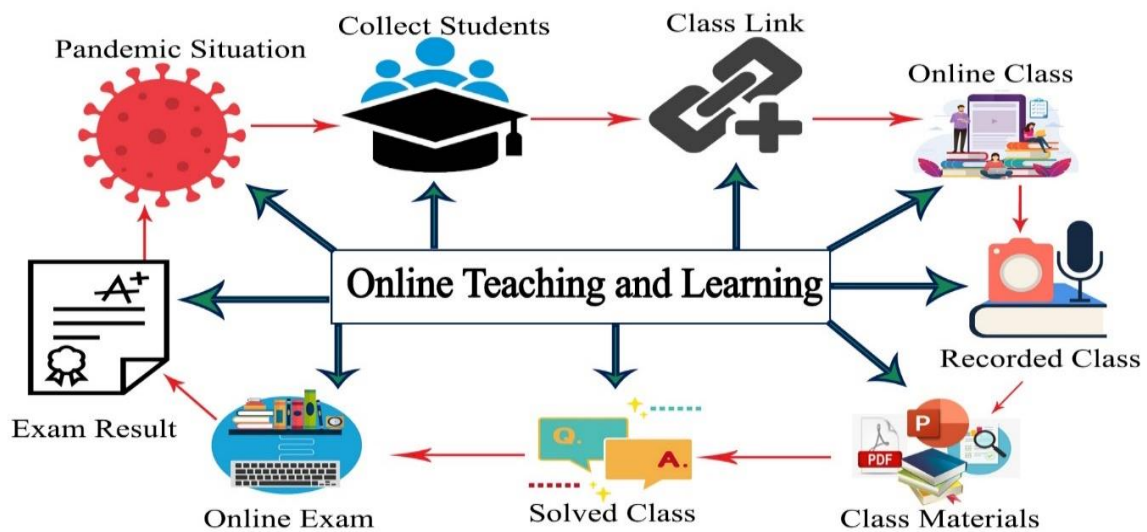


Figure 1: Online teaching-learning model

2.4 Methodology of the Study

This study followed a mixed method approach where both qualitative and quantitative methods are applied. University students and teachers of Bangladesh are the target population of this study. Here, data is based on two types of sources. Such as:

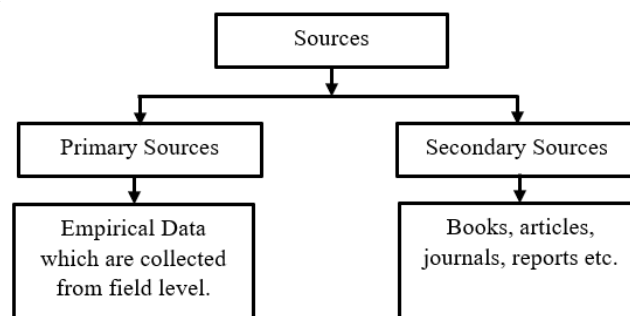


Figure 2: Sources of Data

In the context qualitative method, the survey is adopted. In total 335 university students both boys and girls are selected randomly using a questionnaire through Google form. To gather qualitative data two focus group discussions are conducted with university teachers through the zoom meeting platform. There are 10 teachers in each focus group. Collecting data is reviewed, classified, and analysed very carefully. The study is conducted among university students and teachers of Bangladesh and the data is collected through Google form.

2.5 Objectives of the Study

Here, a new and holistic picture of the ongoing online teaching-learning model is developed by exploring university students' perceptions of their adoption, use, problems, and acceptance of emergency online learning and university teachers' experiences with their online teaching management process. This is the main objective of this work. Surely, this model will be helpful to remove academic disturbance and other complexities if any kind of emergency or pandemic like Covid-19 comes in the future.

3. Data Analysis and Interpretation

3.1 Demographic Status of the Respondents

In this study, students at the university level are considered the respondents of the survey method. At the very first of the study, the respondents are asked about demographic variables consisting of age, gender, religion, and educational status presented in graphical and tabular form.

Table 1: Distribution by gender of the respondents in percentage

Male		Female		Total (n)	
Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
205	61.19%	130	38.81%	335	100%

Source: Processed by Researchers (2022)

From Table-1, it is found that the total sample size (n) of the study is 335. Here, 61.19% of respondents are male that's the frequency (f) is 205 and 38.81% are female that's frequency (f) is 130. Graduate-level students are the target people of this study in the context of the quantitative method.

Table 2: Distribution by age of the respondents in percentage

Age	Frequency (f)	Percentage
18-20	103	30.75%
20-22	80	23.88%
22-24	55	14.42%
24-26	50	14.92%
Above 26	47	14.02%
Total	335	100%

Source: Processed by Researchers (2022)

Table-2 showed that all the respondents of the study are young. Among them, 30.75% of respondents are between 18 and 20 years of age. 23.88% of respondents are between 20 and 22, 14.92% are between 22 and 24, 7.16% are between 24 and 26 years of age. Only 14.02% are over 26 years of age. From this statement the participation of respondents aged 20-22 years is higher in the study than frequency (f) is 103.

Table 3: Distribution by the religion of the respondents in percentage

Religion	Frequency(f)	Percentage
Muslim	250	74.63%
Hindu	80	23.88%
Others	5	1.49%
Total	335	100%

Source: Processed by Researchers (2022)

This table-3 showed that the percentages of Muslims and Hindus are 74.63% and 23.88% among the respondents and others are only 1.49% in the study area. The percentage of Muslims is recorded as

higher than Hindu religion and other religions that's the frequency (f) is 250. That means 80 respondents are Hindu and only 5 respondents belong to other religions out of 227 respondents.

Table 4: Distribution by education of the respondents in percentage

Education	Frequency(f)	Percentage
Honor's 1 st year	107	31.94%
Honor's 2 nd year	75	22.39%
Honor's 3 rd year	60	17.91%
Honor's final year	50	14.93%
Masters	43	12.84%
Total	335	100%

Source: Processed by Researchers (2022)

All the respondent's education ran at the graduate's level. As shown in this table-4, 31.94% of respondents studied in honor's 1st year. 22.39% of respondents in honor's 2nd year. 17.91% studied in honor's 3rd year and 14.93% are in 4th year. Only, 12.84% studied master's. In this section it is found that all the respondents are higher-level educated students in the context of Bangladesh.

3.2 Online Learning Status by the Students

Table 5: Distribution of the Activities of the Students before Starting their Online Class

Before Starting Class		
Activities	Frequency (f)	Percentage
Ensuring Internet/Mb Package	64	19.10%
Checking Battery of the Devices	45	13.43%
Staying a Friendly Place for Better Connection of Network	65	19.40%
Opening Class Link	70	20.90%
Pressing Mute button	30	8.10%
Turn on Camera	30	8.10%
Turn off Camera	20	5.10%
Using Microphone for Better Sound	11	3.2%
Total	335	100%

Source: Processed by Researchers (2022)

Table-5 showed the activities of students before starting their online class. This table is drawn based on the answers of respondents to close-ended questions. Here, 19.10% of respondents check the internet package before starting their online class. 13.43% of respondents check the percentage of the charging battery of their smart device and 19.40% of respondents go to a friendly place where an internet connection is available. 20.90% of respondents said that they open the class link for attending online classes and 8.10% mute their speaker after joining the class meeting. 8.10% of respondents open their camera and 5.10 close their camera and only 3.2% of respondent use a microphone for better sound.

Analyzing the table 5 it is found that, a student follows the above steps of table-5 before the online class starts. Some students follow it all again and some follow a few of it. However, everyone must follow these steps before starting the online class. So, these tasks can be called pre-class tasks or activities.

Table 6: Distribution of the Activities of the Students During and After Online Class Hours

<i>During and After Class Hours</i>		
<i>Activities</i>	<i>Frequency (f)</i>	<i>Percentage</i>
<i>Taking Lecture</i>	60	17.91%
<i>Fill up Attendance Form</i>	30	8.10%
<i>Focus on the Teacher's Lecture</i>	37	11.04%
<i>Pressing unmute button</i>	30	8.10%
<i>Leaving Class link after the Order of Teachers</i>	30	8.10%
<i>Collecting Study Materials and Class Recording</i>	70	20.90%
<i>Saving PPT and Other Materials in the File of Devices</i>	78	23.28%
<i>Total</i>	335	100%

Source: Processed by Researchers (2022)

Table-6 indicated the activities of students during and after their online class. This table is based on the answers of respondents to close-ended questions. Here, 17.91% of respondents take class lectures in time of online class hours. 8.10% of respondents said that they fill up an attendance form, 11.04% of respondents focus on the teacher's lecture concentrated during class hours. Again, 8.10% of respondents were unmute during class hours for sharing and knowing any issues of class topic or clearly understanding class lectures from teachers. Then, 8.10% of respondents leave the classroom after the order of the course teacher. Mostly 20.90% of respondents collect study materials and class recording after the online class time. Lastly, 23.28% of respondents save ppt and other materials in the file on their devices.

Analyzing the table-5 it is found that, a student follows the above steps of table-5 during online class starts. Some students follow it all again and some follow a few of it. However, everyone must follow these steps after starting the online class. So, these tasks can be called during-class tasks or activities.

Table 7: Distribution of the Activities of the Students Taking Preparation of Online Examination

<i>Taking Preparation for the Betterment of Online Examination</i>		
<i>Activities</i>	<i>Frequency (f)</i>	<i>Percentage</i>
<i>Listening Class Recording</i>	102	30.45%
<i>Reading PPT</i>	48	14.33%
<i>Reading Other Materials</i>	57	17.01%
<i>Taking Preparation for better Result</i>	90	26.87%
<i>Browsing Google for Other Study Materials</i>	38	11.34%
<i>Total</i>	335	100%

Source: Processed by Researchers (2022)

Table-7 identified the pre-activities of students in their online examination. This table is based on the answers of respondents to close-ended questions. Here, 30.45% of respondents listen to class recordings again and again for a better result in the online examination. 14.33% of respondents read ppt and 17.01% of respondents read other materials requiring preparation for the examination. Noteworthy, 26.87% of respondents prepared themselves for better preparation, and 11.34% of respondents browsing different websites for collecting better sources of the study materials so that they write the informative answer for the examination paper.

Table 8: Distribution of the Extra-Curriculum Activities of the Students Using Online Medium

<i>Participations of the Extra-Curriculum Activities</i>		
<i>Activities</i>	<i>Frequency (f)</i>	<i>Percentage</i>

<i>Online Seminar & Webinar</i>	97	28.96%
<i>Online Quiz</i>	78	23.28%
<i>Online Cultural Competition</i>	65	19.40%
<i>Online Debating</i>	35	10.45%
<i>Writing on the Online Journal, Newspaper and Magazines</i>	60	17.91%
Total	335	100%

Source: Processed by Researchers (2022)

Table-8 examined the pre-activities in the online examination of the students. This table is based on the answers of respondents to close-ended questions. Here, 28.96% of respondents participate in online seminars and webinars, 23.28% of respondents join the online quiz, 19.40% of respondents join the online cultural competition, 10.45% of respondents join the event of online debates and lastly 17.91% of respondents spent their leisure time to write on online journal, newspaper, and magazines for ensuring extra-curriculum activities staying lockdown life through online medium.

3.3 Online Teaching Status by the Teachers

Although transitioning to the online teaching-learning process due to Covid-19 is a very complex matter but considering the quality of the teaching process depends on the management capability of teacher. Analyzing two focus group discussions (FGD), the researcher find out a set of activities that are effective to ensure the smooth process of the online teaching model. Such as:

Box-1: Distribution of the Activities of the Teachers for Taking Online Class (Qualitative Data Display)

Major Findings
✓ Preparing class schedule
✓ Making class link
✓ Providing class link to the class representative
✓ Joining class meeting timely
✓ Providing floor to know students' opinions
✓ Permitting student request to join class meeting
✓ Starting recorder to record class
✓ Uploading recorded file
✓ Providing the link of recorded class to the students
✓ Providing available study materials
✓ Giving assignment and homework to the students
✓ Solving student's problems
✓ Making good and analytic questions
✓ Taking examination
✓ Preparing result sheet
✓ And uploading the notice of the result.

Source: Processed by Researchers (2022)

The above box analysed the categorization of academic activities to the continued online classes. Teacher performance to take class and student's performance to receive knowledge from online class based on the following theme of activities.

Besides, analyzing two focus group discussions (FGD), it is estimated that the teachers have organized various online-based programs to ensure the mental well-being of the students. That's given below through a box:

Box-2: Distribution of the Extra Activities of the Teachers for Keeping Calm to the Student’s Mentality (Qualitative Data Display)

Major Findings
✓ Online Cultural Program
✓ Online Student Counselling Meeting
✓ Online Webinar, Seminar and Workshop
✓ Online Conference
✓ Online Quiz and Competition
✓ And so on.

Source: Processed by Researchers (2022)

The above box analysed the categorization of extra activities to keep fit student’s mentality. Due to Covid-19 students are more mentally disturbed than physical illness. For maintaining their concentration on career life and academic life, teachers followed the above events as well as academic activities.

4. Results and Discussions

Online learning or e-learning is a sudden and fruitful platform to keep a smooth educational chapter in this pandemic period. However, analysing the perception, experience, and opinion of the teacher-students, the researcher develop a model of online education in the context of the Bangladeshi higher-level educational system based on two figures. These are given below:

4.1 Model of Online Learning (Perspective from Students)

Analyzing Table-5, 6, 7, and 8, we developed a model of the online learning method. This model is given below:

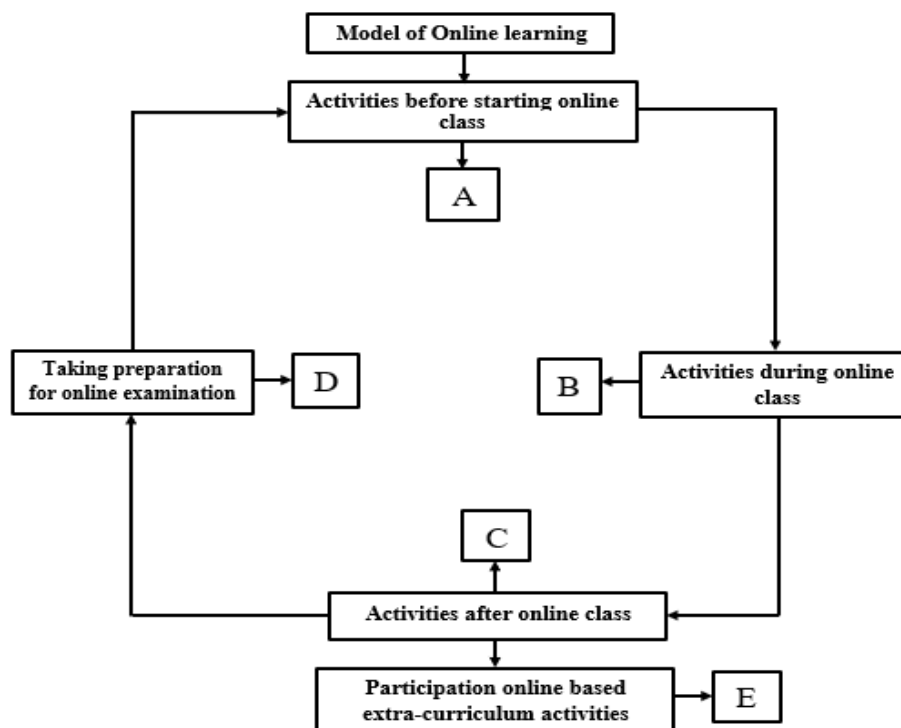


Figure 3: Model of Online Learning

The formula of online learning is: $A+B+C+D + E = \text{Online learning}$

4.2 Model of Online Teaching (Perspective from Teachers)

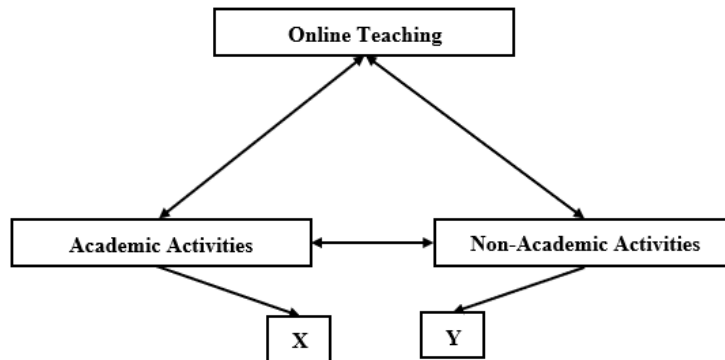


Figure 4: Model of Online Teaching

Here, the formula of online teaching = (X+Y). the overall formula or model of online teaching-learning is:

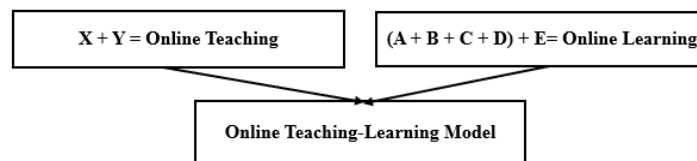


Figure 5: Relationship between Online learning and Teaching

In fine, just as a teacher prepares for the online class, a student prepares for an online class. Students maintain different rules and regulations (unmute, keep silent and pay full concentration on the screen of their devices) during online classes. After online class teachers upload their lecture videos and then share the links to those videos with the students. Most importantly, students also take preparation listening and watching these videos on the betterment on the online examinations. These are the above activities to develop a model of online teaching and learning from the perspective of higher-level education in Bangladesh.

Last but not the least, this paper resolved to study the consciousness of teachers and students on the online teaching-learning model during the COVID-19 lockdown period (Mishra et al., 2020). Analyzing the data of this study, a circle of the online procedure is developed using several components. That's: Zoom meeting, Google meet, Class recording system, Internet system, Smart device, etc. Teachers are trying to enliven the class system by providing the class link, showing slide presentation, uploading video recordings of classes, taking an online test on intellectual questions, etc.

5. Conclusion

The online platform is not like magical issue, but it has invisible magical power. At first, the educational system was disrupted due to the COVID-19 pandemic. After that, with the magical power of the online medium educational system gradually continued through the zoom meeting schedule.

Negative ways of learning online negatively affect communication between instructors and students, if online learning affects students' productivity levels (Alawamleh et al., 2020)

The Covid-19 crisis is forcing both teachers and students to embrace the digital academic experience as an acceptable solution to the online teaching-learning process (Lederman, 2020). However, the online platform is the best option to save students from collapsing academic world in this pandemic situation. Although this online system has some problems, it is to improve the education system through this online system. Above all this online teaching-learning mode is appropriate to continue higher-level education and it will be helpful for any kind of future emergency like the COVID-19 pandemic.

5.1 Limitation and Study Forward

We know that horrible COVID-19 has caused an epidemic all over the world. Socio-economic as well as the political system as well as our education system has been severely hampered by it. In this situation, we have taken the help of online platforms to continue the education system. We have erected a new model for this study in light of the respondents' perceptions. In the light of their opinion, some problems have arisen with online classes, but those problems have not been mentioned in this study. We think it could be better researched later. Because by identifying those problems we can set up a new model of online education activities. It is a large limitation of this study.

And this study was done during the pandemic period. Due to this we could not talk to the respondents directly in the field. By talking face to face, the feelings and experiences of the respondents can be better understood. This is another limitation of this study. Also, we did not receive any funding to complete our research. If we had any funding, we would have been able to complete the research on a larger scale.

Acknowledgments

We would also like to acknowledge the research respondents who share their valuable ideas for this work purpose honestly.

References

- Aguilera-Hermida, A. P. (2020). College students' use and acceptance of emergency online learning due to. *International Journal of Educational Research Open*, 1-8.
- Alawamleh, M., Al-Twait, L. M., & Al-Saht, G. R. (2020). The effect of online learning on communication between instructors and students during Covid-19 pandemic. *Asian Education and Development Studies*.
- Baird, S., Seager, J., Sabarwal, S., Guglielmi, S., & Sultan, M. (2020). *Adolescence in the Time of Covid-19: Evidence from Bangladesh*. <https://openknowledge.worldbank.org/bitstream/handle/10986/34801/Adolescence-in-the-Time-of-COVID-19-Evidence-from-Bangladesh.pdf?sequence=1&isAllowed=y>
- Boling, E. C., Hough, M., Krinsky, H., Saleem, H., & Stevens, M. (2012). Cutting the distance in distance education: Perspectives on what promotes positive, online learning experiences. *The Internet and Higher Education*, 15(2), 118-126.
- Caratiquit, K., & Pablo, R. (2021). Exploring the practices of secondary school teachers in preparing for classroom observation amidst the new normal of education. *Journal of Social, Humanity, and Education*.
- Department of Education. (2021). *Guidelines on the Implementation of the Results-based Performance Management System for SY 2020-2021*. Retrieved from <https://region8.deped.gov.ph/wp-content/uploads/2021/01/RM-s2021-024.pdf>.
- Evans, O. (2020). Socio-economic impacts of novel coronavirus: The policy solutions. *BizEcons Quarterly*, 7, 3-12.
- Graham, C. R. (2018). Current research in blended learning. *Handbook of distance education*, 173-188.
- Griffiths, B. (2016). A faculty's approach to distance learning standardization. *Teaching and Learning in Nursing*, 11(4), 157-162.
- Haleem, A., Javaid, M., & Vaishya, R. (2020). Effects of COVID-19 pandemic in daily life. *Current medicine research and practice*, 10(2), 78.

- Halim, S., Wahid, R. A., & Halim, T. (2018). Classroom observation-A powerful tool for continuous professional development (Cpd). *International Journal on Language, Research and Education Studies*, 2(2), 162-168.
- Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). *The difference between emergency remote teaching and online learning*.
- Kemp, A., Palmer, E., & Strelan, P. (2019). A taxonomy of factors affecting attitudes towards educational technologies for use with technology acceptance models. *British Journal of Educational Technology*, 50(5), 2394-2413.
- Khan, M. R., & Hossain, S. S. (2021). Perception of distance learning in Bangladeshi tertiary education: prospects and obstacles in the Covid-19 era. *Journal of Social, Humanity, and Education*, 1(3), 197-207.
- Lawless, C. (2020). *Synchronous vs asynchronous learning: Which is right for your learners*. Online: <https://www.learnupon.com/blog/synchronous-learning-asynchronous-learning/>(retrieved: 25.10.2020).
- Lederman, D. (2020). Will shift to remote teaching be boon or bane for online learning. *Inside Higher Ed*, 18.
- Mishra, L. G., T. and Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*.
- Mishra, S. S., & Pradhan, B. B. (2020). SUPPLY CHAIN MANAGEMENT AND INTEGRATION CONTROL. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(6), 5401-5409.
- Mustafa, N. (2020). Impact of the 2019–20 coronavirus pandemic on education. *International Journal of Health Preferences Research*, 4(1), 25-30.
- Mwesigwa, D. (2021). *Consequence of Covid-19 lockdown on household food security: Voices from Hoima City, Uganda*.
- Owusu-Fordjour, C., Koomson, C. K., & Hanson, D. (2020). The impact of Covid-19 on learning-the perspective of the Ghanaian student. *European Journal of Education Studies*.
- Remuzzi, A. R. a. G. (2020). COVID-19 and Italy: What next?. *The Lancet*, 1225-1228.
- Report, T. (2020). *Coronavirus: 63 universities taking online classes across Bangladesh*. Retrieved from <https://archive.dhakatribune.com/health/coronavirus/2020/04/29/coronavirus-63-universities-taking-online-classes-across-bangladesh>
- Sarkar, S. S., Das, P., Rahman, M. M., & Zobaer, M. (2021). Perceptions of public university students towards online classes during COVID-19 pandemic in Bangladesh. *Paper presented at the Frontiers in Education*.
- Sweet, K. (2020). *What is an Educational Module?* Retrieved from <https://classroom.synonym.com/what-educational-module-4739884.html>
- Tadesse, A. W., Mihret, S., Biset, G., & Muluneh, A. (2020). *Psychological impacts of COVID-19 among college students in Dessie town, Amhara region, Ethiopia; cross-sectional study*.
- Tarhini, A., Hone, K., Liu, X., & Tarhini, T. (2017). Examining the moderating effect of individual-level cultural values on users' acceptance of E-learning in developing countries: a structural equation modeling of an extended technology acceptance model. *Interactive Learning Environments*, 25(3), 306-328.
- The World Bank. (2020). *TV-Based Learning in Bangladesh: Is it Reaching Students?* <https://openknowledge.worldbank.org/bitstream/handle/10986/34138/TV-Based-Learning-in-Bangladesh-Is-it-Reaching-Students.pdf?sequence=4&isAllowed=y>
- The World Bank. (2021). *Keeping Bangladesh's Students Learning During the COVID-19 Pandemic*. <https://www.worldbank.org/en/results/2021/04/18/keeping-bangladesh-s-students-learning-during-the-covid-19-pandemic>
- Tiruneh, D. T. (2020). COVID-19 school closures may further widen the inequality gaps between the advantaged and the disadvantaged in Ethiopia. *Education in Emergencies*, April.
- Tzifopoulos, M. (2020). In the shadow of Coronavirus: Distance education and digital literacy skills in Greece. *International Journal of Social Science and Technology*, 5(2), 1-14.
- UNESCO. (2020). *Distance Learning Solutions*. Retrieved from <https://en.unesco.org/covid19/educationresponse/solutions>
- UNICEF. (2020). *The Future of 37 Million Children in Bangladesh is at Risk with Their Education Severely Affected by the Covid-19 Pandemic*. Retrieved from

<https://www.unicef.org/bangladesh/en/press-releases/future-37-million-children-bangladesh-risk-their-education-severely-affected-covid>

Zhang, X. (2020). Thoughts on large-scale long-distance web-based teaching in colleges and universities under novel coronavirus pneumonia epidemic: a case of Chengdu University. *Paper presented at the 4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020)*.

Zulaikha, Z. F., Hariri, H., & Rini, R. (2021). Analysis of vocational education curriculum in ASEAN Economic Community: a literature review. *Journal of Social, Humanity, and Education*, 1(3), 157-170.