

**“If We Can Not Do Classes, We Will Face Great Loss”: The
Experience of University Students from Remote Areas of
Bangladesh During COVID-19**

By

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A thesis submitted to the Department of English and Humanities in partial fulfillment of
the requirements for the degree of
Master of Arts

English and Humanities

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Declaration

It is hereby declared that

1. The thesis submitted is my own original work while completing degree at Brac University.
2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
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Ethics Statement

This is my own work. While conducting this research I reviewed many articles, journals, book chapters and other published works; however, the results, presented in this dissertation are based on my own study and the reflection of my own analysis. Besides, I maintained ethical issues and confidentiality of the participants. I neither mentioned the real name and identity of the participants nor used their institutions' names. I did not force anyone to participate in this research; the participants took part in this research voluntarily.

Abstract

This research, a qualitative study in nature, has explored how effective online classes there have been for the remote tertiary students of Bangladesh amidst Covid-19 pandemic. Considering the importance of online classes at tertiary level during pandemic and its relation with remote students, it particularly emphasizes on the predicaments, experienced by them and the possibilities, they can think of attending online classes. Adopting the non-probability technique as a sampling method, data has been collected from the remote students of three public and five private universities through interviews and their perceptions are presented as a basis for discussion through thematic analysis. The results illustrate that remote students suffer in attending online classes due to financial crisis, low speed of internet, sufficient power supply, lack of suitable devices, technological knowledge, availability of service centers and adverse family environment. These factors gradually prevent them from understanding content, receiving effective feedback, teachers' responses and interacting with teachers. In addition to that, the convenience of time and place, technological advancements and uninterrupted education system due to online classes are documented as the possibilities, students can think of. Finally, opting for a combined education system in near future, this study concludes by suggesting some recommendations for various stakeholders to reshape and redesign online academic activities effectively during any unfavorable or unrest situation in our country.

Keywords: online classes, COVID-19 pandemic, remote tertiary students, predicaments and possibilities.

Dedication

To my parents;

“Thank you for every single thing”

Acknowledgement

In the name of Allah, the Most Gracious the Most Merciful

I cannot thank the Almighty Allah enough whose blessings have brought me here. Then, I would like to thank my father and my mother whose constant support, love, care, affection and motivation help me to overcome every situation of my life. In particular, I am very much grateful to my supervisor Dr. Md. Al Amin, the most understanding and the most helpful person who has taught me that there is always a room for improvement and guided me in every single step of my thesis as well as my learning. I would also like to thank our chairperson Professor Firdous Azim and all the faculty members. Last but not the least I would like to thank my siblings, friends, my seniors and each and every person who were there for me when a strong hand of support was needed.

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List of Acronyms

UGC University Grants Commission

Chapter 1

Introduction

The COVID-19 pandemic has impacted our lives in all aspects including health, education, and economy. The sudden spread of this virus throughout the world has forced global shutdown and brought a drastic change in everywhere, especially in the education sector. Similar to other parts of the world, COVID-19 that started spreading in Bangladesh in the middle of March, 2020 has been impacting the lives of all citizens in all aspects. The government ordered a nationwide lock down that led to the closure of offices, marketplaces and educational institutions and all were instructed to transfer their activities from traditional setting to online mode. In order to that, many educational institutions from all levels of education have gradually shifted their activities online with some still in the process. Moreover, this transition has been prevalent mostly in private universities as they have been continuing to teach and assess their students since the middle of 2020.

Additionally, most of the student residence halls and hostels were evacuated and a large number of students have to attend classes from their own homes located in their native town or particularly in remote areas where there are several predicaments. These include: lack of sufficient supply of electricity, poor internet connectivity, unavailable technologies such as a good computer or smartphone and so on. Also, the number of such is significant; hence, conducting online classes and taking assessments have become difficult to continue their education. Moreover, tertiary education is considered as one of the most important phases of academic life in our country which determines the future of a student to a great extent. Unfortunately, tertiary students from remote areas and their experiences and situation in case of continuing learning during this pandemic have always been ignored as a research study. Eventually, this situation intrigued the researcher to conduct a study on remote university students with a view to understanding their perceptions regarding the predicaments and usefulness of attending online classes in order to explore how effective online classes there have been for them.

1.1 Overview of Online Classes in Tertiary Level of Bangladesh during the Pandemic

Online class is not entirely a new concept in the context of Bangladeshi tertiary education. However, a complete shift to online class from traditional setting has significantly been a novel phenomenon in the education sector of Bangladesh since 2020. Due to Covid-19

pandemic, educational institutions of our country have been closed since 17th March, 2020 and they are instructed to shift academic activities online. In order to that, over 41.9 million learners get affected while around 3.3 million are in tertiary education (Islam et al., 2020).

In this situation, a large number of private universities started to conduct classes and arrange assessments online from April 2020. For comparison, the rate of online academic activities is significantly lower in public institutions till now. Related to this, a survey on 2038 students at the end of 2020 (public university 58.8% and Private university 41.2%) showed that only 23% students are in favour of online classes while 77% oppose the idea (Islam et al., 2020). It is because a large number of students do not have proper internet connection, electric supply and suitable devices (laptop/PC, smartphones). On top of that, a significant number of students are not capable of bearing the expenses of online classes because an average duration class may take 300-400 MB of data which not only costs a lot but also requires a minimum speed of internet (Islam et al., 2020; Ramji & Sultana, 2020). Islam et al. (2020) found that almost 44% tertiary students staying at remote and rural areas where the socio-economic condition and technological infrastructures are notably low. In this situation, the students do not find online classes effective due to the infrastructural barriers, lack of interaction, less feasibility of assessments and understanding concepts (Islam et al., 2020; Mamun et al., 2020; Al-Amin et al., 2021). In addition to that, a few teachers, due to their lack of technological knowledge and proper training on conducting classes online, are facing difficulties to conduct classes, design materials and assessments procedures (Dutta, 2020; Mamun et al., 2020). Unfortunately, no study has specified the problems that tertiary students from remote areas facing in attending online classes, although the contextual scenario of these areas is significantly different than urban areas. However, the government and various state organizations are providing internet facilities, sanctioning smartphone loans to students and teachers but it fails to meet the increasing demand of a large population.

Apart from these, online classes are usually being delivered through Zoom, Google Meet, Google classroom and Facebook while most universities do not have their own learning platform or online Learning Management System (LMS). Due to this, continuation of online classes, performance of teachers, recording students' attendance, academic activities such as; exams, quizzes, assignments and all are found problematic (Islam et al., 2020; Dutta & Smita, 2020). Nevertheless, universities, Ministry of Education and University Grant Commission (UGC) are trying to maximise the virtual learning effects by introducing novel pedagogy, methods and assessment tools. In fact, they are trying to ensure quality

teaching-learning context online amid pandemic since this is the only way to continue education.

1.2 Statement of Problem

Tertiary education is important as it produces better-educated citizens and paves students a path of being added to the efficient workforce of the country. Unfortunately, COVID-19 pandemic has forced global shut down of face-to-face classes and thus, online classes and assessments have turned out to be the only option to continue education (Shama & Iqbal, 2020). In order to do that, universities are gradually shifting their academic activities online; however, Bangladesh has always been backward in economic and technological advancement. As a result, students of tertiary level are suffering to continue classes due to lack of sufficient internet connection, electric supply, suitable technologies and technological knowledge, financial crisis and so on (Al-Amin, 2021; Mamun et al., 2020). In particular, the condition of the remote students is even worse since the socio-economic development and technological infrastructure are significantly miserable. Nonetheless, they are large in number and they often get ignored as a research subject. Therefore, considering the interrelation between the importance of online classes in tertiary level amid pandemic and remote students' situation, as a researcher, I decided to explore how effective online classes have been for tertiary level students in remote areas of Bangladesh in terms of its convenience and learning with the challenges faced by the students.

1.3 Context of the Study

The aim of this study was to explore how effective online classes are for the remote tertiary students of Bangladesh amid Covid-19 pandemic. In this regard, I took two interrelated aspects: scenario and importance of online classes in tertiary level during pandemic and perceptions of remote students as my research context. It is because, on one hand, tertiary education plays a significant role to shape the future of a student, and, on the other hand, remote students cover a significant portion of the total tertiary students in Bangladesh.

Consequently, remote area is usually considered as a place which is less developed than the central or urban areas of a country where 'urban area' is identified as a place, having developed infrastructure of built environment, availability of resources regardless health, education, business, administration and 'rural areas' as the places which have hardly any access to these resources (Ardeneret et al., 2012). Similarly, in Bangladesh, 'remote area' is considered as a place where people find it difficult to access resources available in urban

areas. These include sufficient health services, educational opportunities, transportation services, technological advancements, digitalization and markets (Hanchett, 2017).

In addition to that, tertiary education, one of the most important phases of students' life that prepares students for competitive job market and to be better-educated citizens has come under threat due to Covid-19 pandemic as, on-campus classes are closed down and academic activities are operated through online platforms. In this situation, a large number of students have to continue classes from remote areas where the socio-economic condition and technological infrastructure is significantly miserable. Since, online class is the only way to continue academic activities, so I recorded perceptions and experiences of the remote students regarding attending online classes through interviews. I documented remote students' views on online classes from five private universities and three public universities. It was found out that universities were conducting classes through Zoom, Google Meet, Google Classroom and Facebook while only two universities had their own learning platform such as, BuX (in-house e-learning platform, created by Brac university) to operate academic activities. Rest of the universities uploaded their classes either on Facebook Group or Google Classroom. Moreover, a few teachers did not even upload the lectures assuming that student will not attend classes intentionally if s/he uploads lectures. Additionally, a few of the teachers did not even respond to students' queries on time. Besides, assessments were conducted as a form of loads of assignments and quizzes (MCQ and conceptual) where there was a high presence of using unethical means. Sadly, the rate of conducting classes and assessments online was higher in private universities than public and no formal assessments were taken in public universities.

Also, students who were interviewed said they faced problems of power cuts and low speed of internet. However, power cuts or no or low access of internet were not the only factors, preventing them from enjoying online classes, adverse family environment, lack of suitable devices and financial crisis were obstructing them to get an effective learning environment. Consequently, all these factors create barriers in case of receiving feedback, interacting with teachers and others and so on. Last but not the least, they were noticed to appreciate it due to its convenient nature: time saving, location of choice and reducing study gap, however, all of them wanted to go back to face-to-face classes.

It is here needed to mention that the researcher has been termed as 'I' and 'the researcher' throughout the study.

Literature Review

This chapter includes scholarly articles and researches, conducted previously on the issue of attending online classes. It particularly emphasizes on several concepts, causes, impacts and effectiveness of learning, consistent with online classes and relevant to this study. Later on, the researcher concludes the chapter by specifying the research gap and contribution of this study in the field of measuring effectiveness of attending online classes during pandemic in Bangladeshi context.

2.1 Perceptions on Online Classes throughout the Globe

Online class is a form of distance learning that requires internet connection to connect to the students and teachers through computer or smart phones (Park, 2009). In fact, advanced technology and online classes facilitate teaching-learning in all kinds of educational sectors to a great extent though mixed perceptions are noted regarding online courses and classes (Johnson et al., 2020). To begin with, two aspects of online classes are agreed by most of the scholars throughout the globe: firstly, online classes provide flexible time schedule for both teachers and students which in return assist them in balancing their academic and professional life with personal life and secondly it makes them technologically advanced in case of browsing, emailing, having online discussion board and so on which are very important to cope up with modern teaching-learning contexts (Beard, 2004). Besides, online classes are taken from home or location of choice which makes it more affordable by saving transportation and meal costs and lessens the chances of students missing out on lessons (Wavle & Ozogul, 2019) while Akram et al. (2020) consider it expensive due to its high expenses on internet and suitable technology. Hence, perceptions and impacts of online classes vary in contexts (Sharma et al., 2021).

On a different note, Adedoyin et al. (2020) state that at the time of any social calamities or unrest situation like Covid-19, when it becomes nearly impossible to continue physical classes, a transition to online classes from traditional setting for an uninterrupted education system is a well contemporary thought which provides more flexibility, technological knowledge, self-pacing and specifically makes teachers and students more digitalized. Besides, Verma et al. (2020) explore that though online classes are expected to work as an alternative of face-to-face classroom; lack of technological training of teachers, insufficiency of technological tools, fear of using novel technologies, lack of friendly

interaction, easy destruction of students from class create obstacles for an effective online class. Additionally, conducting continuous online classes and being highly benefitted by it is quite difficult for the less developed and developing countries like Pakistan, Bangladesh, India and so on (Adnan & Anwar, 2020). In particular, both teachers and students have mixed perceptions regarding the effectiveness of online classes as teachers along with more flexibility; find it difficult to modify course materials, assessment process and engage students in class while students feel difficulty to cope up with this online mode of instructions (Kebritchi et al., 2017).

2.2 Reasons behind Shifting to Online Classes from Face-to-Face Classes

There are a number of reasons behind shifting face-to-face or traditional classes to online mode. To begin with, the increased accessibility of Internet, World Wide Web, development of technology and communication system are enhancing opportunities for teachers and students to learn from home and shifting teaching-learning context and materials to online from traditional classroom setting (Li & Ibry, 2008). Similarly, mentioning this transition to online mode from face-to-face class as a paradigm shift, Harasim (2000) considers technological development as the main cause of this shift. Besides, online classes and learning benefit the learners by saving traveling cost and providing flexible time of learning which lead to the shift of traditional classes to online mode (Park, 2009).

On the other hand, Singh et al. (2020) mention that social problems sometimes change the education system of any nation and introduce a new education system. Here, he exemplifies this through Covid-19 pandemic situation which shifts educational settings from face-to-face to online base. In this regard, Ramji and Sultana (2020) point out that online classes are very common in developed and technologically advanced countries whereas it is quite difficult for the developing countries to think of any alternative ways of face-to-face classes suddenly due to the lack of technological advancements. Still, developing countries like Bangladesh, India, Ghana and so on are noticed trying hard to shift the education system to online mode to cope up with the global pandemic situation of Covid-19. Similarly, Sultana and Khan (2019) state that a complete shift to online platform due to global pandemic of Covid-19 is relatively a new concept for the developing countries like Bangladesh, India, China, Ghana and so on; yet they are turning towards online platform for an uninterrupted and continuous education system. Therefore, Bangladesh, a developing and technologically less advanced country is also facing a pandemic situation since 2020 and she is gradually

shifting her education system regardless of primary, secondary and tertiary level to online mode.

2.3 Effects of Online Classes on Higher Studies

Different scholars have examined the effects of online classes on the students of tertiary level in different ways. To begin with, Nguyen (2015) finds no significant difference regarding effective learning between online and face-to-face classes while Bergstrand (2015), based on a case study of 114 students finds out that students of tertiary level can learn less in online classes. It is because, as he mentions that students get easily distracted by social media and other sites and due to getting less chances of interaction with other students, they feel a sense of isolation which all together increase the dropout rates.

Apart from this, effective teaching-learning relies on proper feedback, assessment and interaction between teachers and students and various effects are noticed regarding these aspects. It is stated by Boud and Molloy (2013) that feedback, one of the most important aspects which is a must to improve learning happens constantly in face-to-face classroom but not possible in online classroom while McNeil (2014) mentions that online feedback through email, Facebook group, Skype and so on is more flexible and helpful as teachers can provide it at any time as per students' need. Further, students can receive it accordingly and ask for more clarification if needed. Also, learners feel less anxiety taking feedback through online learning platforms. Additionally, it is reported that majority of the students feel comfortable interacting with other students and instructors in face-to-face classroom and they become dissatisfied in online classes due to have less chances of interaction(Sarwar et al., 2020) while Hwang (2013) argues that online classes develop interaction between students and teachers through the continuous use of audio, video, social media platforms such as Facebook, Whatsapp in the form of debate, discussion board and so on where students can participate from anywhere in the world. Besides, it is more flexible and informal than traditional classroom which make the learners less inhibited and increase their level of interaction which in turn make an effective learning context. Moreover, a proper assessment is required for effective teaching-learning which lacks in online classes due to its less capability of ensuring validity and authenticity (Boud & Molloy, 2013) while Persaud (2019) argues that online classes introduce alternative assessments in a large number and technologies today ensure authenticity quite well.

2.3.1 Scenario of Online Classes on Higher Studies in Developing Countries during Pandemic

In this modern era of technology online learning is very significant even though the effectiveness and success of the implementation of online classes vary in contexts and academic levels (Wavle & Ozogul, 2019). In this regard, Akram et al., (2020) state that it is quite difficult for the developing countries to design and prepare a complete online based learning platform due to its technical constraints such as suitable technologies and internet connectivity. For instance, during COVID-19 pandemic, only when online classes are significantly noticed in the developing countries show that flexibility and convenience of online classes make it attractive to the students for learning at the first phases but gradually lack of sufficient broadband connection and suitable devices make it a challenge for them. Also, conducting practical oriented courses are found difficult and likely to be impossible for both students and teachers (Muthuprasad et al., 2020).

Apart from these, while comparing traditional and online classes, Kaur et al. (2020) find out that the students and teachers of medical and engineering sectors in India are not satisfied with online classes due to lack of interaction, inability to engage students in class and group works, power cut, poor broadband connections along with other technical issues. Also, they feel that online classes cannot substitute traditional classrooms because it is hard to enhance critical thinking skills, collaborative learning skills, improving social, communication and career building skills. Similarly, Nambiar (2020) based on the teachers' perspectives show that in Pakistan majority of the undergrad students cannot make desired results, compared to traditional classrooms due to no access or slow speed of internet, lack of face-to-face interaction with the instructor, lack of technical and monetary issues. With the same tone, Bao (2020) states that arranging online classes and getting satisfactory benefits out of it is difficult for a developing country like china due to inadequate support from teachers, course materials, technological knowledge, suitable course contents and technologies. Additionally, Bangladesh is also trying to cope up with this new educational approach but lack of technological infrastructure, high speed internet connection, financial crisis of students' families are hindering its path of success (Ramji & Sultana, 2020). Still, a sudden response to continue academic activities through online classes during a pandemic is undoubtedly a great phenomenon, happened in developing countries but it is not possible to make attending classes mandatory for all the students due to the poor internet connection and expenses of mobile data (Dutta, 2020).

2.4 Overview of Online Classes at Tertiary Level in Bangladesh during Pandemic

After the outbreak of COVID-19, like other countries, the education system of Bangladesh has been going through a transitional period from traditional to online mode of instruction. However, meeting the required facilities of conducting online classes like computing devices, internet connection, arranging enough suitable infrastructures for teachers and students are found really difficult (Shama & Iqbal, 2020). Besides, comparing to primary and secondary level, online classes are significantly observed in universities, especially in private universities but limited or no access to the internet, high cost and low speed of internet, unavailability of suitable electronic devices and lack of technological knowledge are impacting on the teaching-learning contexts of the students of universities (Dutta & Smita, 2020). On the other hand, taking both teachers' and students' (private university) perspectives into account, Sarker et al., (2019) explore that online learning is gradually being accepted by both teachers and students due to its flexibility in attending classes, reviewing and posting course materials and information while Mamun et al., (2020) report that online classes get affected badly due to financial crisis, sufficient internet connection, incapable of managing both home and academia at the same time which later on increases family conflicts and mental health issues. In particular, Bangladeshi higher studies are still at a very early stage of adopting learning through online classes.

2.5 Research gap

Different scholars around the world have emphasized on different aspects of online classes during normal and pandemic time. Some of them (Kaur et al., 2020; Sarwar et al., 2020; Nguyen, 2015 and so on) along with explaining the concept of online classes have compared it with face-to-face classes, while others (Li & Ibry, 2008; Singh et al., 2020; Sultana & Kahn, 2019) have shown the reasons of shifting to online mode of instructions and some of them (Nambiar, 2020; Persuad, 2019; Dutta, 2020; Bao, 2020, Mamun et al., 2020) have explored the effects of online classes in general.

However, in Bangladesh little research has been conducted on the effectiveness of online classes both on the context of before and during pandemic even though it is one of the most significant issues in today's world. In particular, studies found regarding the effectiveness of online classes on higher studies either have a focus on the impacts on the students and teachers as a whole, or have focus only on the students of private universities (based on the perspectives of both teachers and students) or have explored the possible ways of making online classes effective (Shama & Iqbal, 2020; Dutta & Smita, 2020; Sarker et al., 2019). Hence, no study is found that emphasizes on the students of remote areas while on one

hand, a large number of students are from remote areas and on the other hand, the scenario of remote areas is quite different from city areas. Considering these aspects, I have emphasized on the predicaments and convenience, experienced by the students of remote areas. Later on, based on their perceptions, I have explored how effective online classes have been for the remote students of Bangladesh. Also, most studies, mentioned above are conducted either following mixed method or quantitative approach but this particular study has documented remote students' perceptions, experiences and suggestions qualitatively.

Chapter 3

Methodology

This chapter presents how the entire study has been conducted. In the first place, it includes the purpose and significance of this study. Later on, it discusses research paradigm, philosophical assumption and the methods, adapted for this study with a proper justification. Finally, it includes the procedures of collecting and analyzing data, the criterion of selecting participants, and ways of maintaining ethical issues, validity and reliability.

3.1: Purpose and Significance of This Study

This study has been designed to explore the effectiveness of online classes for the remote students of tertiary level in Bangladesh. In order to that, it documents remote students' perspectives regarding the challenges and possibilities, experienced by them. Due to global lockdown and pandemic, universities are instructed to resume their classes and other activities online. As a result, a large number of students have to conduct classes from their home, situated in the remote areas while the socio-economic scenario and technological infrastructure of remote areas are quite questionable in Bangladesh. On the contrary, currently there are few researches, found based on this situation which presented the effects of online classes on the students and teachers as a whole. Considering these aspects, it seemed essential to locate the challenges and possibilities of online classes, faced by the remote tertiary students as on one hand; they are large in number and on the other hand, no study has a particular focus on their experiences. Moreover, tertiary education is considered as one of the most significant and important phases of academic life in our country as it shapes and determines the future of a student to a great extent. Hence, this study aims to explore the perceptions and opinions of the students of remote areas regarding the challenges and barriers they experience in online classes and the opportunities they can think of.

Consequently, following research questions will guide the researcher to conduct this research;

CRQ: How effective is online learning for the remote tertiary students of Bangladesh?

RQ1. What are the challenges and barriers, faced by the remote tertiary students while attending online classes?

RQ2. What is the usefulness and possibilities, remote students can think of regarding online classes?

Since online class is the only way to continue academic activities amid the pandemic and COVID-19 is showing no sign of abatement, so this study will assist the Ministry of Education, University Grants Commission and university authorities to identify the predicaments that remote students who cover a large population of tertiary students are facing. Consequently, the respected concerns can also redesign and reshape online academic activities by considering remote students' perceptions that will eventually lead to an effective learning context. Most importantly, if any pandemic or natural-social-political unrest happens in our country in future, this study can work as a guideline to make teaching-learning effective by identifying the barriers and minimizing those.

3.2: Research Design

Since research design is considered as an outline, a preliminary sketch or the plan of the researcher to create, construct and relate ideas to reach a conclusion; so, the researcher also made a research design to conduct this study.

To begin with, I adapted qualitative method and followed inductive approach to conduct this research. It is because, qualitative approach helps to explore and understand the meaning, individuals or groups ascribe to a social or human problem and inductive approach assists to make a conclusion based on the information, gathered from the participants (Creswell, 2014). Besides, this qualitative process includes some emerging questions based on which data is typically collected from participants in a natural setting, is analyzed inductively that gives a general theme and further includes the interpretation of data, made by the researcher. In order to do that, qualitative approach was followed as data was collected in a natural setting through interviews of the participants. Nevertheless, emphasizing the challenges and possibilities, faced by the remote tertiary students, this study explored the effectiveness of online classes where documenting perspectives of individuals was a must. Therefore, collecting subjective data on individuals' perceptions through qualitative approach was required for this study.

Furthermore, this particular study explored predicaments and possibilities of online classes which was not possible through some close-ended questions with numerical analysis like quantitative method rather it needed open-ended questions and analysis of individual perspectives to draw a conclusion. In addition to this, since there was no study, found in this area, so there was nothing to test any theory or hypothesis like deductive approach. Thus, it was worthy for me to adapt qualitative method and inductive approach to understand the participants' opinions to draw a conclusion.

Additionally, emphasizing more on primary sources (documenting participants' perceptions through interviews) as it is mentioned by Tavakoli (2012) that primary source works well for getting original data to find out the research objectives, I also looked at secondary sources such as; published articles, journals and so on to make a comparison in which aspect my research was different. Later on, adapting thematic approach of data analysis, I gradually came up with a number of themes based on the words or sentences, uttered more times by the participants.

3.3: Multiple Case study Approach

To conduct this study, multiple case study approach has been adapted. In fact, to explore any real-life incident, event or issue of a large population by looking at a smaller group of that through interviews, observations and document analysis; case study approach can be used (Yin, 2018). Considering this, case study approach has been chosen as I collected data by interviewing a smaller portion of remote tertiary students.

In addition, the focus of this study was to find out the effectiveness of online classes for the remote tertiary students which was a real-life incident and thus, it fulfilled the criterion of adapting case study approach. In particular, among three types of case studies such as intrinsic case, single instrumental case and multiple case study (Creswell, 2014), I adapted multiple case study approach. It is because as stated by Yin (2018) that on one hand, multiple case studies provide the opportunity to investigate one issue by analysing more than one case and on the other hand, it allows the researcher to show multiple perspectives on one single fact. Therefore, I explored the challenges and possibilities of online classes, faced by the remote students of tertiary level by documenting different perceptions, experiences and suggestions from multiple cases on a single issue and eventually concluded the study with relevant analysis of collected data.

3.4: Context of Collecting Data

This study has been designed to explore the effectiveness of online classes for the remote tertiary students of Bangladesh. Due to this, documenting the challenges and possibilities of online classes faced by these students was a must. Considering these aspects, data was particularly collected from the students who were attending online classes from remote areas. In this case, I collected data through interviews from both the students of public and private universities. Additionally, the students were mostly from Bangla medium background and thus, they spoke in Bangla or mix-language during interview. Moreover, this study itself was conducted during COVID-19 pandemic when it was almost impossible to observe or take

interviews physically. Due to this, I had to collect data over phone-call and Zoom meetings. In particular, data was collected from the remote students of five private universities and three public universities with whom I have some connections in any ways.

3.5: Participants of This Study

Participants were carefully chosen for this study. Since the research explored the challenges and possibilities of online classes, faced by the students of remote areas, so participants, attending online classes from remote areas were the main focus of this study. Hence, I interviewed students from both public and private universities though public universities could not resume their classes online during global lockdown like the way private universities did. However, participants, chosen for this study were total 35 in number while 12 students were from public universities and rest of them were from Private universities.

3.5.1: Selection of Participants

Participants were chosen carefully through an appropriate sampling method as it is important to make an appropriate sampling for conducting any research. Eventually, the researcher also made a proper sampling by adapting non-probability technique among two techniques; probability and non-probability. It is because, non-probability sampling allowed the researcher to choose participants as samples from the large population of his/her own choices and to gather information from the respondents whom the researcher could easily get in touch with. In contrast, probability technique requires the equal participation of all the members of the group or population on whom the study is being conducted (Creswell, 2016) which was nearly impossible to adapt for me during covid-19 pandemic. Since, this study was conducted within a very short time during pandemic and I had to collect data from home over phone or Zoom so, it was easier and justified for me to collect data from my own circle or people I could access easily. In this case, I chose representatives and interviewed those whose contact number, email address or Facebook ID were with me, in particular; interviewed those with whom I had some connections.

Along with this, I used purposive snowball technique. It is because, it is considered as an appropriate sampling technique to gain a rich amount of data from the limited source within a short period of time which again comes under non-probability sampling method of conducting research (Galvin, 2015). However, in case of multiple case study approach, the number of cases or participants are not fixed and researchers are advised to start analysing data until saturation occurs which means the reoccurrence of coming same theme or

information from analyzed data (Galvin, 2015). In order to that, I interviewed those who had connection and experience in the studied subject for gaining relevant information.

3.5.2: Participants' profile

Though the number of interviewees was 35, all of their answers were not satisfactory and relevant to this study. In order to that, I discarded some of the participants' views and continued with the information, seemed relevant to me. It is mentioned that all the names (participants and remote areas), used here are pseudonyms and the names of institutions are not also mentioned. An overview of the participants is given below:

Serial No.	Name	Gender	Institution	Semester/year	Area
01	Mimi	Female	Private	8 th semester	Chapaipur
02	Prova	Female	Public	3 rd year	Gobindonagar
03	Porosh	Male	Public	2 nd year	Palashtoli
04	Ritu	Female	Private	11 th semester	Nadidanga
05	Farhin	Female	Private	Last semester	Gobipur
06	Supti	Female	Public	4 th year	Gobipur
07	Pulok	Male	Private	7 th semester	Ranirhat
08	Badhon	Male	Private	9 th semester	Ranirhat
09	Noshin	Female	Private	4 th semester	Moyurbai
10	Zarin	Female	Public	Final year	Bondorkhola
11	Orin	Female	Private	2 nd semester	Kusumpur
12	Propa	Female	Public	3 rd year	Nabinpur
13	Neeha	Female	Private	10 th semester	Jaintinagar
14	Ayon	Male	Private	9 th semester	Fultuli
15	Sanim	Male	Private	10 th semester	Dhupchaya
16	Timur	Male	Public	2 nd year	Taranagar
17	Mumu	Female	Private	11 th semester	Fulbagan
18	Mimu	Female	Private	6 th semester	Rokkhonpur
19	Jenny	Female	Public	1 st year	Taranagar
20	Priya	Female	Private	7 th semester	Dhunutipur
21	Priti	Female	Private	Last semester	Moyurakkhi
22	Shumi	Female	Public	4 th year	Laalnagar
23	Torab	Male	Public	1 st year	Ulitola

24	Tuli	Female	Private	4 th semester	Shernagar
25	Mehrab	Male	Private	9 th semester	Shibchachiya
26	Eva	Female	Private	7 th semester	Halisnagar
27	Zeba	Female	Private	10 th semester	Muktadanga
28	Arshi	Female	Private	9 th semester	Nabipur

Table: Details of Participants

3.6: Data Collection Procedure

Data needs to be collected very carefully to conduct any qualitative research. Therefore, I collected data through semi-structured interviews as providing a very friendly environment to the researcher for having conversation with interviewees, it also allows them (R) to have a set of same questions and additional questions to ask for more clarification (Walliman, 2017). Considering these aspects, I chose semi-structured approach to interview as I not only asked a set of some specific questions to the participants but also asked additional questions to elicit relevant information when needed.

In brief, while interviewing, I started with 3-5 straight forward questions and then moved to open-ended and opinion-based questions based on which I tried to find out the answers of my research questions. It took almost three and half months to interview and each interview took around 15 minutes. I took the interviews through mobile phone and Zoom app and recorded the whole conversation with the consent of the participants. Furthermore, I took interview at their convenience and there was no language bias or barriers. While interviewing, I used pen and notebook to note some points, seemed important to me. However, this study was conducted at the time of COVID-19 pandemic, so it was nearly impossible for me to collect data through observation and face to face.

3.6.1 Developing Interview Protocol

To conduct any research, it is important to develop an interview protocol and hence, I adopted Interview Protocol Refinement (IPR) Framework to design semi-structured interview questions for this study. It has been adopted from Yeong et al., (2018) which includes four steps and those are given below:

1. Ensuring alignment between interview questions and research questions
2. Constructing an inquiry-based conversation
3. Receiving feedback on interview protocols
4. Pilot testing of the interview questions.

Since, the above four steps need to be completed to interview participants, so, at the first place, I made interview questions (Appendix B) in such way that were able to answer the research questions 1 and 2. Then, I maintained a chronology of interview questions by writing it differently from RQs and kept asking additional opinion-based questions which made the interview session more like social conversation. It also gave the participants an opportunity to open them up without any hesitation. After that, I took feedback from experts, expert in the field of studied area. In this case, I piloted interview with one of my seniors and my course instructors and faculty of BRAC University, English and Humanities Department and based on the feedback I modified some parts of my interview questions to gather more accurate data for this study. I also sent the consent form (see Appendix A) to the participants before taking the final interview so that the interview session goes smoothly and no interruption or confusion occurs. Later on, these steps helped me to ensure credibility and trustworthiness of this study.

3.7: An Overview of Data Analysis Procedures

I chose a data analysis framework to analyse my data. In this regard, I searched for several scholarly frameworks, used to analyse qualitative data and thus found a data analysis framework, used by Griffiee (2012) appropriate for my study. In fact, this is considered as a suitable framework for interpreting and analysing interview data and according to this framework, data needs to be analysed through the maintenance of five steps (Griffiee, 2012) which are as follows:

Step one- Listening to the recordings of the interviewees and transcribing them accordingly.

Step two- Reading the transcriptions for several times to understand what is meant by the interviewees.

Step three- Selecting themes and coding the responses.

Step four- Writing a summary of coded data.

Step five- Writing a memo for yourself.

Therefore, at first, I listened to the recordings carefully and transcribed the interview data. It is to be mentioned that while transcribing, I translated the Bangla language into English first and then transcribed. Secondly, after transcription, I read it several times and marked some areas, which were found relevant to my research questions. In fact, I read the transcriptions and marked places several times to understand the direct and underlying meaning of the participants' responses to the interview questions. Later on, based on the responses I gathered

the codes to find out the broader themes as Themes provide the practical results in a Qualitative study according to (Vaismoradi et al., 2019). Finally, I used note book as a memo to write the summary of coded data, key points and notes, taken from the interview and transcription for own comfort and understanding.

3.7.1 Analyzing Interviews

For analyzing the responses of the students, the audio recordings were transcribed (see Appendix C) verbatim manually. Then, the transcriptions were coded through a seven-column template (see Appendix D) and the researcher used constructing coding which is the combination of open coding and in vivo coding (Saldana, 2015). Then, choosing codes from the transcription, I identified the themes and all themes were compared to each other based on the students' responses and further organized chronologically (more prominent to less). Finally, data were analyzed thematically so that it could answer the research questions properly.

3.8 Ethical Considerations

Ethical issues were highly maintained to conduct this study. To begin with, I did not reveal any participants' and their locations' name. I did not even reveal any institution's name rather mentioned its category; public or private. Moreover, I did not force anyone for the interview rather I just tried to convince some of them who were hesitating. In this regard, I ensured that the language, being used did not have any bias and interviewed participants at their convenience. I also took permission before recording the conversation. Apart from these, before starting the interview, the participants were at first well explained about the purpose of this research and interview. Later on, after hearing the researcher's explanation regarding this research along with the ways of maintaining their privacy in all possible ways; they signed the consent form, was sent to them earlier.

3.9 Credibility and Trustworthiness

For conducting any study, it is important to establish credibility and trustworthiness. Due to this, for ensuring credibility and validity, I at first looked for previous researches on similar issue to realize how other researchers-maintained trustworthiness and credibility. Then, I ensured whether data was able to answer the research questions or not. Later on, to make the study credible, I used the approach of triangulation, transcription and member checking. In this case, I showed the same words and expressions, heard from the participants and for triangulation I used two sources of collecting data: primary (interviews) and secondary. As credibility is established depending on how much a research's finding can reflect over the

reality as stated by (Leung, 2015), so I emailed the transcriptions of individual participants to them so that they could check by themselves whether findings were reflecting their perceptions or not. Finally, I made an audit trial (see Appendix E) to ensure credibility and discuss the results of my study in the next two chapters

Chapter 4

Remote Students' Perceptions on Predicaments and Possibilities of

Online Classes

Before starting the Results and Discussion Section (Chapter 4 & 5) I would like to present the emergent themes of my study. Later on I will gradually discuss Chapter 4 and 5.

The Effectiveness of Online Classes during Pandemic: a Study on the Remote Students of Tertiary

Level in Bangladesh

Predicaments of Remote Students

- *Continuous Load-shedding and Power Outage*
- *Poor Internet Connection*
- *Unavailability of Resources*
 - *Suitable Technologies*
 - *Lack of Technicians and Service Centres*
 - *Unavailability of Libraries*
- *Financial crisis, leading to some other difficulties* (Incapability of affording suitable resources, sense of humiliation and mental stress)
- *Pressure on Using Novel Technologies*
- *Adverse Family Environment*

- *Unfavourable Surroundings*
- *Incompatible Mind-sets*

Possibilities, Remote Students Can Think of

- *Uninterrupted Education System*
- *Learning with Technology*

Technological Advance,

- *Matter of Convenience*

- *Convenience of Time*
- *Location of Choice*
- *Low Living Cost*

Remote Students' Perceptions on Effective Learning Factors

Mixed Perceptions (Helpful and problematic)

- *Feedback*
- *Interaction*
- *Responsiveness of Teachers*

- *Improper Assessments*

Figure: Emergent Themes of this Study

Remote Students' Perceptions on Predicaments and Possibilities of Online Classes

(Chapter-4)

This chapter documents the responses; the researcher has received while interviewing the participants. It then presents a critical discussion and analysis of those responses through scholarly literature and the researcher's own point of views. In fact, the main objective of this study is to explore the effectiveness of online classes for the remote tertiary students of Bangladesh through the lenses of its barriers and opportunities, faced by them. In order to that, I, in the first place have segmented this particular chapter into two sections which will gradually answer the research questions following thematic approach. For instances; first section (4.1) will include the responses and analysis on the challenges and barriers, faced by the remote students and the second section (4.2) will present the opportunities and possibilities of online classes, remote students can think of. Finally, I will conclude this chapter by presenting an overall analysis of students' views on barriers and opportunities (4.3).

4.1 Challenges and Barriers, Faced by the Remote Students of Tertiary Level

The following section aims to give details on participants' views about the barriers they face attending online classes and assessments. It also includes the analysis of those responses through the lenses of scholarly literature and researcher's own point of views.

4.1.1 Continuous Load-shedding and Power Outage

The responses, received from the participants show that they suffer a lot attending online classes and assessments due to the regular load-shedding and sudden power cuts. In this regard, majority of them have shared that joining classes and attending exams on time often turn out to be difficult due to sudden power cuts. Additionally, Prova, Ritu, Mimu and Badhon have mentioned that in their locality power outage for hours, fire on transformer, power station and electric cables are the most common phenomena during any hazardous weather like storm, heavy rain or even in mild thunder-voices and mobile networks even do not work properly for the time being. For instance,

‘In my last semester...during my mid-term due to heavy rain and thunderstorm, fire broke out in a few electric wires and we did not have electricity for three days. Also, mobile data was not working at all and later on, I did not have charge on my phone and laptop. So, I could not attend any classes and failed to submit one assignment. Also, despite having proper reasons my marks had been deducted’ (DU BAD 20).

On this point, Mehrab and Farhin have added that, ‘the authority takes a lot of time to fix any problem and even if it is fixed after a long time, voltage remains very low which is not safe to use laptop.’ Here, Sanim has reported that, ‘we need to switch off the router and use mobile data and thus, costing gets doubled at the end(laugh)’.

Therefore, data shows that students of remote areas struggle to attend online classes, assessments and prepare their lessons due to load-shedding and power cuts. Same aspect has also been identified by Akram et al., (2020) and Kaur et al., (2020) that it is quite difficult for the developing countries, particularly the remote and rural areas of those countries to continue education through online platforms due to insufficient supply of electricity, load-shedding and continuous power cuts. Similarly, based on the responses and scholars’ views, I also think that continuous load-shedding, sudden power cut and low power of electric supply are interrupting the effective learning of remote tertiary students.

4.1.2 Poor Internet Connection

Responses from the participants reveal that they suffer a lot attending online classes due to have poor internet connection. On one hand, majority of them are less capable of taking broad-band connection at their home and even if they have broadband connection; it often remains poor. On the other hand, using mobile data for attending classes costs a lot and connection often remains low.

“I often get disconnected from the class and...sometimes cannot even join Zoom and Google meet. Not only that, I could not even...hear the feedback of my final presentation because of poor net connection and...important for final assignment” – stating this, Sanim has identified it as one of the major challenges for him. Along with him, the rest of the participants have also commented that internet speed of both broadband and mobile data often remains low in remote areas. Due to this, they not only suffer while attending classes or exams but also often struggle in preparing lessons and completing assignments.

In this case, Farhin, Pulok and Tuli have said that, due to the slow speed of broadband connection they cannot hear the lectures properly and miss out the lessons. Tuli has further added that, "...even if the teachers upload the lectures, it becomes difficult to understand the concepts of Maths and Physics by only listening to the recorded lectures...no way to ask the questions for the time being as well". Additionally, majority of the participants have shared a common view that they face problems while submitting the assignment through Google form or email. For example, Mimi has said that,

"During submission it shows like 'you are not a robot'...I failed several times to submit...and some of my faculties were not ready to accept the circumstances and cut my marks...affected my grade" (DU MIM 25).

Moreover, Orin has reported that, "umm...it is not like that...I always have very slow internet connection but...often cannot connect zoom and missed classes. Also, I took one of my teacher's appointments but could not even connect Zoom on that day'.

Apart from these, data also shows that the rate of using broad-band connection is higher among the students of private universities than those of public universities. It is because, as some of the students from public university including Torab, Jenny, Porosh, Supti and Timur have mentioned two things; on one hand, their financial condition does not support them to have broad-band connection and on the other hand, since their faculties usually do not take classes and there is no formal assessment, so they try to attend the classes using mobile data. Unfortunately, as Supti has stated,

"our faculties usually do not take classes and even if they take classes one or two days in a month, I cannot even attend it properly due to poor internet connection of mobile data as I need to use Hotspot to connect to my laptop. Also, my mobile is not well enough to conduct classes and take notes" (DU SUP 25)

Therefore, it is evident that the students of remote areas suffer a lot due to the poor internet connection. In fact, the success of online education is highly dependent on the sufficient supplies of internet availability and thus, lack of sufficient internet connection is found to be a major barrier in remote and rural areas to continue online education and gain an effective learning out of it (Muthuprasad et al., 2020). Similarly, in Bangladesh, online classes are getting affected badly due to no or less access to the internet (Dutta & Smita, 2020; Mamun et al., 2020). As a final point, since online education is solely dependent on adequate internet connection, so it is apparent that students of remote areas will suffer due to the poor internet connection.

4.1.3 Unavailability of Resources

Access to suitable technological resources is one of the most significant prerequisites of effective and successful online education (Adedoyin et al., 2020). Unfortunately, responses from participants present that they have lack of sufficient resources to continue online education smoothly such as, suitable electronic devices, technological knowledge, technicians and so on. Therefore, documenting the responses, I have noted three aspects of resources, not sufficiently available to the students yet very essential to continue online learning. For example; Suitable technologies, Sufficient service centres and technicians and Libraries.

4.1.3.1: Suitable Technologies

The responses received from the students show that a large number of students face difficulty in continuing online learning due to suitable technologies. Also, many of them including Torab, Porosh, Jenny, Timur, Mehrab, Priya, Pulok and Noshin have specified that neither they have suitable technologies nor they can afford it right now. As a result, they (public universities) do not attend classes and those from private universities really struggle a lot to attend classes and assessment which in turn hamper their grades. For instance; as Torab and Noshin have stated that,

“I do not have computer and my mobile also gets hanged several times...cannot afford mobile phone or laptop...do not attend class” (DU TOR 18)

“I belong to a middle-class family...bought a second-hand laptop...disturbs a lot for continuous use...it is not possible in any ways to buy a laptop and also, using mobile phone for attending class and preparing assignments is way too difficult for me and I get frustrated in every single time” (DU NOS 24)

In this case, a few have mentioned that a laptop or computer with sufficient internet connection is kind of compulsory for learning through online platforms. It is because, as Jenny has mentioned, “There are some tasks which are really difficult to complete without a computer like making presentation slides, long assignments etc.” Besides, Priya has added that, “it is already hard to read through a PDF file and it becomes really tough to read from a mobile phone...do not have sufficient space to save the files”.

4.1.3.2: Lack of Technicians and Service Centers:

Majority of the participants have pointed out that they do not have any well service center and proficient technicians to fix technical errors. On this point, Ritu has said that,

“...there is no good technicians or service centers...so it becomes very difficult to fix any problem...like when online classes first started, my PC got hanged...almost umm... three weeks to solve this...used mobile phone which was so so so difficult for me...I even wrote the whole assignment on my copy, then took picture and asked my friend to type assignment for me” (DU RIT 24).

Similarly, Arshi, Ayon and some others have told that broadband connection providers are comparatively new in their locality; particularly they have come to focus after pandemic. In order to that, they take a lot of time to fix any difficulties and sometimes provide wrong information. Ayon has further added that, “once I had a problem in my adapter...changed it according to their suggested ways and you know... after umm...two days my adapter got blasted”. Also, “...technicians and service centres mostly send the devices to the company showroom of Dhaka but umm...during lockdown it was not even possible...I had to miss my final exam...luckily my course teacher understood my situation” (DU MUM 18).

On a different note, a few students have claimed that they do not get good health facilities in their area as proficient doctors from Dhaka or main Sadar do not regularly come due to pandemic. In this situation, despite suffering from severe eye sight problems and headache for continuous use of mobile and laptop, they could not get proper treatment. Therefore, it was difficult for them to continue classes for many days.

4.1.3.3: Unavailability of Libraries

Some of the students including Prova, Orin, Priti, Sanim, Arshi and Mehrab have shared a common view that they face difficulty in reading PDF files but books, suggested for their courses are not available in their local libraries. In this case, they all have mentioned that during face-to-face classroom, they either went to University Library or Nilkhet to buy books. They have further added that they along with their friends bought one or two copies of a book together and made photocopy of the required chapters. Additionally, Priti has stated that,

“I used to print out the required chapters and shared files from University lab...as...cannot mark and read from PDF...cannot always afford to buy books...” (DU PRI 22).

On this point, Mehrab has mentioned that, “...during lockdown the photocopy shop was not opened in our area...did not go out, so passed a very tough time during the first two online semesters”. Additionally, Arshi has added that, “I ordered one book online but...got after two

and half weeks...already had to submit two graded assignments, designed on that book”. Moreover, Shumi has said that, “I really struggle to understand mathematical concepts from PDF but...not afford to buy from online pages...impacting badly in my study”. On a different note, some of the participants have shared that reading from PDF files for hours has an adverse impact on their eyesight and they often feel a severe headache.

Therefore, from the above responses (on three aspects as mentioned earlier) it is evident that unavailability of suitable and required resources has adverse impacts on effective learning for the students of remote areas. Similarly, it is explored by Dutta and Smita (2020) that unavailability of suitable electronic devices and lack of enough infrastructures are impacting the online teaching-learning contexts of the university students of Bangladesh. In particular, the residents of remote areas usually have less or hardly sufficient access to built environment and resources like health, education and modern technology (Ardener et al., 2012) which in turn create obstacles in online education for the students of remote areas (Ramji & Sultana, 2020). In summary, considering the responses and scholars’ point of views, the researcher also reaches to the conclusion that unavailability of adequate suitable resources is hampering the learning of remote university students of Bangladesh.

4.1.4 Financial crisis, leading to some other difficulties

A large number of participants have expressed that their economic condition is not supporting them to buy sufficient equipment for attending online classes, particularly smartphones, laptop and internet connection. As a result of it, a large number of students, mostly from public universities do not attend classes even though they usually have very few classes in a month. For instance; as Timur and Prova has said that,

“...not even buy a better phone...not afford mobile data...do not attend classes...sometimes called friends but it also costs a lot...stopped doing it” (DU TIM 16)

“...two of my close friends do not even have smart phones though...donated money but not sufficient...impossible for them to join class” (DU PRO 18)

Besides, a common reply, given by Timur, Propa, Shumi, Zarin and Eva that this pandemic has threatened their economic condition to a great extent as some of their parents either lost their jobs or faced severe loss in their business. In this situation as stated by Eva, “I have dropped this semester as I could not pay the tuition fees and my family cannot afford internet bill.” Moreover,

“I used to give tuition and do a part time job...bear my own expenses and send money to my family but now everything has been stopped...exam will take place once university is opened...cannot do any class, take notes...just getting mentally sick” (DU SHU 20).

“I used to work in a restaurant and bear my expenses...not possible to find job in this area...become the burden of my family...cannot concentrate on study” (DU EVA 26)

Additionally, a few have said that since it is almost impossible for them to afford broadband connection and mobile data on a regular basis. In order to that, they used to go to their neighbour at the beginning but after a few days, they noticed them quite indifferent and unwilling to share their internet and thus, they stopped going there with a sense of humiliation. Hence, the overall responses present that economic instability is not only hampering their learning, but also lessening their efforts of learning.

However, it is explored in an analysis of social class that economic instability often limits the path of taking proper education (Bang, 2013). Similarly, examining the education system of Covid-19, scholars (Adnan & Anwar, 2020; Ramji & Shanta, 2020) have found it challenging for countries with economic instability to set a complete online based education system even though the initiative is undoubtedly praiseworthy. As a reason of this difficulty, Mamun et al., (2020) by taking Bangladeshi online learning scenario into context have identified that online learning requires suitable technologies with high-speed internet connection; however, people of developing countries like Bangladesh, Pakistan, India and so on cannot afford it due to financial disabilities and thus, getting expected benefits out of it remains unfeasible. In conclusion, from the above discussion and scholars' findings I also feel that due to the financial crisis, the remote students cannot afford proper education through online platforms which eventually lessens the possibility of effective learning.

4.1.5 Pressure on Using Novel Technologies

Responses from the students show that lack of technological knowledge is creating an immense pressure on the students which in turn obstruct their path of effective learning through online platform. Data further shows that two groups of remote students are suffering most on this issue: Beginners (fresher or 2nd/3rd/4th semesters) and Introverts who hesitate to ask for help despite being quite unable to solve any technological error. It is because, as participants including Orin, Tuli, Prova, Mimu, Zaba have shared that they are not technologically sound and are not familiar with the novel technological tools, used for online learning. Also, most of them do not have anyone at their house to assist them in technological

affairs. As a result, they always have a fear that how they will sort any technological error out if anything goes wrong and thus, get nervous while using laptop and computer. For example; Orin and Zeba have stated that,

“...born and brought up in extremely remote area...and...umm...don’t know much about searching in Google and you-tube...no one in my family have any idea about it...I do not know many students...never heard the name of Zoom, Google classroom...if saw any different thing... get nervous and feel like what will I do now and ...cried sometimes” (DU ORI 23)

“I downloaded the question paper attached with answer sheet but could not find where it was saved...I got so nervous that I started crying...then I called my friend but could not even get what he was trying to say...out of fear could not even exploring much...I could not finish exam on time” (DU ZEB 22)

Moreover, Mimu, Tuli and two more have said that they have started using laptop, smart phones after being admitted into university and their typing speed is very slow which is affecting their grades. Besides, “I still fail to understand the Mute and Unmute option in Zoom and Google meet”- stating this, Tuli has pointed out that many of them just know the basic things of a computer which is not enough to continue learning only through online platform.

Therefore, the overall responses indicate that the students of remote areas are suffering in conducting online classes and assessments due to lack of technical knowledge. On this matter, considering the relation between technological knowledge and online education, scholars (Johnson, 2020; Verma et al., 2020; Park, 2009) emphasize on sufficient and proper technical knowledge and training on using suitable learning tools for acquiring effective online teaching-learning. Verma et al., (2020), taking the effects of online learning on teachers and students into account, further have added that lack of technological knowledge emerges a subconscious fear among learners and teachers which eventually obstruct the path of effective learning. Similarly, based on the responses, the researcher also hypothesizes that since sufficient technological knowledge is required to continue online learning effectively and remote students have lack of it, so it is quite certain that they tend to suffer learning effectively through online platform. Thus, it is evident that inadequacy of technical knowledge emerges fear among students which in turn affects negatively on their learning.

4.1.6 Adverse Family Environment

Online education is thought to be an efficient way of balancing the professional and academic life with personal life (Beard, 2004). Conversely, responses from the participants show that they are struggling more than usual in balancing their family and academic life due to the online mode of education. It is because, as a large number of the students except Neeha, Ayon, Farhin, Propa and three others have shared that their family members (in most cases) are not understanding and prepared enough to realize the actual pressure of surviving with this new mode of education which in turn are affecting their learning. They have further added that, initially it was fine and considerably attractive to continue study staying with family but gradually it turns out to be quite troublesome. In particular, the participants have pointed out several family issues such as, accommodation problem, sudden change of learning environment, mentality and so on for which their learning gets affected badly. Hence, based on the responses, the researcher has further come up with two major domestic affairs, affecting the learning of remote students: Unfavorable Surroundings and Incompatible Mind-sets.

4.1.6.1: Unfavorable Surroundings

Data from participants show that their surrounding is not conducive enough for effective learning. To begin with, due to shortage of space, there is always noise around them which breaks their concentration during class and exams. In this case, some of them have figured out that the situation gets worse while any guest arrives at their house. For example; as Sanim, Mimu and Mumu stated,

“...I asked a question to my faculty...while replying...my nephew was playing and all members were laughing loudly...I could not hear anything properly...my teacher also felt a bit irritated” (DU SAN 18)

“umm...during my final exam, my aunty with her family came...during class they suddenly came to the room...started gossiping, offered foods...while studying for exam or like preparing assignment...I heard a lot of noise...could not work at night or in the morning properly...needed to share my room” (DU MIM 16).

“...sometimes teachers ask to turn on video...suddenly come to room and start talking...both teacher and me feel embarrassed...” (DU MUM 19).

Moreover, Ritu, Torab, Priti, Tuli, Badhon and Mehrab have pointed out that they got used to a different lifestyle in the hostel and thus, adjusting with family rules for a long time seems difficult. On this matter, Tuli has said that, “at home, everything needs to be done on time like breakfast, dinner etc. etc. etc. and umm...like...no matter how important class or

assignment or chapter I am studying...I have to do things on time". With the same tone Priti has added that, "...if not do according to their time...get scolded...having mental pressure...affecting study".

Additionally, Mehrab, Badhon and Ritu have said that they need to look after several family affairs and take more responsibilities. For instance, "my parents were tested Corona positive and...had to manage everything... passed a really tough time...no other way except dropping the semester...lost money and months" (DU MEH 18).

4.1.6.2 Incompatible Mind-sets

"...like I studied till late night and woke up late...but my parents think that I used mobile phone the whole night"- stating this, Zarin has claimed that their parents and family members do not understand the actual pressure of online classes rather they think that they use phone and laptop with the name of class and assignments. Along with her, a large number of students have reported that since they are attending class and exams from home, so their family members consider it very easy going. For example,

"My parents think and keep saying, how much can one learn from online classes? It is just a way of private universities making profit. We can pass just attending the exams, without studying. And, we can copy everything on exams. So, attending guests seems more important to them than attending class and studying" (DU PRI 22).

With the same tone, Mimi has added that, "and...if I cannot entertain them according to their expectations, then they call me antisocial". On the other hand, Tuli has expressed that,

"it's not like they are not supportive. Actually, they fail to understand sometimes...like I am doing class or studying and, on that moment, anything exciting happened or someone made any dishes...so, they keep calling me again, again and again and if I denied to go, they instantly get upset and pinched as well...get irritated and lose my concentration".

In addition to this, there is a pressure of marriage on female students which make them psychologically disturbed. In this regard, Shumi and Noshin have said that since their family members are not familiar with this new mode of learning and cannot see any visible changes except the continuous use of mobile and laptop, so, it creates no value to them. Therefore, getting their married off is turned out to a better solution to them.

Due to these mind-sets, a few participants are suffering from mental health issues and taking counselling. For instance, Noshin has expressed that, "...having suicidal tendency and if I did not leave my hostel seat, I would go back there".

In fact, a favourable family environment works best for having proper education (Bang, 2013) but the students of remote areas are struggling to continue classes through online platform due to several family issues. In summary, based on the participants' opinions and examples, I have noted that their learning gets affected mostly in two ways: they(S) are not getting a sound learning environment due to lack of sufficient space and again, their family members are not ready to accept their point of views and eventually, fail to understand the consistency between current covid-19 situation and the necessity of attending online classes.

4.2 Scenario of Online Classes: Possibilities and Opportunities

Despite experiencing a large number of barriers, remote tertiary students can still think of a fair number of opportunities and possibilities of online classes. Therefore, along with participants' views on opportunities and possibilities, this particular section contains a scholarly analysis of those responses.

4.2.1 Uninterrupted Education System

A complete shift of the education system to online mode is comparatively a new and challenging concept to the remote students yet; all of them are gradually appreciating it due to its potential of ensuring an uninterrupted education system. To begin with, participants, particularly from the students of private universities have agreed on the point that there has been no study gap due to online classes. On the other hand, though there are fewer classes, conducted in public universities, students are ensured that final exams will take place within a few days once the university is open. In particular, they all have expressed that since they all are getting used to this online mode of education, so there is a high chance of the education system being continued even during any political or social unrest, pandemic and natural calamities in future.

On this point, Farhin, Badhon, Arshi, Mimi, Ritu, Neeha and Ayon have clearly stated that they are indeed passing through a hard time in continuing academic activities through online platform but, due to online classes they do not need to suffer from session jot. It eventually carries a lot of positivity among them. For example: as Ayon and Torab have said that,

“if there were no classes, then we would face a great loss. We needed to sit idly and it took a lot of time to complete our study”. (DU AYO 28)

“We do not have many classes online but we could collect notes, shared on Facebook group and at least can take preparation...our final exam will be held just after the

university opens...there will be a little study gap but at least not excessive” (DU TOR 26)

Moreover, assuming the near future, the participants are hopeful to the fact that, the way online education is spreading and being accepted, no social, national or political unrest further can interrupt the education system. For instance, as Mimou has expressed that, “natural calamities, hortal, strike etc...very common in our country for which our institutions get closed but after this pandemic I do not think, this interruption will even occur...attend class, exam online”.

In particular, while Governments have issued ‘Stay-at-Home’ directives during this global pandemic, there education system remains mostly uninterrupted due to online classes (Adedoyin et al., 2020; Singh et al., 2020). Similarly, taking Bangladeshi Covid-19 education scenario into account, Sultana and Khan (2019) have claimed that it was indeed not easy for a developing and technologically backward country to introduce online education, still, it is lessening university students’ study gap. Therefore, based on the participants’ responses and scholars’ point of views the researcher also feels that this new mode of instruction has indeed become the key component of an uninterrupted education system for the time being. I also hypothesize that since the very common social or political unrest closes the academic activities in our countries very often and university students suffer most in this situation, so online classes might work best to overcome the occurrence. Thus, it is evident that despite having a few drawbacks, online classes assist to continue academic activities.

4.2.2 Learning with Technology

Advanced technology facilitates online education and again, online education makes the learners and teachers technologically advanced (Sarker et al., 2019). Unfortunately, the students of remote areas have lack of suitable technologies and sufficient technological knowledge, yet they all have agreed on the issue that online classes are making them technologically advanced. They also hope for a combined education system in near future. Therefore, based on the responses, I have identified two aspects: online classes are making remote students technologically advanced and again, are heading a path of combined (physical and online) education.

4.2.2.1: Technological Advance, Heading to the Path of Combined Education

Despite having fear of using technologies, all of them have reported, the compulsory use of technology is increasing their technological knowledge and lessening their fear everyday.

They have also addressed that the spread and gradual acceptance of online learning throughout the country will lead to the path of combined education in near future.

To begin with, considering technological knowledge as one of the most important components to cope up with modern days' education, Arshi has said, "I did not know more functions of computer and internet before online classes but...not understand anything, I can search immediately on Google and learn from you-tube...not get nervous...try to solve by own". Evan further has added that, "...our teachers are also getting skilled". Later on, all of them have shared that they are expecting a combination of physical and online classes after the pandemic. It is because, as Mehrab has mentioned that,

"now almost all of us irrespective of school, college and universities get used to this mode of instruction, so online classes will not be a matter of fear or obstacle in the near future. Teachers can update materials...can take extra or make-up classes online. Also, a part of assessment can be online based...Universities can launch completely online based courses" (DU MEH 29).

On a different note, Ayon, Porosh, Prova and Pulok have pointed out that broad-band connection providers have increased in a great number which was quite uncertain in their locality.

Therefore, data of this study shows that students along with their areas are being technologically upgraded due to the continuity of online classes which in turn paving the path of combined education in our country. In this regard, Johnson (2020) has also explored that online classes make students and teachers technologically advanced in case of browsing, emailing and having online discussion boards which are very important to cope up with modern teaching-learning contexts. Finally, the researcher also hypothesizes that though the sudden outbreak of coronavirus has negative impacts in all aspects of human life, still it has triggered students and teachers exploring many new things in the field of education, particularly academia with technology.

4.2.3: Matter of Convenience:

Online classes provide flexibility in time, space and expenses to learners and teachers (Park, 2009; Wavle & Ozogul, 2019). Similarly, majority of the participants of this study have reported that despite creating an immense pressure on them, online classes facilitate learning by providing flexibility of time, location of choice and by lowering their living costs.

4.2.3.1: Convenience of Time

Zarin, Sanim, Ritu, Badhon and many more have addressed that since they can attend classes and exams from home, so, they do not need to leave for classes or exams early. As a result, they neither face any traffic jam nor get tired, rather can manage time properly for study and domestic affairs. Additionally, Sanim, Ayon, Eva and Mimi have specified that they often had to attend back to back classes and exams from morning till afternoon where traffic jam wasted their valuable hours. Later on, they got tired and could not concentrate on the study properly which impacted on their grade. However, they do not face these issues in online classes.

4.2.3.2: Location of Choice

While talking about the advantages, all of them have shared that they can attend classes and exams from anywhere in the country. In this regard, Farhin, Neeha and Arshi have mentioned that online classes noticeably lessen the chances of our missing out on lessons and attending exams. For example, as Neeha and Mumu have expressed that,

“My elder sister got married on January and if there were physical classes, I would have missed classes and quizzes but I could do everything properly” (DU NEE 28)

“...during last semester final, suddenly my grandmother met a Brain Stroke... and we had to go there immediately ...but still could attend classes and exams only because of online mode of instruction” (DU BAD 28)

In addition to this, Zaba has stated, “my mother is not feeling well for the last few days but...due to online classes, along with taking care of mother and household chores...can attend classes timely”. Therefore, it can be noted that since remote students can attend class and exams from anywhere due to online mode of instruction, so there is less possibility of them missing out on lessons or exams.

4.2.3.3: Low Living Cost

Majority of the participants except Supti, Eva and Priti have claimed that online classes have comparatively lowered their living cost. It is because, as majority of them have mentioned that since they are staying at their home leaving the hostel, so they do not need to pay extra for living and transport. Besides, due to the online mode of instruction, they do not need to buy books or any materials. In this regard, Mumu, as a student of the Architecture department has said that, “usually we need to buy lots of materials to prepare projects but showing the concept online through MS word, powerpoint etc. is enough for the time being...saves a lot of money”. On the other hand, only Supti, Eva and Priti have claimed that their costing gets

increased as they have not left their seat in the hostel and thus, they need to bear the expenses of hostel as well.

Therefore, from the above responses, I think that along with creating a large number of barriers for remote students in attending classes; it makes their learning a bit easier by providing flexibility of time and location of choice which in turn saves their money.

4.3 Researcher's Views on Remote Students' Challenges and Possibilities

Taking Bangladeshi Covid-19 scenario into account, I consider online classes as a well contemporary thought for an uninterrupted education system. Later on, considering students' responses and scholars' point of views, I, at the first place, understand that remote students face a lot of challenges attending online classes. Further I realize that some of the factors, affecting their learning are quite interrelated. First of all, due to their financial instability, they cannot afford suitable technologies and internet connection where both of these are considered as the most essential components for effective online learning. Besides, due to lack of these materials, their technological knowledge and skills have never been much improved which impact badly on their learning. Moreover, due to lack of sufficient supply of electricity, they often need to have a backup internet connection for uninterrupted class and assessments which again costs a lot, way too unaffordable to them. Finally, all these factors might have a negative impact on family affairs and all together creates an unfavourable learning environment which eventually hampers their effective learning.

Apart from these, the researcher also hypothesizes that during pandemic when everyone is instructed to stay indoors and universities get closed down, at this moment online classes have become the major component of a continuous education system. Additionally, making technologically advanced everyday and providing flexibility of time and location, it eventually saves remote students from session jam and extra costing. Finally, based on students' responses, it can be noted that online classes would be more effective once the barriers will be minimized.

Chapter 5

Remote Students' Perceptions on Effective Learning Factors

Effective learning through online platforms significantly relies on proper feedback, assessment, the responsiveness of teachers and interaction between teachers and students (McNeil, 2014; Gamage et al., 2014). Since this study has a particular focus on the effectiveness of learning through online classes, so, it was essential to document remote students' views on these factors. Moreover, perceptions regarding these factors vary in persons (McNeil, 2014; Gamage et al., 2014; Sarwar et al., 2020). Therefore, based on the responses and scholarly literature, the researcher, in this chapter will shed light on the effectiveness of online classes through the lenses of feedback, interaction, assessments and responsiveness of teachers.

5.1: Feedback

Mixed perceptions have been recorded regarding the effectiveness of feedback in online classes. To begin with, a large number of students have claimed that despite spending a significant amount of time to complete any task or activity, they are not receiving feedback properly. As a result of this irregular feedback, their next assignments and sometimes their final grades get affected. Besides, power cuts and slow speed of internet connection have always been a problem in case of receiving feedback. In this regard, Ayon has stated,

“during physical classes, if we took any exam or submitted assignment; let's say Sunday of this week, then we would get our grades with feedback within next Sunday...but now we often do not get it timely...last semester we got feedback of exams and assignments from two courses just before the final...till then all other submissions had already been done and we got less chance to rectify our mistakes. Also, there had been an immense pressure on us as we had to make a lot of changes based on the feedback”. (DU AYO 26)

Farhin further has added that “sometimes, it is hard to understand the feedback but we do not have sufficient time to ask for clarification...I had to change my entire interview schedule for the thesis as I did not get feedback on interview questions timely...got a reply almost after 10-12 days”.

Additionally, Arshi, Eva, Zeba, Pulok and Badhon have reported that during physical classes they could go to teachers and attend consultation hours frequently for clarification which is quite impossible in online classes. It is because, as Zaba and Pulok have commented that they hesitate to email and often it becomes difficult to express the problems through emails. On the other hand, Mehrab, Tuli, Mumu, and Mimmu find it helpful as they think online classes facilitate talking to teachers one-to-one with less hesitation through emails and Facebook posts. Considering the overall situation, Priti has expressed that,

“...though teachers use breakout rooms to deliver feedback, often it turns out to be a generalized one but in physical classes, they used to give verbal and written feedback individually...also some of us cannot attend the whole class due to internet issue and all...I know that our teachers are also passing through a hard time as they need to check lots of assignments at a single time... whatever it is; at the end of the day, the students have to suffer.” (DU PRI 24)

Moreover, Sanim, Neeha, Noshin, Eva, Orin, Priya, Priti and Zarin have shared that some of their course teachers often encourage peer-to-peer feedback which does not seem effective to them (except Noshin and Eva) as they feel shy and hesitate to make comments. Besides, there are some students whom they have never met nor have a good relationship and thus, “it is difficult to make comments on someone’s activity whom I do not know. Also, I along with my friends keep wondering what others will think if we indicate their mistakes” (DU ZAR 18). Orin has further added, “our concepts are not always clear enough to make comments on others’ tasks...net buffering during receiving feedback...not hear clearly”. On the other hand, Noshin and Eva think that the use of peer-to-peer feedback in online classes makes them proficient in not only delivering feedback but also makes them introduced to various technological tools.

Therefore, the data of this study shows that students have mixed perceptions regarding the effectiveness of feedback in online classes. Similarly, previous studies have also addressed that compared to physical classes, the effectiveness of feedback in online classes varies more in students and their teaching-learning contexts (Boud & Molloy, 2013; Sharma et al., 2021). Besides, based on the responses and scholars’ points of view the researcher hypothesizes that; time constraints and the new mode of instruction often limit the continuous and spontaneous feedback in online classes. Also, infrastructural inadequacy;

unfamiliarity with technological tools, an insufficient supply of electricity, and internet connection also has an impact on students in case of receiving feedback from teachers.

5.2: Interaction

Increasing learners' communication skills, interaction helps the teaching and learning process run smoothly while lack of it might have a negative impact on learning (Hanum, 2017; Hwang, 2013). Therefore, considering scholars' point of views and responses of the participants, the researcher has addressed two different realities: on one hand, a large number of students find it challenging to interact with teachers and other students in online classes which in turn make their lessons incomprehensible. On the other hand, a few students find online classes much more interactive as they get the opportunity to interact with their teachers ignoring their nervousness which in turn improves their communication skills.

To begin with, a large number of students including Jenny, Tuli, Mimi and eighteen more have addressed that due to the slow internet speed of the internet and power cuts they sometimes cannot join classes. Additionally, since attending classes is not made mandatory for some courses and teachers are instructed to upload the class lectures, so they sometimes do not join classes thinking that they will listen to the lectures later on. As a result of it, on one hand, they fail to interact with teachers and on the other hand, while listening, several concepts remain incomprehensible to them. Besides, "our syllabus gets covered but our knowledge is not increasing" (DU ZEB 18). In addition to this, Badhon has stated,

"during physical classes, if we did not understand any concepts or we needed any suggestions, we could frequently consult our seniors and friends but it is difficult in online classes...like I am discussing but in the meantime, net starts buffering..." (DU BAD 20)

Also,

"...during physical classes teachers, by noticing our facial expression could realize that we did not understand the particular concept clearly...but in online classes, we usually turn our video camera off...Also, in one class I explained my query three times...could not get properly due to poor net connection...many of us often lose our concentration" (DU ARS 20)

On the other hand, few students including Shumi, Torab, Mimu, Arshi, Neeha and two others have expressed that, despite having problems in a few areas like the internet, electricity and so on, their communication skills have been developed. It is because, "...I along with some of my friends used to get nervous while giving presentations or answering questions in physical classes...now can give presentations and ask questions by turning off our video, so...less nervous...presentation skill really gets improved" (DU FAR 20). Besides, "...we can interact with anyone easily through messenger, whatsapp, emails...in physical classes I only used to talk to those whom I know personally or like...my friends" (DU PRI 20).

On this matter, scholars (Sarwar et al., 2020; Hwang, 2013) have also explored that a number of students feel comfortable interacting with teachers and other students in face-to-face classroom while some others find online classes more flexible and informal which, by making them less inhibited and improving their communication skills prepare an effective learning context. Similarly, data of this study have recorded similar aspects on the effectiveness of interaction in online classes. Finally, by analysing the responses, I hypothesize that a large number of students indeed have problems interacting in online classes due to poor net connection, power cuts, adverse family affairs and so on but there are a few students who are suffering due to their indifferent nature. Additionally, students from remote areas are usually used to the traditional way of teacher centred classroom from the beginning which might have an impact on their university life as well; however, online classes facilitate them interacting and developing their communication skills.

5.3: Assessment

"...we are getting grades and passing our courses, but we are not assessed properly"- stating this, Priya has claimed that no matter how innovative ways or tools like alternative assessments; the authority chooses for them to make exams authentic, almost all of the students use unethical means. With the same tone, the rest of the participants have reported that no matter how hard the questions are or how bad their preparations for the exams, they can get at least a minimum or often good grades by using unethical means. For example; Ritu and Neeha have stated,

"...we use WhatsApp and messenger group to consult during exams (laugh)" (DU RIT 18)

“...no matter how proficient a student is, everyone uses unethical means...we keep notes with us while taking exams...also we can search on net...so assessments except assignments are not proper” (DU NEE 20)

On top of that, “...when we can get good grades with less efforts then obviously we will read less...eventually impact on our learning...we are not gaining proper knowledge which might impact on our later life” (DU BAD 18)

In addition to this, Arshi, Mehrab, Sanim and Mimi have added that some of their teachers instruct them to keep their video camera on; however, since there are a large number of students in each course, so it is hardly possible to identify anyone using unethical means through Zoom or any other platforms. Also, “often we keep notes and mobile on our lap. Sometimes, we cannot keep our video on due to slow internet connection, power cuts and lack of webcam or sometimes we make excuses (laugh)” (DU SAN 20).

In this regard, scholars (Bound & Molloy, 2013; Persaud, 2019) have commented that though online classes introduce a number of alternative assessment tools and try to ensure authenticity, validity and practicality; at the end it often fails to ensure these aspects. Similarly, data of this study show that despite trying to ensure authenticity, the participants use unethical means while taking exams. In summary, I think that though students get familiar with alternative assessment tools which are very rare in our country; it is difficult to keep the students away from using unethical means in online classes. As a result of it, they are passing the courses but cannot gain proper content knowledge.

5.4: The Responsiveness of Teacher

“...All credits go to my course teachers to make our learning easier and fruitful in this hard time.”- stated by Eva. On the other hand, Propa has stated, “...sadly, most of our teachers consider our problems as our excuses instead understanding our situation. they are not even ready to accept that everyone does not make excuses; rather we might have problems in family, net connection, electricity etc. etc...” In this regard, Mehrab has expressed, “...I could not submit my exam paper on time due to sudden power cuts. I tried to use mobile data but the hotspot was not working...my course instructor did not take my script, rather took my exam again with another question paper...” Besides, “...not give sufficient time...they do not

understand that our typing speed might slow...though there are some exceptions” (DU PRI 26). Moreover, Ayon and Badhon have added that,

“...there are some teachers who do not upload class lectures thinking that students will not join classes if they upload lectures. As a result, many contents remain incomprehensible; yet we have to take exams or assignments on these contents” (DU AYO 20)

“...my elder brother and father were Corona positive...My laptop got hanged...I requested to extend two/three days for my assignment submission and upload the lectures...he (T) did not listen to my pleas...” (DU BAD 24)

In addition to this, Zarin, Prova, Neeha and Priti have mentioned that, sometimes they are instructed to turn their video or audio on but there is noise around them. In order to that, a few teachers get angry assuming that they are doing it intentionally while they have a lack of sufficient space. On the other hand, Pulok has pointed out that, “...it is true that many of us give false excuses...teachers at the beginning were really considerate...they still try their best to make lessons comprehensible but there are few concepts which are hardly possible to teach online”. For example, as expressed by Orin that,

“...I was not getting a concept clearly but my final assignment was based on this...she (T) at first set a meeting at 4PM but my internet was not working properly...she again set that meeting at 10PM...did not refuse or get angry...really helpful” (DU ORI 27)

Therefore, it is evident from data that students have mixed experiences regarding the responsiveness of teachers in online classes. In fact, teachers play a significant role to ensure quality education both in physical and online classroom; in particular, the responsiveness of teachers makes online learning convenient and effective for students (Nambiar, 2020; Gamage et al., 2014). Conversely, since this is comparatively a novel way of instruction, so teachers also find it difficult to modify course materials, assessment process and engage students in class (Kebritchi et al., 2017). As a matter of fact, the researcher feels that to make online classes effective for the remote students, both teachers and students need to be a bit co-operative to each other. Also, teachers need to be a little patient to understand the problems, remote students might face attending online classes. Hence, instead assuming they (T) might try to investigate the actual truth; for example, asking his/her other course

instructors about his/her activities for the time being. In this way, I think the online classes might be made effective for remote students.

Chapter 6

Conclusion

This chapter presents an overview of the entire study. It further discusses a few recommendations for those who are involved in designing online classes for the tertiary students and are getting affected due to the implementation of online classes.

Covid-19 pandemic has successfully forced global shutdown of several activities including health, education, economy and so on and created great uncertainties in the education sector of Bangladesh. On-campus classes at universities have been closed since Mid-March 2020 as per the ‘Stay-at-home’ directives of our Government. Later on, both public and private universities are instructed to conduct classes online by Ministry of Education and UGC (University Grant Commission) in order to continue education system. Unfortunately, it has been noticed that students of tertiary level are suffering due to lack of technological infrastructure, high speed internet connection, financial crisis and so on (Ramji & Sultana, 2020; Dutta, 2020). In fact, there has been always a fear that students with disadvantaged background might be left behind due to this new mode of instruction (Shama & Iqbal, 2020). Based on this fear and emergent education system, the researcher thought of documenting remote tertiary students’ perceptions on online classes. It is because; on one hand, a large number of students have to conduct classes staying at their home, situated in remote areas while the socio-economic and technological infrastructure are exceptionally miserable there and on the other hand, online class has become the major component to continue education system during this pandemic. Therefore, the researcher, by adapting qualitative method with a particular focus on the perceptions of remote students regarding attending online classes has attempted to explore the effectiveness of online classes through the lenses of its challenges and opportunities, faced by them.

Consequently, considering the responses and scholars' point of views the researcher in the first place has explored that online classes, by reducing session jams and by providing convince of time and place has turned out to be a useful component for an uninterrupted continuous education system during pandemic. Additionally, the compulsory use of technology is making the remote students proficient in using technological tools and heading a path of combined education in near future. On the other hand, remote students find it difficult to continue online classes due to sudden power cuts, continuous load-shedding, slow

speed of internet, less or no access to internet, lack of sufficient space, suitable technological devices, knowledge and service centres. On top of that, a large number of students suffer due to their economic instability which eventually arises some other difficulties such as; mental stress, incapability of paying tuition fees, internet bills, buying suitable technologies and humiliation from family members. Apart from these, remote students have different perceptions regarding the effective learning factors such as; feedback, interaction, assessment and responsiveness of teachers. It is because; the effectiveness of these factors varies in terms of students' teaching-learning contexts. In order to that, a few students find it helpful and convenient to interact and receive feedback in online classes while some others find face-to-face classes as an effective learning context even though all of the participants have found online assessments improper.

Therefore, it can be noted that shifting to online classes from traditional setting is undoubtedly a well contemporary thought for a developing country like Bangladesh and online classes can be effective for the remote students if the barriers, as mentioned by them can be minimized. In addition to this, the effectiveness of online classes vary not only in terms of students but also in terms of public and private universities as the rate of conducting online classes and assessments are higher in private universities than public universities. However, since Covid-19 is showing no signs of abatement and we have no idea when the students can return to their classroom, so, we can think of some possible solutions to minimize the problems in order to maintain continuity in Bangladeshi Tertiary education. Therefore, I have come up with a few recommendations which are discussed below:

- Ministry of Education and the respected university authority, including course teachers should assess remote students' financial condition before designing curriculum and course materials. They should consider whether they will be able to afford necessary equipment such as; suitable technologies (smartphones, laptop, internet connection) to continue learning. In this regard, university authority by selecting representatives from multiple areas can record students' feelings, experiences and problems with the purpose of taking these aspects into consideration. In addition to this, they should develop a fair and efficient way of assessing students.
- The course teachers need to be advised to provide academic materials in the most convenient manner. In addition to this, they should be as responsive as possible and might be a bit considerate about the sufferings of remote students.

- Vulnerable families should be given financial support so that they can arrange suitable equipment for maintaining continuity in education.
- Service centres (Technological, libraries with sufficient collections) should be made available in remote areas.
- To reduce remote students' fear of using technology and increase their technological knowledge, National Curriculum and Textbook Board should emphasize on the practical classes of ICT.

In conclusion, it was indeed a challenge for me to take interviews over phones and Zoom App, still I tried to gather relevant and adequate information to make this research reliable and open a path for the future researchers to explore more on this phenomenon. In fact, online class has become the major component to maintain continuity in the education sector of Bangladesh while remote students face a number of predicaments that obstruct their path of effective learning. It is not impossible to make online classes effective for the remote students but we need a well thought out and comprehensible plan to minimise their problems. However, we need to keep in mind that we have to continue with online classes for an uninterrupted education system. Finally, it can be assumed that socio-economic and technological development of remote areas might change the aspects or conclusion of this study but most importantly, if any pandemic or political unrest emerges in future, this study will help to address the problems, tertiary students of remote areas face and eventually assist the respected authority to take suitable actions to solve those problems.

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Appendix A.

LETTER OF CONSENT FOR PARTICIPANTS

Respected Concern,

I am Sadia Tasnim, an MA student of Applied Linguistics and ELT at the Department of English and Humanities, Brac University.

As a part of our degree, we have to complete a dissertation for which I have chosen the topic “The Effectiveness of Online Classes during Pandemic: a Study on the Remote Students of Tertiary Level in Bangladesh”. I would like to invite you to be a part of a small interview and share your valuable thoughts and perceptions regarding what problems you face due to the implementation of online classes as a remote student and what opportunities you can think of regarding online classes amid pandemic.

The interview can be taken through Zoom or over mobile phone at your convenience. The interview will be recorded only for analysing the data and will not be shared with anyone. Please note that the information gathered from you will be used anonymously only for the purpose of the study. I can assure you that none of the information will be misused.

If you would like to participate in the study, please read the details of the consent form on the next page and sign it. Your contribution to this study will be much appreciated.

Thanking you,

Sadia Tasnim

Student of the Department of English and Humanities, Brac University.

Phone No. 0175723475

E-mail: sayonti.aussnsc@gmail.com

Research Participation Consent Form

Please read the following statements and tick in the boxes.

Statements	Agree
1. I have read the description and understand the researcher's stance of the study and data collection procedure.	
2. My participation is voluntary and no pressure was created to participate in the interview.	
3. I agree to be video and audio taped for my voice and face if the researcher wants to.	
4. The researcher has my permission to contact me if she needs any further clarification, through the following phone number or email address.	

Phone No.

E-mail address:

Date:

.....

.....

.....

Name

Signature

Appendix B

Interview Questions

1. Which university are you studying?
2. In which program (undergrad or Masters) are you enrolled in?
3. Is it a public university or private?
4. Is your University conducting online classes and assessments? From when?
5. From which area are you attending the class?
6. Can you attend every class regularly or on time?
7. Can you attend the exams on time?
8. How do you feel about online learning and assessments procedures? Is it effective or problematic? Can you please explain with examples?
9. What are the challenges and barriers you face attending online classes and assessments as a remote student?
10. Do you find any positive sides of online learning as a remote student? Can you please explain with examples?
11. When the situation will be normal in near future, will online classes have impacts on the education system? Will it be helpful or barrier for the education system in Bangladesh? Can you please share your thoughts?

Appendix C

NOTATIONAL CONVENTIONAL TRANSCRIPTION

	Notation	Meaning
1.	DU	Discourse Unit
2.	I	Interviewer
3.	[]	Incomplete Sentences
4.	.../umm	Pauses
5.	Laugh	Laugh
6.	DU RIT 18	DU <space> student's name's first three alphabets <space> DU number. DU RIT 18 refers to Ritu's DU number 18.

DU	Participants	Questions and Answers
1	I	Which university are you studying?
2	Ritu	Stamford University
3	I	Is it a public university or private?
4	Ritu	Private University
5	I	In which program (undergrad or Masters) are you enrolled in?

6	Ritu	I am doing my undergrad and I am in Law department
7	I	Which semester are you in?
8	Ritu	11 th Semester
9	I	Is your University conducting online classes and assessments? If yes, then tell me from when?
10	Ritu	Yes our university is taking online classes and doing...online assessments from umm...cannot recall the date...like from the beginning when...university became closed.
11	I	From which are you attending online classes?
12	Ritu	Umm...I am attending classes from Naogaon. I live in a hostel in Dhaka.
13	I	Can you attend every class regularly or on time?
14	Ritu	Ummm...no not really. As in fact this is a remote area, so... often we face load-shedding, internet connection problem. So, it happens that sometimes I cannot attend at the beginning...then I have to attend in the middle of classes or...almost at the end like classes are at 10 AM but I can join...umm...10.30.
15	I	Can you attend the exams on time?
16	Ritu	Yes! Till now luckily I could attend exams on time but some of my friends faced trouble in attending exams on time like...you know...once our course teacher took exam on Google form and at the time of submitting she lost her net connection and mobile data

		was...not you know working and umm...she could not submit on time. So, teacher cut her marks.
17	I	How do you feel about online learning and assessments procedures? Is it effective or problematic? Can you please explain with examples?
18	Ritu	Ummm...actually I feel both...it is helpful in some cases and I think, physical class is much more effective...it is helpful because you know that...we can stay with our family and...it is time convenience...like...like..for example; in University we need to travel and sometimes we cannot reach on time but umm...now there is no such problem like this, we can attend classes from our comfort zone. Also, we can hear the recording and take notes which are also effective that you know...difficult in class. But there are some concepts that you know...are not included in our syllabus because of online class. An...d umm...also, like for this reason there is learning gap for this course. Also, in exams students use unethical means except the assignments, so learning and assessments are not proper. We use Whatsapp and Messenger group to consult during exams (laugh). Also, those who are you know...less extrovert like me we cannot...like...communicate properly. Umm...example like; there are some courses where it happens that only two or three students talk in the whole class. Teachers also sometimes do not want to understand our problems. So, yes in these ways I think that online learning is less effective.

19	I	How do you feel about feedback? Is it helpful or problematic?
20	Ritu	I think, it is less helpful. I am not blaming teachers obviously...they are also in stressful situation...but it happens that we sometime do not get the reply of...umm mail or...umm comment on Facebook on time. Sometimes, it happens that...I cannot understand what they actually mean...though my friends also face this...and...you know ...I like not only me...my friends as well...we feel embarrassed to ask again...at University we could go to them...also by looking at our facial expression...they...they could understand many things (laugh)
21	I	What are the challenges and barriers you face attending online classes and assessments as a remote student?
22	Ritu	Lot of problems like the most common problems load-shedding and slow internet speed. In our area, if the weather is bad, then we face electric shortcuts and most cases...mobile network either stops working or slowly work and I cannot use hotspot. Also, after taking broadband connection, if it does not work then I need to buy mobile data...which you know costs double. And...in fact, at our house no one you know except me needs internet that much...so it is an extra cost...And...like you know...at our hostel...we pay Wi-Fi bill together but here...you know... And...there is no good technicians or service centres...so it becomes very difficult to fix the problem...like when online classes first started my PC got hanged and it took almost umm... three weeks to solve this...and I had to

		use mobile phone which was so so so difficult for me...I even wrote the whole assignment on my copy, then took picture and asked my friend to type assignment for me. Then, you know... there is family stress as well...sometimes there is guest, sometimes someone becomes sick, also...ummm... sometimes I cannot make them understand that online learning has a...a lot of academic pressure...then...everyone talks at home when exam is running or class...so overall it becomes really difficult to manage family and study.
23	I	Do you face any health issue due to online learning?
24	Ritu	Yes Obviously as I feel headache most of the time. Also, I use glasses and my power has increased and I find it very difficult to read from PDF. Also, during Covid, it was not even safe to go to doctor and also, those who come from Dhaka...like they are more renowned but foe Corona they umm...do not come.
25	I	Do you find any positive sides of online learning as a remote student? Can you please explain with examples?
26	Ritu	Ummm....time convenience, I can attend classes and exam from anywhere...I can stay with our family...I do not need extra costing that...I needed to pay at hostel..and I get my foods ready (laugh)...And...it is true that I...also my friends are really advanced in technological knowledge...I learnt many things like use of Zoom, Google meet and many more...and also I have learn may new functions of laptop...And...we need to pay comparatively less

		<p>money to university (laugh)...Also, now I have to maintain the deadline strictly as there is fixed time of submitting assignments and....teachers usually cut marks and do not accept after the deadline. Also, I can hear recorded lectures and no..take notes. In fact...frankly speaking that...if problems like... electricity, net connection...then technician...also strict assessment, feedback giving like teachers' cooperation etc. can be solved...then online classes will be effective for remote areas' students as well.</p>
27	I	<p>When the situation will be normal in near future, will online classes have impacts on the education system? Will it be helpful or barrier for the education system in Bangladesh? Can you please share your thoughts?</p>
28	Ritu	<p>Yes I think that it will have positive impacts on Bangladeshi education systems. Now almost all of us irrespective of school, college and universities get used to this mode of instruction, right? So...online classes will not be a matter of fear or obstacle in the near future. Teachers can update materials...can take extra or make-up classes online. Mainly, it is hoped for a combined education in future.</p>
29	I	<p>Okay dear! I am ending the interview here. Thank you so much for your patience and participation.</p>
30	Ritu	<p>You are welcome.</p>

Appendix D

Sample of Inter-Coding Template in response to RQ2: What are the opportunities, remote students can think of regarding online classes?

Sample of Inter-Coding Template in response to RQ2 by Ritu

Interview Questions (1)	Subordinate key word of question (2)	Subordinate main point from conversation (3)	Elaboration examples from verbal to support the subordinate (4)	Occurrence main idea transferred into the form as key word(s) (5)
<p>How do you feel about online learning and assessments procedures? Is it effective or problematic? Can you please explain with examples?</p>	<ul style="list-style-type: none"> • Online classes, helpful or problematic 	<ul style="list-style-type: none"> • Both helpful and problematic • Helpful in some cases but physical classes are more effective • Convenience in Time and location • Continuing classes with family • Challenge 	<p>Ummm...actually I feel both...it is helpful in some cases and I think, physical class is much more effective...it is helpful because you know that...we can stay with our family and...it is time convenience...like...like..for example; in University we need to travel and sometimes we cannot reach on time but umm...now there is no such problem like this, we can attend classes from our comfort zone...Also, we can hear the recording and take notes which are also effective...included in our syllabus whole</p>	<ul style="list-style-type: none"> • Less helpful • Time convenience • Comfort zone • Staying with family

		s are bigger than advantages	class...I think that online learning is less effective.	
When the situation will be normal in near future, will online classes have impacts on the education system? Will it be helpful or barrier for the education system in Bangladesh? Can you please share your thoughts?	<ul style="list-style-type: none"> • Impacts on the future education system of Bangladesh • Possibilities and opportunities of online classes 	<ul style="list-style-type: none"> • Positive impacts • No fear in attending classes online • Combined education 	Yes I think that it will have positive impacts on Bangladeshi education systems. Now almost all of us irrespective of school, college and universities get used to this mode of instruction, right? So...online classes will not be a matter of fear or obstacle in the near future. Teachers can update materials...can take extra or make-up classes online. Mainly, it is hoped for a combined education in future.	<ul style="list-style-type: none"> • Positive impacts • No fear in attending classes online as for getting used to online platforms • Combined education (physical and online)

Appendix E

AUDIT TRAIL OF THE STUDY

No	Date	Activities	Records
1.	15 th October to 20 th October	Contacted course instructor, approved the topic and took suggestions regarding how to conduct the project	Email and laptop
2.	30 th October to 14 th January	Recorded interviews	Audio files on phone and laptop
3.	20 th January to 9 th March	Transcribed interviews of participants, Analyzed data thematically, made several frameworks and took approval from course instructor	Transcripts
4.	7 th May	Showed draft to instructor	Emails
5.	17 th May	Got feedback from the Instructor	Emails
6	18 th - 21 st May	Gave final revision on the study and Submitted	Laptop, Email and drive

