Exploring the Effectiveness of Online Teaching Learning Practices at the Government Primary Schools of Bangladesh during the COVID-19 Pandemic

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fulfillment of the requirements for the degree of
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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.

4. I have acknowledged all main sources of help.

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Approval

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Abstract

This study is about how online education is assisting students in government primary schools in Bangladesh during the pandemic and whether it is effectively assisting students in meeting their goals. The study was carried out to find out how distance learning, also known as e-learning, electronic learning etc.is helping the students to meet their pedagogic needs and fulfill the criteria needed for effective online schooling. To analyze the efficiency of online classes amidst the pandemic, GPSs from the marginalized communities of the Rayerbazar area have been chosen to represent the fragment of the educational crisis the nation is suffering from. In this regard, the following study was carried out in four Government Primary Schools from the Razyerbazar area of the capital. The catchment area that these four GPS covers are primarily within the zone of the urban slums of Dhaka city. The targeted population were comprised of stakeholders who are primarily affiliated with the Government Primary Schools, namely students, teachers and head teachers. The findings from this study suggests that the students and teachers who were interviewed came into a common consensus that they prefer physical classes over online classes, however even if online classes were not the best mode of schooling, it was still the next best alternative and preferable rather than sitting idle at home during the lockdown imposed by the pandemic. Lack of adequate technological devices like smart-phones, laptops, desktops and expensive data packs were some common obstacles from the student's side. On the other hand, the teachers expressed their challenges regarding not receiving adequate training to effectively conduct online classes, unsatisfactory attendance from the students, and lastly, lack of proper technological devices. However, one of the key findings of this study is that although there are various obstacles that students and teachers face when teaching online learning, the good news is that conducting lessons online is without a doubt a laudable move adopted by the present administration to prevent students' academic activities being lost. Online classes are a next best alternative to physical classes, even though the entire system of online classes does not have the potential to out rightly remove the existence of physical class altogether. Online classes were helpful but it was not always feasible and quite expensive.

Dedication

This thesis is dedicated to the students with whom I spent two years as their mentor, who shaped my mindset about education, about the socio-economic differences, and most importantly encouraged me to stand strong even during the toughest times.

Acknowledgement

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Chapter 1

1.1 Introduction and Background

As the whole world becomes gradually interconnected, people face many common problems at once. Currently, the COVID-19 pandemic is ravaging around the world (Asif, Dasgupta, Gupta & Hasan, 2021). Most importantly, COVID-19 hampered peoples' health, national economy, trading, sustainable development goals, education, etc. (Marois, Schleicher & Seetharaman, 2021). Soon this pandemic forced the world to start a lockdown situation for safety purposes (Asif et al., 2021). The educational institutions in Bangladesh remained closed from the beginning of March 2020, approximately 38 million students in our country lost the opportunity of receiving proper learning and interaction with their peers, which in return has affected their education experience (Rahman & Ahmed, 2021). This sudden shutting down of academic organizations immensely affected not only the majority of the student population but also other involved people of the education sector (Tabassum, Mannan, Parvej & Ahmed, 2021). Like many other countries, our country has started the online education system and they are continuing with this process to minimize the gap till the situation becomes normal and everything goes back in track (Rahman, 2020). However, online learning or distance learning is very challenging for a country like ours; it is a huge defiance for both the teachers as well as the students (Tabassum et al., 2021). All this new changes to the educational system including technical support, administrative planning, maintaining online schedule and data, etc. are very unfamiliar for the teachers and they must have and need to acquire proper knowledge and training on using the technological devices and other technical supports (Tabassum et al., 2021). In this regard, the following study was carried out in four Government Primary Schools (GPS) schools from the Razyerbazar area of the capital. The catchment area that these four GPS covers are primarily within the zone of the urban slums of Dhaka city. The targeted population were comprised of stakeholders who are primarily affiliated with the Government Primary Schools, namely students, teachers and head teachers. In this chapter, the sections are organized as Statement of the Problem, Purpose of the Study, Significance of the Study and Research Topic and Research Questions.

The study was carried out to find out how distance learning, also known as e-learning, electronic learning etc.is helping the students to meet their pedagogic needs and fulfill the

criteria needed for effective online schooling. To analyze the efficiency of online classes amidst the pandemic, GPSs from the marginalized communities of the Rayerbazar area have been chosen to represent the fragment of the educational crisis the nation is suffering from. Also, the positive aspects of online education in the pandemic context and the accessibility of technology required and the perception of teachers and students of GPS regarding online education practices were taken into consideration. The results of this research may inform the decision-makers and relevant stakeholders in the education sector of our country to further acknowledge the importance of online education in the ongoing pandemic. Moreover, if the findings of this research are disseminated at the grassroots levels with the help of schools and relevant community stakeholders, then it may inspire the parents and the students to understand the effectiveness of online education in their lives.

There are many challenges that both the teachers and students are facing in online education system due to lack of proper skills and knowledge. However, the best part is that the online method of teaching-learning process is also helping to reduce the loss of student's academic activities. The government of our country has played a vital role in this process as well (Khan, Rahman & Islam, 2021). Many new and old learners who have attended the online system of learning stated that attending online classes helped them to be more self-assured about online exams even though they are taking this new way of exams for the first time. In the middle of all this crisis, the online class has helped to build a strong connection between students and their teachers, sharing new and good ideas as a positive outcome not only helps students avoid all kinds of fears, but also create a mental strength and confidence when they are going through an unusual coronary crisis. The more digital the country becomes, the faster and easier it becomes to generate computer-efficient/digital citizens and bestow to the management of everything generated electronically that stands on digital principles (Khan et al., 2021).

1.2 Research Topic

The title of my research is- 'Exploring the Effectiveness of Online Teaching Learning Practices at the Government Primary Schools of Bangladesh during the COVID-19 Pandemic.'

Millions of students from the government primary education system were affected by COVID-19 school shut-down in our country (Bangladesh), without giving students no other options rather than to rely on remote leaning (Chowdhury, 2020). However, maximum number of students do not have access to digital learning technologies for which students find virtual classes to fall short of their belief and education demand (Chowdhury, 2020). On top of that, many students belong from poor socioeconomic backgrounds and they are not able to participate in online classes due to unavailability of digital devices and poor internet connection for living in rural areas. However, some of the students had this opportunity of participating in online classes but their lack of concentration during online classes because of the new class format and poor lecture presentation of teachers made it quite difficult for them to focus and understand what has been taught (Asif et al., 2021). Students studying in primary schools are within 6 to 11 years old; all are in their middle childhood (Tomonari, 2020). According to the Bangladesh Bureau of Statistics (BBS) 2018, the number of students is approximately 10,188,129. Most of the primary level students are missing out from a crucial academic phase of their lives due to this pandemic.

The instantaneous effect of the COVID-19 resulted in the shut-down from learning of around 36.8 million primary students (MoPME, 2020), it is putting things into confusion about the planned activities of the school year and thus developed in a complete gap of more than one year. Schools remained closed throughout the entire pandemic until 12 September, 2021 until they reopened again (UNICEF Bangladesh, 2021). Even now, as the year 2021 is approaching towards the end, many children are still facing an unusual second year of school closures as new variants of the coronavirus spreads across the region. The interconnected significance of such continuous school shutdowns is surprising and resulting in learning loss; excruciation; missed school; meals and practiced inoculation; increasing child labor and child marriage. These extreme consequences are already affecting many countless children, and it will continue to be felt in the years to come (UNICEF Bangladesh, 2021). Therefore, it was necessary to investigate this issue in government primary schools during the pandemic situation.

1.3 Statement of the Problem

The main goal is to see how online education is assisting students in government primary schools in Bangladesh during the pandemic and whether it is effectively assisting students in meeting their

goals. Is studying from home via electronic devices allowing children to explore more and providing students with more options and opportunities to learn electronically rather than in a real classroom. As a result, it is becoming a daring to ensure that the schooling process continues during this crisis by keeping children inspired by education and continuing their devotion to studies. Because this is a new platform for them, not only students but also teachers face new obstacles in their everyday life. And hence the title, "Exploring the Effectiveness of Online Teaching Learning Practices at the Government Primary Schools of Bangladesh during the COVID-19 Pandemic".

1.4 Research Questions

The research questions of this study are as follows:

1. What are the challenges of online education experienced by the students of Government Primary Schools in Bangladesh?

2. What are the challenges faced by the teachers of Government Primary Schools of Bangladesh while taking online classes?

3. What are the positive aspects of online learning in the current context of COVID-19 in the Government Primary Schools of Bangladesh?

4. What are the perceptions of teachers and students of Government Primary Schools regarding the online education practices?

1.5 Purpose of the Study

The goal of the research is to see how well e-learning is assisting students in meeting their academic needs and meeting the criteria for online schooling, as well as whether they have access to the devices and other resources required for online classes. The research will also look into how teachers are dealing with new problems in their daily lives as a result of new technology. Another key topic to consider is the benefits of online education in the context of a pandemic, as well as the requisite technical accessibility.

1.6 Significance of the Study

Although it existed in various forms slightly earlier, digital education is mostly a product of the previous several decades. In the near future, considerable changes related with the digitalization of some portions of the educational system are expected to serve as mitigation against unanticipated pandemics such as Covid-19 in 2020 (Suleiman & Danmuchikwali, 2020). The transmission rate of coronavirus has been increasing and it is showing no signs of dormancy even after the development of vaccines; more researches are needed to assess the usefulness of the current COVID injections against the variants (World Health Organization, 2020). As a result, it is safe to say that the educational institutions in Bangladesh may remain closed for the unforeseeable future. So, to bridge the gap between students missing out on crucial academic time due to lockdown, there is no other better substitute than implementing the platform of online education. As a damage control policy, e-learning process was introduced as urgent situation (Tariq & Fami, 2020). In Bangladesh, primary level students are not used to online learning patterns compared to any other country. Not just students but many teachers of primary education prefer the practice of traditional teaching techniques (Asif et al., 2021). As it was the first experience for both teachers and students to get connected through the online classes which created a communication gap among them (Alea, Fabrea, Roldan & Farooqi, 2020). As a result, this resulted in high rate of absenteeism among the primary level students. Most students of GPSs are not well equipped with the basic technological means to attend the online classes; to participate in digital education, students need at least a cellphone and a constant internet connection. The latest 2020 data of HIES (Household Income and Expenditure Survey) showed that around 12.70 percent of the poor families do not have a single mobile phone (Tariq & Fami, 2020).

The results of this research may inform the decision-makers and relevant stakeholders in the education sector of our country to further acknowledge the importance of online education in the ongoing pandemic. Moreover, if the findings of this research are disseminated at the grassroots levels with the help of schools and relevant community stakeholders, then it may inspire the parents and the students to understand the effectiveness of online education in their lives.

Chapter 2

2.1 Literature Review

Distance learning is a branch of education that focuses on teaching methods and technology with the goal of providing instruction to students who are not physically present in a typical educational setting such as a classroom (Honeyman & Miller , 1993). The phrase "remote learning" refers to educational techniques that focus on expanding access to education by liberating students from time and location constraints. Individual and group learners can take use of its flexible learning opportunities. This is the fastest-growing area in education. The emergence of Internet-based technologies, notably the World Wide Web, has highlighted the potential impact of distance learning on all aspects of education. It is defined as learning that entails the deployment of information, computer, and communications technology applications in several locations (Webster, J & Hackley, P, 1997). The basic definition of distance learning assumes that the teacher and students are separated in space and that this distance is bridged via the use of technological tools (Casarotti, M., Filliponi, L., Pieti, L. & Sartori, R., 2002).

With the turn of the century, open and distance learning took on a new lease on life, with more and more courses being delivered through distance education models around the world. The impact of new media, particularly digital connective technologies for delivering courses from a distance, has sparked a renewed interest in open and distance learning opportunities, such as the introduction of Open Education Resources and Massive Online Open Courses, which aim to provide learning access to a wider audience (Simonson, M., Smaldino, S., & Zvacek, S., 2015). Distance education also holds the possibility of bringing education to underserved and disadvantaged segments of society, allowing a broader audience to benefit from equal access to education. As a result, distant education is seen as a more democratic kind of education because it attempts to reach out to all members of society (Gunawardena, C. N., & McIsaac, 2004). The techno-social shifts in society have engineered and reengineered distance education. Furthermore, the habits, ideas, and cultures of those attempting and developing open and distance learning have influenced how it is planned and carried out. As a result, the philosophical, epistemological, and pedagogical roots that have been taken, as well as the technology that have been used, have all influenced the design and delivery of distant education courses. Each generation of distance education has evolved in tandem with the educational foundations and technological advancements of its time. Distance education

relies largely on communications technologies to bridge the geographical and temporal gap between learners, teachers, and learning resources, so observing the harmony of pedagogy and technology in distance education activities is important (Saykılı, A., 2018).

The COVID-19 pandemic has wreaked havoc on education systems around the world, affecting approximately 1.6 billion students in over 200 nations. More than 94 percent of the world's student population has been touched by school, institution, and other learning facility closures. This has resulted in significant changes in every part of our life. Traditional educational techniques have been considerably disrupted by social alienation and limited movement policies. The reopening of schools once the restrictions have been lifted is another challenge, as many new standard operating procedures have been implemented. Many scholars have shared their work on teaching and learning in various ways in the aftermath of the COVID-19 outbreak. Face-to-face instruction has been phased out at a number of schools (Pokhrel & Chetri, 2021).

In most countries, school closures have resulted from lockdown and social distancing measures in response to the COVID-19 epidemic. The way educators deliver quality education through multiple online platforms is undergoing a structural shift. Despite the problems faced by both educators and learners, online learning, distant learning, and continuing education have proven a remedy for this unprecedented worldwide pandemic. Transitioning from traditional face-to-face learning to online learning can be a completely different experience for both learners and educators, which they must adjust to because there are few or no other options. Through numerous internet platforms, the school system and educators have adopted "Education in Emergency," and are obliged to adopt a system for which they are unprepared. Students, parents, and educators around the world have felt the unanticipated rippling impact of the COVID-19 epidemic as schools have been closed to deal with the global pandemic. While governments, frontline workers, and health officials do their utmost to contain the spread, educational systems strive to provide high-quality education to all students during these tough times. Many students have experienced psychological and emotional hardship at home/living environment and have been unable to interact successfully. The greatest online homeschooling techniques have yet to be discovered (Petrie, C., 2020).

Since the beginning of the pandemic, the government of Bangladesh has initiated alternative schooling programs such as digital classes, follow-up by teachers, and lesson broadcasts on television and radio channels. However, such actions have failed to become feasible substitutes to physical classes due to availability problems for the students of GPSs belonging from insolvent socioeconomic backgrounds (Shovon, 2021). Those who did manage to participate in distance learning activities, 90% of them agreed that they were not able to recall what they had learned as teachers did not give enough attention and time to follow up with the lessons, according to a study by Save the Children (Shovon, 2021). Furthermore, a high rate of absenteeism due to the unavailability of technological devices for the students is one of the primary reasons for online classes being inefficient at the GPS level (Priyanka, 2020).

2.2 Online Education: Consequences of COVID-19 Pandemic in Education System

E-learning is a kind of education where students use their personal desktops or laptops or cellphones with the help of internet, staying away from their academic organizations (Anastasiadesa, Filippousis, Karvunis, Siakas, Tomazinakis, Giza & Mastorakid, 2010). During this coronary crisis, digital schooling has become a fuzz word in the field of schooling since no other alternatives gives education/schooling to the students in the organizations (Baiyere, A., & Li, H., 2016). Due to the insurgence of the coronavirus epidemic, the whole universe is assessing a huge death toll with immense fear and uncertainness. Many countries around the world are intriguing to reduce the gap and diminish the vandalization of students due to the current scenario (Archambault, L., & Crippen, K., 2009). However, digital schooling outcomes are not always a blessing for the educational group as they pose many opinions in the context of online teaching and learning, leading to extensive concern over the disputed issue of teaching pedagogy. The present study seeks to demonstrate the provocations and probabilities of countries that are not as technologically sound as those blessed with previous modern-tech technology (Khan et al., 2021).

All educational organizations in Bangladesh (school, college, university) have been shut-down like other countries where social distancing is a matter of concern. To make sure that the digital schooling method is not interrupted among the students, the Ministry of Education has provided support to the teachers in continuing online schooling and the free flow of knowledge. The concerned authority has begun broadcasting e-learning shows for schools, colleges, and

universities. Digital education system has been mostly highlighted on the greatest level of education in our country (Khan et al., 2021). So, now a days online teaching-learning or digital schooling is the only way of diminishing the educational crisis, which is occurring throughout the whole world due to the epidemic of COVID-19 (Basilaia & Kvavadze, 2020). In this circumstance, distance education system has received so much precedence in the education system; media, like Zoom, Google Meet, video communication systems, has earned immense popularity during these lockdown days (Khan et al., 2021).

2.3 Background of the Study

A recent study by the Ministry of Education, 2020 points out several solid provocations occurred by the recent digital alteration of educational operations during the period of the COVID-19 pandemic (MoPME, 2020).

Reaching out to all school-going children from different socio-economic backgrounds is the main challenge. Currently, around 56 percent of households of the country have access to television while in the case of radio it is lurching to 0.6 percent, though many students may get the access through their cellphones and this requires awareness-raising around the probability of using mobile phones to access radio programs. Only 5.6 percent of households of the country have access to a home work station that is a desktop and 37.6 percent of households have access to the Internet.

2.4 Student's Challenges

One of the main restraints that the students face first is the insufficiency of conditions that are required for the online classes because of their living areas. A greater number of students in our country are living in rural-based areas. Some of them live in a very deep rural areas where the availability of these resources is rare (Subrata, 2020). Students are also forced to use various online learning platforms that need a high-speed internet connection. But in isolated areas, it is almost impossible to get a high-speed network connection to finish the online classes smoothly. Students face an interruption into the class for poor network connection which is then found as a hindrance to their understandings**.** In rural areas, most of the students have to buy data packs to participate in online classes. But due to network problems in rural areas and the high cost of data packs, students' rate of absenteeism has increased (Subrata, 2020). Distance-learning through television

or smartphones are working for the time being but a maximum number of students are in shortage of these devices. In rural areas, not everyone has a television or smartphones, or any other digital devices. Most of the families in this pandemic are struggling for their basic needs and for them buying any digital devices is very hard. So, for the lack of digital devices, students are struggling to join classes (Asif et al., 2021). Students lack concentration during the time of the online lectures. The way the courses are carried out and that environment keep students away from concentrating on the class (Kaniz, 2021). The online course pattern cannot even be grasped by the students. They choose to stay quiet instead of asking the professor any questions, even though they are asked by the teachers (Chowdhury, 2020). Mental distress caused by extraordinary uncertainty due to epidemics will affect the mental health of both the students and teachers. (MoPME, 2020).

Moreover, most students access the Internet through cellphones which are often basic phones will not necessarily run many of the learning platforms and apps. Access to mobile phones at the household level is approximately 95 percent (BBS, 2019). In the case of younger children, especially at the primary level, remote learning opportunities are generally inappropriate and may be much less effective than for older children. This is because younger children need a lot more time, guidance and assistance from parents/caregivers, as they are very vulnerable and cannot learn things quickly and independently (UNICEF, Covid-19 Factsheet, 2020). However, primary schools in Bangladesh function in a low-tech environment where teachers and students are not familiar to using digital technological devices for learning. Producing digital content and assessing it was harder and challenging for primary-level teachers and students. Moreover, young children require assistance and motivation to be engaged and concentrate in distant learning activities which is an added challenge and pressure for households with less-educated parents (World Bank, 2021). Currently, Bangladesh does not have the necessary digital architecture and digital literacy for system flexibility building in the primary education sector to cover the whole student and teacher population through an effective remote learning approach for a long period (MoPME, 2020). Moreover, teachers and education authorities did not have any past orientation or experience in monitoring remote learning (UNICEF, 2020).

2.5 Positive Aspects of Online Education

One of the biggest advantages for today's learners is nearly unrestricted access to information, knowledge, and learning, thanks to the recent boom in the development of Internet and mobile technology. Another advantage of digital education is that students have more flexibility in determining when is the best time to study. (Zounek & Sudický, 2013). The notion of "anywhere" and "anytime" learning is followed while using online technology to promote learning. When we think of online learning, the phrases "personalization" and "flexibility" come to mind. Students and teachers can take advantage of the ability to readily share knowledge and collaborate on a variety of topics and projects by utilizing online technology (Zounek & Sudický, 2013). Amid crisis, the online class has created a strong bond between students and teachers. (Khan et al., 2021). One of the advantages of online learning is that it is relatively low cost and gives people who can't afford to go to physical school access to quality education (National University Resources, n.d.)

2.6 Challenges Faced by the Teachers

Teachers are having difficulties in this new style of online teaching due to a lack of proper skills and knowledge of technology (Zaman, 2021). In many cases, online classes were not that effective as traditional classes. This problem started with a lack of proper knowledge about technology and online classes because most of the teachers were not well trained in these technology facilities (Islam, 2021). In Bangladesh, primary grade students are not used to online learning patterns. Not just students but the teachers of primary education prefer the practice of physical teaching techniques (Islam, 2021). Because of lecturers' poor presentation skills in class lectures, students sometimes lose their rhythm or interest in class, and for which they prefer to remain quiet and not asking any questions. Teachers are demoralized by this approach since students show little enthusiasm or drive in communicating with their teachers. (Mohammed, Rashid, Salih & Budur, 2020). Teachers feel quite uncomfortable while delivering the speech in online classes where the students keep their camera off and hardly respond to the lectures that are given. Teachers have to put extra effort to succeed in online classes and grabbing students' attention (Sajibur, 2020). The length and duration of online classes are also a source of debate. Students become bored and lose interest if the classes are long and difficult, or if the teaching method is not engaging. It may be a

constant source of pressure for students to cover all of their lessons or complete all of their home-assigned tasks in all of their disciplines (Zaman, 2021). For this reason, they cannot concentrate or even understand the documents they were given for that particular lesson.

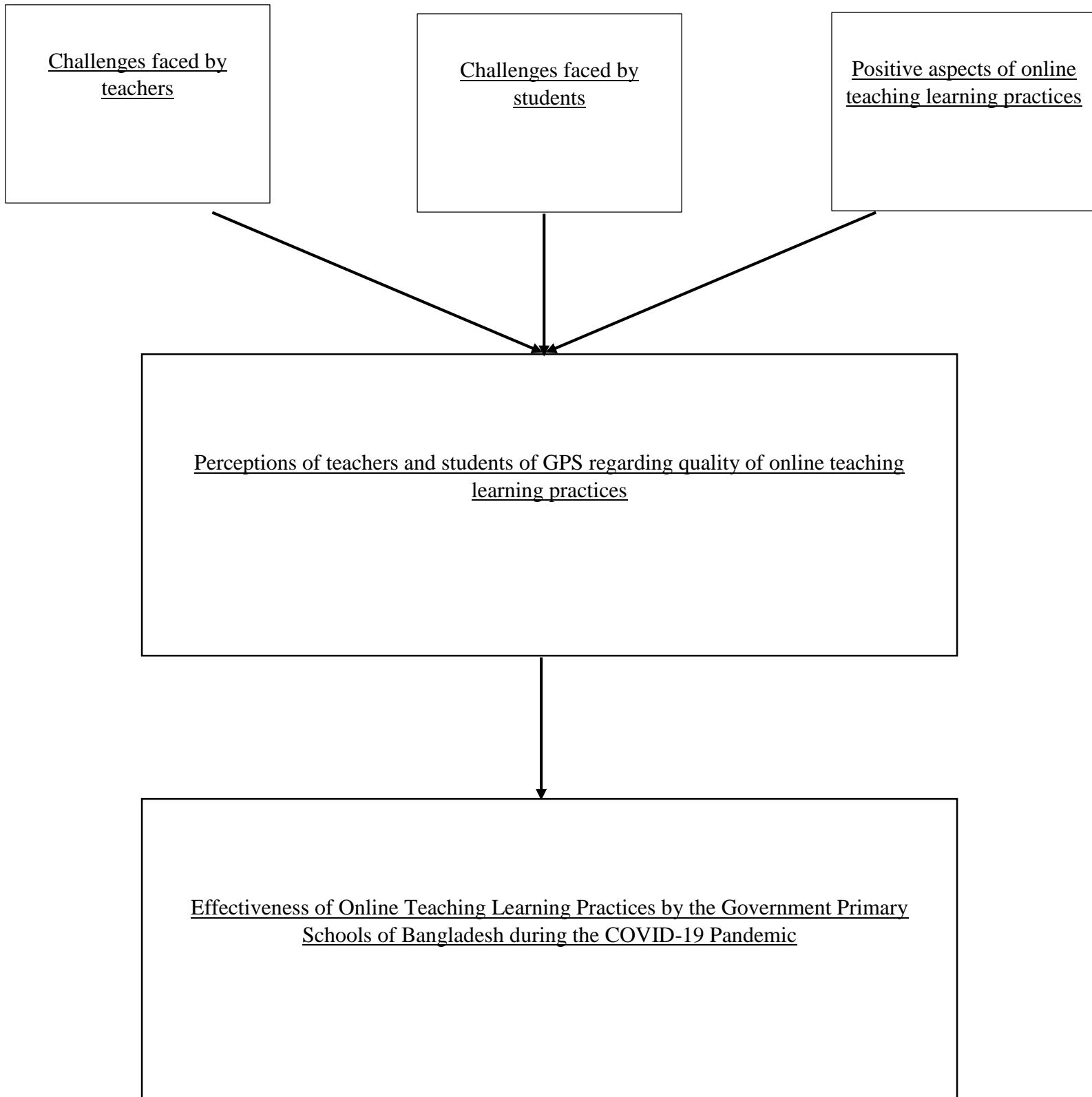## 2.7 Perceptions of Teachers and Students

In this part of the literature review, the efficiency of online classes in comparison to traditional face-to-face classes was compared.

In the midst of the pandemic, online classes are swiftly transforming the entire structure and experience of education. However, the efficiency of online education may face considerable doubts in a context where resource constraints and lack of adequate knowledge is a common scenario (Goodwin University, 2021). In a developing country like Bangladesh, the online learning system is a relatively new concept. (Gopal, Singh & Aggarwal, 2021). Without a doubt, online learning is an excellent idea for continuing to teach and educate during this pandemic (Kim. J, 2020). However, students and teachers must contend with various difficulties in transitioning to online classes (Kim. J, 2020). Due to the fact that online learning is relatively new in our educational system and we are unfamiliar with the process, both students and teachers experience challenges during online classes (Gopal et al., 2021). Traditional face-to-face lessons are still used in developing nations like Bangladesh, with teachers providing lectures and students and teachers employing virtual technology to run educational activities for the first time (Ramij & Sultana, 2020). Adoption of the new online class and test systems is fraught with difficulties for both teachers and students (Al-Amin, M., Al Zubayer, A., Deb, B. & Hasan, M., 2021). In Bangladesh, internet costs are relatively costly, and most rural regions lack high-speed internet connections such as broadband internet service (Al-Amin et al., 2021). As a result, students rely on the pricey internet service provided by cellular carriers, and many struggle to afford expensive internet bundles due to budgetary constraints (Rahman, 2020). They can't always have a good internet connection because of bad networks, which makes online learning difficult (Al-Amin et al., 2021), and they must also look for ideal locations for an adequate internet connection. Lastly due to change in course pattern, both teachers and students face problem in taking virtual classes.

Teachers in the country's administrative center have just recently begun to use a combination of real-time interactive courses and classes, as well as pre-recorded materials and homework-based digital sessions on a small scale. This, however, is not the case for the entire country. As an initial response, a state-run television channel broadcasted pre-recorded lists for primary school kids around the country. Leaving aside the value of this non-interactive education method, the fact that half of the country's households lack a television means that a large number of individuals have been excluded from its reach. Following that, the government was scheduled to make all primary and secondary student lists available online (via YouTube). This strategy assumes that everyone in the country has access to broadband services (Khan, Rahman & Islam, 2021).

With online technologies, the possibilities of a digital education system are endless. It has several advantages for both teachers and students in terms of teaching and learning. Self-learning is more appealing to students, and they agree that online courses are more appropriate for them (Brazendale, 2017). The most crucial point to make is that students have plenty of opportunities to develop cognitive and polygonal techniques to help them attain their educational objectives. They also don't require any additional preparation to join the lesson online, so they can be ready to participate in any situation, regardless of time or location. The inauguration of educational institutions in the Covid-19 situation is still unknown. However, the learning path is in place to help pupils obtain more knowledge and avoid falling behind. Learners in Bangladesh who take online classes say that taking online classes has given them the confidence to take online tests on time, even if it is their first time taking online lessons and exams. In the midst of the crisis, the online class has developed a strong link between students and teachers, resulting in good ideas as a positive outcome that helps students avoid all types of concerns that can arise when they are experiencing a heart attack. The more digital a country becomes, the easier it is to establish digital citizens and contribute to the administration of everything that is published online and is accessible through virtual platforms. (Khan, Rahman & Islam, 2021).

2.8 Conceptual Framework

Challenges faced by teachers	Challenges faced by students	Positive aspects of online teaching learning practices

Perceptions of teachers and students of GPS regarding quality of online teaching learning practices

Effectiveness of Online Teaching Learning Practices by the Government Primary Schools of Bangladesh during the COVID-19 Pandemic

Chapter 3
Methodology

3.1 Research Approach

The research was conducted using the qualitative approach. Qualitative research can help to filter the complexities into more manageable parts as well as it helps in understanding the environment better and is a much more helpful approach in terms of explanation (Sauro, 2015). Semi-structured interviews over telecommunication mediums were used to take primary data from students, teachers, and other relevant stakeholders. The study was conducted with a sample size of 16, 01 students from each of the 04 schools (04), 02 teachers from each of the 04 schools (08), and lastly, 01 head teacher from each of the 04 schools (04); therefore, total 16. Additionally, secondary data from the online literature review was analyzed to understand the depth of the problem. Since it is a qualitative approach, the responses of the research participants were transcript, analyzed, and incorporated into the report.

To analyze the efficiency of online classes amidst the pandemic, GPSs from the marginalized communities of the Rayerbazar area have been chosen to represent the fragment of the educational crisis the nation is suffering from. As a result, the qualitative approach was used in the research because it is useful in providing detailed descriptions of complex phenomena, tracking unique or unexpected events, and illuminating the experience and interpretation of events by key stakeholders with widely differing stakes, roles, and opinions. Since this is small-scale qualitative research and therefore, the findings from this research cannot and should not be generalized.

3.2 Research Site

Four GPSs were chosen from the Rayerbazar area of the capital. The catchment area that these four GPSs covers are primary within the zone of urban slums of Dhaka city. The total average number of students in four schools are 1000 and the total average number of teachers are 15. The majority students of the four schools belong from marginalized socio-economic backgrounds.

The rationale behind selecting the following research sites is firstly, all the aforesaid research sites are Government Primary Schools from the Rayerbazar catchment area were the students mostly come from the urban slums. According to my prior knowledge from my Teach for Bangladesh fellowship experience, all the four GPS used to conduct ICT classes in weekly basis, before the pandemic. Using this information, the following research sites were shortlisted as they were already well acquainted with the use of ICT in primary education, so to see whether they have further carried on the practice of using ICT as a medium during the pandemic.

3.3 Research Participants

The research participants essentially were comprised of primary level students aging from 06 to 11 years. Other important stakeholders such as the GPS teachers as well as the head teachers of these aforesaid 04 schools were interviewed as well. The total sample size was 16. Students 04, Teachers 08 and Head Teachers 04. The following research participants have been chosen because, they are the main important stakeholders connected to the ongoing system of online education. The head teachers are responsible for the overall monitoring of the online classes, guiding their teachers, allocating resources etc., while the teachers conduct the online classes for the students who are the main stakeholders in this regard.

3.4 Sampling Procedure

Target population: The research participants essentially was comprised of primary level students aging from 06 to 11 years. Other important stakeholders such as the GPS teachers as well as the head teachers of these aforesaid 04 schools were interviewed as well. The total sample size was 16. Students 04, Teachers 08 and Head Teachers 04. Students and teachers from grade 01 to grade 05. The study was conducted with a sample size of 16, 01 students from each of the 04 schools (04), 02 teachers from each of the 04 schools (08), and lastly, 01 head teacher from each of the 04 schools (04); therefore, the total number is 16.

3.5 Data Collection Methods

Semi-structured interviews over telecommunication mediums were used to take primary data from students, teachers, and other relevant stakeholders using simple questionnaires.

The rationale behind using semi structured interviews are as follows: Other interview styles, such as question-and-answer sessions, might flow more like conversations than semi-structured interviews. In contrast to a broad questionnaire, semi-structured interviews allow interviewees to respond to questions more imaginatively and interviewers to ask a variety of open-ended and personally tailored questions. Interviews that are semi-structured can be adapted to the researcher's expertise and skill set (Houlis, 2019). Additionally, the semi structured interviews were carried out over the telephone-conversations due to the lockdown of the GPS during the pandemic. The head teachers of the selected schools were interviewed over the phone using my personal rapport with them back from the fellowship days. Contact details of the teachers were taken from the head teachers of the respective schools. The list included teachers who take online classes from grade 01 to 05. Subsequently, the contact details of the students were taken from the teachers. Both teachers and students were chosen using the method of stratified random sampling. Before conducting the interviews, Permission was taken from the Head Teachers of the schools through written letters. After the permission was granted, phone interviews were conducted to collect the data from the students. During collecting the data, no recordings were taken with their permission. All the data were written in hand and later they were all transcribed. Since no face -to -face interviews could be conducted due to the pandemic, all the phone interviews were done in front of the parents so the students do not feel uncomfortable.

3.6 Role of the Researcher

My role as a researcher was be to conduct this study by being unbiased and at the same time protect the confidentiality and ensure voluntary participation of my research participants. I will refrain from drawing any conclusions and making statements rather than focus and analyze the current context of my problem statement.

3.7 Data Analysis

Since it is a qualitative approach, the responses of the research participants were transcribed, and incorporated into the report. All the data collected were categorized according to the teacher's interviews, student's interviews and Head Teacher's interview. The information collected were

all written in hand as bullet points but later they were all elaborated with more specific terms and requirements.

3.8 Ethical Issues and Concerns

During conducting the interviews, the application that was granted from my supervisor was sent to the Head Teachers of the schools via email to grant me the permission for doing the research work. The whole research was conducted in a respectful manner. There were no political questions asked to any of the participants throughout the survey. Students were interviewed over the phone in front of their parents. No harms were caused to the surrounding environment while conducting the research.

Prior knowledge from my fellowship experience resulted in some bias within me while carrying out the research as I was already aware/informed about the background of the schools. However, in order to rid of the bias, firstly, acknowledging the bias was crucial. I acknowledged my biasness and was mindful towards drafting the thesis proposal, through constant checking, editing and with the help of peer reviews, I refrained from making any biased statements from the entirety of my thesis paper.

3.9 Credibility and Rigor

While doing the research, I could not go on field visit due to the circumstances imposed by the lockdown situation. I collected all my data over the phone from students, teachers and head teachers of the selected schools. I did debrief sessions with all the informants prior to the interviews to make sure that they do not feel uncomfortable. No personal questions were asked while taking the interviews. In most of the interviews with the students, the student's parents were nearby during the phone conversations, however, in some cases, some of the parents were not available. Probing questions were asked to the students to ensure clarity in the data that was being recorded. And later, these data were compiled together and put in the report. As a researcher, I had complete faith in my job and in my ability to conduct good study.

3.10 Limitations of the Study

Due to the pandemic situation many research approaches were not conducted. For example, semi-structured interviews were held over the phone rather than talking face-to-face interviews. This reduced the efficiency of the data and the research. No FGDs were conducted due to social distancing and hygiene issues. Small sample size was considered because it was not possible to go on the field and collect data on a large scale, since the interviews were conducted over the phone, so the sample size selection was precise. The whole research was conducted in a respectful manner. There were no political questions asked to any of the participants throughout the survey. Students were interviewed over the phone in front of their parents. No harms were caused to the surrounding environment while conducting the research. Since this is small-scale qualitative research and therefore, the findings from this research cannot and should not be generalized.

Chapter 4
4.1 Results

The study findings will be highlighted in this chapter in relation to the research questions. All the data were collected by phone interviews because it was not possible to conduct face to face interviews or arrange any focus group discussion due to pandemic situation. The results obtained were based on the challenges of online education faced by both the teachers and students of the Government Primary Schools of Bangladesh. The positive aspects of online education as well as the perceptions of both the students and the teachers regarding the new concept of online education also known as distance learning. Four (04) primary level GPS students were chosen from four (04) different GPS from the Rayerbazar area of the capital. The primary data extracted from the student group showed a rather positive response regarding online education. Student's feedbacks regarding their teachers were also positive. All the students who were interviewed came into a common consensus that they prefer physical classes over online classes, however even if online classes were not the best mode of schooling, it was still the next best alternative and preferable rather than sitting idle at home. Younger children are very prone to diseases and infections but older people can fight back, so it was wise for the children to stay home during the pandemic.

Eight (08) primary level GPS teachers were chosen using stratified random sampling method from four (04) different GPS from the Rayerbazar area. The primary data suggested an all in all negative trend on the efficiency of online education amongst the teachers. In this chapter, both the pros and cons of online education has been discussed in more details. The findings of the result have been discussed according to the research questions. All the findings were found by interviewing the students and parents as well as the Head Teacher of the schools to go into the depth of the study. Ethical issues and concerns were kept in consideration while doing the interview so that it does make the interviewees feel uncomfortable while the questions were asked.

4.2 Findings from Interviews with Students

The analysis of the findings from the student's interviews will be discussed under four (04) thematic areas in this section: Technological Aspect, Challenges of Online Education, Positive Aspects of Online Education and Overall Perception on Online Education. Four (04) semi-structured interviews were carried out, one (01) student each, ranging from standard two (02) to standard five (05) respectively. The semi structured interviews were numerically categorized as following: STU_G2_Int#01, STU_G3_Int#02, STU_G4_Int#03 and STU_G5_Int#04.

4.3 Technological Aspect

All the students used mobile phones for attending the classes. They bought data packs to do the classes. Few students used their own internet service. According to interview number STU_G5_Int#04, the student used personal Wi-Fi connection for doing the classes which was faster. Whereas, according to interview number STU_G2_Int#01, the student had to buy data packs for doing the classes and used personal mobile phone. Students were not very comfortable with using laptops or computer because they thought it was difficult to operate. According to STU_G4_Int#03, the student did not use laptop even after having one at home because mobile phone seemed much handy and user friendly for that particular student. All the students interviewed agreed that using phones did not cause any disruption in doing the classes but according to interview number STU_G3_Int#02, the student said that it was problematic at the beginning to mute while the teacher gave the lecture and then forgot to unmute back. In this way, some of the instructions were missed out, but gradually this became very easier and could control easily. Load shedding was a huge issue in the Rayerbazaar area. All the students agreed that using computers or laptops would have been much difficult in this case rather than internet connection which is relatively pretty good. All the students were given a link in Google Meet to do the classes. Students all formed a group (available ones) and clicked on the link given by the teachers to join the classes. According to Stu_G2_Int#01, the student faced internet disconnection problem because the student had to buy data packs and could not again rejoin after getting disconnected as buying data packs was always not feasible. But overall, they enjoyed doing the online classes.

4.4 Challenges of Online Education

In every case, there are some challenges and obstacles on the way. Doing online classes using phone and buying data packs were not always feasible for the students of marginalized economic background. According to interview number STU_G2_Int#01, the student did not have a personal phone. Parents were not available in the morning due to their work and they carried the phone along with them, so the student could not always attend the classes on time. But to minimize the problem, few teachers decided to take evening classes for the student's benefit. Another huge problem was with buying internet data packs which was quite expensive to buy all the time for the parents as well as the students. Electricity connection was another big issue for the students. According to STU_G3_Int#02, the student had serious power supply problem, for which it was impossible to do classes in the dark, hence the student had to sit outside to do the classes. Operating the technological devices were also not user friendly at the beginning according to all the students. Students had to struggle with the mute/unmute options. They could not also do screen sharing and also see what was taught in the class. Math class was the most difficult one to attend according to interview number STU_G5_Int#04.

Since buying internet packs were difficult, students used to make groups of same-class and arrange money altogether. According to interview number STU_G4_Int#03, the student gathered other boys and girls who were willing to share the data pack and bought it together and did the classes. In this way, the cost could be minimized. Parents also had difficulty managing their work life for their children. Some parents had to compromise on particular class time for their children so that they could use the phone and do the classes. Those who missed the classes had to go to school or call the teachers again during their convenient time for the lesson.

4.5 Positive Aspects of Online Education

Online classes were not always difficult and stressful. It also had many positive sides as well. Both teachers and students enjoyed doing classes online. According to STU_G5_Int#04, the student enjoyed the online classes because in this way, it was possible to stay in touch with books and complete the syllabus. The student could see the teachers through the video calls and visit friend's place to do group calls. The schools were all closed for over one and a half years and the

initiative of doing online classes saved many children from dropping out from their academic lives. Schools provided many worksheets related to particular subjects and they enjoyed doing the worksheets at home and in this way, they could keep things in their memory, otherwise it would be quite impossible to remember everything. According to interview number STU_G3_Int#02, the teachers were very cooperative even after the online classes. Those who found the classes difficult, they were given extra time after the class. According to STU_G4_Int#03, teachers were also available over the phone all the time. In any difficulty, related to classes they helped the students with the lesson. Students could stay connected with their teachers in this way.

Parents were also very cooperative with online classes. They gave the financial support like helped in buying the data packs for the students. According to STU_G2_Int#01, the student enjoyed online classes very much since it was a new platform that helped the student to stay connected with friends and education even though the school was closed for a long time. They have no pressure of going to school on time every day. They could do the classes at their convenient time like in the evening, so in the morning they could finish their assigned homework or worksheets before attending the class. Online class initiative was very helpful rather than putting pressure to the students. It not only helped in getting education but also made the students learn how to use the technology for something fruitful.

4.6 Student's Overall Perception of Online Education

Online education system in government primary schools was a great initiative for the students as well as for the teachers according to students' interviews. According to all the interviews that were carried out on the students, all the students came to a common consensus that the back-up plan of online education proved to be a blessing for them in the testing times of the pandemic. As many of their friends were forced to temporarily migrate due to the pandemic induced socio-economic constraints, those friends were still able to acquire schooling through the online platforms. On a social point of view, the students were able to stay connected with their friends; they all had a common purpose of logging in into the link and attend the classes while also knowing what their friends were up to, how they were doing and so on. The students claimed that thanks to the system of online classes, they felt more confident and adept while handling or operating tech-devices.

Lastly, even though all the students preferred physical classes, online classes also had immense potential and can definitely be used for future reference, even when there is no pandemic.

4.7 Findings from Interviews with Teachers

The analysis of the findings from the teacher's interviews will be discussed under four (04) thematic areas in this section: Technological Aspect, Challenges of Online Education, Positive Aspects of Online Education and Overall Perception on Online Education. Eight (08) semi-structured interviews were carried out. The semi structured interviews were numerically categorized as following: TC_RBGPS_Int#1, TC_RBGPS_Int#2, TC_RGPS_Int#3, TC_RGPS_Int#4, TC_MGPS_Int#5, TC_MGPS_Int#6, TC_GTGPS_Int#7 and TC_GTGPS_Int#8.

4.8 Technological Aspect

All the classes were conducted using Google Meet. Initially, the teachers were using the Zoom platform but unfortunately the user interface of Zoom proved to be difficult for both the teachers and students to operate. According to the interview number TC_RBGPS_Int#2, the teacher from grade five (05) generated Google Meet links for her students to notify them and assigned different tasks the day before conducting the particular class. However, such technicalities were avoided for students belonging from lower primary grades, because they had a harder-time adapting to this; in this case, the teachers sent the links using SMS, IMO or WhatsApp to the students. According to the interview number TC_RGPS_Int#4, almost 80% of the teachers in her school used smart phones to carry out the online classes as they found it more user friendly compared to laptops. In addition, even though the head-teachers had created a provision for the teachers to carry the schools' laptops in their respective homes and use them for the online classes, the lack of number of laptops often created problems. So, rather than using the school's laptops in a rotational basis, the teachers prefer using their own personal smart phones to give their online lectures. From all the semi-structured interviews carried out with the teachers, it was common for all the schools that the teachers had the opportunity to take their online classes from inside the school premises, using school's laptop and Wi-Fi connection during the usual school hours. According to interview number TC_GTGPS_Int#7, teachers often struggled with the screen-sharing option which glitches

out from time to time. Screen sharing option was very important for the teachers to provide visual aid in their lectures, especially for Math and English. In some cases, the students also needed to share their screen to show their work or submit their worksheet, but due to its software related inconsistency and unfriendly user interface, students as well as their parents struggled with this option which disrupted the entire flow of the class. Noise pollution was another factor for which teacher found it difficult to take the classes.

According to interview number TC_MGPS_Int#6, all teachers at first in her school, was finding it difficult to operate the different online platforms to give their lectures as they did not have any prior experience/training on it, but since a lot of time had passed, the teachers slowly adopted and were completely adept in using the virtual platform to provide their lectures. According to interview number TC_MGPS_Int#5, teachers often struggled with the mute/unmute option in Google Meet. Teachers often had to mute the students to minimize sound disruptions, as a result, both students and their parents found it difficult to unmute themselves and subsequently it was seen in many cases that the students ultimately fail to submit their tasks. According to interview number TC_RGPS_Int#3, students from lower primary grades like standard one (01) and two (02) got easily distracted with pop up messages, phone calls and so on which disrupted the overall flow of the class. All the teachers interviewed collectively agreed that load-shedding and power cuts caused greater disruption than connectivity related issues from the internet providers. According to interview number TC_RBGPS_Int#1, the teacher bought data packs at her own expense to act as a backup during load shedding however, the school did not have any provision to reimburse this expense. All the teachers interviewed came to a common consensus that the internet quality had improved and they did not usually face any connectivity related issues during the class time.

According to TC_GTGPS_Int#7, the GPS teachers lately were receiving online trainings from the Ministry of Education through Google Meet regarding how to effectively conduct online classes.

4.9 Challenges of Online Education

All the teachers who were interviewed agreed that high level of absenteeism was the main reason for inefficient online classes. On an average, each teacher received around 5%-10% of the entire class's attendance in the online classes. Additionally, forced internal migration due to the ongoing negative impacts in the socio-economic conditions of the families were also held primarily

responsible for this high level of absenteeism. When enquired further regarding root causes behind high level of absenteeism, the teachers further revealed that unavailability of technological devices was one of the main reasons why the parents preferred their children to take private tuitions rather than online classes using expensive data packs, according to their standards. Another common challenge that the teachers had to face while taking online classes was their inability to use practical references on the screen. This was a pertinent issue while teaching subjects like science and geography related topics. Also, it was difficult to grab the attention of the students through mobile phones. Children were very busy talking or giggling among themselves. When the parents were around, only that time the students could focus and take control of the device. Since, buying the data packs were expensive for the students, when the internet got disconnected, it was not possible for the students to re-join back, hence, it was quite impossible to finish the assigned task properly. Overall, through the interviews, the challenges the teachers talked about significantly outweigh the positive aspects of conducting online classes.

4.10 Positive Aspects of Online Education

Even though online classes have their fair share of challenges; it had also acted as a blessing in some specific contexts and scenarios. Firstly, all the teachers agreed that through online classes, they could at least keep the students engaged and not completely fall out of the discipline of schooling. The response from the students were satisfactory especially the children from class 4 and 5 and those belonging from a better socio-economic background. However, the teachers implied a positive inter-relationship between the socio-economic condition of the students with their attendance rate; meaning, students belonging from a sound socio-economic background face lesser obstacles in the form of device availability, quality of network connection, attendance rate and so on. Parents were very co-operative and responsive in case of emergency. The students enjoyed the classes very much, they did not feel stressed at all. In order to take the online classes, teachers had to move away from their inherent reluctance of adopting new technology in their work and slowly became adept at handling and operating technological devices, which served as a positive learning curve in their teaching career. There was no pressure to take the classes on time. Teachers could take the classes at their convenient time. Once lessons were online, teachers no longer had to wake up before 6am to stay in school by 7.30am. This was one of the top benefits of online teaching. They could work from home without taking the trouble of travelling which in a

way helped to save the travelling cost. This required no getting up and be ready for going to school early in the morning. Teachers could easily find a comfort space in their home to take the class. No exams were needed which helped the students as well as the teachers from reducing the pressure. Only worksheets were provided to the students, which they would complete before the classes. This helped the teachers to adept themselves to technology and helped to update the course contents easily. The software that was given to the teachers to use in the devices were very easy to operate. Teachers could also identify the weaker students since the number of students joining the classes were less. This way the teachers could give more time after the class to the weaker students. It not only helped the teachers but also the students access to teachers. Online education helped the teachers as well as the students to get upgraded in many ways. Not only it had the negative impacts but also resulted in many positive aspects.

4.11 Teacher's Overall Perception on Online Education

Online classes are a next best alternative to physical classes, even though the entire system of online classes doesn't have the potential to out rightly remove the existence of physical class altogether. Physical classes will and always be preferred by the teachers over any teaching learning practices. For students' online classes were very interactive and enjoyable. They could do the classes sitting home without taking the trouble of going to school, but it was also not feasible in terms of buying the data packs and devices for doing the classes. Not all the students had smart phones, parents used to carry it along with them which created a problem for the students to do the classes timely. According to teachers, there is no alternative to physical interaction between the teachers and the students. Practical examples while taking lessons, eye contact, appearance, ease of interaction are all salient and necessary aspects of conducting a fruitful teaching learning experience. But in order to keep the students updated and in touch with books, online education played a vital role in the field of education. However, teachers did not face any difficulty with device or internet, but the attendance rate was not satisfactory and this also demoralized many teachers to take the classes properly. Teachers think that weekly 2 days of schools would have been very helpful than online classes. Furthermore, online education has helped to minimize the education gap and keep the whole world going during this severe condition of covid-19.

4.12 Findings from Interviews with Head Teachers

The analysis of the findings from the head teacher's interviews will be discussed under four (04) thematic areas in this section: Technological Aspect, Challenges of Online Education, Positive Aspects of Online Education and Overall Perception on Online Education. The semi structured interviews were numerically categorized as following: HT_ Int#01, HT_Int#02, HT_Int#03 and HT_Int#04.

4.13 Technological Aspect

All the head teachers who were interviewed, apprised that the teachers along with the head teachers were given virtual training on online education for 10 days, by the Thana Resource Officer. The training was given for 1-2 hours daily for 10 days and was conducted from the Zigatola Resource Center. Additionally, after the training, the teachers and the head teachers were invited for a 10 days' practical demonstration of the training on online education. The head teachers also went on to add that firstly, all the technical aspect of the entire online education system was proving to be stressful for their teachers as they were not familiar with the technology and new ideas of giving their lessons. It took time for all the teachers to cope up and understand the usage of technology. But lastly all the teachers got used to it and they all enjoyed the system and overcame all the obstacles. There was digital classroom set ups in all the schools. Those who conducted the digital classes based on training only those teachers' got remuneration from the government.

4.14 Challenges of Online Education

All the head teachers came to a common consensus that no resources were given from the government. It was not possible to fulfill the target of the entire syllabus through online classes, said the head teachers. It was a challenge for the head teachers to arrange physical meetings with the teachers during the lockdown, to give the teachers proper directive on how to further carry out the tasks while taking online classes. The data packs were expensive, according to the head teachers. Only those who had the facilities could do the classes. Schools could not provide any technological devices to the teachers for doing the classes since primary level schools especially government primary schools do not have any computer lab. Hence, teachers had to take classes

with their personal devices. But schools provided worksheets to the students in the form of homework which was later assessed for giving grades.

4.15 Positive Aspects of Online Education

According to the head teachers, academic progress was satisfactory with online classes as the teachers tried to giver the lesson through phone calls by calling the students in some cases. The head teachers visited the online classes and informally asked the parents to buy separate devices for their children in the form of smart phones with the money that they get from Upobritti, so that they can be a part of uninterrupted online classes without any hindrance. The head teachers also motivated the parents who were present at the time of their children's online classes to actively participate in the classes and also requested the parents to motivate other parents in the neighborhood to make them understand the importance of this virtual platform, so that their children participate in the online classes conducted by the school.

4.16 Overall Perception on Online Education

The head teacher collectively responded that the students did not at all find online classes to be stressful. They did not feel pressurized, they enjoyed the classes very much. But the challenging part was that maximum students did not have any devices for doing the classes and they had to buy data packs, which was not unlimited like Wi-Fi. As a person who is responsible for the overall welfare of the school, the head teachers agreed that keeping the schools closed was the right decision by the government. HT_ Int#01, quoted that all the parents had the right to ensure the safety of their children, and by shutting the schools, that safety and security was ensured. Furthermore, she added that the children belonging from the GPS, were not very well aware about the health and hygiene related issues. They were very reluctant about maintaining the healthy protocols, as it was observed during the first few weeks of COVID, that they would not wash their hands properly. They did not wear the mask all the time and were not always aware about wearing it. Students were hampered academically but in forms of health, they were safe and sound. Younger children were very prone to diseases and infections but older people could fight back, so it was wise for the children to stay home during the pandemic.

Chapter 5
5.1 Discussion

Online education system in government primary schools was a great initiative for the students as well as for the teachers according to student interviews. According to all the interviews that were carried out on the students, all the students came to a common consensus that the back-up plan of online education proved to be a blessing for them in the testing times of the pandemic. Students found online classes to be quote unquote "exciting." They enjoy their weekly dose of 18-20 hours of online classes with their school friends. They solve several worksheets, submit their homework's online, meet their school friends on a virtual platform with whom they haven't probably met in more than one and a half years now. Online classes are a next best alternative to physical classes, even though the entire system of online classes does not have the potential to out rightly remove the existence of physical class altogether. Online classes were helpful but it was not always feasible and quite expensive. Students had to spend a lot in buying data packs to do the classes but that was not sustainable for long time. When data packs were over, they could not attend the classes anymore. Internet connections were never a problem during this time period. But the availability of devices was a problem. The ratio of phone: student was 1:5. Physical classes will and always be preferred by the teachers over any teaching learning practices. According to teachers, there is no alternative to physical interaction between the teachers and the students. However, teachers also mentioned that online classes helped to create strong bond with students during this lockdown period. Through online classes, teachers were able to talk in details with the students about anything related to their subjects. Not only that, teachers were able to guide many students with courage and positive thoughts during this pandemic situation. The students also shared their common challenges of doing online classes in the form of, load shedding, poor network quality, unavailability of devices and so on. The teachers on the other hand share a very different story altogether regarding online classes. Practical examples while taking lessons, eye contact, ease of interaction are all salient and necessary aspects of conducting a fruitful teaching learning experience, according to the teachers. Some of the prominent challenges that the teachers have faced are mainly in the form of, high absenteeism, internal migration due to the pandemic, unavailability of technological devices amongst the students, reimbursement issues from the school regarding the expenses of data packs and so on. The teachers also added that it is difficult

to ensure higher efficiency in the quality of the online classes amongst the students who are relatively younger compared to that of older students. Younger students could not keep their focus for a long time. They always needed assistance from their parents to do the classes. It was very difficult for the teachers to keep up with the younger classes' students than bigger classes. They gave blank looks to the teachers and could not co-operate properly with their mentors. Parents later used to either call the teachers for homework or they used to sit back home with their children during the class time. This was very challenging for both the teachers and parents. Lastly, the head teachers collectively re-assured that the students were hampered academically but in forms of health, they were safe and sound.

Younger children are very prone to diseases and infections but older people can fight back, so it was wise for the children to stay home during the pandemic. Younger children do not wear masks properly. They do not understand the consequences of the pandemic. They think wearing mask is suffocating and causes breathing problem. Children usually do not like forcing and does what they feel like doing. Most of the students do not wash their hands properly before having their tiffin in normal times. They were never guided about hygiene and safety. They would not understand the importance of cleaning hands with soap or hand sanitizers. Therefore, shutting down the schools were effective in terms of keeping the children safe from disease. At some point in the next year, covid may left behind us and students can return to their classes easily and freely with no fear, but the teachings and instructions from online classes should never be forgotten (Dr. Stevens, 2020)**.** The results of this research may inform the top-level decision-makers and relevant stakeholders in the education sector of our country to further acknowledge the importance of online education in the ongoing pandemic. Furthermore, it will help them realize the fact that the current status of online education is provided in the GPSs is not efficient. Moreover, if the findings of this research are disseminated at the grassroots levels with the help of schools and relevant community stakeholders, then it may inspire the parents and the students to understand the effectiveness of online education in their lives. Government of our country has taken a noble step by introducing online education in Bangladesh. It has helped to reduce the loss of student's activities in the pandemic (Khan, Rahman & Islam, 2021)**.**

5.2 Conclusion

Although there are various obstacles that students and teachers face when teaching online learning, the good news is that conducting lessons online is without a doubt a laudable move adopted by the present administration to prevent students' academic activities being lost. It took time for all the teachers to cope up and understand the usage of technology. But lastly all the teachers got used to it and they all enjoyed the system and overcame all the obstacles. Students were hampered academically but in forms of health, they were safe and sound. Parents also played a vital role in the lives of their children during this crisis. However, the situation was, they somehow managed to provide their children with all the necessities for doing the classes and stay in touch with schooling. It was tough for many parents to manage the financial cost of buying devices and data packs, but they didn't give up. They were enthusiastic about the matter and highly co-operative with this matter. Many teachers said that parents did the homework for their children if they couldn't get the delivery properly. Students and teachers must be encouraged to complete this activity correctly, and it must be perceived as a challenge to complete. Students must remember that they are the major stakeholders, and they must be self-motivated to take a greater interest in receiving a response to their digital lessons in all of their undertakings.

5.3 Recommendations

Several challenges have arisen as a result of the advent of online education in Bangladesh, particularly during the COVID-19 pandemic. Several increases in mental health difficulties, as well as challenges in conducting online classes, exams, and other activities. Because online education is still a relatively new concept, these obstacles are to be expected. However, this study proposes a possible solution to some of these problems, allowing them to be resolved or at the very least mitigated. Expensive internet connections, as well as shortage of technological devices, are two of the most typical problems that students and teachers confront. Pre-recorded video lectures are one approach to address these challenges. Due to a variety of internet challenges, students find it difficult to publish their scripts on time during exams. On the other hand, the instructor must check that everyone followed all protocols with the correct intent and that everyone took the tests in a fair manner. Time might be changed to solve both difficulties so that the questions don't take as long to answer. When it comes to teachers ensuring fair assessments, a variety of online class

monitoring tools could be employed to detect any plagiarism or unlawful actions committed by students. Even after these issues have been resolved, there is still a problem. In terms of online classes, mental health has become a big issue. There is nothing anyone can do to stop students from becoming depressed. In this case, the approach should be more forgiving in the pupils' favor. The number of assignments and home tasks should be lowered slightly. Because it is a difficult time for everyone and everyone is having difficulty adjusting, this is the least that educational institutions should do to ensure that students who are taking classes online are not being pressured or given excessive homework. A small modification in policy from educational institutions could actually assist to minimize tension for students, and everyone can learn and receive education and information in a safe, entertaining, and proper manner throughout the epidemic.

Another thing that would be wiser would be to take feedback from both the parents and the students and then responding to it immediately for better improvement. The schools can arrange more trainings from the government/upper level so in order to bring out efficient outcomes from online classes. Government could increase the amount of Upobritti money and other materials to make the classes more attractive so that the absenteeism rate decreases and students can easily buy the technological devices for doing the classes. Moreover, Government can subsidize data packs for students in particular to do online classes. This will help to move the burden of bearing high cost. Also, Government can take initiatives in working towards designing a separate curriculum for online classes.

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

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Appendices

Appendices A: Consent Form

Please find herewith the attached Letter of Informed Consent for your kind perusal.

Dear Concern,

I am a student at BRAC Institute of Educational Development, and I am conducting a thesis-study examining the 'Exploring the Effectiveness of Online Teaching Learning Practices at the Government Primary Schools of Bangladesh during the COVID-19 Pandemic.'. The effects of online education amid the pandemic are new, undetermined and there is little research on the perceptions and experience of important stakeholders like the students, parents and teachers. The results of this study will hopefully improve our understandings on the likely effects of widespread online education for our future. It is my understanding that you are currently one of the associated stakeholders related to online education in the government primary level education of our country.

I am interested in your experience of online education thus far, so I have enclosed a questionnaire which asks you to respond to a series of statement and questions. The questionnaire primarily includes statements evaluating how effective online education has been across the primary level education sector within your understanding.

I want to stress that your participation in this study is voluntary and all efforts to protect any information regarding your identity as confidential. Any details of your identity would not be in any way disclosed anywhere in the report.

I am hereby sending this consent form for your kind review. Please read the letter and feel free to contact me if you have any questions about the study. I look forward to learning about your experiences regarding online education. Your participation will be greatly appreciated.

I herewith, seek the consent of my supervisor to carry out my data collection for the purpose of this research topic.

Sign: _____

Date: _____

Sincerely,

Narjis Akhter

Contact: 01633372877

Appendices B: Research Tools

Questionnaire for Students:

Student details:

Name:

Age

Sex:

School:

Class:

1. How do you feel overall about your online classes?
2. Do you have access to a device for online classes?
3. What device do you use for your online classes?
4. How much time do you spend each day on an average on your online classes?
5. How effective has online classes been for you?
6. How helpful your school has been in offering you the resources to learn from home?
7. How stressful is online classes for you during the COVID-19 pandemic?
8. How well could you manage time during your online classes?
9. Do you enjoy you online classes?
10. How helpful are your teachers while studying online?

Questionnaire for Teachers/Head Teachers:

Teacher's details-

Name:

Age

Sex:

School:

1. How is your school delivering the online classes?
2. Do you have high-speed internet at home?
3. What device do you use for the online classes?
4. Are you satisfied with the technology and software you are using for online teaching?
5. How helpful your school has been offering you the resources to teach from home?
6. How stressful do you find teaching online during the COVID-19 pandemic?

7. How stressful were your students while learning online during the COVID-19 pandemic?
8. How were your experience teaching students from home as compared to teaching at school?
9. What kind of response have you got so far from your students?
10. Generally speaking, how helpful have parents been while supporting their children's online learning?