# Exploring the Capacity of Government Primary School Teachers for Conducting Online Classes During the COVID-19 Pandemic

By

Nadia Afrin Bintu Student ID: 19357080

A thesis submitted to the BRAC Institute of Educational Development in partial fulfillment of the requirements for the degree of Master of Education Leadership & School Improvement

BRAC Institute of Educational Development

BRAC University

April 2024

© 2024. Nadia Afrin Bintu All rights reserved.

## **Declaration**

It is hereby declared that

- 1. The thesis submitted is my original work for the completion of my Master's 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 that 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 literature and data used.



Nadia Afrin Bintu

## **Approval**

The thesis titled "Exploring the capacity of government primary school teachers for conducting online classes" submitted by

1. Nadia Afrin Bintu (19357080)

of Spring, 2021 has been accepted as satisfactory in partial and fulfillment of the requirement for the degree of Master of Education in Educational Leadership and School Improvement on April 21, 2024.

## **Examining Committee:**

Supervisor: (Member)	
(men)	Mamunur Rashid
	Senior Lecturer, BRAC Institute of Educational Development
Program Coordinator: (Member)	
,	Dr. Manjuma Akhtar Mousumi
	Assistant Professor, BRAC Institute of Educational Development
External Expert Examiner:	
(Member)	Nazmin Sultana
	Lecturer, BRAC Institute of Educational Development
Head of the Institute:	
	Dr. Erum Mariam
	Executive Director, BRAC Institute of Educational Development

## **Ethics Statement**

This thesis was completed following ethical protocol throughout the process, starting with submission of an ethics application along with the thesis proposal. It was then accepted by the Ethics committee after careful review. The interview questions were also designed so that it does not lead to bias responses. Before the interview and focused group discussion the interviewees were given a consent letter, which included the research topic, interview method and duration and maintaining data privacy. In the case of minors, prior to interviewing them, a consent letter was given to their parents.

During the data collection, I conducted the interviews and focused group discussion having a neutral standpoint. All the adults and parents of minors signed the consent letter before the interview and focused group discussion. All data is stored on my personal computer and none of it is shared with any external body for usage. Also, alias names were used when participants were refereed in the thesis.

## **Abstract**

This is qualitative research to explore the capacity of government primary school teachers' skill in conducting online classes in the context of Dhaka, Bangladesh. The research focuses on 3 areas: the current practices in Bangladesh to take online classes, the type of capacity government teachers has (in terms of creating a learning environment, digital knowledge and motivation) and what new capacity building is required for teachers.

Ten teachers and ten students were interviewed from ten different government primary schools in Gulshan Education Thana. Interviews and focused group discussion (FGD) were conducted to collect the data. From the opinions, expressions and experience of the participants the research discovered that so far, the approach towards online classroom has been crisis management, only teacher-centric pedagogy has been used where students are struggling to retain attention. Lastly, teachers are facing difficulty in conducting the classes due to lack of digital skills, support, infrastructure, training in these areas as well as for motivation during this time of uncertainty.

Key words: COVID19 Pandemic; Online Class; Capacity of GPS Teachers; Primary Education; Digital Literacy; Teaching Skills.

# **Dedication**

This Thesis is dedicated to my beloved students, who have driven me to work further in education.

## Acknowledgement

I would like to thank my thesis supervisor, Muhammed Mamunur Rashid, Senior Lecturer, BRAC Institute of Educational Development for his keen observation and thoughtful guidance throughout the thesis completion. Also, BRAC University for this opportunity to work on an important topic. I am also grateful for my friends, colleagues and family who consistently motivated and supported me to complete this work. Lastly, I am thankful to almighty to bless me overcome the difficulties throughout the journey of this paper.

## **Table of Contents**

Declaration	1
Approval	2
Ethics Statement	4
Abstract	4
Dedication	5
Acknowledgement	6
Table of Contents	7
List of tables	9
List of Acronyms	10
Introduction and Background	11
1.1 Introduction	11
1.2 Research Topic	11
1.3 Problem Statement	12
1.4 Research Questions	13
1.5 Purpose of the Study	13
1.6 Significance of the study	14
2. Literature Review and Conceptual Framework	15
2.1 Literature Review	15
2.2 Conceptual Framework	18
3. Information and Methodology about the field research	19
3.1 Research Approach	19
3.2 Research site	19
3.3 Research Participants and Sampling Procedures	20
3.4 Data Collection Methods	20

3.5 Role of the Researcher	21
3.6 Data Analysis	21
3.8 Ethical Issues and Concerns	22
3.9 Credibility and Rigor	22
3.10 Limitations of the Study	22
4. Results	24
4.1 Introduction	23
4.2 Major findings	32
5. Discussion and Conclusion	34
5.1 Discussion	34
5.2 Conclusion	40
5.3 Recommendations:	41
References	44
Appendices	
Appendix A and B: Consent Letter for Interviews and FGD	81-40
Appendix C: Interview Transcripts	50

# **List of Figures and Tables**

Figure 1: Conceptual Framework map	. 18
Table 1: Field Plan Table	. 21

## **List of Acronyms**

ICT Information and Communications Technologies

MKO More knowledgeable others

USAID United Stated Agency for International Development

MoPME Ministry of Primary and Mass Education

NGO Non – Governmental Organization

FGD Focus Group Discussion

IMO Audio/Video calling and instant messaging software service

U.S. United States

GPS Government Primary School

## Chapter 1

## **Introduction and Background**

## 1.1 Introduction:

Since the sudden closure of schools from March 2019 due to COVID-19 pandemic, it has become pertinent to know and dig deeper into the education system in providing distance learning. This pandemic is expected to change the future of education forever where there will not be any sole dependence on on-site classes. Among many other aspects of the education sector that enables successful student learning, more than ever the capacity of different teachers for conducting online classes has become a necessity. 'With a 98% enrollment rate in a country of over 18 million primary school students (USAID, 2023) if the teachers are not able to reach them it will lead to a huge learning loss and academic achievement gaps.' 'At the same time the capacity building of teachers would be a mammoth size task too, given the number of working government primary schools teachers were 3,54,722 in Bangladesh in 2019' (MoPME, 2019).

Primary years of schooling helps students create a base for future learning. Teacher student interactions, learning with peers and all other activities in school helps a child grow. Many existing government primary schools also had large size classrooms which made teachers deliver lessons and ensure quality during on-site classes. So, delivering the lessons online is not only a mountain size challenge for teachers but at the same time they have to be highly skilled and proficient in doing so. Given, most schools are taking place over the internet, including the government ones. Now, majority low-resourced government schools already have many challenges and skill gaps among teachers.

This research is intended to explore the capacity of government primary school teachers in Gulshan education thana, who were taking classes online. Additionally, it will be useful in digging deeper about the issue which impacts the dropout, and lack in academic achievement in students.

## 1.2 Research Topic

Research Topic: Teachers' skill in conducting online classes

During the pandemic, there has been a rapid demand in online teaching skills due to the abrupt shift of the teaching-learning methods. The COVID-19 had resulted in schools shut all across the

world. "Globally, over 1.2 billion children are out of the classroom. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms" (Li & Lalani, 2020) (paras 1-2).

Online teaching skills now have become a must-have for teachers being integral stakeholders in education and educational institutes all around the world. Bangladesh has the largest primary education system in the world with a major literacy and achievement gap and dropout among students. During this pandemic these issues are aggravating. Teachers' ability to keep the students invested in classrooms, especially via online is key. Now before the teachers can do that, they need the appropriate skills. Hence, I have chosen the topic which will look into this pressing issue.

**Research Title:** Exploring the capacity of government primary school teachers for conducting online classes.

Haque et al. (2017) in his research mentions that "The primary education sector is the biggest national enterprise with more than 20 million students attending 78,126 educational institutions served by more than 320,000 teachers" (p.6). He also adds that "Every participant (trained teachers) got 12 days for ICT in Education training at their nearest PTIs" (p.15). On the other hand, in a news article Jasim, (Jashim, 2022) 'argues how 12 hours of training is inadequate for teachers to build ICT skills and deliver any effective lesson. At least 60 days of training is required'. So, the government primary schools have been most affected given the large number of students and lack of teachers ICT skills. Hence, the research is focused on these schools in Gulshan Education Thana where I have two years of work experience.

#### 1.3 Problem Statement:

One of the main educational problems in the Bangladeshi context is the capacity of teachers in terms of teaching-learning methods, classroom management through understanding child psychology, ICT skills etc. Most large size classrooms hinder from making the lessons activity-based targeting different forms of learners, such as kinesthetic and mostly focus on audio - visual learning in on-site classes. This hinders teachers from providing effective learning experiences for students. Islam (2020) also adds that "many independent studies have also raised questions about the quality of teaching-learning activities at both primary and secondary levels" (para. 2). Now, when the time has come for distance learning, having only lecture-based classes will impact students' learning even more. The application of these traditional methods of teacher-learning will also make teachers' job challenging in ensuring the learning.

Children require constant attention from teachers and they are not old enough to be self-taught. With large student number classrooms, individual attention was already an existing challenge. This needs to be addressed while teaching online. And if creative and alternative solutions are not adopted then this will not ensure the learning of students no matter how much the teachers are working hard in creating content, assessments etc. A large size classroom may be manageable with various classroom management techniques when on-site but if the same are tried for online then the overall learning goal, process and experience will be hampered.

Lastly, for students to be engaged "The key factors behind this are: lack of access to early childhood development programs, low quality of teaching practices, challenges related to poor school management" (Yinglun, 2019) (para. 6). During this pandemic besides the previous aspects, teachers' knowledge and confidence in using ICT is a prerequisite in conducting effective online class taking. Since there has not been a regular practice of using ICT by all teachers during the onsite classes, building their capacity is crucial. If teachers do not know how to operate a computer, then training on digital modes of teaching will require a lot of time while ensuring students' participation in online classes. The latter cannot be done without ensuring the former and this can lead to creating a dip in learning for students and teaching for teachers. Given the previous challenges I am curious to know more about how the teachers are facing challenges in terms of their capacity of conducting online classes which will help in surfacing the problems even more to come to probable solutions.

## 1.4 Research Questions:

In relation to the problem discussed above I would like to know what are the teachers currently practicing, like the methods of teaching online etc. What capacities do the teachers already have from training, etc. and they are satisfied. The questions are as follows:

- 1. What are the current practices in Bangladesh to take online classes for primary education students?
- 2. What type of capacity do the government teachers currently have to teach online?
- 3. What capacity needs to be built in the teachers?

## 1.5 Purpose of the Study:

Looking closely into the issue, it can be broken down into deeper layers. The research will find out what is the current capacity of government primary school teachers to be able to take online classes to reduce the gap in education that is taking place and provide an effective learning environment and support for students. The research will also explore the answers to what skills are actually required in order for teachers to take classes effectively, whether the government teachers currently have the capacity and skills to do so and lastly are there any training, session or activities being provided to them to build their capacity in this area. And lastly, it will also examine whether their current capacity is adequate for them to provide satisfactory support to students in order to achieve their desired academic outcome and which areas the teachers feel the necessity for capacity building.

## 1.6 Significance of the Study:

The research will create the knowledge and understanding of the current situation of the teachers about their existing skills in taking online classes which is crucial for now and the future. It will generate the knowledge and understanding by:

- What are the current practices of the government primary school teachers in conducting online class, which will help to understand the already existing scenario?
- What is the existing capacity of the government primary school teachers in terms
  of how they are being able to create a learning environment, what digital knowledge
  they have and what are their motivation factors that is driving them to continue the
  work? This will lead to a more asset-based approach in determining what the
  teachers already have.
- After the previous investigation the research will also look into what the teachers feel they need capacity building on.

Therefore, through this research policymakers will get a better understanding of the scenario at school level and hear voices of the teachers, who implement the strategies made by the policymakers. This will add value and the findings will contribute to policymakers making policies and find out further problems associated with the skill gap on educational development. Additionally, the voice of the stakeholders will enable policy makers and thana education offices to provide need-based training. Overall, the research will provide more contextual knowledge to those who are working in the education sector, such as teachers, local and international NGOs to understand if there are any gaps in teachers training areas and provide them more room for work.

## Chapter 2

## **Literature Review and Conceptual Framework**

## 2.1 Literature Review:

Online teaching skills

"The 21st-century skillset is generally understood to encompass a range of competencies, including critical thinking, problem solving, creativity, meta-cognition, communication, digital and technological literacy, civic responsibility, and global awareness (for a review of frameworks, see <u>Dede, 2010</u>). And nowhere is the development of such competencies more important than in developing country contexts, where substantial lack of improvements in learning outcomes has suggested that the task of improving instructional quality is urgent" (Kim et al., 2019) (p 100).

Online classroom teaching requires a different set of skills than physical ones. "Digital literacy skills have become critical for teachers to move online and manage their virtual classes, especially through live streaming. Some older teachers face significant difficulties though, making their lack of digital literacy a major barrier to teaching effectively" (Xu et al., 2020) (para. 3). Additionally, 'teachers must get technical support, alter their teaching style, create a proper and safe learning environment for students, use effective communication methods with students and interactions themselves' (Gillett et al., n.d. p.6). Given, Bangladesh is a lower-middle income country, to ensure and sustain quality of education is an urgent next step. The 21st century skills, which also includes digital literacy is crucial to help teachers in improving instructional quality. A gap in digital literacy skill will affect the overall quality and delivery of content and even if one has the other skills there will be lack of effective demonstration of those. So, online teaching skills has become pertinent more than ever during the pandemic and afterwards.

## **Trainings**

"What's the best way to raise the academic achievement for our students? Standard-based reform emphasizes improved teaching as the best path to increased learning. But students' learning will be transformed only if teachers' classroom practices reflect high standards. Many teachers, however, are not prepared to implement appropriate teaching practices

(Porter and Brophy, 1988). Professional development plays a key role in addressing the gap between teacher preparation and standards-based reform; it is a key focus of U.S. efforts to improve education." (Birman, et. al., 2000, p.28). In the 80s America found out that teachers' professional development and continuous trainings is required to enhance the quality of education and students learning and achievement. So, there is a direct correlation between the two. This literature actually sheds light on that fact that if in-person lessons require such rigorous training, what would the same outcome expected via online platforms require. Given, the demand for online classes is an abrupt shift in the primary education in Bangladesh, trainings on ICT and the nuances of online training are crucial.

So, government has taken steps "through partnerships with numerous other governments and institutions, ICT training centers for education, cost-effective internet connections and computers, and ICT training for teachers and students were ensured." (Wing, 2020) (para. 6). Wing also mentions 'how many teachers along with other stakeholders lack adequate knowledge on how learning takes place on online platforms. Many of them are using online learning platforms for the first time.'

To help with the teachers, many online platforms are providing new resources while also offering guidance to schools about the best practices in online learning. "However, there is a lack of qualified teachers in Bangladesh who understand the content and delivery style required for online education. The overall ICT infrastructure is not strong either." (Wing, 2020). Additionally, as per Tariq and Fami (2020) 'most primary school teachers lack practical knowledge of online teaching methods and resources and are struggling to combat these issues.'

## Teachers adapting, current practices

As per Asjad (2020), 'a large number of teachers in Bangladesh are facing challenges to take online classes with inadequate resources and skills. They depend on costly mobile phone data. The teachers have always taken classes face-to-face and lack training to take classes online which requires some technical skills'. "It also requires the ability to engage with students online as reliance on certain tools warrants shifting instructions accordingly.

Many of them have, however, successfully familiarized themselves with online teaching methods during the pandemic." (Asjad, 2020) (para. 8).

As it was crisis situation, teachers' mindset of willingness to adapt is important. Asjad also mentioned 'how a good number of teachers in villages and semi-urban areas are facing major struggles and still not prepared for the new pattern and method of learning'. This is majorly because they do not have the required support. "The majority of the teachers feel that delivering a lecture before delivering a lecture before the camera is quite different from doing so in front of students. They can neither make an assessment of how the audience is responding nor can they use their gestures to secure the attention of students." (Asjad, 2020) (para. 5).

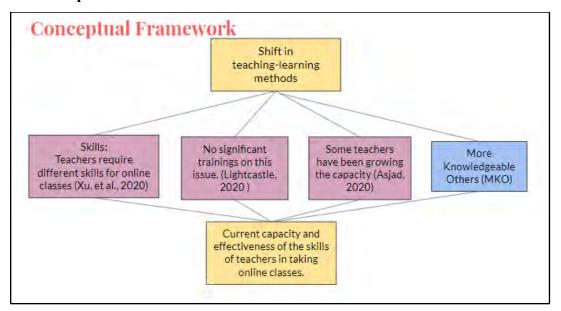
## Peer Support

Given that many teachers, like the senior teachers who are inexperienced in using advanced technology found it difficult to run many applications and teach via online platforms. Peer support was crucial during these times. "Support from peers includes encouragement to continue teaching online, helping each other if there are fellow teachers who cannot use other computer applications or programs, as well as coordination of classroom materials between classes conducted online." (Rasmitadila et al., vol. 7 2000, p 100). Rasmitadila et al. in their paper also represents teachers directly mentioning about 'how they should be supportive and motivative to one another as it is will hamper student learning otherwise. Also, peers can often inspire each other, especially in times of difficulty and having a sense of feeling that despite online teaching being difficult it is not a burden.'

Another study of primary and secondary schools in Malta also surfaced how peer support was one of the key factors during this novel situation. "Open-ended responses for teachers who collaborated with colleagues teaching the same grade or subject area yielded some interesting insights, highlighting the division of labor, the significance of collegiality and supportive school management team, constant communication between colleagues, and feeling a sense of belonging as they faced unique and unprecedented emergency circumstances." (Busuttil and Farrugia, 2020, p 227) So, it is quite evident that peer support was one of strongest backbone for teachers not just in terms of learning applications and

strategies for taking online lessons but also for moral support. And more knowledgeable and abled ones have supported and guided their other colleagues.

## 2.2 Conceptual Framework:



In the overall research, I have personally experienced, during the pandemic that there has been a shift in teaching-learning method, forcing everyone to shift to online or some form of distance learning. While looking at other literature I found various readings and research talking about the necessity of teachers' capacity building in terms of teachers' digital literacy, students' interaction and creating a proper learning environment and having the motivation to teach online even when it gets very difficult. Additionally, there has been a lack of ICT training of government teachers but again some teachers have been trying to adapt to teaching online. This also connects to the theory of more knowledgeable others (MKO) 'where learners say here the students get to learn from someone who has higher knowledge, like their teachers. This creates an area of exploration to assess the capacity of teachers currently existing to conduct classes online' (Cherry, 2023).

## Chapter 3

## Methodology

## 3. Information and Methodology about the field research

#### 3.1 Research approach:

The research approach is qualitative. Given the topic requires finding out the capacity in terms of skills of the teachers which will be based on their experiences and opinions qualitative research is most appropriate. Verhoef and Casebeer (1997) mentioned that "The goal of qualitative research is the development of concepts that help clarify phenomena in natural, rather than experimental, settings, giving due emphasis to the meanings, experiences and views of all the participants being studied. And, quantitative research is very well suited to establishing cause-and-effect relationships, to testing hypotheses and to determining the opinions, attitudes and practices of a large population, whereas qualitative research lends itself very well to developing hypotheses and theories and to describing processes" (p 65). So, since it is an exploratory research, qualitative method will give the scope to dig deeper.

#### 3.2 Research Site:

The research is conducted on 5 different government primary schools of Gulshan Education Thana in Dhaka city. The schools had co-education comprising both girls and boys. The schools are located in densely populated area with limited resources, such as some have shortage of access to clean drinking water, inadequate number washrooms, inadequate infrastructure (such as number of seats, fans, lights, etc. in the classrooms), limited ICT facilities with one or two laptops and a projector for the use of whole school with no computer lab. Given the pandemic is ongoing, the datas were collected virtually for safety precautions. Most of the schools have high teacher to student ratios with coeducation classrooms, on average 65 students to 1 teacher for every class. These schools have a range of approximately 600 - 1500 students. Most of their students come from lower

income backgrounds where their parents are day laborers, garments' workers and etc.

## 3.3 Research Participants:

Ten government school teachers and ten students of those particular schools were selected as participants. Any combination of either two government assistant teachers from each school or one government assistant teacher and one head teacher, i.e., two teachers from each school are the participants of the research. The criterion for selecting the teachers was that they had or are conducting online class and the student participants were of those who have attended online classes. This was an important criterion as otherwise it will be difficult for them to reflect on the research questions without having any experience of online class.

## 3.4 Sampling Procedure:

The target population of this research population was the government primary school teachers conducting online classes from class 2 - 5. For students, it was those who were in class 3 - 5 and attended online classes of any subject of those schools which the teacher participants are from. The participants were selected through convenient sampling, based on their availability, willingness and time to participate. In terms of students, their parents' consent and willingness was a criterion. After the previous selection, participants were (randomly) selected at the convenience of their availability and came down to 2 male 8 female teachers and 3 male and 7 female students. From which, government primary school (GPS) Headteacher and 4 GPS assistant teachers, and focused group discussions with 5 GPS assistant teachers. Also, all the teachers had attempted providing some form of distance learning and also received different trainings from government in the past (such as, ICT, subject-wise or etc.)

**Field Plan:** So, data were collected on February 2021 and details of data collection is given in the table below:

Activity	Participants	Date
Reach out for requesting to	10 teachers and headteachers	Feb 7 - Feb 11
participate	of 5 schools of Gulshan thana	

Interview	Interview 15 participants	Feb 12 - Feb 20
Focused group discussion	FGD with 5 participants	Feb 22 - Feb 26
(FGD)		

Please look into the Appendix for a letter of consent.

#### 3.5 Data Collection Methods:

## **Research Method(s):**

'Qualitative research gathers data about lived experiences, emotions or behaviors, and the meanings individuals attach to them' (University of NewCastle Library Guides, 2020). So, data was collected by interviews with 5 government primary school (GPS) teachers (including 1 headteacher) and 10 students and focused group discussion with 5 GPS teachers.

#### 3.6 Role of Researcher:

My role as a researcher was to collaborate and communicate with each person involved in the research process. I explored and shared knowledge for the purpose of the research and greater good of the society, economy and education sector. Additionally, I maintained honesty and strong research ethics throughout the process. Given, I was also a teacher (assigned from an NGO) in one of the sample schools, I tried to keep that in mind and was careful to be biasfree and objective for fair research.

## 3. 7 Data analysis process:

There were a total of 20 participants comprising 10 government teachers and 10 students from class 4 and 5. Then I did thematic analysis where at first, I translated and transcribe the interviews and focused group discussion (FGD) from Bangla to English and then primarily code the data to understand the content, then found patterns and themes of those codes for different interviews. Finally, I reviewed the themes again. The reason for which I used thematic analysis is because it will help me find out the desired research questions which focus on participants' opinions, views and experiences. To ensure the trustworthiness and rigor of the process I reviewed the data and the process by my research supervisor so that the findings are consistent and usable. Also, a triangulation process is

used in data collection with interviewing teachers and students and as well as FGD with teachers.

#### 3.8 Ethical Issues and Concerns

A consent form, both in English and Bangla, was printed. For the two in-person interview respondents the consent form was handed over for them to go through and ask questions if necessary. For respondents attending the interview virtually or over the phone, the form was emailed or sent through messaging apps one day before the scheduling of the interviews. The teachers signed, scanned, and sent back the form. For all the respondents, the consent form was read out again before beginning the interview to communicate transparency, data security, introduce the research topic, purpose of the study, and most importantly to encourage their dialogue. Participants were reminded again to have full freedom in accepting or rejecting participation in the study at any point during the data collection process. All data collected is strictly confidential to the researcher.

## 3.9 Credibility and Rigor

I have conducted quantitative and qualitative data collection as part of my previous academic coursework. I am familiar with the research topic and the school environment from prior professional experience as a primary classroom teacher.

## 3.10 Limitations of the Study

There were a couple of barriers to this research. Given there is an ongoing pandemic, the data collection was done online and over phone calls. There were technical challenges such as sound quality, time-lag, web-cam issues, etc. Government teachers are usually very packed with various administrative work, so finding a suitable time for them was challenging. The research questions are related to government training provided. Some participants were hesitant to talk openly about the issues. Additionally, one participant was

quite late to join the FGD hampering this contribution in the discussion. Also, given the teachers were at home there were sometimes distractions from their surroundings.

To tackle these limitations I predicted ahead, I prepared the participants ahead of time and asked them to take support from any of their family members who are tech savvy. With some participants I took a trial call before the actual data collection. Additionally, I was flexible and allocated an adequate time frame for the data collection. Before beginning the data collection, I communicated a couple of times with the teachers and built a rapport so that they become comfortable while sharing information. Lastly, I mentioned at the very beginning of the research that their names and school names will be kept confidential and not shared in public. With this information, and rapport building I was able to create a safe space for most of the participants where they were open to share their experiences and opinions

## Chapter 4

#### Results

#### 4.1 Introduction

After data was collected it was transcribed and translated for analysis. This section of the paper focuses on the analyzed data. The data is presented under themes deduced from the responses under each research question. Data representation will follow the chronological order of the questions the research is exploring. Firstly, will it look into the current practices in Bangladesh to take online classes for primary students. Then, what type of capacity do the government teachers currently have to teach online in terms of creating a proper learning environment, having digital knowledge, effective interaction with students, and motivation in taking these classes. Lastly, it will represent what capacity needs to be built in the teachers to make online classes successful.

Following are the current scenario and practices of online teaching by the GPS teachers:

I. External Factors impacting the class directly

I (a). Financial crisis during the pandemic:

Many of the primary school students come from financially challenged communities and

families. This leads to having low quality phones, lack of internet connection, both parents

working, etc. These affect their attendance in class as well as motivation. This also leads

to students frequently getting dropped off in the middle of the class affecting smooth flow

of interaction:

Many times, it happened that some students got offline and were not able to join

the class. At that time, I used to call them and ask about the trouble they were

facing. They shared that they did not have money to buy the internet.

(Interview # 2, Date: 11-03-2021)

I (b). Creating academic gap:

Because the students are not being able to maintain proper flow of attendance and

communication in the classroom it is creating a further academic gap. The primary

education sector already has an academic gap prior to the pandemic and this will keep

adding weight to the existing problem. One of the teachers mentions:

So, it is difficult for us to bring all students in the online class. So, there is a gap

created. It is seen that some students join one class and again some new join in the

next class while previous ones are missing.

(Interview # 2, Date: 11-03-2021)

II. Challenges of current practices

II (a) Usage of software application: The classes are mostly held on IMO, Facebook

messenger. Some are held on Zoom. IMO and Facebook messenger are applications used

for video and audio calling, chatting, etc. These are used in primary education due to

students' ease and familiarity with these apps. It took some time for teachers to make some

students use Zoom because it was tough for students to use it and also required more mobile data. Calls in these have particular challenges of their own, such as IMO can have 5-6 people in one group. Call on Zoom, on the other hand, has a time limit of 40 minutes for free accounts. Even though some of them had access to these applications, the classes could not be held regularly:

Many students did not have smartphones. But the ones who had, we used messenger and IMO to give them tasks.

(Interview # 04, Date: 12-03-2021) another participant said about how they used IMO groups:

I have used IMO by making two groups. And also used Facebook for recorded class.

(Interview # 03, Date: 12-03-2021) to add with it another student mentioned about Zoom:

One teacher divided groups with people who lived close by whoever used Zoom. (Interview # S5, Date: 16-03-2021) there was more about Zoom classes for another participant:

Zoom class was taken 2 classes daily in the morning and evening.

(Interview # S6, Date: 16-03-2021) Another student mentioned about Facebook and messenger as well:

Facebook, messenger and IMO. We had some classes in IMO regarding Bangla and some other subjects.

(Interview # S1, Date: 14-03-2021)

II (b) Digital Literacy: 100% of the teacher participants mentioned that they have no formal training on taking online classes. Some have ICT training but that does not include remote learning. One teacher participant with 30 years of teaching experience mentions in the

interview that:

I didn't get any ICT training. I have self-learned. And other teachers have

supported and helped in making the video lessons go viral. I have not received any

ICT training saying that I am a senior teacher, so not eligible though I have 9 years

more to go.

(Interview# 3, Date: 12-03-21)

Not only the lack of digital skills and knowledge have surfaced during this pandemic but

also the limited capacity of the system in training the teachers is vivid. So, lack of teachers'

knowledge affects the students as well.

II (c) Environmental support: Households have become classrooms now. And not everyone

has a similar environment at home that is supportive of online classes. One of the 11 years

old student participants shares her challenges of studying from home environment:

At home I have a younger sibling and they make noise, throw toys that would be

disturbing. At school these were not there which was helpful for studying.

(Interview# S1, Date: 14-03-2021)

There are often distractions and background noises from both students and teachers.

Teachers mentioned being distracted by household demands of chores during class

affecting the online classroom environment.

III. Innovative pedagogy

III (a) Communication: Students have mentioned that teachers frequently checking for

students' understanding, giving time at the end of classes to ask questions have been very

helpful.

One of the 5th grade student participant shares in the interview that:

Video classes have been most effective, as we could see what was done. Ma'am

used to inform us ahead of class timing by calling, so I would gather friends around

and be ready for class.

(Interview# S4, Date: 17-03-21)

Students feel more connected as they can call their teachers anytime, they want to ask

questions they do not understand via phone calls, audio clips and video calls. So, students

get more personalized attention and scope of interaction.

III (c) Visuals and stories: Students have also shared that they liked classes with usage of

more visuals like videos and photos. This has helped them to engage more with the lesson.

One student mentioned that he liked learning Bangla via online classes as it had more

stories.

The teachers showed the books in the video and that helped.

(Interview # S2, Date: 14-03-2021) another student also said about liking Bangla:

I like Bangla as it has many stories.

(Interview # S3, Date: 14-03-2021)

IV. Primary focus: crisis management

Teachers mentioned that the primary focus till date has been managing crises by gathering

students' phone numbers, talking to their parents and guardians to bring them to online

classes and other remote learning practices. One participant in FDG says:

How to improve class was not the focus. The basic focus was to bring them to class

and stay connected to books and continue studying. Well, I did not apply much in

the online class as there was not much capacity or opportunity.

(FGD, Participant # A, Date: 25-03-2021)

These have been so time consuming and energy draining that it has not left them with much

scope to explore other areas of the online class.

The following will look into the type of capacity the government teachers currently have

to teach online:

I. Online classroom learning environment

Online classrooms differ from physical classrooms in many ways. As per students'

experience, they mentioned they enjoyed physical classrooms since they are more

interactive. They enjoy talking directly to their teachers. The lessons are easier to follow

as they are face to face. Students mentioned about the online classes being noisy. The

teachers also validated this problem in their interviews saying it is difficult to manage class

and noise level during the online class. Students also talked about how onsite classrooms

have writing boards and other physical teaching materials which helped them learn the

content better.

Students do not understand in online class. In physical class we can try different

techniques of teaching or explaining a lesson if they do not understand, like peer

learning which is lacking here. Online is not as fruitful as physical classes.

(Interview# S3, Date: 12-03-2021)

II. Students' interaction

Teachers informing about the online classes ahead of time, maintaining routine helps them

to follow the schedule of the classes better. The teachers also mentioned that having a

proper system of communication in place has helped students to stay informed and join

classes. One of the students participants shared that:

Ma'am called us ahead to inform us when the class will be held. At times my father

would be home then I'd call her and ask for the tasks, this was helpful.

(Interview# S7, Date: 15-03-21

III. Digital aspects

III (a) Technical difficulty and adaptation: There were often technical difficulties. Despite

students joining on time in the class, they would hear disrupted voices and sometimes get

distracted. It took quite some time to adapt to this new normal of doing classes online,

using devices and applications. The process of adaptation is still ongoing.

There has been an internet disturbance. Many people would log out of class again

and again.

(Interview # S2, Date: 14-03-2021) to add with it, a student mentioned about the

call dropping being a disturbance:

But could ask more in physical class. But the call would drop every 40 minutes, so

that was disturbing.

(Interview # S10, Date: 20-03-2021)

III (b) Resources as a support: Teachers mentioned that they have not received any digital

device support. This made their job harder as not all teachers had devices. Teachers had to

share their devices with their children at home who were attending online classes in their

own schools. Teachers also talk about the added financial burden on them due to use of the

internet, mobile phone bills and buying new devices. They feel a lack of support for them

to keep their job running smoothly. Some teacher participants shared their thoughts in the

focused group discussion:

If teachers were given a laptop each would be helpful. Because my children have

class using my personal laptop. We did not get any conveyance for phone calls.

(FGD, Participant# E, Date: 25-03-21)

#### IV. Motivation

Teachers feel their motivation depends on support from the government and being appreciated. The pandemic is taking a big toll on their work. Students being enthusiastic about doing the class also impacts teachers' motivation and self-assessment of success and fulfilment. A participant talked about lacking support for teachers:

Many sectors got support but teachers did not. Adding these affected my motivation.

How long can I provide one-sidedly?

(FGD, Participant# D, Date: 25-03-21)

· -

Following will look into what capacity needs to be built in the teachers:

## I. Capacity building:

I (a). Training on digital literacy: Teachers mention how they are still struggling to solve many ICT related problems, using new applications, teaching students how to use them. There is an urgency on training all teachers in the primary education section on digital literacy to make online classes more effective. Teachers desperately feel the need of this and shared it in the FGD:

Every school should have more than one ICT teacher. But all teachers should get some digital literacy training. I saw many teachers are interested but they do not have the skills so are not able to conduct the class. Apart from us, many teachers do not know the basics of ICT. We should get more and more training and updated on new apps and how to continue the class in such situations.

(FGD, Participant# A, Date: 25-03-21) Teacher participants added about how their older peers needed help but could not avail it:

Many very skilled senior and experienced teachers due to lack of digital skills could not take online classes. If someone helped them then maybe they could. We did not get any training on these things.

(Interview # 02, Date: 11-03-2021)

I(b). Training on online pedagogy: Teachers feel that currently the online classes are very teacher-centric where they are giving tasks and lectures and students are following the

command. They struggle with content designing, delivering them efficiently. Students

mentioned they enjoyed classes that had activities where they participated. Some

mentioned about parts of the lessons that they liked the most. These areas need to be

focused on training as well:

Ma'am online classes were really fun! During online class in English dialogues,

ma'am acted in class. She asked me to act in those dialogues. Yes, ma'am I mostly

understood. But I had a home tutor who helped me with subjects. Also, I called

school teachers to explain topics that were hard.

(Interview# S1, Date: 14-03-21)

I(c). Training on mindset: Having the mindset to solve problems and look for continuous

learning is crucial. Teachers mention how sometimes they lack self-interest which leads to

creating gaps. Teachers also need to be team players and support each other. Some teacher

participants directly shared these thoughts in the FGD:

For motivation appreciation is also key. Laptop or other materials are far away.

The effort we put in I have not heard any appreciation. The pandemic has shown

us how important these areas are.

(FGD, Participant# A, Date: 25-03-21) another participant added teachers need to

show interest too:

It is important that teachers grow interest in self-learning as well as receive

training. If we are reluctant to adapt then it is never possible.

(FGD, Participant# C, Date: 25-03-21) a participant said about maintaining unity:

I feel most areas are covered but teachers also need harmony and unity. Teachers are trying and hopefully things will turn out good.

(FGD, Participant# D, Date: 25-03-21) a participant mentioned about the importance of the trainings being onsite:

I feel it should be taken onsite. Because it is practical knowledge. Most people could not turn on and off the PC so how will they understand the training? So, onsite is the best way.

(FGD, Participant# B, Date: 25-03-21) another participant also reinforced about onsite training:

I agree, most people lack that knowledge and hence onsite is the best.

(FGD, Participant# C, Date: 25-03-21)

Teachers are trying and are also hopeful. When asked, the majority shared that these training needs to be done onsite so that the experience is better and hands on. If the training is onsite then it will be tough to get online practice. Rather should be blended to build teachers' confidence and easy of using different tools and methods.

## 4.2 Major findings

Some of the major findings of the research are as follows:

- The already existing socio-economic problem of the students has made the online learning a struggle to even bring out the bare minimum of output, such as low income and insufficient space at home for learning.
- The primary approach for teachers until now has been crisis management and bringing students to online classes and hence they have not been able to manage time in designing content and making online class more effective.

- Not all teachers have adequate digital literacy which increases the gap of supporting students in terms of learning to use the applications for attending classes.
- Due to the roadblocks of applying direct online teaching, teachers have started being creative opting for alternative and innovative pedagogy including more personalized and small group interactions via phone calls and text messages. This has brought different techniques of learning approaches to actions.
- Despite students struggling to figure out which areas need improvement, they clearly
  mentioned which aspects of the online classes they liked, which were engaging activities,
  using more visuals and materials. These are all part of interactive-pedagogy whereas the
  current practice is teacher-centered pedagogy
- Many teachers who had no struggle with classroom management in onsite classes mentioned noisy classrooms and so did the students. Each home has become a classroom.
   So, the previous techniques of classroom management are not fully applicable for online classrooms.
- Majority of the online classes depend on applications that are not child or education friendly. They have access low quality video with increased risk of child protection on the internet.
- Teachers widely feel a lack of support from the government and other sectors in terms of resources, finance and devices. These external factors in turn affect their motivation level in conducting online classes.
- Motivation works vice-versa for students and teachers. When the students are enthusiastic and responsive in online class, teachers feel motivated and the same goes for students. So, when the teachers are focusing on the crisis management approach, focusing less on the classroom designing itself, the students present might lose motivation and eventually drop out. And then this will affect teachers' motivation too.
- There is a huge pressure on teachers to manage household work, catch up with a new steep learning curve of digital methods, design new content, keep the students connected to education and adapt to the new normal.
- Some elderly teachers do not even know how to turn on computers, digital literacy can become a slow long process for them. So, majority of the teachers think the digital literacy training should be provided onsite.

- There is evidence of peer learning among students but nothing mentionable among teachers, maybe in terms of digital literacy, resource sharing, motivating each other or by school leaders.
- Capacity building not only requires training on digital literacy but also teachers having an intrinsic motivation for the willingness to learn, apply and solve problems.

## 5. Chapter 5

#### **Discussion and Conclusion**

#### 5.1 Discussion

In this section, the findings are discussed in detail. Relevant ones are compared and contrasting to the literature.

• Crisis management versus online teaching:

The word crisis here surfaced many pre-COVID socio economic problems, such as financial crisis of the many groups of students of these under-reproduced schools. Those have amplified and become a roadblock in ensuring smooth experience of online learning, forcing teachers to focus managing the blow from these crises on top of COVID19. As soon as the schools closed in March 2020, the first question of the research explored looking into the current scenario the primary focus has been ways to bringing the students into the classroom. Given many of the primary school students come from migrating groups and their parents are day-laborers, the sudden loss of job was a shock for these families. They moved to villages and it was difficult for teachers to communicate with the students.

Again, many of the students have poor quality phones, stolen phones and hence frequently change numbers. Tackling these all at once for a teacher with a high student ratio in the class is time consuming and draining. Additionally, learning and design on the online lessons are time consuming as well. So, the teachers had to prioritize the two. These have had a direct impact on the existing students who were doing the online classes. They felt less engaged and eventually might have added to the drop out. This is an area that can be

explored further in regards to the ripple effect of the pandemic adding to dropout in education.

#### • Interactive - pedagogy from teacher-centered pedagogy:

While the students were asked what skills or techniques their teachers should improve while taking online class they seemed to struggle to answer. It may be due to their exposure to having online classes for the first time. However, they clearly mentioned what they enjoyed in the class. And some gave examples of activities that took place, like sharing dialogues, etc.

This proves that given there is limited human interaction and students wanted classes to be more fun and engaging. They mentioned how classrooms had boards and materials. The students seemed satisfied with what the teachers were doing, however, all mentioned how they enjoyed physical classrooms better. Teachers, however are not satisfied with what they are being able to do in class as they mention lack of supervision and assessment still persists. This also relates to the literature, "they can neither make an assessment of how the audience is responding nor can they use their gestures to secure the attention of students." Asjad (2020) (para. 5). Here Asjad emphasizes on the importance of teachers adapting to the new modes of teaching and learning.

#### Homes as classroom:

When the classes are shifted to online, there is a whole paradigm shift of the classroom environment. In a physical classroom the environment is quite in the control of the teacher but that is not the case online. Different households have different environments which affect the overall virtual experience of all the students and teachers. Environment such as having quiet and open space, a proper chair and table set up for class, enough lighting in the room and supportive family members all affect the classroom. For instance, a class with 40 students joining virtually, they are partially in 40 different environments. This leads to teachers applying different classroom management techniques than they did in onsite classrooms, revealing the learning environment GPS teachers are being able to create in online classroom answering the second research questions.

In the literature, Asjad highlights this fact "It also requires the ability to engage with students online as reliance on certain tools warrants shifting instructions accordingly. Many of them have, however, successfully familiarized themselves with online teaching methods during the pandemic." (Asjad, 2020) (para. 8). Though the teachers have familiarized themselves with online class methods, they still feel a lack of control, especially in noise management in the virtual world. So, that the findings also eco the literature.

### • Inadequate infrastructure:

To explore the second research question of the research in creating and ensuring proper learning environment in online classes, teachers' capacity is highly dependent on adequate infrastructure for both learners and the providers. Currently, there is not only a gap in terms of access to devices and internet among students but also teachers. Majority students join from mobile phones and do not have access to laptops. This limits their experience of the content the teacher is trying to show. Plus, findings also show that along with low quality of video there is lack of safety and protection for children on the applications and software currently being used which might stem other problems.

Additionally, because many students cannot use high end education friendly online applications, teachers who are able to deliver more are limited to do only so much. For instance, if the classes were in Zoom, then all students can join at once, the host of the call (in this case preferably the teacher) has control over muting the students when needed and also, besides the video call, participants can interact in the chat box. But through IMO or messenger only a few students can be added at one call, with poor video quality and there is hassle if one wants to chat while being on the call. Besides limiting the teacher exploring and using digital content and materials for the lessons it is time consuming for the teacher as they have to deliver the same lesson multiple times with small groups of students. However, this is also beneficial in terms of students getting personalized attention from the teacher which was otherwise lacking when the teacher to student ratios were high in physical classrooms. The findings somewhat are parallel with the literature in terms of how teachers in villages and semi-urban areas have struggled more with inadequate support and it is quite tough to assess the accomplishment of the lesson objectives in the current

infrastructure. But maybe the low teacher student ratio is not a focus in the majority of the researches yet.

### • Motivation as a key ingredient:

Both teachers and students' motivation are crucial in these trying times as there is a lack of physical interaction between them and colleagues at school to keep going no matter how difficult it gets. Many teacher participants in the focused group have mentioned they reduced taking online classes when the students moved to villages. Both external and internal factors are affecting the teachers' motivation. Given they are government teachers, they usually get support from the government and in some cases nonprofit organizations. Teachers have mentioned that they did not feel enough appreciated for the amount of hard work they were doing, which boosts intrinsic self-value and importance of their work. Neither have they received support in terms of devices, training or finance. Since many students did not have the internet, the teachers had to call them on their cellular phones regularly to give tasks. This expense was made from the teachers' own pocket and was burdening for many. This can lead to some unethical conduct like not actually calling the students as the teachers might show the record on papers.

Additionally, when the students are not being fully engaged in the online classes, they feel demotivated to make the effort to join further and this leads to drop in teachers' motivation, thinking they are not being successful. This can spiral new dropouts from the existing students who are connected to the online classes. As per some teacher participants in the focused group discussion, teachers need to foster the mindset of self-learning, being team players and maintaining harmony. The supervisors of the schools are not being able to supervise, monitor and guide the teachers as they would have been able to otherwise prior to the pandemic. So, if the teachers are not careful there will be more gaps adding up to the already existing primary education system. The literature however, does not mention anything directly about teachers' intrinsic motivations, but helping each other was a boost which is discussed in the points below. There might be lack of research yet on what has been the motivating factors for teachers to keep going despite the

impediments other than the governments' order of instructions.

### • Applying asset-based approach:

In times of crisis, many organizations survive by creating a supportive ecosystem and utilizing the existing resources, called asset-based approach. The support can come from peers and superiors. There are many literatures found on how peer support kept the teachers going and to a great extent kept the primary education system running during the pandemic around the world. Peers and, or colleagues stood by each other by helping through teaching technical skills by MKOs and sharing classroom materials. This shows how a new avenue of learning and bonding was created among the teachers that otherwise might have been missing. This also acted as a source of motivations and the literature also highlights 'how a supportive school management team and continuous communication created a sense of belonging and courage in this novel time', particularly by Rasmitalda et al. (2020) and Busuttil and Farrugia (2020) (p 227).

While finding the results of the second research question, looking at motivation, in this research, however, there was a lot of collaboration and MKO support among the students facilitate by the teachers. Yet, there in not enough evidence to show that the same was being done among the colleagues, i.e., the GPS teachers or the school management teams. This may be due to lack of number of teachers with ICT knowledge, a large group being aged who required time to learn and adapt, where the teachers were already overwhelmed by their own work. However, had this been done, the system might have benefited from greater output in ensuring better quality of learning, higher retention of students and quick ICT learning of the teachers.

### Adaptation and capacity building:

Adaptation in the classroom is interconnected to adaptation to the new normal now.

Teachers acknowledging and getting enough training on crisis-management, new online classroom techniques, content designing is very important. The previous two questions

also reflect on where capacity actually needs to be built as well. Teachers have repeatedly mentioned about how motivation is vice versa, in other contexts, as we have seen in the literature how encouragement from the school management has worked wonders. So, building capacity in terms of their leadership in how to handle crisis, motivate teachers seems to be important too.

In the literature it is mentioned that "Digital literacy skills have become critical for teachers to move online and manage their virtual classes, especially through live streaming. Some older teachers face significant difficulties though, making their lack of digital literacy a major barrier to teaching effectively" (Xu et al., 2020). This also reflects in the interviews and focused group discussion drawing the answer of the third research question which wants to know what the GPS teachers' opinion on their needs to build capacity on.

Teachers also feel that they should receive immediate training on pedagogy, digital literacy, training students to use applications and devices. Interestingly, GPS teachers have suggested that these trainings should be done onsite, which indicates that the teachers might still not confident that they can operate the tools by themselves yet. In the literature, Tariq and Fami (2020) tells that 'Most primary school teachers lack practical knowledge of online teaching methods and resources and are struggling to combat the online classroom issues', which the GPS teachers have acknowledged as well. However, another paper mentioned that, "To help with the teachers, many online platforms are providing new resources while also offering guidance to schools about the best practices in online learning. Nevertheless, there is a lack of qualified teachers in Bangladesh who understand the content and delivery style required for online education. The overall ICT infrastructure is not strong either." (Wing, 2020). But whatever these platforms are offering are clearly not reaching all the schools, as 100% of the participant teachers mentioned that they have received no such training or guidance and are rather self-learning everything.

#### 5.2 Conclusion

This research aimed to explore the capacity of government primary school teachers in conducting online classes. Data was collected by interviewing teachers and their students in the form of interviews and focused group discussion to bring out their experience, perspectives and needs. The participants were from ten different primary schools in Gulshan thana, comprising ten teachers and ten of their students. Since the teachers are the implementers and students the beneficiaries, hearing both of their voices has brought a better understanding of the situation. Till now the government primary school teachers have been trying to cope with the sudden shock of school closure and managing the crisis of students not being in touch, dropping out, migrating to villages and joining online classes. These all have been very time consuming, leaving teachers no time to focus on content designing and classroom management strategies. The teachers are also under pressure as they lack digital literacy and skills to quickly adapt to the demand of shifting classes to online. It is mostly a steep learning curve for them where they are mostly self-learning.

Both teachers and students would prefer physical classes as the data shows that most online classes have been teacher-centric which is not being effective. Students have suggested they enjoyed the classes when they interacted more with the teachers and their peers, did activities, had more visuals and videos. This indicates that there is a need for interactive pedagogy. Teacher-centered pedagogy, poor quality non children and education friendly application usage with poor quality internet is disrupting the smooth learning experience for the students and making teaching extremely difficult for teachers. Addition to these, the teachers are also not trained enough to quickly adapt to the new demand. These all are leading to students not fully grasping the lessons online, paying less attention and lack of assessment and supervision. These may in turn push more students to drop out from the existing students in online platforms creating and expanding the academic learning gap already existing in the primary education system prior to the pandemic.

Lastly, while this research is not conclusive, teachers shared their desperation for the need of training on pedagogy, new online techniques, digital literacy as well as support in the form of devices, finance and appreciation. They seem to have less control over their online class environment compared to their onsite classes. Teachers seem to be struggling with noise

management as each home environment is reflected in the online classrooms now. These all are affecting teachers' motivation to keep going forward with the online classes. Also, students' enthusiasm to attend classes and learn more through online classes are motivating teachers and right now perceived as a form of success by them. Training should also involve adaptation strategies and help teachers build a solution oriented and eager to learn mindset.

#### **5.3 Recommendations:**

It is difficult to solve problems of the complex primary education system at once. Online teaching being one aspect has many embedded and underlying socio-economic factors, digital infrastructure and knowledge, motivation and many other variables affecting it. Given the COVID-19 pandemic is one of its kind has exaggerated the problems, pressing immediate actions. However, it will require time, effort and careful planning to if not completely tackle but mitigate many of the issues arising and as well as focus on effectively using the existing resources. Some of the recommendations are as follows:

### Systemic Change

- I. Proactively plan anticipated risk of forthcoming situations of the pandemic.
- II. Learn from other countries on what strategies they are following for migratory students.
- III. Learn and implore creative solutions by thinking beyond only online platforms and blend more practical strategies, like community-based learning, remote learning materials, flip classroom and blended learning.
- IV. Redesign syllabus focusing on blended learning.
- V. Hire and assign more teachers in a high teacher to student ratio so that teachers can manage time to cater to small groups of students as well as spend time designing content and grow digital literacy skills.

### Strategies for online classroom:

I. Shift pedagogy from teacher-centric to interactive and activity - based learning.

- II. Share digital contents created by teachers in a platform where others can use and save classroom preparation time.
- III. Design short conceptual lessons which are easy for students to grasp and save time.
- IV. Use more materials or ask students to create materials for the lesson as a form of activity and more engagement.
- V. Teachers may have more control over the classroom environment by investing parents and guardians in the process. More time needs to be spent on building their awareness on the importance and support for helping their children join online classes.
- VI. Teachers to have asset-based thinking where they can adopt methods that students like to keep up their interests.

### **External Support:**

- I. Education ministry can provide devices on the community level where students can use it in shared groups and also for teachers.
- II. New easy student friendly applications can be created which will help students and teachers use it for online classes. Also, the applications should ensure removing risk of child safety on the internet while using these applications.
- III. Access to the internet can be provided to students by opening a student account with the mobile operator.
- IV. Provide training for teachers in terms of new curriculum, online classroom management techniques, application usage, ICT, digital content designing, and how to train students to use applications.
- V. Training should also focus on building necessary mindsets of teachers to deal with difficult situations and crises, that may include being resilient, solution oriented, having more agency and continuous learning.
- VI. Additional training can be provided for school management team to build stronger leadership, emotional intelligence so that they can support teachers as per their need. So that the head teachers are proactive in giving moral support and encouragement then just delivering information and orders, to keep up the team spirit. Also, so that they can create collaborative and peer learning culture within and across the schools.

- VII. Teachers can be given a monthly allowance for making phone calls to the students.
- VIII. Teachers should be encouraged to foster asset-based thinking where Teachers and students alike are valued for what they bring to the classroom rather than only focusing on what they lack.

Lastly, the research would help primary education stakeholders get a better understanding of the current capacities the teachers are having, which they can leverage on and what areas need improvement and support. Given the research has the voice of both teachers and students this can be a starting point where a pedagogical shift is crucial and new possibilities in various aspects of online classes are explored. Further research is recommended to study further about the pedagogies that will work best in Bangladesh primary education context for online classrooms.

### References

- Asjad, T. (2020, August 21). Teachers yet to be at ease with online classes. *Financial*. Retrieved from <a href="https://thefinancialexpress.com.bd/views/opinions/teachers-yet-to-be-at-ease-with-online-classes-1598024819">https://thefinancialexpress.com.bd/views/opinions/teachers-yet-to-be-at-ease-with-online-classes-1598024819</a>.
- Birman, B. F., Desimone, L., Porter, A. C., & Garet, M. S. (2000). (rep.). *Designing Effective Professional Development: Lessons from the Eisenhower Program*. EBSCO Publishing.
- Busuttil, L., & Farrugia, R. C. (2020). Teachers' Response to the sudden Shift to Online Learning during COVID-19 pandemic: Implications for Policy and Practice. *Malta Review of Educational Research*, *Volume 14*(No. 2.).
- Cherry, K. (2023, July 6). *How Vygotsky defined the zone of proximal development*. Verywell Mind. <a href="https://www.verywellmind.com/what-is-the-zone-of-proximal-development-2796034#:~:text=The%20concept%20of%20the%20%22more,during%20the%20sensitive%20learning%20period">https://www.verywellmind.com/what-is-the-zone-of-proximal-development-2796034#:~:text=The%20concept%20of%20the%20%22more,during%20the%20sensitive%20learning%20period</a>
- Directorate of Primary Education, Annual Primary School Census 2019 (2019).
- Education: Bangladesh. U.S. Agency for International Development. (2023, April 6). <a href="https://www.usaid.gov/bangladesh/education">https://www.usaid.gov/bangladesh/education</a>
- Gillet, E., Cole, L., Kingsbury, L., & Zidon, M. (n.d.). Successful Online Learning in Teacher Education: What do Teachers and Students Need? *Teaching & Learning: The Journal of Natural Inquiry and Reflective. Retrieved from.* https://web.mnstate.edu/colela/TOPOST.pdf
- Haque, Md. Z. H., Ohiduzzaman, K. M., Ahammed, S., & Islam, Dr. Md. R. (2017). National Academy for Primary Education (NAPE). Retrieved from <a href="https://nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/publications/f3d0fbb5">https://nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/publications/f3d0fbb5</a>
  <a href="https://nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/publications/f3d0fbb5">https://nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/publications/f3d0fbb5</a>
  <a href="https://nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/publications/f3d0fbb5">https://nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/publications/f3d0fbb5</a>
  <a href="https://nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/files/files/nape.portal.gov.bd/sites/default/sites/files/nape.portal.gov.bd/sites/default/sites/files/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/default/sites/nape.portal.gov.bd/sites/def

- Islam, S. M. R. (2020, January 2). Achievements and challenges in Bangladesh education. *Financial Express*. Retrieved from <a href="https://thefinancialexpress.com.bd/views/reviews/achievements-and-challenges-in-bangladesh-education-1577975979">https://thefinancialexpress.com.bd/views/reviews/achievements-and-challenges-in-bangladesh-education-1577975979</a>.
- Jashim, M. M. (2022, May 8). Unused laptops, incompetent teachers ... How Bangladesh braces for 4ir. *The Business Standard*.
- Kim, S., Raza, M., & Seidman, E. (2019). Improving 21st-century teaching skills: The key to effective 21st-century learners. *Research in Comparative and International Education*, 14(1), 99–117. https://doi.org/10.1177/1745499919829214
- Li, C., & Lalani, F. (2020, April 29). *The COVID-19 pandemic has changed education forever.*this is how. World Economic Forum. Retrieved from

  <a href="https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/">https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/</a>
- Libguides: Research Methods: What are research methods? (n.d.). LibGuides at University of Newcastle Library. Retrieved (2024, March 6). Retrieved from: <a href="https://libguides.newcastle.edu.au/researchmethods#:~:text=Qualitative%20Research%20g">https://libguides.newcastle.edu.au/researchmethods#:~:text=Qualitative%20Research%20g</a> athers%20data%20about,social%20interactions%20or%20cultural%20phenomena
- Rasmitadila, R., Aliyyah, R. R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., & Tambunan, A. R. (2020). The perceptions of primary school teachers of online learning during the COVID-19 pandemic period: A case study in Indonesia. *Journal of Ethnic and Cultural Studies*, *Vol* 7(No 2), 90–109. https://doi.org/10.29333/ejecs/388
- Tariq, S. B., & Fami, T. (2020, July 28). *The Business Standard*. Retrieved from <a href="https://www.tbsnews.net/thoughts/online-education-system-suitable-bangladesh-112546">https://www.tbsnews.net/thoughts/online-education-system-suitable-bangladesh-112546</a>.
- Verhoef, M. J., & Casebeer, A. L. (1997). Broadening horizons: Integrating quantitative and Qualitative Research. *Canadian Journal of Infectious Diseases*, *Vol* 8(No 2), 65–66. <a href="https://doi.org/10.1155/1997/349145">https://doi.org/10.1155/1997/349145</a>

- Wing, L. A. (2020, May 22). Expanding the Bangladesh Education Sector Beyond Traditional Classrooms. LightCastle Partners.

  <a href="https://www.lightcastlebd.com/insights/2020/05/expanding-the-education-sector-beyond-traditional-classrooms/">https://www.lightcastlebd.com/insights/2020/05/expanding-the-education-sector-beyond-traditional-classrooms/</a>
- Xu, J. J., Ra, S., & Panth, B. (2020, April 1). Lessons learned from the massive shift to online learning due to COVID-19. *Asian Development Blog*. <a href="https://blogs.adb.org/lessons-learned-from-the-massive-shift-to-online-learning-due-to-COVID-19">https://blogs.adb.org/lessons-learned-from-the-massive-shift-to-online-learning-due-to-COVID-19</a>
- Yinglun, S. (2019, February 27). Education Quality still cause for concern in Bangladesh: World bank report. *Xinhua*. Retrieved from <a href="http://www.xinhuanet.com/english/2019-02/27/c">http://www.xinhuanet.com/english/2019-02/27/c</a> 137855105.htm

# **Appendices**

# **Appendix A: Sample Consent Letter for Interview**

Consent Letter for GPS Teachers

Title: Exploring the capacity of government primary school teachers' skill in taking online classes of Gulshan Education Thana.

Dear (Potential participant's name),

I am Nadia Afrin Bintu, currently a master's student at BRAC University. You are being invited to participate in my BRAC Institute of Education master's research study on teachers' skill in taking online classes. In particular, I am interested in the current capacity of the teachers in Bangladesh to take online classes and how effective are those skills.

This research will require about 1-1.5 hours of your time. During this time, you will be interviewed about your experiences during this pandemic. The interviews will be conducted via phone call or online as per your preference, and will be tape-recorded. There are no anticipated risks or discomforts related to this research.

You may also find the interview to be very enjoyable and as a form of reflection. By participating in this research, you may also benefit policy makers and other educational stakeholders to better understand the current reality of the topic. Several steps will be taken to protect your anonymity and identity. The typed interviews will NOT contain any mention of your name, and any identifying information from the interview will be removed. Your kind response will be used only for this academic research and this monograph report will not be published in the future. And, your participation in this research is completely voluntary.

If you require any information about this study, or would like to speak to me please find the contact information below.

Nadia Afrin Bintu M.Ed. Student, BRAC University

Email: n.afrin4030@gmail.com

Phone: 018299 27271

I have read (or have been read to) the above information regarding this research study on the teachers' skill in taking online classes, and consent to participate in this study.

Name:	
Date:	
Signature:	

### **Consent Letter for students' parents**

Title: Exploring the capacity of government primary school teachers' skill in taking online classes of Gulshan Education Thana.

Dear (Potential participant's name),

I am Nadia Afrin Bintu, currently a master's student at BRAC University. Your child is being invited to participate in my BRAC Institute of Education master's research study on teachers' skill in taking online classes. In particular, I am interested in exploring the capacity of the teachers in Bangladesh to take online classes and how effective are those skills.

This research will require about 1-1.5 hours of the participant's time. During this time, your child will be interviewed about their experiences during this pandemic. The interviews will be conducted via phone call or online as per your preference, and will be tape-recorded. There are no anticipated risks or discomforts related to this research.

Several steps will be taken to protect your and your child's anonymity and identity. The typed interviews will NOT contain any mention of your names, and any identifying information from the interview will be removed. Your kind response will be used only for this academic research and this monograph report will not be published in the future. And, your child's participation in this research is completely voluntary.

If you require any information about this study, or would like to speak to me please find the contact information below.

Nadia Afrin Bintu M.Ed. Student, BRAC University

Email: n.afrin4030@gmail.com

Phone: 018299 27271

I have read (or have been read to) the above information regarding this research study on the teachers' skill in taking online classes, and consent to allow my child to participate in this study.

Name:	
Date:	
Signature:	

# **Appendix B: Sample Consent Letter for FGD for GPS teachers**

Consent Letter
Title: Exploring the capacity of government primary school teachers' skill in conducting online classes
Dear
I am Nadia Afrin Bintu, currently a master's student at BRAC University. You are being invited to participate in my BRAC Institute of Education master's research study on teachers' skill in taking online classes. In particular, I am interested in exploring the capacity of the teachers in Bangladesh to take online classes and how effective those skills are.
This research will require about 1-1.5 hours of your time. During this time, you will have to share about your experiences during this pandemic in a focused group discussion. The discussion will be conducted via phone call or online as per your preference, and will be tape-recorded. There are no anticipated risks or discomforts related to this research.
You may also find the discussion to be very enjoyable and as a form of reflection. By participating in this research, you may also benefit policy makers and other educational stakeholders to better understand the current reality of the topic. Several steps will be taken to protect your anonymity and identity. The typed interviews will NOT contain any mention of your name, and any identifying information from the discussion will be removed. Your kind response will be used only for this academic research and this monograph report will not be published in the future. And, your participation in this research is completely voluntary.
If you require any information about this study, or would like to speak to me please find the contact information below.
Nadia Afrin Bintu M.Ed. Student, BRAC University Email: n.afrin4030@gmail.com Phone: 018299 27271
I have read (or have been read to) the above information regarding this research study on the teachers' skill in taking online classes, and consent to participate in this study.
Name: Date: Signature:

Source: Roassman, G. B., & S. F. (2003). *Learning in the field: An introduction to qualitative research.* Thousand Oaks, London & NewDelhi: SAGE Publications

# **Appendix C: Interview and FGD Transcripts**

## **Teachers' Interview**

Alias names are used of the Transcript:

Date: 11-03-2021 Name of Teacher: Sipy Code: 01

Interviewer: Thank you for agreeing to participate. Can you please tell your name, age, gender? A: (laughs) My name is Sipy. I have been teaching for the past 10 years in the government. Primary school. I also teach 7th and 8th grade as our school is till 8th grade. I am a female. (laughs) and 33 years old.

Interviewer: Thank you apu. You have been teaching for 10 years, could you tell me what subjects you are teaching now?

A: yeah, I was appointed in 2010. We get training for teaching all subjects in primary, including other religions, for example Hindu religion. So, from maths to Bangla to English to science, we teach all subjects...

Interviewer: Okay. Apologies to cut you in the middle, which subjects and grades are you teaching this year?

A: This year I am taking mostly English for first grade and taking maths for higher grades.

Interviewer: Great. So, according to you, how has teaching-learning been impacted during the pandemic?

A: According to me, all around the globe the most affected sector is the education sector. Especially in the communities we teach. You may already know, our students come from lower income backgrounds, so they barely can afford smartphones. Even the ones who have smartphone s cannot afford the internet. Being in physical class makes a lot of difference by interacting with the students. Whereas, during the pandemic the number of students involved in education was very low.

Interviewer: Right. Has teaching been impacted? Could you give some examples?

A: Yeah absolutely. The way we could teach in onsite class the same is not possible for online class. Students' education is highly impacted. For example, the students from grade one got auto promotion to grade two during COVID but the gap is there. Students could not learn the contents and skills needed in that grade so this will create more pressure for the students and the teachers in future to tackle the gap and pull them to the new grade level.

Interviewer: Right. Since you taught online, which medium or mediums did you use the most and why?

A: I used to call the students the most...

Interviewer: Via online which platforms you used the most?

A: Oh! For online mostly IMO for lower grades and slowly shifted to zoom for higher grades. Most of the students' parents in the community used IMO online, that is why I used IMO.

Interviewer: What are some of the challenges you are facing while conducting the classes?

A: There were many challenges. To mention some major: one is that students do not have stable internet connections. Their call drops at times. Timing is an issue too, many of their parents are free during the night. Despite all these challenges we are constantly trying. I did not see any reduction in students' enthusiasm but no one is used to attending online class. They all know and have seen offsite class only, so that adapting was...I would say still is a challenge.

Interviewer: I see. As per your experience what digital skills does a teacher require in order to take classes online?

A: As we are not used to taking online classes it was challenging for us at the beginning. But especially for older teachers, say above 40 for them it is quite daunting. My mothers and aunties, for example, can barely save a number. So, in this situation if we ask teachers for that age to take online classes it is quite challenging. And for training only some of us get ICT training, so there the teachers lack skills already.

Interviewer: So, what skills do you think the teachers require?

A: How to deliver teaching content and show materials. Say, during onsite classes we could easily show materials to students but during online class that is very important. Also, understanding many features of the apps and how to use them to make class more effective. With time we later used a whiteboard app but at the beginning it was very tough. Also, understanding the whole system and process on online delivery is important. NGOs and other organizations should really work on helping govt teachers build these skills.

Interviewer: Okay. Have you seen any chances in your motivation when it comes to online classes? If so, how is it different?

A: Umm... motivation., yes, slightly. It was fun teaching the higher grades online with time. They were enthusiastic to learn new features of zoom, how to share files, etc. I enjoyed introducing them to them as well. But with lower grades it was tough. They are so young, so I had to put on a lot of

effort to just get the bare minimum as an output. And they also didn't seem much enthusiastic about new features and all.

Me. What challenges have you faced in communication strategies during the online class?

A: As I already mentioned, onsite classes are way more interactive but online there is not enough satisfaction. With students understanding content or communicating with them I did not face major challenges. It was easy to ask and cold call any students by putting others on mute.

Interviewer: Okay. Have you been trained to take online classes? If yes, what training have you received?

A: (slightly laughs) No, we did not get any training on these. I self-learned from YouTube and other online sites to help myself.

Date: 11-03-2021	Name of Teacher: Zara	Code: 02
------------------	-----------------------	----------

Interviewer: Hi Apu (sister), how are you?

Interviewee: I am good, how are you?

Interviewer: I am good, thank you. I am sure you have read the whole document, so let's start the

interview. I am recording this interview.

Interviewee: Sure.

Interviewer: First, please tell me your full name, age, how long have you been teaching?

Interviewee: since 2018, age: 33

Interviewer: What subjects and grades are you teaching?

Interviewee: I have taught in another high school before joining as a government teacher for 6

years. Took Bangla for grade 1, grade 4 religious' studies, grade 5 & 6 science.

Interviewer: So according to your experience and opinion, how has teaching-learning been impacted due to COVID?

Interviewee: I took classes but the communication was not good. It was tough to understand whether they were understanding or not. The classes I took on IMO, they were regularly getting disconnected. So, some students would respond but I would not understand the majority as they would not respond. Whether the students are understanding the lessons at all was difficult to understand which was possible otherwise in face-to-face class.

The financial condition of students is bad in the primary section. So, they do not have access to internet connection. So, they are not used to using the internet as well as not interested. So, it is

difficult for us to bring all students in the online class. So, there is a gap created. It is seen that some students join one class and again some new join in the next class while previous ones are missing. While making the IMO group found some but not all.

### 1. What mediums have you used?

I have used IMO by making two groups. And also used Facebook for recorded class.

- 2. Why have you chosen a particular medium and not others? (Motivation for using this medium) Most students cannot use Zoom and they are used to IMO. Then I thought not all students can be brought at once in IMO class. So, I made a couple of groups in IMO to conduct classes.
- 3. What are some of the challenges you are facing while conducting the classes?

Initially the students and their parents were not interested in attending online classes. So, I had to invest a lot of time calling them and motivating them to join the class. They would say, "Cannot stay on the internet for so long". Majority of the time the phones would be with the father. They used to be busy at work and I could find students calling in those numbers. So, the days when their father would be home then could contact them.

I've told them to show the students the homework that has been given.

Collecting the phone number itself has been a challenge. Initially when I called them, they would say, "Ma'am we do not have food in our stomach, we don't have time to listen to these".

Interviewer: When you were conducting the online class, what challenges did you face at that time?

At times my internet is unstable and it takes time to connect to the class.

Many parents would misbehave when I called. They would get disconnected as it was for a long time. I would check initially who is attending the class. Again, when I gave homework or classwork at that time, I used to check who was present in the class. I allowed them to go offline and finish the tasks.

Not only students, I myself do not have the ability to use the internet for this long. How many people have the ability to use the internet for so long though?

Challenges from families are there. While taking class many problems and distractions come from family members.

4. As per your experience what digital skills does a teacher require in order to take classes online?

Teachers require skills for operating laptops and phones. Like, how many people can be grouped in IMO. So, we had to self-learn these things. Many very skilled senior and experienced teachers due to lack of digital skills could not take online classes. If someone helped then maybe they could. We did not get any training on these things. We were left open and people individually tried and did what they could in their capacity.

Also, we need training on developing skills on how to keep the students' attention in online classes. We need training on how to teach students using different softwares, like zoom, as many could not join that platform. So, even if parents are not around, the students can independently attend the classes.

Interviewer: Anything else?

Yes, the way I create content for a physical classroom, it would be different when it comes to online. It has to be such that within a short time the main concepts need to be explained. As well as give out homework and classwork. So, the contents need to be delivered in a very short span of time. So, I need to be prepared ahead on the main areas.

Interviewer: Would training on developing these skills vary as per age of the students or class? Yes, of course it varies. For class 1 the contents need to be developed so that they understand them. For higher grades, when I know what previous knowledge they have and then just focus on the main concepts.

5. Have you seen any chances in your motivation when it comes to online classes? If so, how is it different?

Initially, when the students wouldn't respond then I would feel bad. But once they started responding I used to feel good. I would feel more motivated to conduct the classes. It requires time ahead of the class to make the online classes efficient. So, when students were responding I felt it would be good if I could take some more online classes.

- 6. What challenges have you faced in communication strategies during the online class? Many times, it happened that some students got offline and were not able to join the class. At that time, I used to call them and ask about the trouble they were facing. They shared that they did not have money to buy the internet, So, I'd give homework via phone message.
- 7. Have you been trained to take online classes? If yes, what training have you received? No, I have done an ICT course in Dhaka University in MEd but none from the government or any other organization.

Interviewer: How did you learn about the apps and other digital mediums you are using? I have self-learned using YouTube.

Date: 12-03-2021
------------------

1. Position, Age, Gender, Teaching Experience

Assistant teacher, master trainer of English. Teaching for 30 years. Female. 50 years old.

2. How long have you been teaching?

30years.

3. What subjects and grades do you teach?

I taught English in class 5, 4, and 2 then Bangla in class 4 and 2. I teach English mostly.

4. How has the teaching-learning been impacted due to COVID?

The physical classes are more effective than online classes. How many students have access to these classes? Because the majority of students do not have access to android phones in primary education. That is why I have recorded videos and uploaded them on Facebook. I also asked the students to watch it from neighbours or relatives' phones if possible. But it is still not very effective. But the case is different for middle class families and college and high school students, they have access to phones. But for the primary majority, parents do not have access to smartphones.

5. What mediums have you used?

I used Facebook. I recorded videos and posted them there, so many students have access to them. I have grouped the students on messenger. Specific time was given to them and then they would attend video classes.

6. Why have you chosen a particular medium and not others? (Motivation for using this medium)

Facebook has many students. Not just mine, but all over Bangladesh, even the Bangladeshis living abroad have watched my lessons. They have enjoyed and commented there as well. Everyone from teachers to students and the ministry have watched these videos. I have not only thought about my school and students but rather did it for all children.

7. What are some of the challenges you are facing while conducting the classes?

When I was recording videos for Facebook, I made the setup in my room, there were various challenges regarding logistics. The setup would be different in different classes. Again, when conducting classes on messenger people would call in the phone, so there is discretion from them. Again, someone rings the bell in the house and I have to start the class again. As I have to attend to these household needs. So, I used to take classes late at night or very early in the morning. It is difficult for students to sit for this long. They get interrupted by phone calls during class on the phone they are attending. There is an electricity problem as well. Then I have to explain them again later on. Their communication is not clear and sound issues due to the poor quality of their phones.

Interviewer: Any challenges you faced in terms of students understanding the lessons?

Students do not understand in online class. In physical class we can try different techniques of teaching or explaining a lesson if they do not understand, like peer learning which is lacking here. Online is not as fruitful as physical classes. What will I do with such a small number of students? The students are not motivated to attend online classes.

8. As per your experience what digital skills does a teacher require in order to take classes online?

Of course, the teachers need skills on how to use devices, more ICT knowledge, like how to set the devices.

The teachers need to have the proper voice tone and intonation while teaching online. The teachers have to be properly dressed and present themselves smartly. If you don't dress well online then teachers will feel more attracted to the class. The students follow the teachers, so students will like it. The presentation in online class has to be smart.

Like physical class I do energisers at the beginning of the class and create a positive environment. Like starting the class with a good morning song and ending with goodbye class. Now, if a teacher is not used to doing it in the physical class, they will not be able to do it in online class.

9. Have you seen any chances in your motivation when it comes to online classes? If so how is it different?

The motivation is quite the same as physical class. But physical class has all students which is not the case here. But I take the classes the same way.

10. What challenges have you faced in communication strategies during the online class?

Not all students come to messenger class. It is tough to bring them to class all the time.

11. Have you been trained to take online classes? If yes, what training have you received?

I didn't get any ICT training. I have self-learned. And other teachers have supported and helped in making the video lessons go viral. I have not received any ICT training saying that I am a senior teacher, so not eligible though I have 9 years more to go.

Date: 12-03-2021	Name of Teacher: Tamim	Code: 04
------------------	------------------------	----------

1. Position, Age, Gender, Teaching Experience

I am working as an assistant teacher. Teaching from 2009. I am 46 years old.

- 2. How long have you been teaching?
- 3. What subjects and grades do you teach?

Grade 5- Maths and Grade 4 - Bangla

4. How has the teaching-learning been impacted due to COVID?

We have tried doing but 100% did not happen. Many students did not have smartphones. But the ones who had, we used messenger and IMO to give them tasks. After completion they submitted their work in these mediums. Online is more one-way teaching but physical class has more interaction. For example, during BTV lessons students cannot ask questions.

Interviewer: Anything else how it has been impacted?

It has been impacted. In physical class students could talk about their struggles with not understanding any lesson but online the scope of that is limited.

5. What mediums have you used?

I have used IMO the most.

6. Why have you chosen a particular medium and not others? (Motivation for using this medium)

Students knew how to use IMO perfectly, not messenger. That's why I used it.

- 7. What are some of the challenges you are facing while conducting the classes? Communication is not very effective online. Not all students stay full time in every class. Say, out of 50, 25 attend the class. Not all the same students attend the classes regularly.
- 8. As per your experience what digital skills does a teacher require in order to take classes online?

Teachers need ICT training. In primary schools there are not many ICT teachers in majority schools, like, we have none in ours. But we can do the small tasks. But these skills are not enough to conduct classes.

What skills do you think might be needed?

Since we didn't get any computer training like creating digital content, technical matters so we are not able to do these.

9. Have you seen any chances in your motivation when it comes to online classes? If so, how is it different?

Yes, it has been different. I regularly feel annoyed to take these classes as I am not being able to conduct them my way. The most annoying thing is that there is a mental pressure when online for too long. Physical class is more comfortable.

Interviewer: Does this hamper other aspects of your life?

No, not really. Since I have to take these classes, what is the use of negative thinking?

10. What challenges have you faced in communication strategies during the online class? Since the matter is not practical (physical) so many students do not grasp the concepts. Online is perfect only for students who regularly use laptops and phones at home. There is not enough scope for students to replay or frequently ask questions online.

During class we asked students to be present and ask questions if they do not understand. But in IMO there are many students together and the environment is quite noisy. That is why the teacher and student communication is tough.

11. Have you been trained to take online classes? If yes, what training have you received? No, I didn't get any training.

How did you learn these apps?

(Laughs) These are self- taught.

Date: 13-03-2021	Name of Teacher: Bahar	Code: 05
------------------	------------------------	----------

1. Position, Age, Gender, Teaching Experience

Interviewer: Assalamualaikum apu, how are you?

Yes, I am good.

Interviewer: How old are you now?

33.

2. How long have you been teaching?

Almost 11 years

3. What subjects and grades do you teach?

All subjects of 1 and 2 and some subjects of 8.

4. How has the teaching-learning been impacted due to COVID?

It has impacted on various levels. Many teachers and students are new to this. So, everyone is having to adjust. There has been a change in lesson delivery, physical materials are not in use. We use photos and videos. Syllabus is changed and we are using things and apps we had no idea of before.

Interviewer: Are these effective?

We are trying to make it effective.

Interviewer: Are online classes effective?

Not all students attend the classes. So, not effective for all students. They have a financial crisis, so they cannot afford smart phones or internet all the time. We are able to cater to 20% - 40% of the students.

5. What mediums have you used?

Zoom, IMO

6. Why have you chosen a particular medium and not others? (Motivation for using this medium)

IMO, because many students do not understand how to use zoom.

7. What are some of the challenges you are facing while conducting the classes?

Parents often stay outside, so the timing does not match with the class. There is internet disturbance, especially during rain.

Interviewer: Any regarding lesson delivery?

Students do the homework and submit photos. We cannot supervise enough to see if anyone has done the homework for them.

8. As per your experience what digital skills does a teacher require in order to take classes online?

Teachers need to know how to use different apps. How to design content as it is different from physical classes like sticks or so. Teachers need skills on how to manage classes online though it is not much different. Effective usage of apps and teaching the students to use them is important.

The teachers have to spend a lot of time, energy and resources to bring the students under the umbrella of online learning.

Interviewer: Any skills on keeping the attention of the students?

Teachers also need to know how to make the classes fun and entertaining by doing art, music and showing videos.

9. Have you seen any chances in your motivation when it comes to online classes? If so, how is it different?

When I conduct classes successfully then I feel good. Also, sometimes if I slack then students call and ask when I will conduct classes, their enthusiasm acts a motivation for me. But I feel physical classes require less effort and input for a greater output. But here there is a lot of pressure on us regarding finance as well as time and energy but the outcome is short.

- 10. What challenges have you faced in communication strategies during the online class? Not many. Students came to class on time as it was set ahead.
- 11. Have you been trained to take online classes? If yes, what training have you received? No training. All were self-taught.

#### Students' Interview

Date: 14-03-2021	Name of Student: Hena	Code:	S1
------------------	-----------------------	-------	----

### 1. Age, Gender, Class

I am 11. I go to class 5

Interviewer: What do you like doing other than studies?

I like reading books and my most favorite is drawing.

Interviewer: What do you read?

I read books from Room to Read from school and also my father brings me books if I ask.

Interviewer: How many siblings do you have?

I have two other siblings. (laughs) One brother and sister.

Interviewer: Do they listen to you?

Haha. My brother doesn't.

- 2. Which class do you read in?
- 3. How long have you been attending online classes and of which subjects?

From the last lockdown our school was closed including Ramadan month. So, our teacher asked us to take an online class. I did may classes...

How long have you done classes online?

From May 2020. My father is a businessman, so he comes late and I get the phone really late and often I'd sleep. Ma'am used to give us videos on Facebook, I'd watch them on my own time. We had a messenger group. Not all students would be able to join. But at times when I had classes early in the morning, I'd ask my father to go outside late and then I'd attend the class from his phone.

Interviewer: What subjects did you do?

We did classes on English and Maths online.

Interviewer: Did one teacher or multiple teachers take classes online?

Ma'am multiple teachers.

4. Do you enjoy lessons online?

(Laughs). Ma'am online classes were really fun! During online class in English dialogues, ma'am acted in class. She asked me to act in those dialogues.

Did you understand all subjects online?

Yes, ma'am I mostly understood. But I had a home tutor who helped me with subjects. Also, I called school teachers to explain topics that were hard.

5. Which medium do you use to attend online class? Why?

Facebook, messenger and IMO. We had some classes in IMO regarding Bangla and some other subjects. They would video call in IMO and give tasks and explain the topics. Since my father does not stay home, I asked them to send me video clips there which I saw later on.

Facebook and messenger were used the most. I did not have the phone numbers of all friends who used IMO. So, I asked the teachers who used Facebook and Messenger to give me lessons there which were easily accessible for me.

Interviewer: Do you have Facebook or parents?

My fathers.

6. How is online classes different from onsite classes?

No ma'am there are not many differences, almost the same. But there are some differences. When we did physical class, we could physically interact with teachers, talk to them directly. But in video classes she is on one end and I on another.

Interviewer: Anything else?

In class we can be a little naughty and read stories. But online we could not do that also, the voice would be disrupted in online class. At school we all students stayed together Here many are often missing and not attending class.

7. What are some of the challenges you are facing during the classes? (Teaching techniques, learning environment, technical problems).

I did not face many challenges.

In physical class there is a certain environment in class. Did you face any trouble while studying at home?

At home I have a younger sibling and they make noise, throw toys that would be disturbing. At school these were not there which was helpful for studying.

Interviewer: Did you face any challenges while using apps or the internet?

At first, I was uhm, nervous about how to use Facebook. So, my father and neighbours helped me learn it. My father usually informs people ahead that "My daughter would do video class, do not call in my number."

8. Does your teacher have effective communication techniques for online classes? What are they?

Interviewer: What was effective.

Firstly, my teachers would message when the class would be as a form of communication. We were asked and discussed when to have class and how we are, these were done via phone message. And we would reply by recording short videos and sending it to ma'am like how we are, etc.

Interviewer: Anything else?

If we did not understand any questions, we would send voice recorded clips and communicate with them.

9. What skills or techniques can your teacher add to make your learning more effective? What new skills your teachers can learn or apply then your learning will be better and effective? What steps can your teachers take?

Firstly, I want to talk about my English teacher, her lessons are really fun. So are Bangla and Maths teachers. I do not think anything new can be added. The ones they are applying to, I feel good about that, especially for English.

Date: 14-03-2021	Name of Student: Megha	Code: S2
------------------	------------------------	----------

Ma'am, assalamualaikum, how are you?

Interviewer: Walaikum assalam, my child. I am good. How are you?

Interviewer: Which class do you study in?

Class 5.

Interviewer: What do you want to do when you grow up?

I will get admitted to Madrassa soon. I want to be a doctor.

Interviewer: Why do you want to be a doctor?

Not sure.

Interviewer: Do you want to help other people by being a doctor?

Yes, ma'am.

1. Age, Gender, Class

Class 5, Age: 10 years, Female

- 2. Which class do you read in?
- 3. How long have you been attending online classes and of which subjects?

Last year 3-4 months. We did classes in all subjects.

Interviewer: What medium did you use for doing online classes, IMO, zoom?

Ma'am I'm not sure. My brother helped me and I just did the classes. I am not sure what medium.

Interviewer: How did you do the class?

We were there in groups, in a video call and then turned on the mic and spoke and asked questions.

Interviewer: How many people were in the class?

Ma'am I'm not sure. I did not see these.

Interviewer: Do you remember who was there? Any of your friends?

Yes, some of my friends who usually stay in class.

4. Do you enjoy and understand lessons online?

Yes, I really enjoyed the class. In case I had any problem I asked the teachers and they helped.

Interviewer: What about Maths? It is tough to understand, how did you understand those?

The teachers showed the books in the video and that helped. They taught us very well.

5. Which medium do you use to attend online class? Why?

6. How are online classes different from onsite classes?

There are some differences. Like the offsite classes could be done practically but here the teachers only show the books. Off-site teachers would come close but here it is not possible.

In online class when teachers take oral assessment then students look at the books and answer the questions. Again, when sir has given some homework and later asked to practice then the students show the same task again and again. They do not do it separately. And Sir cannot sign it online and they say that we have done it 5 times but actually did it once.

The real class was better when we all did it together. As we would not get inattentive and sirs could sign the copies. In physical class the lessons would be repeated so we could remember it better but here it's not the case.

Are there good sides of online class?

Yes, there are good sides. Due to online classes people are safe from Coronavirus. It is like everything is happening and our health safety is also ensured.

7. What are some of the challenges you are facing during the classes? (Teaching techniques, Learning environment, technical problems).

There has been an internet disturbance. Many people would log out of class again and again.

Interviewer: Any problems in the techniques?

No, I did not think of anything.

Interviewer: You are at home now while doing class, is this causing any challenge for you?

No, I did not feel any such problem. If there is any chaos at home then I move to a different room where I attend the classes silently and pay attention.

Interviewer: Anything about the online classroom environment?

Initially I had problems using the internet and apps. When sir was present in class, I spoke to him but other times I spoke to my friends.

8. Does your teacher have effective communication techniques for online classes? What are they?

The teachers would get a reminder before the class that class would start by sharing the link before the class, which was helpful.

After explaining each lesson teachers would give scope for asking questions during online class. If we had issues, we could also call them later on after class. I could call them anytime and then sir would say he is busy or also call back later.

9. What skills or techniques can your teacher add to make your learning more effective?

During physical class there was more practical class like using a projector but it is not possible online. When students would not understand various techniques, a projector would be used as an alternative.

Interviewer: During online did teachers using videos or photos to explain lessons:

No.

Interviewer: Do you think using videos would be helpful?

To me I think practical classes would be better, not sure what others think. In physical class if we were inattentive teachers would say various things to motivate us and tell us how we can use education in life. We would keep these things in our head.

Interviewer: So, you think nothing new can be added?

Hmm.

Date: 14-03-2021	Name of Student: Ibnat	Code: S3
------------------	------------------------	----------

Assalamualaikum ma'am.

Interviewer: Walaikum assalam. How are you?

I am good ma'am. Are you good?

Interviewer: Yes, I am good.

1. Age, Gender, Class

I am in class 4 and 9 years old.

Interviewer: How many of you were in the class?

31 or 32.

Interviewer: What do you like doing other than studies?

I like studying and playing.

Interviewer: Tell me your favorite games?

I like kanamachi bho bho.

Interviewer: Now that school is closed how do you play it?

I have neighbour friends; I play with her.

Interviewer: How old are you?

4.

What apps did you use?

IMO.

- 2. Which class do you read in?
- 3. How long have you been attending online classes and of which subjects?

Few months. Bangla, English and Maths.

Interviewer: How did you do class on IMO?

Ma'am would give us a video class and then we would talk to her.

Interviewer: Was it every day?

No, twice a week.

4. Do you enjoy and understand lessons online?

I liked the classes. Ma'am would explain well.

Interviewer: What is your favorite subject and why?

I like Bangla as it has many stories.

Interviewer: Do you write stories?

Yes, sometimes I try writing stories. I read it out to people in the house. I have neighbours, aunties and small children.

5. Which medium do you use to attend online class? Why?

We use IMO. As we use IMO only.

6. How is online classes different from onsite classes?

Not much different.

Interviewer: Think about it and then answer.

Umm... I enjoy it more in physical class because teachers take class in front. But when teachers call online then we can communicate with them, that also feels good.

Interviewer: But you said you liked physical class better? Why is that?

It is because we could see them.

7. What are some of the challenges you are facing during the classes? (Teaching techniques, learning environment, technical problems).

Nothing really.

Interviewer: Anything with the environment?

No ma'am.

Interviewer: Any trouble using it IMO?

No ma'am. My mother helped me understand it.

8. Does your teacher have effective communication techniques for online classes? What are they?

Interviewer: So, were all the techniques your teacher used useful?

Yes.

Interviewer: Could you give me some examples of which were useful?

If we did not understand then ma'am would explain. If we did n;t understand then we would call later after the class. They would help repeatedly.

Interviewer: If schools never open would it be fine to study online?

No ma'am. The fun of studying at school is very different. We get to talk to teachers at school, they explain topics.

Interviewer: Wasn't it possible online?

Yes, but we had to call the teachers repeatedly.

9. What skills or techniques can your teacher add to make your learning more effective?

Ma'am I am not sure. I do not know how to answer it.

Interviewer: Can you take some time to think?

I am not able to answer it.

Interviewer: Okay, as you said school learning is fun. What can your teacher add in online class for which learning can be fun here too? Will it help you to learn better?

Ma'am I have no idea regarding this topic.

Date: 15-03-2021	Name of Student: Faraz	Code: S4

Interviewer: How are you?

I am good ma'am. How are you?

Interviewer: I am good. What did you do all day?

Finished homework, Watched some cartoons on YouTube.

Interviewer: What is your favorite cartoon?

I watch Anime.

1. Age, Gender, Class

What is our age?

I am 10 years old.

Interviewer: Do you want to open your own YouTube channel?

Yes. I have an interest in making videos and uploading YouTube videos.

Interviewer: Great! Which class do you go to?

I am in class 4 this year.

- 2. Which class do you read in?
- 3. How long have you been attending online classes and of which subjects?

Teachers would call in video and explain the topics. They would call within 8PM-10PM almost every day a week. We did all subjects, English, Bangla, Maths, Religious studies, Science and Social Science.

4. Do you enjoy and understand lessons online?

Yes, it was fun. The topics were good.

Interviewer: Did you face any difficulty understanding the topics?

Not really, teachers explained them well. If we faced a problem then we would call ma'am.

5. Which medium do you use to attend online class? Why?

We used IMO for studies. Teacher asked, that's why.

6. How is online classes different from onsite classes?

Hmm. At school we can talk to friends, we can play but online that is not possible. We have tiffin break and play at school but that is not possible online. The physical class had direct delivery of lessons but online that is not possible. I liked school better. It was easier to understand lessons.

7. What are some of the challenges you are facing during the classes? (Teaching techniques, learning environment, technical problems).

Sometimes, there would be phone calls during class.

Interviewer: Any problems in teaching technique?

No ma'am.

Interviewer: Any challenge regarding the learning environment.

I think if the classes were taken in Zoom, then it would be helpful. As we can ask questions in zoom while the class is going on. In IMO it is done after the lesson is taught. In physical class people ask different questions that help others to understand.

8. Does your teacher have effective communication techniques for online classes? What are they?

Teachers would repeatedly ask if we are facing any trouble or understanding the topics.

Sending a message later after class to the teacher if facing any problem makes it easy.

Did you feel inattentive during online class?

No, ma'am taught the lesson with fun. Like ma'am showed us photos of materials in English books and showed those from the books. She would ask us to recite the times table, that was fun.

9. What skills or techniques can your teacher add to make your learning more effective? We had art and drawing class in physical class. This can be added in online classes. Like we can draw and send pictures to the teacher.

Interviewer: What can be done for other subjects?

If we can create our own dialogue in English.

Interviewer: You mean you will make your own dialogues with friends?

Yes.

Interviewer: What can your teacher learn to make your class better?

Teachers can get more training on how to use zoom and other apps.

Date: 16-03-2021	Name of Student: Dahlia	Code: S5
------------------	-------------------------	----------

Interviewer: Hi Dahlia. How are you?

I'm fine ma'am. How are you?

Interviewer: I'm good, thank you. So, what does your father do?

My father does fish business.

1. Age, Gender, Class

So, which class do you read in, what is your age?

I am in class 5. And I am 11 years old.

- 2. Which class do you read in?
- 3. How long have you been attending online classes and of which subjects?

Did all 6 subjects online but the main focus was on Maths, science and English.

4. Do you enjoy and understand lessons online?

Yes ma'am, I like it and understand it.

5. Which medium do you use to attend online class? Why?

IMO. In our phone IMO is supported. Zoom required an app, which I did not have. We were grouped who lived around and attended class online.

Interviewer: Ohh. How many days were the class?

It was 6 days a week during the evening or morning except Friday.

6. How are online classes different from onsite classes?

Ma'am during physical class teachers can explain the topics clearly but it is problematic online. Like, when we are trying to understand maths, we do not have a blackboard at home.

7. What are some of the challenges you are facing during the classes? (Teaching techniques, learning environment, technical problems).

We had video class once or twice but mostly would be on the audio and explain the math over the phone. I had no trouble with the internet as I have Wi-Fi. After IMO class we did coaching class so that would not be a problem. We could not show the home works/classwork to ma'am as there was sometimes internet trouble so we could not share the problem immediately in class. We needed help from coaching to understand this better.

Interviewer: For studying we need a proper environment. Any problems regarding the environment?

We have no trouble with the environment. I have a separate room, so I could study there.

8. Does your teacher have effective communication techniques for online classes? What are they?

Video classes have been most effective, as we could see what was done. Ma'am used to inform us ahead of class timing by calling, so I would gather friends around and be ready for class.

One teacher divided groups with people who lived close by whoever used zoom. After gathering together, we would join the online class together from one room in the neighbourhood. That way it would save them time from explaining each topic one by one.

9. What skills or techniques can your teacher add to make your learning more effective? I am not sure what new things could be done. I think the teachers are fulfilling our needs online. Interviewer: Anything else?

Yes ma'am, in IMO whether audio or video in both cases we need internet. So, if we rather had a video call it would be better to understand the topic as we are spending money anyway.

Date: 16-03-2021	Name of Student: Yamin	Code: S6
	į	

Interviewer: Hi, how are you? What are you doing?

I'm fine, miss. I was doing maths.

1. Age, Gender, Class

Interviewer: What do you want to be when you grow up?

Engineer.

Interviewer: Very good.

2. Which class do you read in?

Class 5. Age: 12

3. How long have you been attending online classes and of which subjects?

From March 2020 till November 2020. I did all the subjects in online class.

4. Do you enjoy and understand lessons online?

Yes I really enjoyed it. I understood everything. Teachers taught really well. Initially classroom students made a lot of noise but later teachers would answer questions repeatedly. We could call again after the class and teachers would explain their very well as well.

5. Which medium do you use to attend online class? Why?

Zoom.

6. How is online classes different from onsite classes?

Physical class is better. Teachers come directly to explain to us, everyone comes together but in online classes teachers cannot scold and even if they do students do not listen and make noise. Sometimes it is a problem to copy the content in class as students make a lot of noise so it is hard to concentrate. So, later, sir erases the board and I sometimes miss what was said or written.

The class can be recorded in zoom and can be heard repeatedly later on as well.

7. What are some of the challenges you are facing during the classes? (Teaching techniques, learning environment, technical problems).

Sometimes my wi-fi connection would be lost and also electricity. My mother helped me learn how to use the zoom app.

Interviewer: What techniques did teachers use?

Teachers wrote on board, on paper and sent photos or showed on video calls. We'd take photos and then do those home works.

Interviewer: Anything to do in the home environment?

At home I cannot make direct contact in class. Also, if anyone makes any mistake then other students keep on saying they know better and make chaos. Another thing is, I cannot meet my friends.

8. Does your teacher have effective communication techniques for online classes? What are they?

Teachers called attendance through ID, so that was helpful. Zoom class was taken 2 classes daily in the morning and evening. The teachers informed us ahead in the routine via messenger and WhatsApp.

If we didn't understand anything, we'd class the teacher.

Interviewer: Did you feel inattentive in class?

I was always attentive. But sometimes if I lost it then I'd put my mic in mute.

Interviewer: Did your teachers discuss other fun topics other than studies?

No.

9. What skills or techniques can your teacher add to make your learning more effective? If sir made everyone keep everyone on mute and then only ones who talked could unmute then the problem would be less. If sir would hang which topic they'd teach in the corner on the board, then it would be helpful. Then I would be prepared ahead of time which copies to be prepared.

Date: 17-03-2021	Name of Student: Sabina	Code: S7
------------------	-------------------------	----------

Interviewer: How are you?

I'm fine, thank you.

1. Age, Gender, Class

What is your age, and which class are you in?

I am in class 5. I am 13 years old.

- 2. Which class do you read in?
- 3. How long have you been attending online classes and of which subjects? I did class for 1 or 2 months. I did class on all 6 subjects.
- 4. Do you enjoy and understand lessons online?

Yes.

5. Which medium do you use to attend online class? Why?

We used IMO in my father's class. Ma'am took a class in IMO that is why. Ma'am asked then we downloaded IMO.

- 6. How are online classes different from onsite classes?Physical class is better because we can understand it better.
- 7. What are some of the challenges you are facing during the classes? (Teaching techniques, learning environment, technical problems).

Not sure. Ma'am came on video and taught lessons. It was a little difficult.

8. Does your teacher have effective communication techniques for online classes? What are they?

Ma'am called us ahead to inform us ahead of time when class will be. At times when my father would be home then I'd call her and ask for the studies, this was helpful.

9. What skills or techniques can your teacher add to make your learning more effective? What she did was helpful.

Date: 18-03-2021	Name of Student: Afia	Code: S8
		1

Assalamualaikum ma'am. How are you?

Interviewer: Walaikum assalam. I am good. How are you?

I am also fine, ma'am.

1. Age, Gender, Class

How old are you and which class are you in?

I am 11 years old and I am in class 5.

- 2. Which class do you read in?
- 3. How long have you been attending online classes and of which subjects?

We have been doing online classes from long back, so I do not remember it. We had classes on Maths, Bangla, English and science.

4. Do you enjoy and understand lessons online?

Ye, I enjoyed it. I could see other friends. Yes, I understood all the lessons.

5. Which medium do you use to attend online class? Why?

We used zoom. Other apps don't allow everyone to join together. Most of the time most students came but sometimes few would miss. We did classes 6 days a week.

6. How are online classes different from onsite classes?

Physical classes were fun. We enjoyed a lot by playing in the school field but this is not possible online. We understood better in physical class lessons at once but now have to ask the teacher again and again. It is because the internet is slow at times.

7. What are some of the challenges you are facing during the classes? (Teaching techniques, learning environment, technical problems).

The internet is slow at times. But no other problems.

8. Does your teacher have effective communication techniques for online classes? What are they?

Not sure.

9. What skills or techniques can your teacher add to make your learning more effective? What they are doing is fine.

Date: 19-03-2021	Name of Student: Shakib	Code: S9
------------------	-------------------------	----------

1. Age, Gender, Class

Hi. Which class are you in and how old are you?

I am in class 5 and 12 years old.

- 2. Which class do you read in?
- 3. How long have you been attending online classes and of which subjects?

We are doing classes every week. I do not remember when we started. We did classes on Maths, English, Bangla, Science and Social science. English and Maths classes were taken more than other subjects.

4. Do you enjoy and understand lessons online?

Yes, I like it. Yes, I understand the topics as well.

5. Which medium do you use to attend online class? Why?

We use zoom apps for classes. We use it because we all can do the class together. My aunty has helped me learn how to use the app.

6. How is online classes different from onsite classes?

I like both but I like physical class more. In physical class, copies and boards are used but in zoom we are given orally. In physical class we are assessed face-to-face. We get to play and see our

friends. In case anyone cannot solve anything, we helped each other in physical class which is not possible online.

How many students attend online class?

Almost 12-13 people join the class from 33 people.

7. What are some of the challenges you are facing during the classes? (Teaching techniques, learning environment, technical problems).

Our internet is sometimes slow, then the voices break it is difficult to understand.

Interviewer: How did your teacher help with maths?

Teacher showed the board in the video. But for Bangla they said orally.

Interviewer: Any challenges with the environment?

No problem with the environment.

8. Does your teacher have effective communication techniques for online classes? What are they?

The Zoom app link was shared in the early morning before class. This was helpful.

If we did not pay attention then they would explain again. If I did not understand anything then my mother would help.

Interviewer: If your mother was busy then?

Then we would call our teachers whenever we wanted to.

9. What skills or techniques can your teacher add to make your learning more effective?

Yes. I think, whatever teachers are doing, this is the best.

Date: 20-03-2021 Name of Student: Armeen Code: S
--

1. Age, Gender, Class

13 years. Class 5

- 2. Which class do you read in?
- 3. How long have you been attending online classes and of which subjects?
- 4 5 months. We did Maths and English
- 4. Do you enjoy and understand lessons online?

Yes, I liked it. Ma'am taught very well. Repeatedly explained the topics.

5. Which medium do you use to attend online class? Why?

Zoom and messenger. Ma'am asked to use zoom. I used my brother's messenger. We did classes

6 days a week, of about 2 hours or more in the evening.

6. How is online classes different from onsite classes?

During face-to-face class we could talk a lot and ask different questions but in zoom there was an

internet problem and there used to be background noise from students. It was tough to follow and

mark from books as sometimes I did not understand what was being explained in the online class.

7. What are some of the challenges you are facing during the classes? (Teaching techniques,

learning environment, technical problems).

I had no problem using the app. Ma'am came to video class and asked us to open the book and she

would show the book on the camera and explain. We sent photographs of homework on messenger.

Online and physical are both good. But could ask more in physical class. But the call would drop

every 40 minutes, so that was disturbing. We messaged ma'am afterwards with problems of

different topics and ma'am would reply to them by message or video call.

Interviewer: What about the environment?

I am by myself so I feel isolated, there is no one to talk to. But then again when I studied by myself

it was easier to focus, whereas in class others would disturb me.

8. Does your teacher have effective communication techniques for online classes? What are

they?

If we didn't understand anything then she would send photos of those topics, explaining them. She

was very helpful and explained well. Ma'am kept everyone on mute and then when time came, we

would unmute ourselves at the end and ask questions.

At times we had other discussions and storytelling.

9. What skills or techniques can your teacher add to make your learning more effective?

Our teacher was already good. If we had physical class then it would have been best.

Focused Group Discussion (FGD) - Date: 25-03-20201

1. Please introduce yourselves. Gender, Age, Teaching Experience (years).

What subjects and grades do you all teach?

Interviewer: Let's start with Sarah Apu.

76

Interviewee E: In this pandemic I taught class 5. I taught all subjects over the phone. I used IMO for 10 and the rest 25 over the phone and gave homework.

Interviewer: Let's hear from Joba Apa.

Interviewee A: I have been teaching since 2012. I taught class 2 and 5 during the pandemic. I taught mostly English and Science. I tried my best to bring as many students as possible to bring them to online classes. I started from May 2020 in zoom. It was thought but brought 50% of the students. Later when the PSC exam was cancelled their motivation and mine both reduced.

Interviewer: Thank you, apa! We will come back to these points. Let's hear from Farhana Apa.

Interviewee B: Last year when I started taking class in pandemic for class 2, I took all subjects. We had to update this data to the education offices. The response was good at the beginning but later they moved to the village, so it got tougher. So, I had to use a phone call. I have been teaching since 2009, so 11 years running. Taught Bangla, Maths, English, social science.

Interviewer: Let's hear from Sayfa Apa. We have lost her.

- 3. Have you all been taking classes online?
- 4. Can you discuss most effective practices in your context to take classes online?

Interviewee B: Whatever we took in online classes, whether zoom or IMO it was very teacher-centred. Whatever we asked the students to do, they followed. Like asked them to read and asked parents to put fingers to follow the instructions. Showed the paper on the screen and also said it orally. As everything was new and we were new to it. Also, besides the copy I used the white board at home sometimes. But could not continue for long as they could not join the class.

Interviewee A: We were not used to Zoom at all. We had no idea the app existed. We are not used to using it. The techniques we apply in physical class are not possible at online class. The major challenge is bringing them to class itself. How to improve class was not the focus. The basic focus was to bring them to class and stay connected to books and continue studying. Well, I did not apply much in the online class as there was not much capacity or opportunity. Despite having 20 - 30 students many kept on losing the internet.

Interviewee B: We could not use materials much. But for Maths while teaching multiplication using color pens, pages and fingers explained them the topic.

Interviewee E: I took class on IMO because they could not use Zoom well. We work with bottom level students. Majority parents were working so it was hard to reach them. For class 5 while teaching Maths, I used chalk to explain the fraction.

Interviewee A: I pointed and marked the answers from the book orally and gave them homework. I checked that homework online. Gave them a list of unknown words and taught them pronunciation.

Interviewer: We have Sayfa Apa. If you could introduce yourself and answer the next question. Interviewee D: I have been teaching from 2009, 12 years running. During the pandemic I taught class 5 of 44 students. I could connect to 42 students. Took class of half of the class on IMO. A sudden change to online was time consuming for all of us.

5. Discuss some challenges teachers face in terms of skills while taking online classes Interviewee D: I tried taking a class on Zoom. Most primary parents could not catch the aspect of Zoom and technicalities. But they were used to IMO and hence I shifted to IMO. We did not get any materials from school. Like developed countries got laptops but we managed whatever we had of our own. So, connectivity was a big problem to join the students.

Interviewee E: I now watch different classes and learn about how to use different digital content and materials. But initially I did not know these. Then I saw private schools doing it. But the challenge was to bring the students to the zoom class itself.

Interviewee B: I agree with Sarah Apa. Our initial target was to bring the students to class. Materials or finishing the syllabus were not a focus, so that was a challenge.

Interviewer: Any new points you want to add, Joba apa?

Interviewee A: Every school should have more than one ICT teacher. But all teachers should get some digital literacy training. I saw many teachers are interested but they do not have the skills so are not able to conduct the class. Apart from us, many teachers do not know the basics of ICT. We should get more and more training and updated on new apps and how to continue the class in such situations. We learned in the crisis how we need to manage so many things. I'm sure the government themselves have realised how digital knowledge is important for teachers and students, all.

6. Do you think the current capacity of teachers in your school and that you have are enough to take online classes? (Digital literacy, teaching style, communication, technical support and motivation) How so?

Interviewee C: Whatever resources we have to take online classes are not enough. Like lack of android phones, internet connection of the students, parents are outside. We have one or two ICT

teachers in each school. Most teachers, like 90%, are updated. But technical support from schools is not enough.

Interviewee E: If teachers were given a laptop each would be helpful. Because my children have class using my personal laptop. We did not get any conveyance for phone calls.

Interviewee D: We could have gotten a laptop, also phone bills. Many sectors got support but teachers did not. Adding these affected my motivation. How long can I provide one-sidedly? The pandemic was so stressful, we are stuck at home with this irregular life. We rather forcefully contacted the students. So, my children had classes too. So, I had to manage and make do with the limited resources I had.

Interviewee A: For motivation appreciation is also key. Laptop or other materials are far away. For the effort we put in I have not heard any appreciation. The pandemic has shown us how important these areas are. There is a saying...chor chole gele buddhi ashe..so now we are more aware of these areas and where we need to grow. I felt Every area needs capacity building, whether that's digital literacy or how to use various apps. Especially teaching style. It has only been teacher-centric or lecture type. I faced a lot of challenges in this area. Also, digital literacy to every area Nadia apa has mentioned needs capacity building. Additionally, only 1 or two teachers get ICT training whereas I think more teachers should receive it.

Interviewee B: I agree with Joba. I feel Teaching style is where I lack the most.

Interviewer: Can you give an example.

Interviewee B: umm... For example, I was telling them to write answers but all of them could barely catch it. I could not ensure j oder pora ta adae kore neya. Out of 40/45 students say 20 or even if 5 could learn how to write the alphabet "shorey o" then I would be satisfied but I feel I lacked skill there. I feel I could not do it properly because of my lack of skills. Had I received more training I would've been able to take smoother classes and be more satisfied with making the students accomplish their study goals and contents.

7. What other areas do the teachers need to build capacity? Why are those areas important? How to build these capacities?

Interviewee C: I feel more teachers need to get ICT training. It not only will benefit them to take classes but also in other areas of life. Like Upobritti. Training is must whether monthly or for 15 days. I think if it were possible to give a training school basis, like Kalachadpur school will get training for a couple of days. Badda for a couple of days in this format. But I have seen teachers

being reluctant when it comes to receiving such training. It is important that teachers grow interest in self-learning as well as receive training. If we are reluctant to adapt then it is never possible.

Interviewee B: Teachers need training. Whether by government or NGO.

Interviewer: Should these be onsite or offline?

Interviewee C: It should be onsite.

Interviewee E: I think it can be online. Kabir sir, during this pandemic except one or two teachers most teachers have learned zoom and other apps and how to conduct class.

Interviewee B: I feel it should be taken onsite. Because it is practical knowledge. Most people could not turn on and off the PC so how will they understand the training? So, onsite is the best way.

Interviewee C: I agree, most people lack that knowledge and hence onsite is the best.

Interviewer: Thank you for your opinions. There is no right or wrong answer to that but more room to explore, so your opinions are important. We have lost Joba apa and Sarah apa. Sayfa Apa, would you like to add anything?

Interviewee D: I feel most areas are covered but teachers also need harmony and unity. Teachers are trying and hopefully things will turn out good.

Interviewer: Kabir sir, since you joined late could you please tell us for how long have you been teaching and which subjects and grades you teach?

Interviewee C: Yes. Apologies again for joining late. I was caught up with sports. I've been teaching since 2010, so almost 11 years. I teach maths and Bangladesh studies for 5th and 6th grade.

Interviewer: Thank you so much everyone for your valuable time and the fruitful discussion.

Interviewee B: Thanks to you too.

Interviewee C: Okay. Thank you.