The Transition from Online to Offline Classes: Students' Benefits, Challenges, and Strategies to Overcome the Challenges in a New Normal Environment based on Private University

Students in Bangladesh

By

Zarin Tasnim 19103034

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

Department of English and Humanities

Brac University

January 2023

©2023. Brac University All rights reserved.

Transition from Online to Offline Mode: Students' Benefits, Challenges, and Ways

2

## **Declaration**

It is hereby declared that

1. The thesis submitted is my own original work while completing my 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 the primary sources of help,

Student's Full Name & Signature:

**ZARIN TASNIM** 

19103034

Transition from Online to Offline Mode: Students' Benefits, Challenges, and Ways

3

## **Approval**

The thesis/project titled "The Transition from Online to Offline classes: Students' benefits, Challenges, and Strategies to Overcome the Challenges in a New Normal Environment based on the Private University Students in Bangladesh" submitted by ZarinTasnim (19103034) of has been accepted as satisfactory in partial fulfillment of the requirement for the degree of Bachelor of Arts in English on 19th January 2023.

## **Examining Committee:**

Supervisor: (Member)	Nazah Farhat Sanjar Lacturar Department of English and Humanitia
	Senior Lecturer, Department of English and Humanitie BRAC University
Danartmantal Haad	
Departmental Head: (Chair)	Professor Firdous Azim, PhD
()	Professor and Chairperson, Department of English and
	Humanities
	BRAC University

#### **Abstract**

The present study sought to explore students' benefits, challenges, and different strategies to overcome a new normal environment due to experiencing the transition period through the perspectives of students implementing a qualitative research design. We spent a long time adjusting to the "new normal" as a result of the Covid-19 pandemic. With the help of Covid-19, we have learned how to modify our lifestyles and adapt to a new normal environment. The transition period had a great impact on the education system. Due to this transition students are experiencing numerous benefits which have upgraded their learning skills and motivations to explore more. Moreover, some major challenges and new adaptative strategies to mitigate the challenges efficiently to cope with the new normal environment. The total participants were seven private university students who took part in semi-structured interviews. For analyzing the data, the thematic analysis method had been used. The study prominently found some major benefits, challenges, and overcoming strategies to mitigate the challenges. However, this study sought some strategies to mitigate the challenges efficiently, still students and teachers both stakeholders should interact well for better learning outcomes. Keywords: remote learning, online assessment, offline mode, benefits, challenges, ways, post-pandemic

## **Dedication**

I would like to dedicate this research work to my parents who support me throughout my journey

Transition from Online to Offline Mode: Students' Benefits, Challenges, and Ways

Acknowledgment

6

fortunate to have my parents' constant support throughout my academic journey. In addition,

First of all, I would like to give my utmost acknowledgment to Allah, the Almighty. I am

I want to express my deep gratitude to my supervisor, Nazah Farhat, who has continuously

encouraged me to finish this thesis and provided me with excellent assistance. Finally, I want

to thank everyone who took part in my study and took the time to speak with me about their

opinions.

ZarinTasnim

January, 2023

## **Table of Contents**

Declaration	2
Approval	3
Abstract/ Executive Summary	4
Dedication (Optional)	5
Acknowledgment	6
Table of Contents	7
L. Chapter 1: Introduction1	0
1.1 Background of the Study	
1.2 Statement of the Problem	
1.3 Purpose of the study	
1.4 Research Questions	
Chapter 2: Literature Review13	
2.1 Theoretical Framework on Remote and Traditional Modes of Learning	
2.2 Advantages of Online Classes:	
2.3 Disadvantages of Online Classes	
2.4 Transition from Online to Offline Class:	
2.4.1 Integrating Digital Technologies with Teaching and Learning	
2.4.2 Uses of pre-recorded lectures:	
2.4.3 The Convenience of Traditional Learning and Teaching	
2.4.4 Students' Authentic Writing:	
2.4.5 Organized Setup in traditional mode:	
2.4.6 Better Learning Outcome	
2.4.7 Enhancement of Reading Habits	

	2.5 Students' Challenges
	2.5.1 Writing Challenges:
	2.5.2 Inaccessibility of Pre-recorded lectures
	2.5.3 Less attention span:
	2.5.4 Huge Learning Gap
	2.5.5 Impacts of Commuting to Academic Institutions: A Barrier to Academic Success
	2.5.6 Time Management Issue During Examination
	2.5.7 Facing Memorizing Issues during Examination:
	2.6 Major Strategies: To Overcome the Challenges
	2.6.1 Retaining attention span during class:
	2.6.2 Effective learning strategy:
Chapte	r 3: Methodology29
	3.1 Research Design:
	3.2 Participants of the study
	3.3 Data Collection procedure
	3.4 Data Analysis Procedure
Chapte	r 4: Findings and Discussion32
	4.1 Major Benefits for Students
	4.1.1 Students' perspectives on becoming tech-savvy:
	4.1.2 Students' standpoint on the development of knowledge and resourcefulness
	4.1.3 Students' perspectives on the effectiveness of supplemental videos/pre-recorded lectures
	4.1.4 Students' Perspectives on Low-Pressure level in offline mode
	4.1.5 Students' Opinions about Better learning outcome in Offline mode
	4.1.6 Students' Opinion on the Enhancement of Reading Skill
	4.2 Major Challenges in Offline Mode
	4.2.1 Students' perspectives on writing issues
	4.2.2 Students' perspectives on the Inaccessibility of Pre-recorded lectures
	4.2.3 Students' experiences with Less Attention Span
	4.2.4 Students' Perceptions of Huge learning gap

4.2.5 Students' opinion on Commuting to university
4.2.6 Students' opinions on Time Management Issue
4.2.7 Facing Memorization Issues
4.3 Students' perspective on retaining attention span during class lecture
4.3.1 Strategies to overcome memorization issue
4.3.2 Overcoming time management issues and writing challenges
Discussion
5.1 Summary of Participants' perspectives on the benefits of the transition period
5.2 Summary of students' perspectives on challenges in offline mode
5.3 Limitations
Chapter 6: Conclusion and Recommendations55
6.1 Conclusion
6.2 Recommendations
References
Appendix62

## **Chapter One: Introduction**

#### 1.1 Background of the Study

Imagine being a university student sent home from university on a day in March 2020, completely unaware that you would not be able to return to university once more for a full year. Why are you unable to start university classes? What happened to your faculty? How about your peers? Where did everything you left on your desk go? You're confused and concerned by the news reporters' remarks and the visuals that are flashing on the TV. You observe that many residents in your society are severely ill and dying. Everyone is staying at home due to quarantine orders, so you can't visit your grandparents or cousins. You hear your parents complaining about losing their employment and see pictures of worn-out healthcare professionals. The world seems unstable, dangerous, unsettling, and perplexing.

Due to Covid-19, which was first discovered in Wuhan, China, in December 2019 and later became a global pandemic that has had a negatively impacted on sociocultural practices, the world has been suffering through unprecedented situations. Nearly all parts of the planet have been affected by the effects of this catastrophe (Jahan et al, 2021, p. 328). The pandemic inspired novel online teaching strategies, constraints that have been placed by the majority of nations, where the manner of instruction has changed to either synchronous or asynchronous. More than 190 countries throughout the world have experienced the greatest disruption of their educational institutions in history.

During the pandemic, students were required to be assessed through online assignments due to the remote learning process. In remote learning, students attended online classes through electronic media such as Zoom, Google Meet, and discord. In addition, the live classes and pre-recorded lectures were provided from different platforms. Moreover, in Bangladesh, some renowned private universities were able to conduct their classes during the covid 19

pandemic when home quarantine was mandatory and going outside was totally prohibited. To continue the learning process, private universities introduced many student-friendly sites where they can get the materials, calendars, class schedules everything. By introducing webbased sites, students were able to continue their studies without any interaction or a yeargap in their academic life. Furthermore, the students of private university students had passed a long journey in the online mode of learning, during this prolonged journey, many new skills have been added and also some challenges. After the transition into the offline mode, students again had to shape their learning style according to the previous traditional based learning setting. Due to this transition, private university students have experienced quite a few reformations in their academic life. Therefore, this study aims to search the following parts for a comprehensive understanding.

#### 1.2 Statement of the Problem

To date, many studies have been conducted on the transition from offline to online modes of learning. However, there remains a significant gap in the literature regarding studies on how the transition from online to offline mode has impacted students' academic life whether the benefits, challenges, or different overcoming strategies. Therefore, this study intends to investigate the following parts:

#### 1.3 Research Objectives

- To investigate students' major benefits in the new normal environment due to covid
   pandemic.
- 2) To investigate the major challenges faced by students in the new normal environment.
- 3) To determine the strategies followed by students to overcome the challenges efficiently in the traditional mode of learning.

#### 1.4 Purpose of the Study

This qualitative research focuses on these research questions:

- 1) What are the major benefits faced by students in the new normal environment?
- 2) What are the major challenges faced by students in the new normal environment?
- 3) What has been done by students to mitigate the challenges?

### **Chapter 2: Literature Review**

Based on the relevant research, this chapter demonstrates the sudden online class teaching and learning method, Alternative assessment, computer-aided learning (CAL), history of CAL, different learning initiatives such as computer-assistedlanguage testing, online class pros, and cons, shifting online to offline class, benefits, challenges and overcoming ways.

#### 2.1 Theoretical Framework on Remote and Traditional Modes of Learning

In March 2020, COVID-19 was recognized as a global pandemic. It had an influenceon all aspects of life, including academics. Therefore, Universities and schools were forced toclose. Furthermore, the academic institution had difficulty adjusting to the unparalleledtransition from traditional to online learning due to its closure. The pandemic inspirednovel online teaching strategies. However, most nations have placed constraints, where the manner of instruction has changed to either synchronous or asynchronous. More than 190 countries throughout the world have experienced the greatest disruption of educational institutions in history.

Makarovaet al (2022) revealed that online work-study appears to be around to stay. Our lives have been dramatically affected by the COVID-19 outbreak, including communication, theworkplace, distance from others, and life quality as a whole. Students are habituated toward traditional classroom-based learning (p. 57). However, due to the outbreak of covid 19, students had to accept the new form of learning is remotelearning. Remote learning was a new concept for every student in the whole world. Students were new to the concept of remote learning. From the starting period of school, studentswere habituated towards attending classes, face-to-face interaction with the teachers and friends, and taking homework, and the homework was checked by the teacher in their next scheduledclass was a common frequent scenario. However, remote learning changed this way oflearning totally. In the remote

learning process, students were bound to attend classes throughonline mode and they were also being assessed through online media. Moreover, the exams were also taken online mode. Though online learning or remote learning is a blessing for students if it is used in the right direction. Indeed, students had the immense opportunity for learning the best by sitting in their place. Students could learn things on their own, maintaining their own pace of acquiring the skills. Through online learning, students got technologically advanced and teachers made the learning module quite interesting for the students so that students can learn things on their own by sitting comfortably at their home.

According to Basta (2009), E-learning is viewed as a future application that will encourage lifelong learning by allowing students to learn at their own pace and at any time. Regardless of the time or place, students can interact with peers and instructors, explore websites, and access course materials. Universities can now increase their current geographic reach, take advantage of new potential students, and position themselves as leading global educational institutions in the top university list.

Basta (2009) also mentioned that e-learning can be a form of blended learning, which incorporates traditional (face-to-face) learning with web-based online strategies. Blended learning uses technology to facilitate in-person instruction The delivery of courses entirely through communication and information technology is commonly referred to as online learning. In the second scenario, students are able to learn the required material without physically meeting with their teachers. Online classes are convenient and easy to use, allowing students to enroll in a semester-long course from any location in the world as long as they have Internet access

#### 2.2 Advantages of Online Classes

During the pandemic, students were required to join online class sessions where students could interact with their peers and faculty members. Moreover, facilitating online learning, supplemental recordings were also provided for the students to deepen down content knowledge. During the pandemic, students had great control over learning at their pace and in their preferred time zone (Xhaferi, 2020). As students were provided with supplemental videos, students could watch the videos in any of their free time by back-and-forth trial. Even, students could join the classes by staying anywhere in the world. Also, faculty members shared the live class lectures to benefit the students who missed the classes for some emergency reason or for those who attended the class but were not much attentive during the ongoing class. therefore, whenever students could feel the need, they could watch the lectures and notethem down at their way of convenience (p. 89).

#### 2.3 Disadvantages of Online Classes

Despite the rapid advancement of ICTs and the declining costs of smartphones, tablets, laptops, and other devices, there is still a major disparity between learners in terms of material resources and Internet connectivity (Zounek et al. 2013). This disparity occurs due to insufficient knowledge of technological skills. In addition, for this insufficient knowledge, many learners fail to upgrade their study experiences and lag behind.

#### 2.4 Transition from Online to Offline Class

We spent a very long time adjusting to the "new normal" as a result of the Covid-19 pandemic. With the help of Covid-19, we have learned how to modify our lifestyles and adapt to a new normal environment. The transition period had a great impact on the education system. Due to this transition students are experiencing numerous benefits which have upgraded their learning skills and motivations to explore more. Moreover, some major

challenges and new adaptative strategies to mitigate the challenges efficiently to cope with the new normal environment.

#### Students' Benefits

This portion provides the benefits which are experienced due to covid 19 pandemic, students had to switch to the online study method for a prolonged duration. That is why, after shifting back to the traditional mode students faced some major benefits. The benefits are being techsavvy, being resourceful, having better learning outcomes, and enhancement of reading habits.

#### 2.4.1Integrating Digital Technologies with Teaching and Learning

The efficiency of tertiary education has frequently been assessed using several methods. The active engagement of students in self-evaluation of their own performance and the growth of reflective thinking are core aspects of alternative assessment(Kavaliauskienė,2007). The success of alternative assessment rests on performance tasks that show what language learners in communicative classrooms are capable of doing. Self-evaluation is a crucial component of alternative assessment, which is typically given as performance reflections. The use of non-traditional approaches to assess students' performance in a variety of activities, such as essays, oral presentations, demonstrations, portfolios, etc., is known as an alternative assessment.

Because of alternative assessment, students were required to perform certain mandatory tasks given by the faculty members to assess each student's current content knowledge in the wake of the pandemic situation. Therefore, students needed to get good grades for maintaining a good GPA. Moreover, educational institutions introduce Turnitin, a software that is used for identifying plagiarism in a written script, therefore, the institution strictly prohibited plagiarized writing and declared only 20% is acceptable for the assignments if any student

goes beyond this percentage, then their assignments would be counted as expelled. Because of these reasons, students were more cautious about not following any unethical means while doing the assignments. That is why most of the students tried to come up with their own authentic writing. According to Smart (2006) learning is facilitated when students actively participate in the learning process, assignments match real-life situations and experiences, and critical thinking or deep learning is encouraged through practical and reflective activities. Online courses offer the potential to provide environments where students actively engage with content and learn by doing, improving their understanding as they develop new information because many new technologies and web-based activities are interactive. Through developing content knowledge by using different web-based media, students become resourceful. Therefore, becoming resourceful helped students in numerous ways. Such as students read many new writings on different sites which eventually broadenstheir capacity for thinking level and thus students can think out of the box which shows up in their writings. As following unethical means were highly prohibited by educational institutions so that students read, analyze, and explore thus deep learning also occurred by using web-based technologies. A study reveals students' resourcefulness in the following way. By comparing and contrasting the unique and major themes in individuals' own experiences of their interaction with practical, social, academic, and affective problems, it first provides an explanation of how students interact with the learning opportunities and resources at universities. Second, it looks at the ways in which students express themselves as they reflect on their educational experiences in reaction to the difficulties they face (p. 207). During the pandemic, students learned where to search what or which site can give them authentic and authorized paper. This actually helped students in their offline courses. Now students are technical experts and became resourceful about using different web pages for extracting the needed information. Students reach a certain level where they can gather numerous information by using different sources to make an assignment more informative

#### 2.4.2 Uses of Pre-recorded Lectures

Students have greater flexibility while managing the competing demands of career, education, and other responsibilities due to the online availability of recorded lectures. The lecture recordings are used by students to examine the course material, revise class notes, comprehend difficult ideas, and work independently. Students benefit from being able to pause or replay the recordings, especially those who do not speak English as their first or major language (Hadgu et al, 2016, p. 109). While taking new courses students could watch the pre-recorded lectures which eventually helps the students to have an overall idea about the course and this idea gives the students an overview on that particular courseand whether continuation would be better or not. The most benefits of pre-recorded lectures are students can watch the lectures at sitting their own place and can gather information quite productively. However, if these lectures were not provided then some students would continue the course and can suffer a lot because the course content might seem difficult for some students.

#### 2.4.3 The Convenience of Traditional Learning and Teaching

Rahman (2021) argues that the most important aspect of every teaching and learning process is assessment. As a result, it is utilized by instructors in a variety of ways to evaluate, monitor, and reflect on a student's educational performance, learning progress, and competence as it relates to the teaching-learning process. This is a methodical strategy for gathering data on pupils' academic progress as part of the evaluation. During the pandemic, students were required to submit online assessments. According to Smart (2006), learning is facilitated when students actively participate in the learning process, assignments match real-

life situations and experiences, and critical thinking or deep learning is encouraged through practical and reflective activities. According to Alhasaniet al. (2022), the ability to manage one's tasks appropriately so that one can balance their academic responsibilities is a major challenge for students in higher education. Students sometimes stress about excessive academic assignments, which take up longer than they have available during the term. Students may experience stress while attempting to meet all deadlines due to their hectic daily routines. Stress might occur from the increased academic responsibilities, particularly when there is disorganization. During online mode, students used to get back-to-back assignments, quizzes, and presentations which created huge stress for the students to cooperate with their teaching-learning process. On the other hand, in the traditional classroom students can interact better with their teacher efficiently during giving lectures, and also students can do group study with their peers, and discuss issues with their peers thus a well-organized assignment can be done by the students. However, the online assignments journey was a nightmare for some students thus, students prefer face-to-face classes because of their own convenience as it is easy to maintain in an efficient manner.

#### 2.4.4 Students' Authentic Writing

Plagiarismas basicallyan act of breaking rules of conduct in various circumstances, like writing assignments in a university classroom, and gravely violating moral standards or passing off someone else's work as their own (Simatupang et al, 2021). During the pandemic, violating the code of conduct regarding plagiarized writing was unexpected for every student. However, some students faced issues regarding plagiarized writing. Some students properly maintained a non-plagiarized writing script but still, some percentage of plagiarized was found in the student'spapers which eventually deduct their marks. Deducting marks really hampered their final grades and it suffered students drastically. Whereas, students more preferred offline classesand examinations as they can write their scripts in front of the

examiner and no plagiarized cheating can be found in the written scripts if they maintain the proper answer on their own.

#### 2.4.5 Organized Setup in Traditional Mode

According to Macan et al (1990), "Students waste time when they search for and fail to find important information. Spending time repeating tasks (such as checking e-mails and social media) and worrying about uncompleted tasks also waste time and impede progress." Therefore, students may find it difficult to distinguish between what is important and what is not. The ability to utilize time in an effective and efficient manner has been utilized as an effective approach to coping with stress. The traditional mode seems more organized and easier to maintain because while attending the class, students can know the important information quite thoroughly. However, online mode of learning, students had to maintain numerous sites, and sometimes they were unable to know important information if they were not connected to Facebook groups or other classroom groups. Even sometimes, getting the classroom code of zoom, google class was also troublesome for some reason. Due to electricity or other familial issues, attending classes was troublesome. Thus, students prefer the offline mode of the classroom that is convenient and mainly students are highly accustomed to the traditional mode of learning.

#### **2.4.6 Better Learning Outcome**

ŞENEL et al. (2021) utter that various vital educational aspects that are more naturally possible in a traditional classroom setting, such as group work, communication, and interaction between students and teachers, may be restricted in a virtual classroom. Moreover, Cyril (2021) also mentions that all the necessary tasks cannot be completed by one person. As a result, people form groups and organizations to collaborate or work together. Every organization, whether it be a family, a college, a business, an army, a government, or a

church, is essentially a group of individuals working toward a common goal. The activities and efforts of various people working together in an organization must be coordinated by a central department or organization in order for them to function as a team. Such collaboration is referred to as "Management." The pandemic was a major situation in every student's life because of experiencing totally a new phase in their higher education system. Online classes were really a blessing during the pandemic. It gave them an immense opportunity to attend class from their home. However, group work, group study, and interaction with the class were not possible in an online class. however, interaction in class, group collaboration, and understanding an obscure topic in a lucid manner is more convenient in a traditional classroom.

#### 2.4.7 Enhancement of Reading Habits

According to Jahan et al (2021), "a study on the impact of distance learning during the coronavirus pandemic found that digital technologies were identified by the study's analysis of a number of evaluating factors as having the greatest influence on learning habits during the Covid-19 pandemic crisis." During covid, students were required to submit assignments that were considered as their formative assessments. Moreover, the assignments were not designed in a way that students could just read the books and answer them rather the assignments were analytical and deep learning based. Thus, reading from different sources and analyzing ability played a significant role in cohesive paper writing. Therefore, it eventually helped students to form a reading compressive habit. Moreover, this habit is immensely helping students in their offline mode of transition to a greater extent. As Adeyemi (2021) mentioned that a study has been done to determine how Covid-19 affects a person's reading habits. According to the study, reading time increased significantly from 1-2 to 3-4 hours each day. According to the survey, respondents used reading as a way to pass the time during the lockdown rather than as a way to enjoy themselves. Students mostly maintain

reading habits to pass the boring time frame of covid that somehow increased students' reading skills.

#### 2.5 Students' Challenges

Due to covid 19 pandemic, students had to switch to the online study method for a prolonged duration. That is why, after coming back into the offline class students faced some major challenges in adapting to the new normal environment. The major challenges are shown below. The challenges are occurring issues in writing, less attention span in class, inaccessibility of recorded lectures, learning gap, memorization issues and time management issues.

#### 2.5.1 Writing challenges

According to Skar et al (2021) Writing about the material reading improves the understanding of the concepts in the text, and writing education helps students become better readers. Moreover, star et al (2021) also uttered that writing is a flexible instrument that we use to communicate, persuade, inform, record experiences, reflect on issues, dream up imaginative worlds, amuse other people, investigate the significance of events, and heal psychological and physical scars. However, during the pandemic, students have to attend online classes and had to submit online assignments. Therefore, all the proceedings were going through using electronic gadgets like smartphones, laptops, personal computers, etc. Atthe tertiary level, students used Microsoft word, google Docs, and PowerPoint these gadgets were for submitting their assignments. Thus, in electronic media, an auto-correction setting is available. Whenever electronic media points out any word or sentence formation mistake, it instantly points out the mistake or automatically rectifies it. Furthermore, students are not accustomed to writing pen and paper anymore. For this issue, students are facing issues in their offline classes in writing their scriptsfor the examination paper. Their

handwriting has got slower and they are facing issues in sentence formation and forgettingthe right spelling. Moreover, students are not able to maintain a well-organized answer in their scripts.

#### 2.5.2 Inaccessibility of Pre-recorded lectures

Hadgu et al (2016) revealed that Students can balance the competing demands of careers, academics, and other responsibilities due to the online availability of recorded lectures. The lecture recordings are used by students to examine the course material, modify class notes, comprehend difficult ideas, and work independently. Students benefit from being able to pause or replay the recordings, especially those who do not speak English as their first or major language. The online class was fully dependent on the accessibility of supplemental or pre-recorded videos from the faculty members so that students could watch the videos to clear out their doubts and can pause/reply to understand or note down important information. Even during online classes, students had the opportunity to watch the recorded lectures during exam hours also. However, in the shift to offline classes, students face huge trouble because of the inaccessibility of recorded lectures. In offline classes students have to attend classes on a regular basis rather they would miss outon important lectures also students are facing memorizationissues as they have passed a great time in online classes depending on the recorded lectures. But offline class is not providing the facility so that students have to memorize each piece of information which seems very difficult for them and is also impacting their exam grades also.

#### 2.5.3 Less Attention Span

Bradbury (2016) asserts that at the beginning of a lecture, students' attention stays at the peak level but after 10 to 15 minutes, it starts to diminish slowly. When a lecture starts, attention usually increases until the first 10 minutes, after which it usually starts to decline. In post-

pandemicclassrooms, students are facing less attention span during the class lecture. When the lecture starts students give their full attention but after a certain time students lose their attention and their focus on the lecture abate slowly. During online classes, students had the chance to attend classes online mode. If they lose their attention then there was a change in their hands that they can resume the lecture from that part but in the offline classroom this type of phenomenon is not possible and from one class students have to gather every information from their faculty members.

#### 2.5.4 Huge Learning Gap

During the COVID-19 epidemic, the use of digital platforms for student learning at home depends not only on teachers' expertise and school resources, but also on elders' availability, their capacity to act as substitute instructors, and the accessibility of digital resources at home (Dhawan, 2020). All the resources were available so many students used them in an inefficient manner, the online class was totally dependent on a student's own integrity, and passion to learn and incorporate the teachings into their assignments and exams. However, most of the students did not maintain integrity while giving exams during online exams, students used online resources, copied others' assignments, and get help from the lectures. Thus, it costs high for numerous students' academic life, because after transitioning to their offline classes, students are facing huge issues and they have to read the previous learning once again to catch the new concept in present classes. Thus, it is requiring more time, effort, pressure, and a huge stress situation for students, learning gap is really dangerous for a student's academic life because all the courses are interconnected and without understanding one concept capturing another concept is difficult and stressful.

#### 2.5.5 Impacts of Commuting to Academic Institutions: ABarrier to Academic Success

According to Hoq (2020), The duration of the course can be shortened by involving many students at once. Therefore, a huge time is saved during online learning. The online class was a big-time saver for most of the students. because online classes gave the opportunity to sit at their home and attend classes anytime, in any situation. If a student is sick or on bed rest, even those students could join an online class if the class is highly important and informative or they can watch the recording any time. However, in offline classes, students have to commute to the university thus they have to face huge traffic congestion in the city area. As a result of the disruption caused by traffic, human productivity levels that contribute to the economic development of cities or regions may be reduced to some extent (Hoq, 2020, p. 478). Due to traffic congestion, students lose a huge time commuting, and facedwith hectic transportation; students do not get sphere time for doing their studies, and eventually, it really impacts their study energy.

#### 2.5.6 Time Management IssueDuring Examination

SENEL et al (2021) also mention that take-home examinations are open-ended questions that provide students the chance to apply their knowledge to a specific topic or subject in a limited amount of time while utilizing all available resources, wherever they are abiding in. moreover, take-home examinations or assignments also gave ample amount of time for submission. Thus, students get the time to analyze, explore, and think critically and an informative organized written paper was present during the online period. However, at the start of offline class students get back to the normal examination system where students have to sit for a timed exam and write the paper. Moreover, at present situation students are really stressed about the fact that they are not able to manage the exam hour properly. Their handwriting has become slower and after a huge break, sometimes students are unable to remember the important topics during an exam. Also, students are really struggling with the time to juggle because they are accustomed to the online class system.

#### 2.5.7 Facing Memorizing Issues during Examination

In most cases, forgetting doesn't mean that you truly lose or remove something from your long-term memory. Typically, forgetting results from an inability to retrieve memories. Although the knowledge is stored in your long-term memory, you are unable to recall it (Grnaz, 2020). The Pandemic has a prolonged impact on every student's life. During the pandemic students usually had all the resources like recorded class lectures, audio-video recordings, and other resources. Therefore, students had the opportunity to watch the videos anytime anywhere. Even some students could take their preparation a few hours before the examination. Therefore, after the transition from online to offline classes, students are facing a huge problem in recalling items during exams. because during the pandemic students had a great opportunity to watch the recording and clear out the concept. However, in offline class examinations, students need a lucid and more comprehensive understanding of the topic quite thoroughly to get the best outcome. As an online mode of learning system has shaped students' learning method constraints to recorded lectures and memorizing the items as it is suggested. Not encouraged deep and critical-based learning for saving for longer periods of time. As pandemic has made the students quite reluctant to study the class lectures from the first day rather students are prone to study before the examination knocking at the door. That is why most students are facing recalling issues during examination hours.

#### 2.6 Major Strategies: To Overcome the Challenges

After the starting of offline mode, students faced numerous issues to cope with the new normal environment. Thus, to minimize the challenges some strategies have to be made to lessen and cooperate with the offline mode system. In the below, some overcoming strategies are discussed below.

#### 2.6.1 Retaining Attention Span during Class

According to Al'Omairi et al (2015) working memory capacity was previously believed to be constant. Attentionspan and working memory capacity can both be enhanced through training. Scientists believe that working memory training impacts how the nervous system functions because training causes some brain regions to become more active. It may be argued that when professors encourage their pupils to pay attention in class, they are training them to control their attention and, by extension, how they process information. The information processing model states that for material to be properly stored in long-term memory and later successfully retrieved, pupils must practice it while processing it in working memory. Classroom distractions should be avoided during the class for a better understanding of the concept. After the transition from online to the traditional classroom setting, students faced issues in giving full attention to the class lecture. They may get distracted or fail to process huge information during class because of the long period of time spending time on online pre-recorded classes. in pre-recorded setting, students had the opportunity to pause the video and then watch it after a while. However, the offline class cannot provide the opportunity. Therefore, retaining attention span to the whole class is crucial and mandatory so that attention span and working memory capacity can both be enhanced through training. Moreover, by giving full attention, responding to the teachers, clarifying the concepts which seem vague or unclear, and lastly, taking short and effective notes throughout the whole class for a better outcome.

#### 2.6.2 Effective Learning Strategy

Grnaz (2020) also uttered that to remember something, one must first understand it. Furthermore, evidence suggests that knowledge obtained at a deeper level is more likely to be remembered than knowledge acquired at a surface level. A research study was conducted

between high-grade achievers and low-grade achievers where high-grade achiever students used some tactics for their better learning and good grades in their traditional classroom. The high-achiever students employed a variety of learning techniques, including reading aloud, using flow diagrams, underlining, taking notes, setting goals, studying in short chunks, summarizing and watching videos, and practicing skills. While several of these learning tactics were not reported by the low achievers, they were often used by the high achievers. From the transition from online to offline classes, many pupils faced challenges in writing. Moreover, organizing a cohesive written script, spelling mistakes, and slow handwriting all are the effect of an online class. as students were totally dependent on electronic gadgets where automatic corrections were done and many resources were available. Therefore, to get rid of this challenge practice free handwriting, and noting down the class lectures with pen paper-based. Moreover, making the writing more attractive students can make the notes more colorful and vibrant. Additionally, the majority of students enjoyed small group talks, explaining how it was highly beneficial because it allowed them to learn by collaborating with fellow learners. By following this, students memorizing issues during examinations can also be solved.

## **Chapter 3: Methodology**

#### 3.1 Research Design

In this chapter, the illustrations of the research methods that the researcher used to carry out this study are described. According to Creswell (2012), the purpose of research design is to provide the researcher with the necessary guidance to carry out the study using any particular method. That particular methodcan be a qualitative, quantitative, or mixed method. The researcher has conformed to the qualitative study methodology. This study used a phenomenological qualitative research design, which is suitable since it can give an in-depth insight into the nature of a certain phenomenon. Through following the qualitative research method, the researcher illustrates the perspectives of the participants regarding the benefits, challenges, and ways of overcoming the challenges in a new normal environment in a post-pandemic situation. The researcher has firm consideration that this exploratory study has helped to learn a lot from the viewpoints of the students after observing and speaking with the participants about their experience of the transition phase brought on by covid. This chapter illustrates the research design, study participants, data collection methods, and data analysis, which are all included in this chapter.

#### 3.2Participants of the Study

For my interview, I have chosen seven students who have faced the sudden shift from online to offline classes. For the research purpose, I have used participants' pseudo names to maintain privacy. For the research, the researcher has chosen BRAC university because during the pandemic most of the public and private universities failed to reconnect their students to learning in totally a new mode. Some of the private universities among them BRAC university were able to set up a new platform named "BUX" where students could connect themselves to the class lectures and recorded videos by their faculty members.

Moreover, all the updates and announcements were efficiently maintained by BUX during the pandemic. Therefore, BRAC university students did not have to sit for a long time to continue their studies. Within a month, starting the pandemic, BRAC university was able to reach every student's door through start with the new remote learning method. Similarly, in the post-pandemic situation, BRAC university was also successful to start the offline class rigorously and with caution. Therefore, the students of BRAC university students have gathered numerous experiences from the shift of online to offline classes' benefits, challenges, and ways of overcoming those challenges in a new normal environment. In addition, the age range of the participants is 23-24 and among the participants four participants were females and three were male participants. All of the participants were currently studying in the 10<sup>th</sup>-12<sup>th</sup> semester.

#### 3.3 Data Collection Procedure

For regulating the study, the researcher has collected interviews with the participants to gather data regarding the study. furthermore, the researcher designed a semi-structured interview methodology specifically for this study. Because semi-structured interviews require participants to respond to predetermined open-ended questions on the study's topics, they are an appropriate interviewing style for this qualitative research because they can elicit detailed data. The researcher conducted a face-to-face interview and the time duration of the interview was 10-15 minutes. All the interview questions were designed following the semi-structured format and open-ended questions. Furthermore, during the interview session, the researcher was able to record the responses of the participants as the participants were quite comfortable in it. Then, the researcher observed all the responses and noted down the key points.

#### 3.4 Data Analysis Procedure

For this research study, the researcher has approached a thematic data analysis method. All of the primary data is in Bangla and English language. Furthermore, after collecting the data, the researcher transcribed it verbatim on a table of MS files. When the students were giving their interviews, the researcher wrote them orthographically. Then, the transcription was coded as per the rules of qualitative data analysis. To analyze data, the researcher followed the five steps recommended by Taylor-Powell and Renner (2003) in their article "Analyzing Oualitative data". The first step is **Getting to know the data**. In the first step, the researcher repeatedly read the information, and more than oncelistened to the recordings. Moreover, the researcher had to talk to the participants for extra details or clarifications if the researcher felt there was a misunderstanding while assessing the obtained data. The researcher was unable to meet with them on a regular basis, so the researcher contacted some of them via phone(p.2). The second step is Focusing on the Analysis recommends to Identify a few key questions that the researcher wants to analyze to answer and writing them down (p. 2). During the interviews, the researcher jotted down relevant items in her diary. In addition, the third step is Categorizing the data where the researcher finds out the themes and arranged the themes subsequently. Taylor-Powell and Renner (2003) mention that this is the most challenging part in qualitative data analysis. Afterward, the fourth part is called **Identify patterns and** connections within and between categories, in this portion, the researcher decided to arrange the data according to the themes The researcher had to review previous knowledge and create connections between every piece of information whenever the researcher received new or crucial data. The last part is **Interpretation-Bringing it all together**after reviewing participants' perceptions over the transition period in a new normal environment, the researcher attempted to demonstrate the interpretation according to the relevant codes with the themes (p. 3).

## **Chapter 4: Findings and Discussion**

The analysis of this study's qualitative data revealed a total of sixteen themes. Seven themes from students' benefits, seven themes from the challenges, and three themes found to mitigate the challenges efficiently in the post-pandemic classroom.

#### 4.1 Major Benefits for Students

#### 4.1.1 Students' perspectives on becoming Tech-savvy

On March 8, 2020, Bangladesh diagnosed its first three cases of COVID-19 (IEDCR, 2020). Like many other countries, the government of Bangladesh decided to close the educational institutions as part of preventive measures against the spread of the COVID-19 pandemic. All educational institutions in Bangladesh have remained closed since March 17, 2020. Therefore, the students from primary to tertiary level are being compelled to stay at home instead of attending classes in educational institutions to maintain social distancing. For attending the online classes, students had to join through mobile or laptops. Moreover, they had to submit their assignments through electronic media. For using electronic media, students gradually learn the use of technical stuff and implementing processes. Almost all participants admitted that the corona phase had actually helped them to become tech-savvy. moreover, they expressed that they became adeptat using MS word, excel, and PowerPoint elements, searching the authentic ones more precisely and effectively.

#### As one participant named Tawsif comments:

During online mode, I used to get immense sphere time and due to working on excel, MS word, PowerPoint, and many more sites I got fastened up in this sector because I used to type on my PC which fastened my typing speed, my researching process,

finding out secondary research process, these items I have learned very effectively during online mode so I became adept in IT sector due to online class

#### Moreover, another participant named Noor expresses that

Our technical sites like using G-suit id, many side finding resources, and using our laptop more effective way, as I am not a CSE student but still an ENH student I get the opportunity to come closer to technology and felt that if we incorporate technology effectively into our education system then it can benefit us hugely.

#### 4.1.2 Students' Standpoint on the Development of Knowledge and Resourcefulness

During the pandemic, students were assessed through alternative assessments. Therefore, students could utilize the time during the pandemic situation by sitting in their own place. The purpose of online assignments was to keep attached students academically active and knowledgeable through the use of web-based media and the integration of different assessments. Almost all the participants responded that during the pandemic they had to submit the assignments in a timed window based. Moreover, the assignments were not designed in a way where students could just read the books and answer the question. For submitting the assignments mostly, they have to analyze, and collected numerous data from authentic sources and used primary data or secondary data to make their written assignments more authentic and valid. Therefore, students had to read their required readings from different sources, and for making their assignments more informative, searching relevant items and using those materials in their assignments hugely upgraded the skill of resourcefulness. A student named Tawsif expresses:

I used to get huge sphere time during an online class. even due to working on excel, MS word, and PowerPoint, I got fastened in this area. Because I used to work on pc, typing has become fast, and my research process, finding out the secondary research,

these learnings I have learned greatly. Moreover, I became adept in the IT sector just because of the online classes.

Moreover, another participant commented that during the online mode, she has to submitassignments which eventually helped to have

good practice for her dissertation paper theselearning can be implemented in her writing efficiently. As Maisha shares,

In many courses, I have written numerous papers and assignments which gave us a better idea about our thesis and how to search the correct sources, these items were also learned just because of online mode.

Almost every participant experienced the immense benefits of the online mode in their offline mode of learning. Online assessments made students experts in the technical field and students got the opportunity to gather skills in the field of IT sector to have a closer involvement in it.As Noor comments,

Our technical sites like using G-suit id, many side finding resources, and using our laptop more effective way, as I am not a CSEstudent but still an ENH student I get the opportunity to come closer to technology and felt that if we incorporate technology effectively into our education system then it can benefit us hugely.

# 4.1.3 Students' Perspectives on the Effectiveness of Supplemental Videos/pre-recorded Lectures

The participants are found getting numerous benefits from having pre-recorded in their offline mode of learning also. The participants said that in the wake of the pandemic, students attended their online classes through zoom, google meet, discord, and other apps. These meetings' main purpose was to make as similar to a traditional or face-to-face class. In that

session, students could easily share the problems which they occurred in watching the supplemental or pre-recorded lectures. Pre-recorded lectures were also made during the pandemic so that students could watch them at their convenience time as review the items in their online meeting sessions. However, these pre-recorded lectures are also available in the post-pandemic classes also. Therefore, some participants revealed that these pre-recorded lectures in BUX are really helpful for them. As they can watch the lecture content before taking any course or after taking a course, they can watch the lectures as well as attend the offline class which eventually are helping them to get a better knowledge and understanding of the topic and course content. As Maisha responds:

Even after shifting to the offline mode, I am still getting the live recordings of many courses which are helping me to watch the course content before taking it and it is immensely benefitting me as I can decide whether the course would be right for me to do or not.

The pre-recorded lectures are still available on BUX where students can enroll in a course easily and watch the course content more comfortably. The participants shared that they spent a huge time in doing the online classes so the abrupt offline class seems a bit difficult for them as they have to note down the class lectures and also sometimes noting down all the lectures are also ineffective cause when they go home, they sometimes do not memorize the right information which was uttered by their faculty. Thus, pre-recorded lectures are actually benefitting the participants in their offline classes also. Another participant named Tania also says, "the first benefit is that they are providing the recording, this has benefitted me hugely. Still, I am watching the previous recordings if I occur any issues in my current courses to clear out my confusion."

#### 4.1.4 Students' Perspectives on Low-Pressure level in Offline Mode

For some participants, the online class was an unfavorable part of their academic life. As the participants shared that during online classes, they had to go through immense pressure and numerous assignments they had to submit and a very short window time was allocated for the submission. All the departmental regulations were not the same online. Such as Noor expresses,

The online semester is quite hectic causing immense pressure, assignment, back-to-backassignment, quizzes, and a very tight schedule. However, in comparison to online, offline mode is very accessible as we can access the materials quite easily and talk to our faculty directly

Thus, all the participants opined that offline class is better for their ultimate learning outcome and the participants said that offline class seems more manageable for them because they can take help from their friends or group study and also, they can get a clearer understanding in offline class which eventually reduce their pressure. Moreover, some participants also shared that during the online mode, they had to submit their assignments through a different digital medium that were very hectic sometimes. Therefore, participants prefer the traditional mode of learning.

#### AsChoiti opines,

During online mode, numerous problems occurred such as for a course I attended my exam on Google form. I was giving my exam but a notification came from the course group. Somehow, I clicked on the notification and all my writing got erased from the form. Due to some of these reasons, I got very poor grades in some courses.

Another participant also comments, "When we shift from online to offline most of the classes are very organized, using the digital medium to organize their classes, first of all, they are

using google calendars, google classroom or Facebook group, therefore it is very easy to contact with the faculty and easy to find out any announcement from the course group."

#### 4.1.5 Students' Opinions about Better Learning Outcome in Offline Mode

In the new normal environment of traditional mode, almost all the participants are experiencing better interaction levels. The participants shared that they can share their queries, and doubts and improvise on their lacking in every concept. As the participants said that in offline mode, they can easily interact with their friends, can have group study and if they occur any complex topic then they can consult their faculty members to clear out the concept. In addition, the participants also stated that in offline mode, they experience more seriousness and their learning outcome is better.

#### As Ashiana comments,

During the online mode, I was not bothered about my study that much cause notes and materials were kept beside me. I became lethargic due to this reason. However, in offline mode, I became serious about my studies when I see my friends' seriousness which helped me to realize that I should be serious as well. this is one of the benefits of offline mode.

Other participants also stated that they feel energetic when they see their fellow mates are serious about studying and it also motivates them to study more in the classroom, however, this experience of seriousness was missing in the online mode of learning because they did not know how their peers were studying or the motivation of learning was also missing. As Maisha says, "if class lectures are followed with friends, seriousness comes greatly."

Another participant named Choiti says,

I feel offline mode is better because on onlinemode, we used to have class recordings and also live classes, we did not respond that much, and the interaction with the teacher was missing. But a better interaction automatically comes in offline mode. Asking questions and responses are very interactive in offline mode.

#### 4.1.6 Students' Opinion on the Enhancement of Reading Skill

Almost all the students agreed that because of remote learning, their reading skillshave got leveled up. The participants opined that due to online assessment, they had to read many articles, journals, books, and other material resources which helped them to increase their reading skills. Even some participants shared that they became good readers for this reason, as most of the participants study background is Bangla medium. Thus, the participants shared their opinion that previously they do not feel like studying any book materials, and some felt bored. However, due to remote learning participants found immense interest in reading materials. As a participant named Choity shares,

Due to online assessments, my reading skill got leveled up. Before I used to read only the summaries of books or usually watched YouTube videos on that particular topic as I felt bored reading books. But the online study made me shaped in a way that now I really enjoy reading materials.

#### 4.2 Major Challenges in Offline Mode

### 4.2.1 Students' Perspectives on WritingIssues

The participants were found experiencing writing challenges during their offline mode. The participants responded that in the wake of online classes, they had to submit assignments and presentations and all were done through electronic media. Moreover, they also responded that there was no system for submitting pen and paper-based assignments. thus, they had no need to write any pen and paper-based paper. That's why they were accustomed to using electronic gadgets like MS word, PowerPoint, etc. Also, the participants stated that while writing the assignments on electronic gadgets, at first, they could read many resources and simply they paraphrased the samples in electronic media, all the mistaken words automatically get rectified so the participants are facing huge problems in their offline mode of examination period as they have to write pen and paper-based. As one participant named Noor states, "my handwriting is messed, up, and forgot how to write when we had half online and half offline at that time it felt so hard to write"

Another participant named Tania shares,

Let's suppose during online we used to write on electronic media so an auto-correction setup was present. But in offline mode, there is no room for auto-correction so while writing in an offline mode setting, confusion creates about its correctness. Ashiana says,

My handwriting is very poor now. Typing on a computer for a long time, now I see my handwriting is very pathetic and I don't feel like writing much even my idea generation has diminished. Also, in one course my faculty used to continuously deduct my marks for grammar mistakes and idea organization problems.

#### 4.2.2 Students' Perspectives on the Inaccessibility of Pre-recorded Lectures

During the pandemic, the education system was greatly dependent on web-based usage. All the assessments were done using electronic media and classes were also taken through different electronic mediums like Zoom, Google meets, or discord. The main benefit of online was, it provided recorded lectures so students could see the lectures and class records comfortably in their own zone. However, from the shift from online to traditional classes, students had to rely upon classes totally. The participants shared that they are facing extreme difficulties because of not providing the class lectures at the start of their offline class. They stated that if they miss any class or faceproblems with having less time span issue then the whole class remains wasted for them. Also, some participants shared that in the online class, they could prepare a good preparation for their exams but in the sudden transition to offline class they are vulnerably facing issuesin preparing themselves for their exams. as one participant Maisha shared, "the challenge which I am facing is previously we used to get the recorded class that helped me to have a good preparation but in offline I have to depend on the class lectures."

Moreover, another participant said, in an online mode, they could easily note down their notes by watching the recorded lectures in a back-and-forth trial. However, in offline mode, if they do not note down the class lectures then the whole lecture got missed.

As a participant named Shudhaditto utters,

the most challenging part is not having any records or not having any after-class notes because I am very bad at taking notes. So, in offline class something important is said by the teacher if I won't note it, I don't have the chance to get it from any other way because there is no recording of the class or no suggestions or notes from the teachers for the class.

Also, another participant Tania shared the same viewpoint, "another is that if I had to miss one class for some urgency then the whole class's lecture gets missed out but if it was online then I could easily watch the pre-recorded video. This is not possible in an offline mode of class."

#### 4.2.3 Students' experiences on Less Attention Span

Nearly allthe participants were found facing some issues in the new normal environment of offline class among them less attention span is also included. Students' utmost attention stays at the peak level at the beginning of a lecture but after 10 to 15 minutes, it starts to diminish slowly. When a lecture starts, attention usually increases until the first 10 minutes, after which it usually starts to decline. The participants shared that when the classes started after the wake of the pandemic, they were extremely vulnerable while the classlecture was going on. During class lecture, students felt that they totally lost their attention and they got blank. Moreover, students could not catch any single word after a certain period of time. One participant named Shudhaditto says that "Also, I have noticed my attention span in-class lecture is also decreased and I cannot focus in the lecture for a long duration." Moreover, another participant also shared her experience that she was struggling hardly while the faculty member gave the lecture because she sometimes lost her attention and for that reason, she sometimes misses out on some of her important lectures which were important for the exam or quizzes. The participant named Choity mentions in her interview that,

Capturing numerous information in class seems very tough, also unable to retain my attention during class. sometimes I observe I am not understanding any single concept and if I go for a consultation, even that time I have to tell the teacher about my exact problem which sometimes I am totally unaware of.

#### 4.2.4 Students' Perceptions of Huge Learning Gap

The pandemic was a time when students had all the open resources and assessments were given to keep attached students to the education system, therefore, the use of digital platforms for student learning at home depends not only on teachers' expertise and school resources, but also on elders' availability, their capacity to act as substitute instructors, and the accessibility of digital resources at home. The online class was totally dependent on a student's own integrity, and passion to learn, and incorporate the teachings into their assignments and exams, the participants found having issues regarding a huge learning gap due to the corona outbreak. The participants shared that during the pandemic they had all the resources available and could easily solve their issues with their peers as no examiner was present due to the home-based exam. The participants also shared that if they found any topic hard sometimes, they would skip the topic and it created a problem when they found a similar type of concepts in a new course in their offline mode of class. Choiti mentions, like in my online semester.

I had an MNS Cod course where I skipped the mathematical part. But in offline class, in another course, the same mathematical part was included. Due to skipping the part previously, I had to suffer a lot in that present course. During online I kept a gap that suffered me in my offline courses but due to teachers' help and consultation hours somehow, I managed to abbreviate the gap.

Moreover, another participant admitted that they sometimes did their assignments by seeing the class notes or slides because of not get proper time to complete them. Therefore, this occurrence fell the participants trouble because in the online mode, students just passed the assignments by any means which is causing an issue in their offline mode of learning. As Tawsif shares his experience,

We used to get very less time for assessments, so we used to copy from the slides so proper evaluation was not happening. In a sense, we ourselves are responsible. I used to take help from different sources and it create a bigger gap which I can feel in my offline mode of learning.

#### 4.2.5 Students' Opinion on Commuting to University

Almost all the participants were found facing challenges regarding commuting to their university at the start of the offline mode of learning in the new normal environment. The participants shared their viewpoint that during the pandemic they could watch the videos by sitting at their own place and they could watch the recorded lectures anytime at their convenience. Moreover, some participantshad also involved themselves in some type of parttime jobs or extra earning sources as going to university for attending classes was not needed at all and it saved a huge time that they could spend in their other workplaces. However, after the transition from online to offline mode, students again needed to attend classes and lectures simultaneously. The participants shared that because of starting classes, they are facing huge problems because they have to attend the classes on a regular basis in a city full of traffic congestion. Moreover, after passing a hectic journey they feel exhausted which impacts their study energy or other work. As Choiti shares her statement, "Wasting a huge jam in traffic jam drains out my energy. Moreover, in class also capturing much information from lectures feel seems really tough and after coming back home, I don't feel study at all." In addition, Tawsif says, "in online mode, plenty of time was in hand but in offline after attending, I feel very exhausted and the spirit to study was not present.". then, Noor also comments that, "the city is full of traffic jam so the online class was a big relief as we didn't have to face the traffic jam regularly."

#### 4.2.6Students' opinions on Time Management Issue

The participants struggled to manage time during exam hours efficiently after the transition from online to offline mode of learning. In addition, the online mode was totally dependent on remote learning and assignments were the way of assessing students' progress. The participants stated that online they had to submit time-based assignments and they used to get ample amount of time for doing their assignments. Due to a decent time limit given during online mode, students could write a well-written paper. However, the participants are struggling with the shift of their offline mode of examination system because of accustomed to the online system of submitting assignments. As the participants shared that in their offline mode of exam, they are facing slow handwritingissues and, bad handwriting problems and due to these issues, they are unable to manage the time, and eventually they are not able to answer all the required questions which eventually deducts their grades. A participant named Tania shares her experience,

During offline mode, I occurred a huge time management issue. In online mood, we got sphere time but in offline mood, we have to think while writing and due to slow handwriting, managing the time is really hard. For this time constraint, I could able to write my own way or had to leave marks during exam

Moreover, the participants are also struggling with idea generation during the exam due to not finishing the answers on time and it eventually gives students panic attacks or anxiety problems. As a participant named Ashiana states,

My handwriting became very poor due to typing on the computer. For this reason, I do not feel like writing scripts much. Moreover, I am noticing I am terrible at generating ideas. Due to these reasons, I am facing time management issues and I am unable to finish my writing on time during exam hall.

#### **4.2.7 Facing Memorization Issues**

In most cases, forgetting doesn't mean that we truly lose or remove something from our long-term memory. Typically, forgetting results from an inability to retrieve memories. Although the knowledge is stored in our long-term memory, we are unable to recall it. The pandemic has had a prolonged impact on every student's life. During the pandemic students usually had all the resources like recorded class lectures, audio-video recordings, and other resources. Therefore, the participants mentioned that during the online mode, they could watch the recorded lectures at any of their convenient times and they usually took notes which helped them in their examination hour. But after the transition to offline mode, participants are facing recalling memorized items during their exam. As Maisha expressed, "I have to depend on the class lectures due to offline mode and I have to memorize the topics. Also, I am noticing that the items which I am memorizing are still unable to retrieve during examination hour."

#### MajorStrategies to Cope with the Challenges in a New Normal Environment

#### 4.3 Students' perspective on retaining attention span during class lecture

Attention span and working memory capacity can both be enhanced through training. Scientists believe that working memory training impacts how the nervous system functions because training causes some brain regions to become more active. The participants were found to have issues with less attention span during the class lecture after the start of the offline class. The participants shared that they are observing less attention during class. Thus, to overcome this problem some strategies like they give their full concentration during the class and noting down the lectures. Moreover, interacting with the faculty also helps the students to retain their attention span. As

Choiti shares,

I give my utmost concentration during class. I am trying to expand my attention span by noting down the class lectures and asking questions.

Therefore, by doing this, now my problems are lessening.

#### 4.3.1Strategies to Overcome Memorization Issue

The participants are found to have memorization issue after the shift from online to offline mode of learning. The participants said that during the pandemic they had all the resources like recorded class lectures, audio-video recordings, and other resources. Therefore, they could watch the recorded lectures at any of their convenient times and they usually took notes which helped them in their examination hour. But after the transition to offline mode, they are facing recalling memorized items during their exam. Thus, to diminish this issue the participants are maintaining some strategies to overcome it. The participant commented that they are employing some learning techniques including reading aloud, using flow diagrams, underlining, taking notes, setting goals, studying in short chunks, summarizing and watching videos, and practicing skills. In addition, some participants also stated that they enjoy small group talks, and explained how it was highly beneficial because it allowed them to learn by collaborating with fellow learners. Moreover, some participants stated that during online mode they used to memorize all the slides without gaining the core concept. However, in an offline mode, they are trying to learn deeply about any topic that eventually helps them to broaden the concept. This way of techniqueis actually helping the participants who are facing memorization issues. Maisha said, "I am taking notes on everything in the class and if I don't understand a topic then I go for a consultation immediately. By discussing the term, I clear out my concepts. Gradually now I don't face any problems." Another participant Choiti also shares, "during the gap hour, we do group study and discuss the concepts which help us to a greater extent. Thus, by doing this, we understand the concept quite efficiently so there's no need for memorizing the topics"

## 4.3.2Overcoming Time Management Issues and Writing Challenges

Approximately all the participants were found experiencing issues regarding time management problem during the exam. Moreover, participants also said, they have issues generating ideas in writing and online, they used to do their assignments on electronic gadgets where auto-correction mode was available. Due to this reason in an offline exam, students are faced while writing pen and paper. Thus, to overcome this issue some strategies that are shared by the participants. Such as practicing writing at home and to start noting down assignments by using different colored pens or markers to make notes more attractive and vibrant whichencourages more writing. As Maisha shares,

I try to write while my faculty gives lectures and then at home, I try to note down the important parts so this habit is really helping me to improve my writing issues and due to attending the quizzes and finals in every course, the time management is also gradually solving to a greater level.

# **Discussion**

This portion provides an overview of earlier chapters' discussions of the data collected through observation and interviews. I've made an effort to draw attention to the crucial factors and solutions.

In Bangladesh, the teaching-learning process at the primary, secondary, and university levels has been impacted by COVID-19. The country's government used a number of unusual social isolation strategies, such as closing educational facilities and converting to virtual learning, to stop the spread of the virus, which significantly impacted the educational system and the lives of students.

## 5.1 Summary of Participants' perspectives on the benefits of the transition period

It has been found that the students are experiencing quite a few benefits in their new normal environment in a post-pandemic situation. During covid, students from primary to tertiary levelswere compelled to stay at home instead of attending classes in educational institutions to maintain social distancing. For attending the online classes, students had to join through mobile or laptops. Moreover, they had to submit their assignments through electronic media. For using electronic media, students gradually learn the use of technical stuff and implementing processes. Due to remote learning, students became adept in technological sectors. Almost all participants admitted that the corona phase had actually helped them to become tech-savvy. The educational landscape of today has transformed for the better or improved due to digital technologies. Using technology to complete the entire curriculum, digital learning allows pupils to study quickly and effectively. According to Haleem et al. (2022), students benefit from an exciting learning experience when technology is used in the classroom, which helps them focus on the material longer. Students may find learning exciting and enjoyable due to the classroom's use of projectors, laptops, and other cutting-

edge technology. By creating assignments in class that involve technology resources, oral presentations, and group interaction, students' learning can become more dynamic and engaging. Participation can go beyond just speaking activities.

Another benefit found from this research is students' development of knowledge and resourcefulness. During online mode, students were assessed through assignments. For submitting the assignments mostly, they have to analyze, and collected numerous data from authentic sources and used primary data or secondary data to make their written assignments more authentic and valid. Therefore, students had to read their required readings from different sources, and for making their assignments more informative, searching relevant items and using those materials in their assignments hugely upgraded the skill of resourcefulness.

Then, getting supplemental videos and pre-recorded lectures are another significant advantage in post-pandemic learning. Due to remote learning, teachers had to provide pre-recorded lectures and live classes to run the online mode of learning efficiently and interactively. These pre-recorded lectures are still available in the offline mode that is quite beneficial for the students in their post-pandemic mode of learning, while taking new courses students could watch the pre-recorded lectures which eventually helps the students to have an overall idea about the course and this idea gives the students an overview on that particular course and whether continuation would be better or not. The most benefits of pre-recorded lectures are students can watch the lectures at sitting their own place and can gather information quite productively. However, if these lectures were not provided then some students would continue the course and can suffer a lot because of the course content might seem difficult for some students. The pre-recorded lectures are still available on BUX where students can enroll in a course easily and watch the course content more comfortably. The participants shared that they spent a huge time in doing the online classes so the abrupt

offline class seems a bit difficult for them as they have to note down the class lectures and also sometimes noting down all the lectures are also ineffective cause when they go home, they sometimes do not memorize the right information which was uttered by their faculty. Thus, pre-recorded lectures are actually benefitting the participants in their offline classes also

In addition, another benefit found from this research that is students are experiencing lowpressurelevels in their offline mode of classroom compared to the online mode. For some participants, the online class was an unfavorable part of their academic life. As the participants shared that during online classes, they had to go through immense pressure and numerous assignments they had to submit and a very short window time was allocated for the submission. All the departmental regulations were not the same like remote learning. Such as a participant named Noor expressed: "online class was hectic because of immense pressure, assignment, back-to-back assignments, tight schedule. But in offline mode, all the materials are quite accessible and students can talk to their faculty directly". Moreover, in offline mode, students can discuss the study materials with their friends and also faculty members. They can understand study materials more effectively which increases their pressure level in academic life. also, students experienced better learning outcomes in comparison to the online mode of learning. As SENEL et al. (2021) uttered that various vital educational aspects that are more naturally possible in a traditional classroom setting, such as group work, communication, and interaction between students and teachers, may be restricted in a virtual classroom. students can interact, express their thoughts, and understands a deep concept more easily if a healthy interaction happens with their peers which opens up a better learning outcome. Thus, students are getting higher learning outcomes from their offline mode of learning.

#### 5.2 Summary of Students' Perspectives on Challenges in Offline Mode

as this qualitative research is analyzing students' experience through the shift from online to offline mode, it is evident that the participants are facing some major challenges in the new normal environmentin their responses to the interview session. The firstchallenge that students are facing is writing their academic papers. As writing is a significant skill in every student's life. as it helps to understand the concepts of a text and works as a good reader. We use writing as a flexible tool to communicate, persuade, inform, document experiences, ponder on concerns, make up fantastical worlds, entertain others, explore the importance of events, and heal psychological and physical scars. Students had to attend online classes and submitted assignments during the pandemic. Therefore, electronic devices like smartphones, laptops, personal computers, etc. were used throughout the entire process. Students at the tertiary level submitted their assignments using Microsoft Word, Google Docs, and PowerPoint. Consequently, an auto-correction setting is provided in electronic media. Electronic media immediately corrects any errors in word choice or sentence structure that are brought to their attention. Additionally, students are no longer used to writing with pen and paper. Students are having trouble writing their scripts on exam paper in their offline classes because of this problem. Their handwriting has become lower, and they are having trouble forming complete sentences and remembering the proper spelling. Additionally, pupils struggle to keep a coherent response in their scripts.

Moreover, less attention span issue is another challenge for the students. The pandemic was a time when students could just watch pre-recorded lectures or live classes in any of their convenient time zones. Even students note down the lectures comfortably and by back-and-forth trial, and repetitivepauses they can watch the lectures. however, in the shift to offline mode, students experienced a low level of attention span during class. students got blank even subconsciously and they do not understand any of the concepts. It is immensely hectic for the

students because they are not able to extract the information during the lectures due to their less attention span.

Also, challenges in the huge learning gap. During the epidemic, all resources were available to pupils, and tests were used to keep them connected to the educational system. Because of this, the use of digital platforms for student learning at home depends not only on the experience of teachers and the resources of the school but also on the accessibility of digital resources at home and the availability of seniors who can serve as substitute teachers. These resources are not equally accessible to all households. Despite having access to all of the resources, many students used them inefficiently. The success of the online course was entirely based on each student's moral character, desire to study, and ability to apply what they had learned to their assignments and exams. The participants discovered that there was a significant learning gap as a result of the corona outbreak. A participant named Tawsif shared, we used to get very less time for our assessments. Thus, everybody used to copy from the slides which is why I think, our proper evaluation was not happening on online mode and in a sense, we are also responsible for it because we copied, got help from different source. So, we can feel a gap which is really realizable in our offline mode of learning.

Additionally, another challenge that is faced by students in their offline mode is a time management issue. As students are used to submitting assignments online, the participants are having trouble switching to an offline style of testing. Participants disclosed that they struggle with slower handwriting and poor handwriting during their offline exams, which makes it difficult for them to manage time and ultimately prevents them from answering all the necessary questions, which ultimately lowers their results. A participant named Tania shared her experience that,

Also, during exam, I faced immense pressure. We used to get a lot of time in online mode but in offline mode examination, I have to think and also because of slow handwriting I face the time constraint issue. For this mismanagement issue I have left huge marks in the examination hall.

It is widely known that recalling information in a repetitive manner expands the probability of retrieving the same information subsequently in comparison to examples from categories that were not previously practiced, participants remember more practiced examples (Macizo, 2014). From the participants' responses, it is quite evident that the pandemic had made students accustomed to preparing themselves for exams in a way where students watch prerecorded lectures, instantly read materials from web-based media and dive into the exam. However, the traditional mode of the examination system does not work in this way. Retrieving information from long-term memory and comprehension of each concept is crucial for recalling effectively during exams. However, students are facing recallingissues while examinations due to less practice of information and studying numerous items just before the exam and all these are the impacts of the online mode of learning.

Nevertheless, this qualitative research also found some major strategies to overcome the challenges in a new normal situation. The participants one of the major challenges is to retain attention span during the lecture. Students lose their attention after a certain of time and do not catch a single word, they feel blank. Thus, to overcome this challenge, participants responded that they give their utmost concentration in class, note down, and try to respond in the classroom, through this way, students are mostly recovering the less attention issue in the classroom.

In addition, recalling information during the examination and slow handwriting are other challenges for the participants. To get rid of these challenges, it is found that students are

incorporating themselves in group work, peer study or consulting the faculty more often to increase the interaction and learning outcomes in their academics. Thus, it helps students to get a clearer concept of every topic and while discussing the concepts, new innovative thoughts occur and these eventually sets in their long-termmemory. Thus, it provokes new innovative thoughts and encouragement to study more. Moreover, to overcome writing challenges, it is also found from this qualitative research that they try to write by themselves at their homes and try to note down the concepts by using different colored pens which gives them encouragement to write further. Furthermore, it is also found that by gradually attending the classes students are able to mitigate their challenges by involving themselves in the system

#### **5.4 Limitations**

The limitation of the study arises from the fact that the researcher was unable to approach the public university students' perspectives in a new normal environment in post-pandemic learning mood. As the covid 19 situation was totally a new phase for the education field in Bangladesh. Thus, from every sphere of students like public university students, national university students also experienced the remote learning assessment. Furthermore, it would be better if the researcher could take responses from public university students in Bangladesh that how they experiencing the benefits of the online mode of learning in the shift of offline mode, then the challenges from their ground and the strategies that they are making to cope with the challenges efficiently.

# **Chapter 6: Conclusion and Recommendations**

#### **6.1 Conclusion**

Remote learning was a revolutionary act in Bangladesh's education system. Students experienced totally a new phase which gave them numerous benefits and also challenges to cope with. online mode of learning has made students technologically adept. The usage of electronic media has increased and incorporating digital media into the education system has revolutionized the learning phenomena to a greater extent. Furthermore, now students cannotbe bound to books or other materials, being resourceful and finding out authentic information is another benefit of online mode. However, students are also facing some difficulties in their new normal environment. As facing writing challenges due to being detached from writing pen and paper-based quite a few times in the online mode of learning. Also, memorizing issues during exams, slow handwriting, forgetting right spelling, and idea generation to some extent have been seen in the offline mode. However, today's generation of students is quite smart enough to overcome any sort of challenges quite efficiently. By incorporating some strategies students overcome the challenges like interacting with peers, group study, noting down strategy, etc. are some strategies found in this research.

#### **6.2 Recommendations**

Students underwent a completely new phase in their educational system as a result of COVID. This study offers a few recommendations to help students integrate into the new normal environment. Students should participate actively in class activities and should be less hesitant to ask questions to their professors. Both stakeholders can help one another if there is more communication between professors and students. In short, students need to work on their free handwriting and develop the ability to write scripts efficiently. Additionally, rather

than just remembering the slides, students need to train themselves to comprehend well each concept

# References

- Alhasani, M., Alkhawaji, A., & Orji, R. (2022). Mental health and time management behavior among students during COVID-19 pandemic: towards persuasive technology design. *Human Behavior and Emerging Technologies*, 2022.

  <a href="https://www.hindawi.com/journals/hbet/2022/7376748/">https://www.hindawi.com/journals/hbet/2022/7376748/</a>
- Adeyemi, I. O. (2021). Influence of Covid-19 lockdown on reading habit of Nigerians: A

  Case study of Lagos State inhabitants. *Reading & Writing Quarterly*, *37*(2), 157-168.

  https://doi.org/10.1080/10573569.2020.1857891
- Al'Omairi, T., & Al Balushi, H. (2015). The influence of paying attention in classroom on students' academic achievement in terms of their comprehension and recall ability.

  In *Proceedings of INTCESS15-2nd international conference on education and social sciences*, 2-4.
- https://files.osf.io/v1/resources/tk7dp/providers/osfstorage/59df5197594d9002b0c42e9b?acti on=download&public file=True&version=1&mode=render&direct
- Basta, T. (2009). Assessment impact on online learning credibility. In American Canadian Conference for Academic Disciplines, Toronto, Canada.

https://www.researchgate.net/profile/Tayeb-

Basta/publication/233794496 Assessment Impact on Online Learning Credibility/l inks/5f15dedca6fdcc3ed718d76c/Assessment-Impact-on-Online-Learning-Credibility.pdf

Bradbury, N. A. (2016). Attention span during lectures: 8 seconds, 10 minutes, or more? *Advances in physiology education*, 40(4), 509-513. https://journals.physiology.org/doi/full/10.1152/advan.00109.2016

- Cyril, A. V. (2015). Time management and academic achievement of higher secondary students. *Journal on School Educational Technology*, *10*(3), 38-43. <a href="https://files.eric.ed.gov/fulltext/EJ1097402.pdf">https://files.eric.ed.gov/fulltext/EJ1097402.pdf</a>
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Boston, MA: Pearson
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of educational technology systems*, 49(1), 5-22.https://doi.org/10.1177/0047239520934018
- Hadgu, R. M., Huynh, S. H. V., & Gopalan, C. (2016). The Use of Pre-Recorded Lectures on Student Performance in Physiology. *Journal of Curriculum and Teaching*, *5*(1), 105-112. file:///C:/Users/HP/Downloads/EJ1157564.pdf
- Hoq, M. Z. (2020). E-Learning during the period of the pandemic (COVID-19) in the kingdom of Saudi Arabia: an empirical study. *American Journal of Educational Research*, 8(7), 457-464. http://article.scieducationalresearch.com/pdf/education-8-7-2.pdf
- Hadgu, R. M., Huynh, S. H. V., & Gopalan, C. (2016). The Use of Pre-Recorded Lectures on Student Performance in Physiology. *Journal of Curriculum and Teaching*, *5*(1), 105-112. <a href="https://eric.ed.gov/?id=EJ1157564">https://eric.ed.gov/?id=EJ1157564</a>
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the Role of Digital Technologies in Education: A review. *Sustainable Operations and Computers*. https://doi.org/10.1016/j.susoc.2022.05.004
- Jahan, N., Rahman, M. A., Mohiuddin, M. G., Al Mansur, A., Habib, A., &Mondol, M. S. (2021). Impact of Covid-19 Pandemic on Study: Assessing Reading Habits of

- University Students in Bangladesh. *International Journal of Social, Political and Economic Research*, 8(2), 327-340. http://ijosper.uk/index.php/i/article/view/194/154
- Kavaliauskienė, G., Kaminskienė, L., &Anusienė, L. (2007). The Challenges for ESP Learners: Alternative Assessment of Performance and Usefulness of Class Activities. *Studies about languages*, 10, 75-81.

  <a href="https://www.kalbos.lt/zurnalai/10\_numeris/11.pdf">https://www.kalbos.lt/zurnalai/10\_numeris/11.pdf</a>
- Grnaz, A. E. (2020). Students' Forgetfulness as a Learning Problem Some Reasons and Solutions. *Middle East Journal for Scientific Publishing*, *3*(2), 100-181.

  <a href="https://www.academia.edu/42051008/Students">https://www.academia.edu/42051008/Students</a> Forgetfulness as a Learning Proble

  <a href="mailto:msex">msex</a> Some Reasons and Solutions
- Macan, T. H., Shahani, C., Dipboye, R. L., & Phillips, A. P. (1990). College students' time management: Correlations with academic performance and stress. *Journal of educational psychology*, 82(4), 760. <a href="https://psycnet.apa.org/record/1991-13852-001">https://psycnet.apa.org/record/1991-13852-001</a>
- Macizo, P. (2014). Inhibition in Recall: Implications for Assessment in Higher Education. *Procedia-Social and Behavioral Sciences*, *159*, 52-56. https://doi.org/10.1016/j.sbspro.2014.12.327
- Makarova, E. A., & Korovin, I. S. (2022). Time Perception and Time Management during COVID-19 Pandemic Lockdown. *International Journal of Cognitive Research in Science, Engineering, and Education:(IJCRSEE)*, 10(1), 57-69. <a href="https://www.ijcrsee.com/index.php/ijcrsee/article/view/1383/791">https://www.ijcrsee.com/index.php/ijcrsee/article/view/1383/791</a>
- Rahman, M. (2021). Practices and challenges of alternative assessments at government primary schools in Bangladesh: teachers' perceptions. BRAC University. <a href="http://hdl.handle.net/10361/15646">http://hdl.handle.net/10361/15646</a>

- Renner, M., & Taylor-Powell, E. (2003). Analyzing qualitative data. *Programme*Development & Evaluation, University of Wisconsin-Extension Cooperative

  Extension, 1-10. http://thesummerinstitute.ca/wp-content/uploads/Qualitative-Methods.pdf
- Smart, K. L., & Damp; Cappel, J. J. (2006). Students' perceptions of online learning: A comparative study. Journal of Information Technology Education: Research, *5*(1), 201-219. <a href="https://www.researchgate.net/publication/220590667">https://www.researchgate.net/publication/220590667</a>
- Simatupang, M. S., Peter, R., Murniarti, E., Male, H., &Tambunsaribu, G. (2021). The

  Plagiarism Tendency During Covid-19 Pandemic. *Turkish Journal of Computer and Mathematics Education*, *12*(14), 4600-4607.

  <a href="https://www.researchgate.net/publication/357924704">https://www.researchgate.net/publication/357924704</a> The Plagiarism Tendency Dur

  <a href="mailto:ing-covid-19-Pandemic">ing-covid-19-Pandemic</a>
- Skar, G. B. U., Graham, S., & Huebner, A. (2021). Learning Loss During the COVID-19

  Pandemic and the Impact of Emergency Remote Instruction on First Grade Students'

  Writing: A Natural Experiment. *Journal of Educational Psychology: Advance online publication*. <a href="http://dx.doi.org/10.1037/edu0000701">http://dx.doi.org/10.1037/edu0000701</a>
- ŞENEL, S., & ŞENEL, H. C. (2021). Use of take-home exam for remote assessment: A case study from Turkey. *Journal of Educational Technology and Online Learning*, *4*(2), 236-255. https://doi.org/10.31681/jetol.912965
- Xhaferi, B., &Xhaferi, G. (2020). Online learning benefits and challenges during the COVID 19-pandemic-students' perspective from SEEU. *Seeu Review*, *15*(1), 86-103.

  file:///C:/Users/HP/Downloads/Online Learning Benefits and Challenges During t

  he%20(1).pdf

Zounek, J., &Sudicky, P. (2013). Heads in the cloud: Pros and Cons of online learning.

In International Conference DisCo New technologies and media literacy education,

At Prague, 59-62.http://academiceducation.com.au/wp-

content/uploads/papers/Heads in the Cloud Pros and Cons of Onli.pdf

# **Appendix**

## Interview questions:

- 1. What is your enrollment year at BRAC university?
- 2. How many semesters have you done offline?
- 3. How many semesters have you done online?
- 4. Which mode is more suitable for your better learning outcome? Share your own experience.
- 5. Which mode of teaching is more convenient for you?
- 6. How was your experience with the alternative assessment during online mode?
- 7. What types of effectiveness/benefits did you notice during the online mode of learning?
- 8. Do you think online classes can be an alternative in place of traditional classes? why, why not? Share your thoughts.
- 9. What types of online mode benefits do you notice in your offline mode of learning?
- 10. What types of challenges do you face due to online mode in your offline mode of learning?
- 11. Which strategies are you following to overcome these challenges?