

Evaluating Free Online Courses: A Case Study on 10 Minute School

By

Sanzida Sharmeen
21363007

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

Department of English and Humanities
Brac University
July, 2023

© [2023]. [Sanzida Sharmeen]
All rights reserved.

Declaration

It is hereby declared that

1. The thesis submitted is my/our own original work while completing degree at Brac University.
2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I have acknowledged all main sources of help.

Student's Full Name & Signature: Sanzida Sharmeen

Sanzida Sharmeen
21363007

Student Full Name
Student ID

Approval

The thesis/project titled “Evaluating Free Online Courses: A Case Study on 10 Minute School” submitted by

1. Sanzida Sharmeen- 21363007

of Spring, 2023 has been accepted as satisfactory in partial fulfillment of the requirement for the degree of Master of Arts on [Date-of-Defense].

Examining Committee:

Supervisor:
(Member)

Dr. Asifa Sultana
Professor, Department of English and Humanities
BRAC University

Program Coordinator:
(Member)

Ms. Rukhsana Rahim Chowdhury
Senior Lecturer, Department of English and Humanities
BRAC University

Departmental Head:
(Chair)

Professor Firdous Azim, PhD
Professor and Chairperson,
Department of English and Humanities
BRAC University

Ethics Statement

I hereby, declare that this thesis composed by me is a genuine innovative work and it has not been published anywhere else. This work has been done for the requirement of MA in English, BRAC University.

Abstract

This mixed method study measured the effectiveness of some of the free courses of 10 Minute School, which is the largest online educational platform of Bangladesh. About 2 million students follow the courses for extra help beside the classroom lessons. Over the years, computer mediated learning has been popular in Bangladesh and this platform admittedly played an undeniable role in that. Although incorporating technology is seen as an advantage in education in this era, it can be impractical if not applied carefully. As 10 Minute School is the first of its kind in the country, the challenges of computer assisted learning often remains unsupervised by the higher authority. Moreover, online courses need different teaching strategies than traditional ones. Previous research often showed their concerns on the robotic essence of online education. This explorative study investigated the efficiency of 10 Minute School to improve distant learning. Furthermore, it described the learning experience of the students to discuss pedagogical issues. This study conducted interview sessions with the users of 10 Minute School along with classroom observations. Secondary level and Higher Secondary school students were selected through purposive sampling as research participants. The interview questions were semi-structured and mostly open-ended to collect in-depth data. The results indicated the inefficiency of the 10 Minute School courses and the unsatisfied experiences of students. This study intends to draw the attention of the concerns and develop the online education quality for students.

Keywords: distance education; online educational platforms; pre-recorded class; 10 minute school

Dedication

This thesis is dedicated to my family, who have supported me throughout my academic journey.

Acknowledgement

Firstly, praises to the Almighty for giving me the opportunity to accomplish this research paper.

I want to thank my family who have helped me to maintain a work-life balance and always motivated me to publish a research paper. I would also like to express my gratitude to my supervisor Dr. Asifa Sultana, who has been kind, patient and supportive while guiding me every time. Finally, I would like to appreciate my friends who have supported me when I was struggling.

Table of Contents

Declaration.....	ii
Approval	iii
Ethics Statement.....	iv
Abstract.....	v
Dedication	vi
Acknowledgement	vii
Table of Contents	viii
List of Tables	xii
List of Figures.....	xiii
List of Acronyms	xiv
Chapter 1 Introduction.....	1
1.1 Background of the Study	1
1.3 Statement of the Problem.....	3
1.4 Purpose of the Study	4
1.5 Research Questions	4
1.6 Significance of the Study	4
Chapter 2 Literature Review	6
2.1 Evolution of Online Education in Bangladesh.....	6
2.2 Online Educational Platforms	7
2.2.1 EdTech platforms in other countries	7
2.2.2 EdTech platforms of Bangladesh.....	8

2.3 The infra-structure of 10 Minute School courses	9
2.4 Effective Online Education.....	10
2.5 Instructors' role in online classes.....	11
2.6 Theoretical Framework.....	12
2.7 Affective factors in online learning experience	14
2.7.1 Learning styles	14
2.7.2 Motivation.....	15
2.7.3 Computer self-efficacy and previous experience.....	16
2.7.4 Attitude toward e-learning and e-learning experience.....	16
2.7.5 Learning outcomes.....	17
2.8 Research gap	18
Chapter 3 Methodology	19
3.1 Research Design.....	19
3.2 Setting and Participants.....	19
3.3 Multiple Case Study Approach.....	21
3.4 Sampling Technique	21
3.5 Data Collection Procedure	22
3.6 Data Analysis	23
3.7 Piloting interview.....	24
3.8 Ethical Considerations	24
3.9 Limitations	25

Chapter 4 Discussion and Analysis	26
4.1 Classroom Observation.....	26
4.1.1 The structure of the courses	28
4.1.2 Active and Engaged Learning.....	28
4.1.3 Credibility and Content Knowledge.....	29
4.1.4 Presentation	29
4.1.5 Assessment.....	30
4.2 Participants' Viewpoints.....	30
4.2.1 Comparison of 10MS with previous experience.....	30
4.2.2 Learning Style and Motivation	32
4.2.3 Attitude towards distance learning.....	32
4.2.4 Expertise of the instructors	33
4.2.5 Reason for choosing 10MS.....	33
4.2.6 Experiences of the course	34
4.3 Discussion.....	35
Chapter 5	38
Conclusion and Recommendations	38
5.1 Conclusion	38
5.2 Recommendations.....	38
References.....	39
Appendices.....	46

Appendix A.....46

Appendix B.....48

List of Tables

Table 1: Participants' Profile	20
Table 2: Structure of the course	48
Table 3: Active and Engaged Learning	49
Table 4: Credibility and Content Knowledge	50
Table 5: Presentation.....	51
Table 6: Assessment	52

List of Figures

Figure 1: Research Model.....	13
Figure 2: Satisfaction with 10MS courses	34

List of Acronyms

10MS	10 Minute School
BOU	Bangladesh Open University
Covid-19	coronavirus disease of 2019
EdTech	Education Technology
ICT	Information and Communication Technologies
IELTS	International English Language Testing System
MOOC	Massive Open Online Course
UDL	Universal Design Learning

Chapter 1

Introduction

This section introduces the readers to the research background, context, and purpose of the study, two research questions, and the significance of the study. This chapter provides an overview of the contemporary issues and the role of 10 Minute School (10MS) to comprehend the research.

1.1 Background of the Study

With a more scientifically advanced era, education has incorporated technology to make the best use of resources. Different educational technology (EdTech) companies like Udemy, Coursera, Khan Academy have been created in the 21st century to promote computer-assisted education. Bangladesh, being a developing country, is technologically behind most countries. The education system followed traditional classrooms mostly with no advanced materials for decades. Recently, Bangladesh has focused on digitalizing education sector with distant education.

This study interprets the effectiveness of the courses of one of the EdTech companies of Bangladesh, 10 Minute School Limited. This organization surely marked a new beginning in the educational revolution of Bangladesh. It is the first Bangladeshi online educational platform with a count of 1.5 million students enrolled in different courses now. At the beginning of their journey, they took live classes on Facebook for students. After getting sponsorships, they expanded their content and reached millions of students. Their social media accounts, Facebook and YouTube, have 28 million subscribers. For this, the ICT sector of Bangladesh's government also supports and promotes this platform.

Although there are more platforms in the recent years that are working to provide online courses, 10 minutes school has still has the highest audience. This platform focuses on

almost every educational sphere of a Bangladeshi student. Their educational courses teach the subjects of the national curriculum, including school (class 1-10), and college to university admission preparation. Most courses have questions or quizzes for the students to evaluate themselves. Moreover, they have educational courses for Bangladesh Civil Services (BCS) exam, IELTS exam. In addition, with their acceptance, they focus on specific skill development courses, i.e., content writing, graphics designing, photography, Arabic language etc.

1.2 Context of the Study

In Bangladesh, parents of students are often authoritative about their children's education, and the use of technology is often seen as a distraction. Although 10MS was founded in 2015, it got popularity among students after the coronavirus pandemic. The founder of this platform, Ayman Sadiq mentioned in an interview that the pandemic has accelerated the growth of online education and pushed the industry a few years ahead (Kader, 2022). Reportedly, parents have accepted the change of online education in this country because of the situation.

The education system mostly focused on the memorization skill of students in Bangladesh. However, in 2019, when the coronavirus pandemic began, this system started to fail and the government had to think of alternate exams. As an aftermath, the evolution of examinations has begun slowly. As a result, students had to comprehend the ideas to understand them. Moreover, the studies are mostly exam driven where the students only focus the important chapters for their tests. Since 10MS was a global platform where any student from any school can attend, they demotivated the students to stop memorizing in their classes.

After covid-19 pandemic, Bangladesh government focused on online education including the "My Digital Education" campaign, which aims to provide digital devices and internet connectivity to students in rural areas. 10MS regained its popularity during covid-19 pandemic. Since students did not have to go to school they could not have any private tuition or coaching classes. Thus their parents thought of using this media as an alternative of extra classes for their children. As a result, even the conservative community of Bangladesh accepted the idea of distance education to keep their children engaged in an educative platform. With their innovative policies, 10MS has ensured they win the hearts of the parents before they reach the students.

1.3 Statement of the Problem

Many students in Bangladesh face challenges in accessing quality education due to a lack of resources and infrastructure. As a result, online education platforms such as 10MS have gained popularity as a flexible and accessible alternative. However, it is unclear whether the educational courses offered by 10MS are effective in meeting the learning needs of students and improving their academic performance.

The significance of this problem lies in the potential impact on the quality of education provided by 10MS. Without evaluation, it is impossible to determine whether the courses are effective in promoting student learning outcomes, such as critical thinking, problem-solving, and knowledge retention. This could result in a waste of time, effort, and resources for students who rely on 10MS for their education. Moreover, it could undermine the credibility and reputation of 10MS as a reliable and effective online learning platform. Since it is largest EdTech platform of Bangladesh, it should be studied closely to take future steps for future e-learning.

10MS has been offering updated educational courses over the years since the curriculum of Bangladesh education board has been changing frequently. Although the

platform has the attention of million students, it has failed to attain their enrolment. Despite the fund, government support, media promotions, there are limited students who have joined their platform. The disappointment in the courses can easily demotivate a student for online learning in future. This research aims to assess the quality of 10MS to develop the specific issues in future and to motivate students for digital education.

1.4 Purpose of the Study

The main purpose of this study is to investigate the effectiveness of the 10 Minute School courses. It also described the experience of the students who completed a course in this platform. The course content creation of this platform was analysed through the perception of the students. Furthermore, it pointed the challenges faced by students while attending online classes. As a result, the educational platform and education board can take account of the issues and the learning experience may improve.

1.5 Research Questions

The following research questions have guided the study to achieve its purposes-

- a. Are the free recorded courses of the 10 Minute School effective?
- b. How is the overall experience of the students?

1.6 Significance of the Study

Ensuring the quality of online education is significant since it is challenging to know what the students are feeling on the other side of their device screens. Moreover, distance education is a comparatively new phase for Bangladesh. Furthermore, there has been no notable research by the 10 Minute School to know the experience of their students. This paper brought unknown issues to light with evidence.

As the government focuses more on free online education to adapt globally, this research chose the biggest online EdTech platform of Bangladesh to provide a real picture of the current situation. By analyzing the issues of this platform, online education in Bangladesh can be planned in a more student-friendly way. This research paper can be used to conduct further studies to improve distance learning in Bangladesh.

Chapter 2

Literature Review

2.1 Evolution of Online Education in Bangladesh

Although online education is believed to be the latest concern, developing education technologies have existed since pre-digital time (Watters, 2021). Bangladesh Open University (BOU) is the first university to introduce higher education through distance mode in 1995 (Alam & Islam, 2010). The main objective of these online programs was to increase access among rural students. BOU broadcasted some radio and TV programs for the students through national TV and radio. Besides BOU, a private institute named the Asian University of Bangladesh also offered some formal academic programs through distance mode.

In Bangladesh, it is uncommon to adopt technology in the classroom even in the 21st century. In March 2020, the coronavirus pandemic resulted in a long gap of 19 months in the studies of students from all levels in this country. However, at the end of 2020, the government announced that educational institutions should begin online classes. Due to the inexperience of the teachers, students, and officials the online education experience was not so significant. Most students preferred face-to-face classes as they were not feeling connected to online classes (Dutta & Smitta, 2020).

Since Bangladesh is a developing country and technologically lagging, the sudden shift of online platforms from offline education was unanticipated. As a result, the instructions were not always helpful to teach the students. Moreover, the internet issues, the electricity problem, and the unfamiliarity of devices created problems for many students of this country. Furthermore, students from rural areas often could not afford electronic devices or did not have any network system in the area (Tabassum et al, 2021).

In 2023, the budget proposed for the education sector is 7838 million USD or 12 percent of the total, compared to 11.9 percent in 2022. The finance minister announced

various initiatives for "science-based education and development of education infrastructure." He referred to the distance mode classroom instruction as the main compensatory approach to keep up with the learning losses during the pandemic (Ahmed, M. 2023).

2.2 Online Educational Platforms

2.2.1 EdTech platforms in other countries

The international market of EdTech products is predicted to reach \$370 billion by 2026 (Statista, 2022). Reportedly, Udemy, Coursera, Edx, Khan Academy are the popular MOOC platforms. Udemy is mostly focused on professional courses whereas Coursera offers educational courses being partnered with more than 200 leading universities and companies. Again, Edx started off its journey as a non-profit organization but joined the market in 2021. In contrast, unlike most other MOOC platforms, Khan Academy primarily focuses on 12th-grade students and offers educational courses.

Apart from online educational marketplaces, various countries have established educational platforms nationally. Russia's OpenEdu is an EdTech platform established by eight top-ranked universities and directed by the Ministry of Higher Education and Science (MHES). This platform was developed to enhance the quality of education with cost-effectiveness. Chirikov, I., et al (2020) proposed an affordable model for stem education by including a national educational platform for every university. Although students excelled in online assessments in OpenEdu than offline assessments, students were slightly more satisfied with physical classes.

Additionally, SWAYAM, complementary to formal education in India, has nine coordinators which cover school education, out-of-school education, undergraduate education, postgraduate education, teacher training program, and self-paced education. This platform intends to host about 2000 courses with 80000 hours of learning materials. The

content of the school courses follows the Indian curriculum. However, this platform is unable to assess the learning with descriptive answers (Majumder, 2019).

2.2.2 EdTech platforms of Bangladesh

Although online educational platforms like 10-minute school, Shikho were established during 2015-2019, the pandemic heightened its reach among Bangladeshi students. After the new-normal, various online educational platforms, i.e. Sohopathi, Eduhive, Boli Online, Interactive Care and ACS were introduced to meet a large number of students. There are about 90 startups currently operating in the Bangladesh EdTech market (Amit et al, 2022).

With the continuous advancement of the internet, it will be easier to reach out to the target MOOC market in Bangladesh for the education sector. According to a report by Bangladesh Statistics Bureau, the users of the internet in Bangladesh are 37.01% of adults (18 years or above) of the total population and 30.68% of children, aged five years and above. The educational technology sector offered new opportunities for companies to accommodate programs once the K-12 segment is established since Bangladesh's average demographic age is about 26 years (Kader, 2021).

Although the educational platforms show a promising number of students in their database, most students discontinue after completing one course. Islam (2021) discussed the reasons behind failure in MOOC programs in Bangladesh, which are- language barrier, lack of self-motivation, lack of familiarity with foreign course content, free to audit, disorientation in the online environment, lecture-based or participatory and experimental teaching process.

2.3 The infra-structure of 10 Minute School courses

10 minute is the largest online educational platform in Bangladesh with 1.5 million students. The platform covers academic classes from classes 1 to 12 of the Bengali version of the national schooling system. The platform was primarily established to outpace or replace the idea of coaching centres. In Bangladesh, coaching centres are a common phenomenon that often causes neglect to schools.

10 Minute School is instructivist MOOCs or xMOOCs where knowledge is learnt in a formal setting with instructivist design. The instructivist MOOCs follow behaviorism, cognitivism, and social constructivism theory. These courses are teacher-centric and the assessments are generally e-tests, and quizzes with fewer cases of peer review and certificates. The communication system of the courses are very limited and attained in their own centralized platform. Participants' retention from MOOCs is another big challenge (Khan & Ali, 2018).

The learner-learner interaction proposed by 10 Minute School are restricted and it also ignores collaborative learning. Their learning model emphasizes more on content satisfaction of learners. According to Elizondo-Garcia & Gallardo (2022), the learners' experiences should be investigated to identify the favourable conditions for peer-interaction learning. They also argued that the advantages of engaging in peer interaction and feedback activities in xMOOCs are not explored properly.

While the live classes of 10 Minute School require money, recorded educational courses are free for students. These courses are organized by the grades and subjects where each subject is sectioned with topics of the national curriculum. Every topic has videos and quizzes at the end for self-evaluation. Although 10 Minute School educational courses follow the national curriculum, some courses have information or topics which are excluded or briefly mentioned in the national textbook.

2.4 Effective Online Education

Distance learning, usually referred to as online or e-learning, has been gaining popularity in recent years as a flexible and practical substitute for conventional classroom-based education. Researchers' and practitioners' disagreement exists over the efficacy of distant learning, nevertheless. Effective online education depends on a variety of factors, including well-designed course materials, meaningful interactions, well-organized and supported teachers (Sun & Chen, 2016). A well-organized course plan helps the instructor to divide the lessons accordingly. Crawford-Ferre and Wiest (2012) added that the online teachers must know how to use the educational software and be familiar with online system. The teachers should also have assistance for immediate technological emergencies.

According to Keengwe and Kidd (2010) five priorities can make the classes more effective, which are- 1. curriculum design and development, 2. self-reflective course design that has a personal touch and incorporates multimedia, 3. plan and assistance of meaningful class activities, 4. setting timetables and deadlines for necessary assignments, 5. educating learners on using online learning tools efficiently. Their findings is also consistent with the TPACK model, which proposed that an online educator needs content knowledge, pedagogical knowledge, and technology knowledge to have a positive experience from online learning (Koehler et al, 2014).

Effective classroom strategies place a high priority on teacher-student interaction. As the learners are unknown to the teacher, it is imperative to speak actively to maintain their focus. Whipp and Lorentz (2009) recommended that teachers in online courses should propose critical questions and point out specific areas that need clarification and explanation to continue effective communication. As well as guiding online conversations to encourage all students to engage, the instructor should respond to students' questions in a simple and

concise way. The teacher should focus on specific issues in discussions, and summarize contents weekly.

Authentic communication plays a big role in online classrooms. When the teacher allows a student to share his/her experience, he/she gains the trust of others. Students favored in-depth individual interactions and to be better familiar with one another's backgrounds and cultures beforehand (Yang et. al., 2014). The optimism of the instructor also plays an undeniable role in the class environment. His assertiveness, responses, care, and overall attitude impact the students highly (Wang, 2014).

2.5 Instructors' role in online classes

It is often assumed that teaching an online class is easier than a traditional class but research has shown that online delivery is more laborious than the offline mode (Crawford-Ferre & Wiest, 2012). Thus, a teacher's role changes due to the change in the medium or platform of education. Online education quality needs to be developed and accepted as equal to traditional Face to Face classroom-based education. It is necessary for teachers to stay more interactive, creative and vibrant in online classes. When students see their instructors taking an active role in fostering online discussions on relevant issues, they also report higher cognitive presence (Shea & Bidjerano, 2009).

Wallace (2003) emphasized the crucial role teachers had in facilitating discussion, providing direct instructions, and giving feedback to students. According to Crawford-Ferre and Wiest (2012), online instructors need additional support to reduce teaching loads or provision of teaching assistance. Moreover, they discovered that "most instructors new to online teaching begin with little to no training or preparation specific to this deliver mode". They suggested that online faculty members should have professional training on pedagogical designs and online instructions.

Most of the Bangladeshi teachers are unaware of the online teaching process and they are learning to cope with technology (Tabassum et al, 2021). Moreover, teachers believed that some subjects are more difficult to teach online than the rest. Many of the teachers faced severe internet problems and the unfamiliarity with educational applications also made them suffer.

Online teachers are advised to be more present in cyberspace to communicate with their students in the classrooms. Kehrwald (2008) established social presence as a person's capacity to exhibit his or her state in a digital reality through interaction with other users. The presence of an instructor stimulates the development of metacognition, improves academic performance, and increases satisfaction levels with online courses (Yuan & Kim, 2014).

2.6 Theoretical Framework

This paper analysed the effectiveness of 10 Minute School through a proposed model by Hung et. al. (2009) Based on this model, learning activities contain a subject (students), a tool (learning software), an object (acquiring knowledge), and a result (learning efficiency and satisfaction).

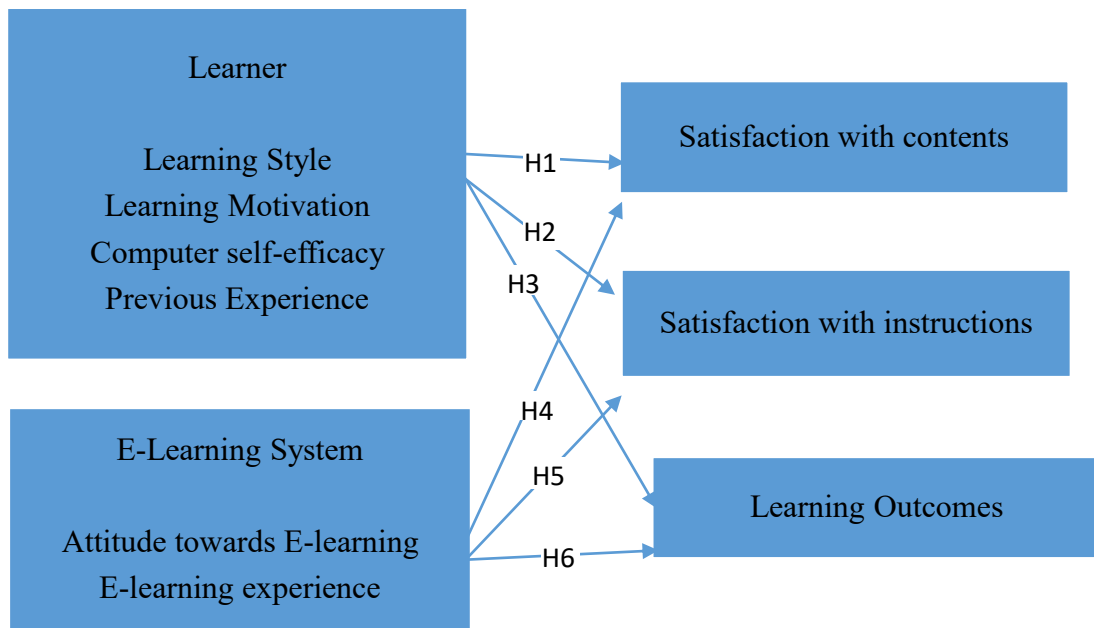


Figure 1: Research Model

This research model is grounded on activity theory. Vygotsky (1978) originated this theory which was later developed by many researchers and is actively being used in education research now. It is a theoretical framework that has been applied in education to understand learning as a social and cultural activity. In recent years, activity theory has been applied to study the role of technology and social interaction in distance education and how it impacts student learning outcomes. Adapting the activity theory, the learning activity comprises learners as subjects, learning system as tool, knowledge as tool and learning effects and satisfaction is the output.

In the proposed model (Figure 1), there are six hypotheses on the learners' effectiveness of an online educational platform. H1, H2, H3 refer to the learner factors (learner style, learner motivation, computer self-efficacy, previous experience) influencing the three dimensions of learning satisfaction (contents, instructions, learning outcomes)

individually. On the other side, H4, H5, H6 indicate the possibility of learning satisfaction for the e-system factors (attitudes toward e-learning, e-learning experience). These possibilities help research to identify the satisfaction level and the reason for the effectiveness of 10 Minute School.

2.7 Affective factors in online learning experience

This section describes the individual variables of the theoretical framework and justifies the impact of each factor. This sub-chapter is divided into four parts where the first three parts discuss the individual factors of learners and the last part combines a review of the e-learning system.

2.7.1 Learning styles

The concept of learning style has been widely researched in education and plays a significant role in shaping the online learning experience. Several studies investigated the impact of learning style on the online learning experience of students and found that students with visual and kinesthetic learning styles were more likely to engage in online learning activities and had a more positive online learning experience compared to those with auditory and reading/writing learning styles (Campbell & Jobling, 2019; Kim & Park, 2019; Al-Somali, Al-Harthy, & Al-Mahruqi, 2021; Li, Chen, and Liang, 2021). The authors concluded that online learning platforms should be designed to accommodate the diverse learning styles of students.

Furthermore, in an online learning environment, Chen and Wang (2021) investigated the connection between students' learning preferences and their evaluated results. The findings indicated that students with varied learning preferences for online instruction had an impact on their learning outcomes. For instance, students with a visual learning style preferred videos and graphics, while those with an aural style preferred audio recordings.

Similarly, a study by Zeng, Kinshuk, and Chen (2020) found that students' learning styles had a significant impact on their online learning experiences. The authors found that students with different learning styles had different preferences for online learning activities, and that accommodating these preferences improved their engagement and satisfaction with online learning.

2.7.2 Motivation

Motivation is a critical factor in shaping the online learning experience of school students. The level of motivation can impact students' engagement, participation, and performance in online learning environments. This section explores recent studies from different countries on how motivation affects the online learning experience of school students and highlights key findings.

A study by Smith, Brown, and Johnson (2021) investigated the relationship between motivation and online learning performance of high school students. The results showed that students who were motivated tended to have a higher level of online learning performance compared to those with lower motivation. The study highlights the importance of addressing students' motivation in online learning environments to enhance their performance.

Park, Kim, and Lee (2020) explored the impact of motivation on students' satisfaction and participation in online learning. The results showed that students who were highly motivated were more likely to participate actively in online learning activities and had a higher level of satisfaction with the online learning experience. The study suggests that promoting motivation in online learning can lead to increased engagement and satisfaction.

Lai and Lin (2019) investigated the role of motivation in shaping students' online self-regulated learning. The results showed that students who were motivated had a higher level of online self-regulated learning compared to those with lower motivation. To optimize the online

learning experience, it is important to create a supportive and motivating online learning environment that promotes student engagement, satisfaction, and performance.

2.7.3 Computer self-efficacy and previous experience

Several studies have investigated the impact of computer self-efficacy on online students' academic performance and satisfaction. Similarly, studies found that computer self-efficacy was positively related to online students' academic performance and that students who had higher computer self-efficacy were more likely to persist in online courses (Li & Liang, 2019; Jakšić & Petrić, 2020).

In addition, previous academic experience also psychologically stimulates perceptions regarding educational satisfaction. A study by Martin and colleagues (2019) found that students with prior experience in a related field were more likely to be successful in their current course of study. The authors found that students with prior experience had a better understanding of course content, were more motivated to learn, and were better able to apply what they had learned to real-world situations.

2.7.4 Attitude toward e-learning and e-learning experience

Students' prior e-learning experiences have a significant impact on their attitudes toward e-learning. Students who had prior positive e-learning experiences reported higher levels of engagement, satisfaction, and motivation, while students with negative experiences reported lower levels of these factors. A study by Cheung and Slavin (2019) found that students with prior experience in online learning were more confident in their ability to navigate and use technology, which led to a more positive learning experience.

Previous experience in online classes can also have a significant impact on students' success and satisfaction. Students with prior online learning experience are more confident in their ability to navigate technology, communicate with instructors and classmates, and

manage their time effectively, leading to a more positive learning experience. A meta-analysis by Wang and Chen (2017) also found that students with prior experience in online learning had better outcomes in terms of course completion and overall satisfaction.

A study by Tu and McIsaac (2019) found that students with positive attitudes toward e-learning were more likely to engage in online learning activities and were more satisfied with their e-learning experience. The authors also found that students who had positive attitudes toward e-learning had better outcomes in terms of academic performance, compared to students with a negative attitude.

2.7.5 Learning outcomes

In distance education, learning outcomes are particularly important because they provide a way to assess the effectiveness of the online learning experience. On another note, the effectiveness of distant learning depends on quality assessment since it promises that the learning objectives are achieved, the instructional design is suitable, and the technology is credible. According to the research model, ensuring learning outcomes is equally important as learners' satisfaction.

Several studies have explored learning outcomes in distance education in recent times. One study by Khalil and Ebner (2019) examined the impact of online discussion forums on learning outcomes in a distance education course. The study found that the use of online discussion forums had a positive impact on learning outcomes, including increased critical thinking and knowledge retention. Another research by Coetzee et al. (2020) assessed peer assessment's effectiveness in supporting the attainment of learning outcomes in a distance education program and discovered that it was a useful tool for giving students feedback and assisting in the achievement of learning outcomes.

The fulfilment of learning objectives in distant education has been ensured through a variety of strategies. Aligning learning objectives with course assessments is one strategy. This approach makes sure that the tests are assessing the anticipated learning outcomes and that the students are aware of what is expected of them. The use of rubrics, which give specific criteria for evaluating student work can help to achieve this alignment (Al-Fraihat et al., 2021; Coetzee et al., 2020).

2.8 Research gap

The previous studies indicated inadequate focus on Bangladeshi online educational platforms. Furthermore, the effectiveness of Bangladeshi online platforms is rarely examined. Although there has been an emphasis on online education in the last few years, the quality of education is quite unknown in this context. To fill this gap, this research has focused on evaluating the effectiveness and quality of education of 10 Minute School. The purpose of this research is to introduce a new research area by shedding light to distance education quality in Bangladesh.

Chapter 3

Methodology

This chapter discusses the methods adopted to execute this research, which includes the research design, settings, and participants, sampling technique, data collection procedure, data analysis, and piloting interview.

3.1 Research Design

The researcher developed the research design for this study by considering previous literature and the research questions. The goal of this research is to determine the effectiveness of 10 Minute School courses. For this, she conducted a mixed method study where I interviewed the students who attended classes in 10 Minute School courses to collect the data. Qualitative methods focus on individual opinions, feelings, and perceptions rather than focusing on numbers. Since my study focused on the candidates' viewpoints, a qualitative study was considered more suitable.

Additionally, this research also aligns with Grounded Theory as the researcher attempted to identify socially constructed patterns with more openness to learning about the participants' lives. The researcher analyzed the data individually and selected codes from all the data. The themes of the coding are also dependent on the collected data. This method enabled the researcher to address the issues of attending 10 Minute School courses in depth.

3.2 Setting and Participants

The study was conducted in Dhaka, the capital of Bangladesh. The researcher chose 20 participants who completed at least one course or attended live classes in 10-minute school. All participants were aged between 13-18 years where 13 were male students and 7 were female students. Among the participants, 17 were high school students (grade 7-10) and 3 were college students.

Table 1*Participants' Profile*

Number of students	Grade	Age range
3	11	16-18
5	10	15-17
3	9	14-15
5	8	13-15
4	7	13-14

Table 1: Participants' Profile

In this research, 17 participants were from Dhaka, two were from Comilla, and one was from Chittagong. The names of the institutions were not mentioned to avoid biases while the students' pseudonyms were used to confirm their anonymity.

To ensure a comprehensive understanding of the research topic, the researcher sought to include data from 10MS Team, as their insights and experiences were crucial to the study. Multiple attempts were made to establish contact with the team through email and phone calls. A formal request explaining the purpose and significance of their contribution to the research was sent, emphasizing the confidentiality and ethical considerations that would be upheld throughout the study. Unfortunately, there was no response from the 10MS team but one of founding members revealed that the syllabus of the courses were designed by individual instructors.

3.3 Multiple Case Study Approach

A case study is used to analyze and describe each person individually that includes his or her activity, special needs, life situation, and life history. Case studies can analyze qualitatively complex events and conduct research with numerous variables precisely because they do not require many cases or a limited number of variables. The integration of case studies in mixed-method research designs can enhance the accuracy and reliability of results by including an in-depth understanding of the phenomenon (Creswell, 2017).

3.4 Sampling Technique

The sampling technique refers to the way of selecting the participants. A purposive sampling technique was adopted for the study in order to get rich data from the limited available sources (Patton, 2002). This type of sampling falls under the non-probability sampling method or non-random sampling, where participants of the research are selected by the researcher.

Since this study was done in a limited time, the researcher searched for people with the help of social media. The researcher got to know their experience in brief and selected people who can provide rich data. Moreover, the cost-efficiency and less time-consuming factors of this sampling have also helped the researcher with the study. Purposive sampling, when used appropriately, is more efficient than random sampling in practical field circumstances.

The researcher posted a Facebook status on public and shared it in 10MS Facebook groups and also commented on their videos. By analyzing of comments, the researcher messaged some students of 10MS for introduction and to seek their permission for data collection of this research. Students who were familiar with online education were given more priority while choosing the participants.

3.5 Data Collection Procedure

In-depth qualitative techniques and observation checklists were used as research tools to collect data for this research. Qualitative interviews guide researchers to conduct an explorative study by comprehending the participants closely. The researcher took online interviews using Zoom applications and recorded the interviews. Interviewing participants gives the researcher the opportunity to clarify questions or answers and increase the accuracy of the data (Alamri, 2019). The semi-structured questionnaire had 13 questions which had open-ended questions. Semi-structured interviews help the researcher to adjust according to the participant and change the course of the questions.

The interview questions were based on the research questions of this study, which are the following-

- a. Are the free recorded courses of the 10 Minute School effective?
- b. How is the overall experience of the students?

Classroom observations were conducted by watching videos online following an observation checklist. The checklist covered a range of observable effective teaching strategies that were relevant to the research objectives. The combination of quantitative and qualitative data gathered through this method facilitated a rich understanding of the online teaching and learning processes, contributing to the overall findings of this research study.

3.6 Data Analysis

The researcher conducted a thematic analysis of the participants' answers as she wanted to identify the patterns and connect them to previous studies. An approach to mixed methods research that uses inductive/deductive hybrid theme analysis can be regarded as being highly facilitative (Proudfoot, 2022). Thematic analysis has helped the researcher to focus on the emotions, and opinions of the participants and organize the data. There are 6 steps of thematic analysis that the researcher has followed (Maguire & Delahunt, 2017).

Step 1: Becoming familiar with the data,

Step 2: Generating initial codes,

Step 3: Searching for themes,

Step 4: Reviewing themes,

Step 5: Defining themes

Step 6: Writing

Accordingly, the researcher listened to the recordings of the interviewees' audio and transcribed the recordings. After that, the researcher read the transcription and interpreted the meanings. The interpreted texts were transformed into several themes. Then she coded the responses and summarized the coding data.

While analyzing the observation checklist, the researcher opted for a Likert scale to evaluate the class since it is simple to construct and likely to produce a highly reliable result (Taherdoost, 2019). In the scale used in the observation checklist, each number symbolizes the following- 1. strongly disagree, 2. disagree, 3. somewhat agree and somewhat disagree, 4. agree, 5. strongly agree

3.7 Piloting interview

To avoid unforeseen difficulties with data collection, the researcher piloted the research with one participant. The participant was a male student of class 9. Piloting the interview helped the researcher to avoid unforeseen challenges of interviews. By coding and analyzing the data, the researcher also perceived a notion of the possible outcome. Although the piloted interview is a part of the research data, it was analysed more cautiously to avoid any kind of bias.

3.8 Ethical Considerations

Ethical considerations of research are crucial for any research to deliver the truth by respecting the participants' comfort. The researcher collected data from participants with their formal consent and used a trusted electronic device to provide safety. Pseudonyms were used to ensure the anonymity of the participants. The confidentiality of the institutions has been maintained to avoid any biases.

The interviews of open-ended questionnaire is often unpredictable as the participants have unique opinions. As the interview responses refer to a specific issue within a restricted duration, the researcher needs to consider ethical issues (Husband, 2020). Although semi-structured interview questions are used to offer some flexibility, the interpretation of the open-ended answers can be dissimilar. Hence, the researcher has often summarized her interpretation to understand the intended response.

3.9 Limitations

The research aimed to portray the internal planning of 10 Minute School by collecting data from the course instructor who is also the syllabus designer of the course. The researcher attempted to obtain an interview with the instructor as a primary data source for the study. Despite multiple attempts to contact the 10MS through various channels, including email and phone, no response was received. In light of the lack of response, the researcher shifted their focus to alternative sources of data, including academic and industry publications, news articles, and online resources. While the lack of response from the 10MS limited the researcher's ability to directly explore the organization's perspectives and practices, the use of multiple data sources allowed for a comprehensive analysis of the research question.

Since the research focused on free educational courses, it is not enough evidence to describe the paid courses of 10MS. Moreover, some of the video contents have been deleted due to the change in curriculum, or shifting the focus to paid courses. Additionally, while the research gives an idea about participants, the sample size is comparatively small, therefore, the results need to be used cautiously by future researchers. Additionally, the collected data is based on the personal perceptions of participants which can be altered due to social prestige. These limitations suggest further research to reduce these limitations and produce a more reliable result.

Chapter 4

Analysis and Discussion

In this section, the observations of the researcher is presented and discussed. The researcher adapted a course checklist to observe the lessons and analyzed the videos to add remarks. The first part of this section includes the observation checklist while the second part is the analysis of the videos according to the checklist.

4.1 Classroom Observation

The researcher modified an online asynchronous course design checklist of California Polytechnic University (2021) to evaluate the quality of 10MS courses from an academic standpoint. This observation checklist (Appendix B) has focused on 5 factors mainly while designing the checklist, which are- the structure of the course, active and engaged instructions, credibility and content knowledge, presentation and assessment.

The researcher watched 7 videos from selected topics of English 2nd paper of class 10. She chose the topics by analyzing the syllabus of a high school in Dhaka. All the videos of this subject in every grade are taught by one female instructor named Prova. Her qualification, availability information were absent in the video series whereas her picture was only seen in the thumbnail of the videos. This demonstrates the lack of technological use to provide information of the instructor and is unsuccessful to facilitate learning (Appendix B).

In the 16th topic in the video series, conditional, the instructor teaches the three different sorts of conditional sentences in an 18-minute video. The medium of instruction was formal colloquial Bengali throughout the video. At first, she mentions her name and introduces the topic within the first 20 seconds. She gives a brief introduction to conditionals by stating the word originated from conditions. After that, she mentioned the grammatical rules of 3 types of conditional sequentially with examples. However, she did not clarify the terms associated with the formulas of the grammatical structure. According to the observation

checklist, the classes did not take account of the students' prior knowledge which failed to produce an active and interactive learning experience.

In the first minute of the video, she differentiated the conditional sentences into two parts but did not explain the clauses. Mixed conditionals did not have adequate rules or examples. In the last two minutes, the video had 5 incomplete conditional sentences for practice. However, the answers were not explained further at the end. Appendix B shows that using multiple ways to solve an academic question makes the learning effective. Among the videos, the researcher has watched, the instructor did not opt for alternate forms of exercises or solving methods.

Although the videos follow the Bangladeshi education board curriculum, the precise syllabus of the course is not mentioned in the video. For class eight students, the website had three videos with a total 27 rules in the right forms of verbs chapter. However, the NCTB books do not have this chapter or these grammatical rules. Many of the schools of Dhaka city include additional books separately following the school policies. Many of the participants had a book named 'Advanced Learner's Communicative English Grammar and Composition' (Chowdhury & Hossain, 2022) book in their schools, but it mentioned more than 27 rules in the right forms of verbs chapter. Hence, it is unknown how 10 Minute School selected the rules or the contents while teaching grammar. However, this tendency discarded materials adhere to Universal Design Learning principles.

The observation checklist indicated that the course materials are not updated through time or the advancement of grades. The researcher noticed that the unchanged videos were uploaded in every class. Although new sections were added in the upper grades, it was not included in the course materials. For instance, the topic of right forms of verbs has identical videos from class 6 to class 12.

4.1.1 The structure of the courses

The first part of the observation checklist has four segments which altogether focuses on the organization of the course and videos. The structure of the courses have a varying result with a minimalistic presentation. Although the videos are uploaded under specific chapters and grade, there is no information on how to search for the course as the instructor did not facilitate or inform about the technological management. The students had to login with a local phone number and a numeric password. Then they receive a pin code on their phone and can enter the subjects according to the grades.

The instructor conveyed a set of learning objectives at the beginning of every video. However, the videos are not co-related to each other and the instructor does not review prior knowledge or previous video lessons. Moreover, the management systems and the learning tools were not effectively used. Lack of transparency on course module, online instructions were observed. The introduction of the instructor was prompt with no contact information for the students.

4.1.2 Active and Engaged Learning

The observation checklist for active and engaged learning proposed a negative result overall. The course do not have any discussion board or any group where the peers can communication with each other or the instructor. The students' prior knowledge are not taken into account in the videos, or surveyed through needs analysis. Prior knowledge, prospects, and student learning behavior are prime variables of student learning outcome (Krijtenburg-Lewerissa et. al, 2021).

Vocal, physical, writing interactions are absent from the videos. The instructor provides clear information regarding access to technology and related resources required in the course. The reasoning skills of the students were not motivated to apply. Prior knowledge

of the students were not analyzed or evaluated in any of the videos. Lack of consistent engagement and activity was noticed throughout the course.

4.1.3 Credibility and Content Knowledge

The proper delivery of content knowledge and the credibility of the instructor is an essential factor in an asynchronous class. To make online learning successful, the instructor needs to provide external resources and include diverse yet relevant issues in the class. However, the instructions were quite mechanical and strictly affixed to the lesson.

The lessons did not have any real life examples or any scholarly reference. Each of the grammatical formulas were explained with any one formula, exempting the alternate ways. The instructor did not mention any diverse disciplinary contributions or history of any chapter. She made no reference to books, internet, or resources for reading or testing topic knowledge. Moreover, she not promote using several logical thought processes or adopting multiple viewpoints.

4.1.4 Presentation

An interactive online learning environment can be created by combining teachers with graphics, animation, or text-based visual information along with strong narration. (Ramlatchan & Watson, 2020) The video included basic graphics with the display of important content, such as formulas or definitions. Although the voice command of the instructor was clear and precise, she was invisible in the video.

The course was simple and obvious to navigate while all the information were available in visual methods. The instructor failed to engage with class and respond to changes in student attentiveness. However, she maintains appropriate voice tone throughout the class. Materials produced by the teacher or from other sources are not accessible to students with impairments.

4.1.5 Assessment

There are no notable assessments in the videos of the courses. At the very end of the videos, the instructor asked 4-6 questions and gave the answers after some seconds of pause. While the platform offered free multiple choice tests for every chapter earlier, there were no forums or tests available online when the researcher checked for the last time.

The checklists presents a precise observation of the researcher based on the variables of quality education. While the courses are organized in an easily accessible way, the presentation, interaction, presenter, instructor's credibility, and assessment still needs development. Assessments are not offered in a variety of formats and are not commonly given during the course of the class. No appropriate rubrics were provided or referral works were shown. There is no opportunity for students to offer feedback on the course design.

4.2 Participants' Viewpoints

This section discusses the perspectives of the participants and categorised the data into themes. The research had 20 high school students who have completed courses on 10 Minute School as participants. The participants were interviewed through Zoom meetings where the researcher followed a semi-structured questionnaire as a research tool.

4.2.1 Comparison of 10MS with previous experience

The researcher asked the students to compare online classes with 10MS after the introductory questions. 13 participants had completed online courses from other platforms other than 10MS, who pointed out various differences. Traditionally, online classes are compared with in-person classes by the stakeholders. To avoid that, the researcher quickly shifted the focus of the comparison of the participants.

Participant 11 mentioned that he completed a philosophy course in Udemy in 2021 which had a different structure. The instructor was seen in the video in quite casual body

language which the participant liked a lot. He also mentioned the instructor was a professor at a public university in the USA, so the participant felt very privileged to see him or attend his classes. At the end of the course, the instructor had given his email id to discuss philosophical issues. In contrast, he did not know anything about the instructor in 10MS. He said, “If I knew the instructor in the course, I would have been more interested.”

Two participants mentioned that 10MS courses only offer bookish knowledge and do not reflect on real-life issues, which often makes the classes boring. Participant 3 mentioned she did a pre-recorded online course offered by a British university. The course was on mental health development during COVID-19 and was facilitated by 3 psychologists. She mentioned the video was presented with many info-graphics and had real-life interviews. The course also gave her information on sources to receive free mental health care. When the researcher asked her a follow-up question, she denied receiving any external knowledge from any 10MS video. Participant 7 also agreed to this and felt the instructor of 10MS followed the script strictly.

Three participants pointed out that 10MS courses are not motivating as the videos are machine-like. Participant 3 said that she expected some advanced video animations or some interesting photographs in the videos. Participant 6 argued that 10MS courses felt like a traditional classroom in zoom meeting where he is unfamiliar with his teacher. Additionally, participant 19 agreed to this and called the video presentation ‘boring’.

Six participants thought 10MS courses were unique as they offered the lessons in Bengali. 33% of the students mentioned they preferred 10MS courses as YouTube videos often have foreign languages. Additionally, 50% participants were pleased as 10MS specially focused on their syllabus.

4.2.2 Learning Style and Motivation

Online courses need to be cautious to include a diverse set of learning elements to cater to students of different learning styles. The use of media in the learning process positively impacted the students to increase their learning motivation. (Puspitarini & Hanif, 2019)

75% of the students expected visually interesting graphics in the videos. There was no background music or external sounds in the video which made it robotic. Participant 2 compared with his in-person multimedia classroom, “Even our teachers make more uplifting and eye-catching PowerPoint slides now.” From the in-depth interviews, most of the students indicated relying on auditory and visual learning. On a follow-up question, 90% of the participants responded positively that the videos would motivate them more if it were aesthetically enriched. These participants were reluctant to watch the videos of 10MS again if needed.

4.2.3 Attitude towards distance learning

According to the research model, attitude towards distance education and technological knowledge play a vital role in the effectiveness of education. 60% of the participants logged in to the 10MS on their own, as there was little to no instruction on the courses regarding it. Most of them are knowledgeable about using an electronic device and watching videos. However, they mentioned typing the answers would be difficult if there was a practice board in online classes.

All the participants believed that in-person classes are more effective than online classes. Similarly, participants pointed out how they missed the human essence in the lectures. Participant 9 wished for some individual practice sessions after the lecture videos. According to her, she understood equations better when her teachers showed her some external mathematical problems. Although she could check the answer from the book, that did not

ensure her formulas and process. She strongly believed that some subjects should not be taught with recorded lectures. On the other hand, participant 17 felt comfortable with receiving distance education from 10 Minute School.

4.2.4 Expertise of the instructors

85% of the participants agreed that their instructors could explain rules, and issues of their subject matter easily. Although they felt the absence of in-person classes, they were satisfied with their teachers. However, when the researcher started questioning them about their lessons, they mentioned they had some confusion but could not clear them as they could not contact the teacher.

Additionally, 35% of participants mentioned their schools taught some additional parts which the 10ms did not cover. Participant 11 and Participant 14 agreed that their teacher had expertise but they criticized that he could not explain some sections. Participant 4 mentioned the instructor was very fluent and had a nice tone. However, the instructor did not come in front of her students and recorded her voice with the sync of the video. 70% felt disappointed that they could not see or know the teacher personally. Participant 9, who is the youngest participant of this research, regretted, 'I wish I could contact her and tell her she is a great teacher.'

4.2.5 Reason for choosing 10MS

The researcher asked the participants why they chose 10MS courses rather than traditional methods. 3 participants mentioned they wanted some help in her subjects but wanted to save their pocket money. 4 participants said their parents had suggested they do a course in 10MS. In contrast, 7 participants attended the courses after seeing their immense popularity on the social media. Additionally, the rest of the participants joined the course out of sheer curiosity.

4.2.6 Experiences of the course

Figure 2

Satisfaction with 10 Minute School courses

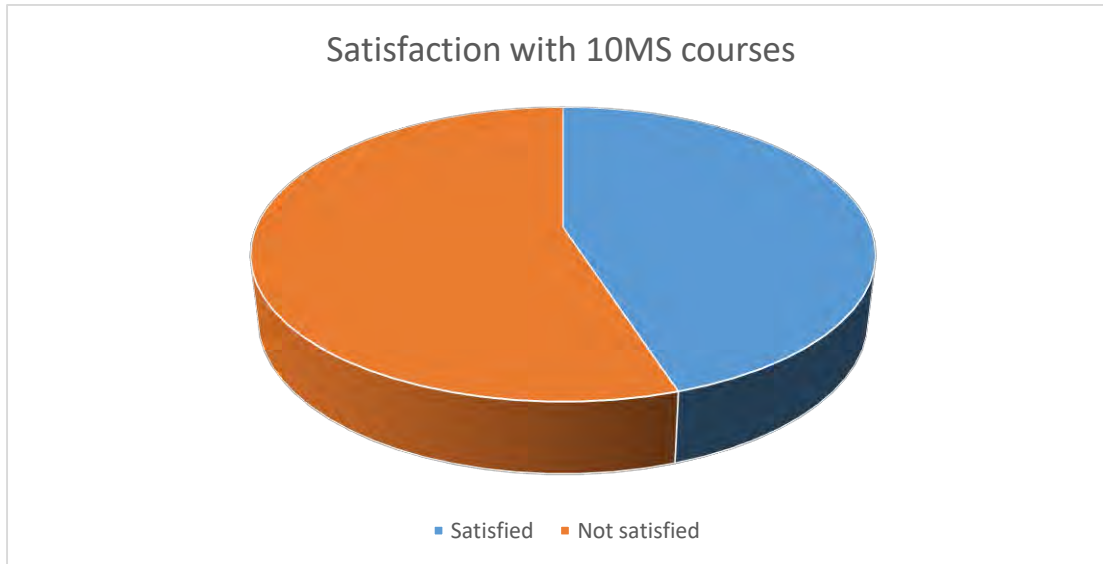


Figure 2: Satisfaction with 10MS courses

55% of the participants were not satisfied with their courses. Participant 15 mentioned it to be a ‘waste of money and waste of time’. 6 participants added that they did not learn much from it as it was basic and not advanced enough. Participant 12 narrated that only people are excellent at self-studying might get help from this but those who prefer an extra hand would not get much help. Almost all the participants agreed that the courses only gives surface level knowledge to the learners. They also mentioned that they were given some practice tests but those were very limited and easy.

The researcher asked the students if 10MS can become an alternative for private classes or coaching or even their institutions. Although they were interviewed individually, all of them answered ‘no’. All the participants mentioned that in-person courses were the best option as they can concentrate more on face-to-face classes. Additionally, 30% of participants argued that they needed schools and coaching classes to stay on track with others. 70% of the

participants agreed to attend online courses on other platforms, especially from international organizations. However, 25% of them considered 10MS as a ‘backup option for emergency situations’.

4.3 Discussion

In this section, the researcher analysed the results that are discussed in the previous sub-chapters. Moreover, the results are connected with the previous research and the theoretical framework to provide valuable insights.

These results show that the attempts of 10-minute school courses have been unsuccessful to motivate students for online learning. The lack of classroom materials has given them an outlook of crash courses or intensive courses. While intensive courses are appreciated, these types of courses need extra effort from learners. In Bangladesh, self-learning is not a common practice among school students due to the social, cultural practices. Thus, students often find this class content difficult to comprehend and become demotivated for it.

Also, minimal presentation in the videos also failed to engage the students in the course. The participants were mostly visual and aural learners (Chen and Wang, 2021) since they learn more through visual and auditory elements. The learning style, therefore, facilitated the learners to remain in their learning style preferences. Since Bangladeshi classrooms mostly has a teacher centred lecture based approach, the interaction can be minimal. As a result, the absence of classroom discussion in online classroom was not identified by most students. If technology is used in an interesting and student-friendly way, the students are more motivated to attend the classes and perform better.

This research has found out that meeting the expectation level of the learners is vital for effective education. Most of the participants attended online classes of their educational institution or attended courses in different platforms which introduced them to the uniqueness

of diverse technological features. Especially animation, videos, music are highly enjoyed by young learners and is regarded as an efficient tool for online education (Vagg et al, 2020). It can also be assumed that previous experiences led the participants to set a higher expectation level for online education. Knowing the expectations of the students can help an educational platform to understand the audience and instruct them accordingly.

Lack of technological advancement as an online platform is also a major disadvantage to provide quality online education. In the recent years, MOOCs have introduced a diverse set of educational instruments, such as online badges for commenting on discussion board, with the proper execution of technology enhanced assessment. The innovation of achievement can be viable alternative form of qualification is at an early stage (Timmis et. al, 2016). In addition, formal certification of achievement can also encourage the students to attend the courses.

The course lecture planning, material development and syllabus designing of 10 Minute School lacked transparency and efficiency. The videos were not updated with time, rather it was hidden when the syllabus changed. The online courses of 10MS was lecture-based classes with no scope for virtual activity, which is a reason for online education failure in Bangladesh (Islam, 2021). Lack of quality was visible while the researcher could not find any information on quality controller. Although national curriculum has a strict syllabus, 10MS has added more subjects to align with private school syllabus. However, these courses only serve the students of Bengali version since there is no translation of terms of subtitles for English version school students. The abundance of English version facilities, apparently, excluded a number of Bangla medium students.

There was no evidence of any sort of assessment which failed to confirm the success of learners' knowledge. Using technology in assessment creatively may even lead to a beneficial 'wash-back' effect on curriculum priorities and design (Timmis et. al, 2016). Participants did not find the course reliable as their progress was unknown due to lack of evaluation.

The course materials' durability is another issue. During the time of this research, the national curriculum was changed but the course videos were removed instead of being updated. Moreover, 10MS had more free educational courses and free quizzes for every class and grades earlier which are unavailable now. Since they have introduced paid courses, the facilities of the free courses have been reduced.

Overall, the free 10MS educational courses did not satisfy the learners and the resulting dissatisfaction has not only impacted users' experience but has also led to a potential loss of future distance education platform. To regain learners' trust and satisfaction, it is crucial for the platform to address these issues promptly and effectively, investing in technical improvements, enhancing learners' experience, and focusing on quality from an educationist's perspective.

Chapter 5

Conclusion and Recommendations

5.1 Conclusion

10 Minute School has undoubtedly influenced the perceptions regarding online education among natives and taught millions of students to date. This paper aimed to evaluate the quality of the free online courses of 10 Minute School. The findings of the paper suggest that the quality of education is unsatisfactory and often ineffective for students. This has resulted in dissatisfied learners and potential long-term consequences for online education. The analysis suggest that 10 Minute School needs to focus on the student experiences more. Results of this research can lead to the overall distance education scenario of Bangladesh with further intensive research.

5.2 Recommendations

Based on the findings the researcher proposes a few recommendations to improve online education. Firstly, the instructors and authorities need to ensure course quality over quantity with the help of an education analyst. Formative assessments should be included in the course to ensure the successful transfer of education. Secondly, the government should intervene in the online education sector for effective policies. Thirdly, students from the rural area have to be encouraged and given access to online education. Finally, it is recommended that further research be conducted in related areas to provide a more comprehensive understanding to develop online education.

References

- Ahmed, M. (2023, January 17). Education in budget 2022-23: Small mercies and dashed hopes. *The Daily Star*.
- Alam, M. S., & Islam, Y. M. (2008). Virtual interactive classroom (VIC) using mobile technology at the Bangladesh Open University (BOU). *Development, 121*, 20.
- Alamri, W. A. (2019). Effectiveness of qualitative research methods: Interviews and diaries. *International Journal of English and Cultural Studies, 2*(1), 65-70.
- Al-Fraihat, D., Joy, M., & Sinclair, J. (2021). Exploring the alignment between learning outcomes and assessment in a distance education programme. *Innovations in Education and Teaching International, 1*-10.
- Amit, S., Karim, R., & Kafy, A. A. (2022). Mapping emerging massive open online course (MOOC) markets before and after COVID 19: A comparative perspective from Bangladesh and India. *Spatial Information Research, 30*(5), 655-663.
- Baldwin, S. J., & Ching, Y. H. (2019). An online course design checklist: development and users' perceptions. *Journal of Computing in Higher Education, 31*, 156-172.
- Cal Poly. (n.d.). *Human Resources & Academic Personnel Services*. Instructional Observation Guide Asynchronous Online: Narrative Version, Human Resources & Academic Personnel Services. <https://hraps.humboldt.edu/instructional-observation-guide-asynchronous-online-narrative-version>
- Charmaz, K., & Thornberg, R. (2021). The pursuit of quality in grounded theory. *Qualitative research in psychology, 18*(3), 305-327.

- Chen, W., & Wang, Q. (2021). The effect of learning styles on students' perceived learning outcomes in an online learning environment. *Journal of Educational Technology Development and Exchange*, 4(1), 1-16.
- Chirikov, I., Semenova, T., Maloshonok, N., Bettinger, E., & Kizilcec, R. F. (2020). Online education platforms scale college STEM instruction with equivalent learning outcomes at lower cost. *Science advances*, 6(15), eaay5324.
- Coetzee, S. A., & Rouhani, S. (2020). Peer assessment as a means to promote the achievement of learning outcomes in distance education. *Australasian Journal of Educational Technology*, 36
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.
- Dutta, S., & Smita, M. K. (2020). The impact of COVID-19 pandemic on tertiary education in Bangladesh: students' perspectives. *Open Journal of Social Sciences*, 8(09), 53.
- Elizondo-Garcia, J., & Gallardo, K. (2020). Peer Feedback in Learner-Learner Interaction Practices. Mixed Methods Study on an xMOOC. *Electronic Journal of e-Learning*, 18(2), pp122-135.
- Hung, S. Y., Yu, W. J., Liou, K. L., & Hsu, S. C. (2009). Exploring e-learning effectiveness based on activity theory: An example of asynchronous distance learning. *MIS REVIEW: An International Journal*, 15(1), 63-87.
- Husband, G. (2020). Ethical data collection and recognizing the impact of semi-structured interviews on research respondents. *Education Sciences*, 10(8), 206.
- Islam, Dr. Md. Nazmul, "MOOC Based Teaching-Learning Initiatives in Bangladesh" (2021). *Library Philosophy and Practice (e-journal)*. 6771.

- Kader, R. (2022). *Bangladesh Tech Briefng: 12 Observations about EdTech Market in Bangladesh Plus Dorik, Evaly, Shikho, and Tap*. Future Startup
- Kalkan, E., & Akbulut, Y. (2021). The relationship between computer self-efficacy and academic performance of online students. *Journal of Education and Practice, 12*(3), 14-19.
- Kehrwald, B. (2008). Understanding social presence in text-based online learning environments. *Distance Education, 2* (1), 89-106.
- Kelas terhadap Prestasi Belajar Siswa di SMK Negeri Kecamatan Tanete Riattang, Kabupaten Bone. *Jurnal Ad'ministrare, 5*(2), 137–146.
- Kentnor, Hope. (2015). Distance Education and the Evolution of Online Learning in the United States. *Curriculum and Teaching Dialogue, 17*(1). 15-41.
<https://ssrn.com/abstract=2643748>
- Khalil, M., & Ebner, M. (2019). Effects of online discussion forums on student learning in a distance education course. *Journal of Computer Assisted Learning, 35*(3), 260-273.
- Khan, M. S., Nambobi, M., & Ali, M. S. (2018). MOOCs in TVET Sectors of Developing Countries: Benefits, Possibilities, and Challenges. In F. Giuseffi (Ed.), *Emerging Self-Directed Learning Strategies in the Digital Age* (pp. 22-47). IGI Global.
<https://doi.org/10.4018/978-1-5225-3465-5.ch003>
- Koehler, M. J., Mishra, P., Kereluik, K., Shin, T. S., & Graham, C. R. (2014). The technological pedagogical content knowledge framework. In Handbook of research on educational communications and technology. *Springer. 101-111*

- Krijtenburg-Lewerissa, K., Pol, H., Brinkman, A., & van Joolingen, W. (2021). Prior knowledge of potential energy and the understanding of quantum mechanics. *Physics Education*, 57(2), 025012.
- Lai, C. H., & Lin, Y. H. (2019). The role of motivation in shaping students' online self-regulated learning. *Journal of Educational Technology Development and Exchange*, 2(1), 1-13.
- Li, Q., Chen, W., & Liang, Y. (2021). The impact of students' learning styles on their satisfaction with online learning. *Journal of Educational Technology Development and Exchange*, 4(1), 17-28.
- Li, X., & Liang, Y. (2019). The impact of computer self-efficacy on online students' academic performance and persistence. *Journal of Online Learning and Teaching*, 15(2), 142-153
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Higher Education*, 9(3).
- Majumder, C. (2019). SWAYAM: The Dream Initiative of India and its uses in Education. *International Journal of Trend in Scientific Research and Development*, 3, 57-60.
- Preece, J., Maloney-Krichmar, D. and Abras, C. (2003). History of Online Communities In Karen Christensen & David Levinson (Eds.), *Encyclopedia of Community: From Village to Virtual World*. Thousand Oaks: Sage Publications, 1023-1027.
- Martin, F. G., Park, J., Lee, Y., & Kim, Y. (2019). The impact of prior experience on student success and satisfaction in higher education. *Journal of Educational Technology Development and Exchange*, 3(1), 1-17.

- Palvia, S., Aeron, P., Gupta, P., Mahapatra, D., Parida, R., Rosner, R., & Sindhi, S. (2018). Online education: Worldwide status, challenges, trends, and implications. *Journal of Global Information Technology Management*, 21(4), 233-241.
- Park, H. S., Kim, Y. J., & Lee, J. H. (2020). The impact of motivation on students' satisfaction and participation in online learning. *Journal of Educational Technology Development and Exchange*, 3(3), 1-15.
- Proudfoot, K. (2022). Inductive/Deductive Hybrid Thematic Analysis in Mixed Methods Research. *Journal of Mixed Method Research*.
<https://doi.org/10.1177/15586898221126816>
- Puspitarini, Y. D., & Hanif, M. (2019). Using Learning Media to Increase Learning Motivation in Elementary School. *Anatolian Journal of Education*, 4(2), 53-60.
- Ramlatchan, M., & Watson, G. S. (2020). Enhancing instructor credibility and immediacy in online multimedia designs. *Educational Technology Research and Development*, 68(1), 511-528.
- Shea, P., & Bidjerano, T. (2009). Community of inquiry as a theoretical framework to foster “epistemic engagement” and “cognitive presence” in online education. *Computer and Education*, 52, 543-553.
- Smith, J., Brown, K., & Johnson, T. (2021). The relationship between motivation and online learning performance of high school students. *Journal of Educational Technology Development and Exchange*, 4(2), 1-11.
- Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education*, 15

- Tabassum, M., Mannan, S. E., Parvej, M. I., & Ahmed, F. (2021). Online education during covid-19 in bangladesh: University teachers' perspective. *Aquademia*, 5(1), ep21005. Technology at the Bangladesh Open University (BOU).
- Taherdoost, H. (2019). What is the best response scale for survey and questionnaire design; review of different lengths of rating scale/attitude scale/Likert scale. *Hamed Taherdoost*, 1-10.
- The University of Phoenix (n. d.) The University of Phoenix history. <http://www.distancelearninghq.com/learningresources-universityofphoenix.html>
- Timmis, S., Broadfoot, P., Sutherland, R., & Oldfield, A. (2016). Rethinking assessment in a digital age: Opportunities, challenges and risks. *British Educational Research Journal*, 42(3), 454-476.
- Tu, C. H., & McIsaac, M. (2019). The impact of students' attitudes on their satisfaction and academic performance in e-learning environments. *Journal of Educational Technology Development and Exchange*, 2(2), 1-17.
- Vagg, T., Balta, J. Y., Bolger, A., & Lone, M. (2020). Multimedia in education: what do the students think?. *Health Professions Education*, 6(3), 325-333.
- Wallace, R. (2003). Online learning in higher education: A review of research on interactions among teachers and students. *Education, Communication & Information*, 3(2), 241-280.
- Wang, Q., & Chen, W. (2017). A meta-analysis of the impact of prior online learning experience on student outcomes in online higher education. *Journal of Educational Technology Development and Exchange*, 10(1), 1-17.

Watters, A. (2021). *Teaching machines: The history of personalised learning*. Cambridge,

MA: MIT Press

Yang, J., Yu, H., Chen, S. J., & Huang, R. (2014). Strategies for smooth and effective cross-cultural online collaborative learning. *Educational Technology & Society*, 17(3), 208-221.

Yuan, J., & Kim, C. (2014). Guidelines for facilitating the development of learning communities in online courses. *Journal of Computer Assisted Learning*, 30, 220-232.

Zeng, Y., Kinshuk, & Chen, W. (2020). The impact of students' learning styles on their online learning experience. *Journal of Educational Technology Development and Exchange*, 3(2), 1-15.

Appendices

Appendix A.

Interview Questionnaire for students

1. Name of school
2. What class do you read in? What is your age?
3. Why did you decide to join the online classes of 10-minute school?
4. How many courses did you complete on this platform?
5. What are the courses and when did you complete those?
6. Did you attend online classes before?
7. Since COVID you have attended online classes before, so this might not be absolutely new for you. How did you feel during class? How would you compare this course with the online classes you did before?
8. Did you know the instructor before? If the answer is no, then did you ever communicated with the instructor about the lesson?
9. How were his/her teaching skills according to you? Can you remember any activities from the lesson?
10. Was the course following your school syllabus or the national curriculum? Did the online lessons have different/more/less topics than your school classes?
11. What did you do when you had some confusion about a topic?
12. Did you ever feel curious about any issue after doing this online class?
13. Can you mention some of the things you have learned from this course?

14. Do you think this course can be a substitute for your private classes or coaching or school lectures?

15. How was your overall experience? Would you suggest this course to others?

Appendix B
Observation Checklist

Table 2*Structure of the course*

Structure of the course						
Observation Criteria	Examples/Descriptors	Observations				
		1	2	3	4	5
Course materials are posted in an orderly, organized fashion	Course content is organized into clear, manageable chunks					
	The instructor provides clear information regarding access to technology and related resources required in the course					
Clear statement of the objectives	Goals/objectives are stated clearly for each video lessons					
Reviews or mentions prior class materials	Video lecture reviews prior learning objectives and previews the current lesson and learning outcome					
Effectively uses online course management systems and communication tools to facilitate student learning	Course description format of the course					
	Guides to be a successful online student					
	includes multiple formats for student communication (zoom, email)					
	availability information, brief biographical information, and a picture of the instructor					

Table 2: Structure of the course

Table 3*Active and Engaged Learning*

Active and Engaged Learning						
Observation Criteria	Examples/Descriptors	Observations				
		1	2	3	4	5
Answers questions clearly and intentionally	Considers opportunities for multiple forms of expression in discussions, e.g., vocal, physical, writing, etc					
	The instructor provides clear information regarding access to technology and related resources required in the course					
	Motivates them to use their reasoning skills					
Incorporating students' prior knowledge in class activities	Surveys students on prior knowledge, experience, etc					
	Links assignments, activities, and lectures to know about students' prior knowledge					
Establishes effective pedagogies for interactive learning	Implements frequent activities that require students to engage with peers					
Facilitates online discussion boards	Facilitates engagement with the course goals					

Table 3: Active and Engaged Learning

Table 4*Credibility and Content Knowledge*

Credibility and Content Knowledge						
Observation Criteria	Examples/Descriptors	Observations				
		1	2	3	4	5
Demonstrates depth of subject knowledge	Includes a diverse set of scholarly examples					
	Reflects on disciplinary perspectives and learning					
	Proposes multiple ways, formulas or perspectives to solve a question					
Introduces/discusses historical development and context of discipline	Talks about diverse disciplinary contributions, including but not limited to cultural practices, indigenous knowledge, historical contexts of knowledge production					
Resourceful	mentions various book, websites for reading or testing the subject knowledge					
Demonstrates openness to student input	encouraging multi-logical thinking, practicing perspective taking					

Table 4: Credibility and Content Knowledge

Table 5*Presentation*

Presentation						
Observation Criteria	Examples/Descriptors	Observations				
		1	2	3	4	5
Presents information in a clear and understandable manner	The course is simple and obvious to navigate					
	Information is offered in multiple forms, e.g., video, text, interactive puzzles/games, etc					
Engages with class and responds to changes in student attentiveness	Shares personal experiences on relevant issues					
	Communicates a sense of enthusiasm and excitement					
Clear video and audio	maintains appropriate voice tone throughout the class					
	incorporates interesting videos					
Materials adhere to Universal Design Learning (UDL) principles	Materials integrate multiple identities through cultural histories, local histories, and contributions					
	Includes a variety of instructional materials without relying on one content type					
	Materials created by the instructor or from external sources are in formats that are accessible to students with disabilities					

Table 5: Presentation

Table 6*Assessment*

Assessment						
Observation Criteria	Examples/Descriptors	Observations				
		1	2	3	4	5
Diverse assignments	Multiple types of assessments are included					
	assessments occur frequently throughout the duration of the course					
Proper rubrics are provided	assessment guidelines/criteria					
	Examples of standard work should be shown					
Feedback sharing	Learners have an opportunity to provide feedback on course design					
	discussion boards, forums					

Table 6: Assessment