Mobile-Assisted Language Learning in Secondary Level Schools in Bangladesh

By

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requirements for the degree of Bachelor of Arts in English

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Declaration

It is hereby declared that

1. The thesis submitted is my own original work while completing degree at BRAC University.

2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The thesis does not contain material that has been accepted or submitted for any other degree or diploma at a university or other institution.

4. I have acknowledged all main sources of help.

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Approval

The thesis titled "Mobile Assisted Language Learning in Secondary Level Schools in Bangladesh," submitted by Shamsia Saima Mumu (ID: 16103017) of Fall 2021, has been accepted as satisfactory in partial fulfillment of the requirement for the degree of Bachelor of Arts.

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Ethics Statement

All the ethical issues had been maintained while conducting this study and those are discussed

in detail in the methodology section.

Abstract

Mobile learning has been applied to higher studies in developed countries for more than a decade to ensure a smooth, effective and trouble-free teaching and learning process. Advanced technology has played a vital role in digital learning. This study explored the scenarios of mobile learning in secondary level Bangla medium schools in Bangladesh. It showed the students' reaction or how they feel about it towards mobile learning after they have experienced it. In addition, it also focused on students' perceptions of using mobile devices as their learning tool. Along with this, this study discussed the problems of implementing mobile learning in secondary-level schools in Bangladesh. At the same time, this study tried to give some suggestions and solutions to the implementation problem. This study adopted a qualitative multiple case study research method and the researcher used the purposive technique to collect data and analyse those data. The researcher did member checking, inter-rater reliability, and triangulation to establish credibility and trustworthiness. Moreover, students' perceptions of different aspects of mobile learning, the problems of implementing digital learning and solutions to it have been discussed in this study. The final result showed that students have positive reactions and perceptions towards mobile learning. However, it had some negative sides too. Nevertheless, the findings of this study will be useful for teachers, policy makers, trainers and so on to implement this new way of learning in Bangladesh.

Keywords: mobile learning, digital learning, inter-rater reliability, triangulation, credibility.

Dedication

I would like to dedicate my work to my family, who were my constant support, my dedicated teachers who always gave me proper guidelines, and one of my friends, Sudipto, who constantly motivated me.

Acknowledgment

Firstly, I would like to thank Almighty Allah for everything I have in my life. Then, I would like to thank my parents for their constant support, unconditional love, and care and for guiding me in the right way.

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List of Acronyms

MALL – Mobile Assisted Language Learning

CALL – Computer Assisted Language Learning

DL – Digital Learning

EFL – English as a Foreign Language

ESL – English as a Second Language

SDL – Self Directed Learning

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The effect of ICT in schooling has been demonstrated globally in different examinations as it can make educating and learning seriously fascinating, persuading just as significant (Chapelle, 2001). In spite of utilising PCs, cell phones are believed to have demonstrated as likely devices are expanding the learning of the language. As of now, innovation in the language classrooms has been noted for the development of talking, composing, tuning in, and understanding abilities (Zurita & Nussbaum, 2004). Along these lines, innovation is fundamental for improving students' accomplishment, commitment, and general cooperation in language learning (Cobb et al., 2010). Moreover, innovation likewise gives students limitless admittance to various assets that work with language learning. In English language teaching and learning, Computer-Assisted Language Learning (CALL) and Mobile-Assisted Language Learning (MALL) are the overwhelming regions that mirror the reception of innovation to help English language learning. Both CALL and MALL have affected language acquisitions that recognise a modern language classroom and a conventional language classroom instructing and learning English. Today, versatile innovation is changing the scene of language learning and is viewed as the following outskirts being investigated for its potential in improving the teaching and learning of the English language.

The transportability of cell phones is expected to bring new strategies that can shape learning styles and instructional methods that could be more customised and permit students to learn progressing (I Solé, Calic & Neijmann., 2010) hence upgrading the English language teaching and learning. The unique idea of cell phones and their transportability recommend that cell phones for learning

might have much greater potential than e-learning (Cheung & Vogel, 2013). The possible advantages of utilising cell phones for learning have been broadly promoted for a scope of purposes that incorporate expense reserve funds, universal interchanges, and area-based administrations (Cheon et al., 2012). The utilisation of cell phones for learning is becoming broad, and exploration in this space is earnestly required (Economides and Grousopoulou 2009); numerous scientists have examined the utilisation and adequacy of cell phones for second language learning (Stockwell, 2007; Chen and Chung, 2008), and until now, Mobile-Assisted Language Learning (MALL) has kept on drawing in light of a legitimate concern for a few analysts. Despite that, Mobile-Assisted Language Learning (MALL) is as yet thought to be one of the new exploration regions in language teaching and learning (Mthethwa, 2014).

For learning English as a subsequent language, the cell phone is a decent mode for drills and practices for jargon, English articulations, and techniques in English correspondence (Kwon and Lee, 2010). Since portable innovation could be a productive go-between for improving English language learning, Mobile-Assisted Language Learning (MALL) is proposed to help students' adapting needs to accomplish the objective requirements of their English language courses.

History of MALL

The historical backdrop of MALL started with research by Twarog and Pereszlenyi-Pinter during the 80s, which saw mobile-assisted language learning. They utilised phones to furnish far-off language students with help and input (Twarog and Preszlenyi Pinter, 1988). Mobile-Assisted Language Learning (MALL) has been created over the previous decade as a field inside its right, with an expanding number of articles that look at different cell phones utilised in conditions both inside and outside of formal language learning. Kukulska-Hulme and Shield (2008), in an outline of Mobile-Assisted Language Learning, have characterised MALL as formal or casual learning

intervened through handheld gadgets that are possibly accessible for use whenever, anyplace. Handheld gadgets incorporate cell phones and tablet PCs with Internet ability and different devices without Internet access like electronic word references, MP3 players, and game players. There has been a shockingly huge measure of examination distributed in the course of recent many years that have seen the field create alongside the gigantic strides forward that have occurred in MALL.

1.2 Mobile Assisted Learning and its Design

Since mobile learning or learning through mobile has become so common nowadays, especially in the pandemic, it is even more essential to demonstrate a framework for mobile learning. The following diagram is proposed by Killilea (2012), Levert (2006), Mayer (2001), which is a collective synthesis of the critical factors and principles of mobile learning.
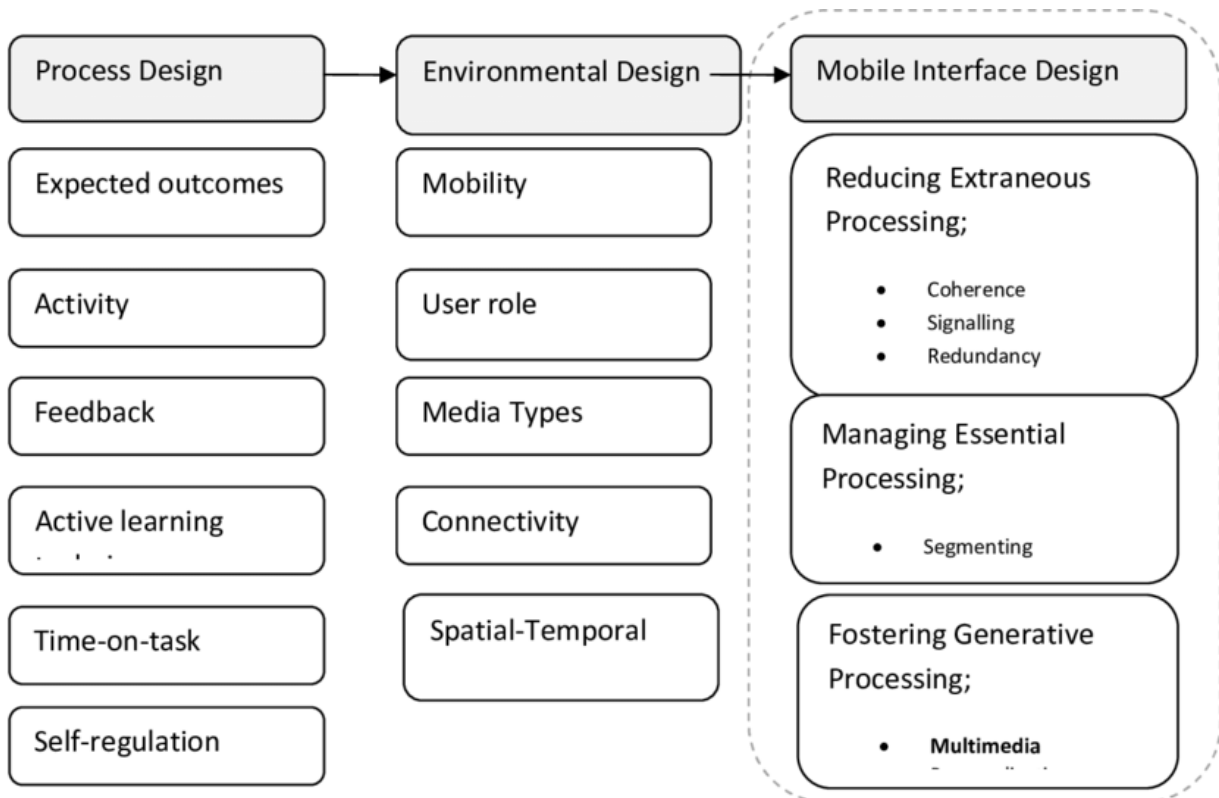

Figure 1: Mobile learning design. Adapted from Bartolomé & Steffens, 2011; Killilea, 2012; Kukulska-Hulme & Traxler, 2013;Naismith & Corlett, 2006; Parsons et al., 2007; Mayer, 2001; Levert, 2006.

Three design dimensions can be identified as process design, environmental design, and mobile interface design. The process design is the process that shows how a learner is recruited and engages in the course of mobile learning. It considers essential elements like activity, expected outcome, feedback, techniques, and so on. (Killilea, 2012; Kukulska-Hulme & Traxler, 2013).

1.3 Statement of the Problem

Like the current worldwide Coronavirus emergency, the seasonal influenza pandemic of 1918 constrained the closure of schools, colleges, and universities and overall carried an end to formal teaching and learning. A significant distinction between then, at that point, and present is that there was no chance around to move the teaching and learning process on the web. Besides, even in the current period, versatile learning has truly just become commonly usable and pervasive over the most recent twenty years, through the expanded availability, usefulness, and transportability of cell phones. (Hall, et al. 2020)

English language teaching and learning classrooms are no exception to the situation mentioned above. The availability of mobile learning may help both teachers and students in order to continue this teaching and learning process. Developed countries have already taken the necessary measures to fill the gap due to the Covid-19 pandemic. Unfortunately, being a developing country, Bangladesh and many other Asian countries face problems promoting and conducting online-based teaching and learning for the whole system. (Biswas, Roy & Roy, (2020).

In this case, Mobile Assisted Language Learning can be an excellent way to improve Bangladesh's secondary level teaching and learning process. Moreover, teachers and students can learn new techniques in the education sector through mobile learning, and it will fasten the speed of learning the English language. In addition, they will get to know how they can utilise their every second at

any place. To know the effectiveness of MALL, we need to know about the students' and teachers' perceptions towards MALL and what challenges they face while they use mobile as a learning tool. Thus, this study aims to find out the perceptions of secondary-level Bangladeshi students towards MALL. The findings will help plan to establish Mobile learning in Bangladeshi classrooms and outside the classroom.

1.4 The central objective of the Study

The primary purpose of my study is to find out the Bangladeshi students' perceptions of mobile-assisted language learning and how it benefits the students in learning the English language.

1.5 Research Questions

The following research questions will be answered in the study:

1. How do the students react to the English language lessons through mobile phones?
2. What do the students think about using mobile in English language learning?
3. What could be the challenges of implementing mobile-based learning in Bangladesh?

1.6 Scope of the Study

The study explores how the students respond to mobile learning at the secondary level. There has been a limited study on this aspect in Bangladesh though it is a common and old topic for the developed countries. Through this study, the researcher explored the students' perceptions of MALL and how they use mobile to learn the English language. This study attempts to understand how secondary-level school students accept mobile phones as a learning tool in English language classrooms. Though the study has been designed for secondary level students of Dhaka, its scope is broader because it can be used for any other mobile learning-based classroom from the students' perspective, even in other developing countries in the world. The reason for choosing Dhaka is

that the mobile network and internet speed are much more stable in Dhaka than in rural areas in Bangladesh. As a result, the researcher has chosen students from renowned schools of Dhaka so that the data collection procedure becomes more accessible for the researcher.

1.7 Limitations of the Study

The study did have some unavoidable limitations. One of the significant limitations of this study was the data collection procedure. The observation part was not completed since all the schools are closed for the pandemic situation. This is why it was not possible for the researcher to go on a field visit to observe the students' reactions. At the same time, due to the covid situation, the researcher could not collect data from students who live in rural areas as they do not have a stable network over there. As a result, it was not possible to adopt the quantitative method for this study. However, further studies can be done on this topic adopting the quantitative approach or mixed-method.

1.8 Significance of the Study

In this study, very little research has been conducted in Bangladesh on mobile-assisted language learning. This research is targeted to fulfill the gap by knowing secondary level students' perceptions towards mobile learning. In addition, this research also focuses on the modern English language techniques, whether the students can follow these techniques and solutions to the shortcomings that students face. Hence, this study will be significant for students who prefer online learning rather than traditional learning and have the willpower to learn a new language without attending language classes physically. They will be able to know how they can convert their mobile devices into learning tools. By knowing this, they can prepare themselves, guide themselves and solve their problems all by themselves. At the same time, this research will also be helpful for

teachers to know students' perceptions towards online or mobile learning. Teachers can also know what challenges the students face, and they can take necessary measures according to students' shortcomings. As a result, the teaching and learning process will be much more effective. At last, by fulfilling the research gap, this study will open up a new dimension for researchers who want to do further research on mobile-assisted language learning.

1.9 Definition of Key Terms

Mobile-Assisted Language Learning (MALL): Mobile Assisted Language Learning is a learning process where students use mobile devices as their learning tool.

Computer-Assisted Language Learning: Computer Assisted Language Learning is learning through computers or laptops where students solve their study problems using a computer.

Digital Learning: Digital learning is conducting the teaching and learning with digital technology gadgets.

CHAPTER TWO

REVIEW OF RELEVANT LITERATURE AND RESEARCH:

2.1 Introduction

The essential focal point of this investigation is to see if MALL can encourage four abilities of language among EFL students or it tends to be utilised as a language learning device. Along these lines, this study examines applicable hypotheses and academic articles identified with MALL and shows procedures for cultivating four abilities of the language. The section likewise targets finding a gap in the writing with respect to encouraging four abilities of language utilising cell phones and features how this examination is tremendous for filling that gap.

Part 1: Mobile Assisted Language Learning discusses the concept of MALL, relevant hypotheses of instructing and acquiring four abilities of language with the help of cell phones, and its significance in the field of education.

Part 2: Advancing Mobile Assisted Language Learning or m-learning in Classrooms examines a few methods to advance MALL or m-learning in study halls or outside study halls.

Part 3: Bangladesh perspective on Mobile Assisted Language Learning shows various instances of advancing four abilities of language among EFL students to demonstrate a gap of information in the insightful article regarding four abilities of language in academic classes. It likewise examines the difficulties teachers and students face while showing four abilities of language and mastering those abilities inside and outside educational classrooms.

2.2 Part 1: Mobile Assisted Language Learning

Quite possibly, the latest changes in English language teaching have been the utilisation of cell phones. Mobile-Assisted Language Learning (MALL) is language discovery that is helped or improved using a handheld cell phone. MALL has advanced to support students' language learning with the expanded utilisation of portable advances like cell phones, MP3 and MP4 players, PDAs, and gadgets like the iPhones or iPads. With the help of MALL, students can get to language learning materials and speak with their teachers or trainers and companions whenever they want at any place (Turc, 2017).

2.2.1 The concepts of Mobile Assisted Language Learning

Mobile-Assisted Language Learning (MALL) has been created as a high-level ground inside its own right over the past decade, and it is acquiring acknowledgment everywhere. There are different issues and studies on mobile learning for explicit language abilities like speaking, listening, vocabulary, writing, reading, and grammar (Guerrero et al., 2010; Suneetha, 2013; Lee & Kim, 2013).

Mobile-assisted language learning is a replacement of Computer-based language learning. It is a different stage in second and unknown dialect learning. M-learning analysts are yet discussing the meaning of portable or m-learning. In any case, they seem to concur that m-learning ought not to be compared to simply learning with cell phones (Turc, 2017).
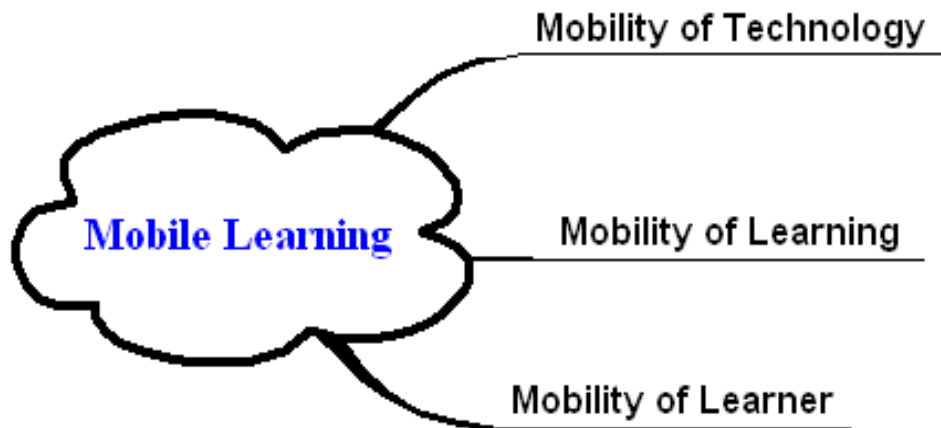
Figure 2: The concept of Mobile Learning. (Kulska-Hulme, 2008)

The above figure is a realistic delineation of the three ideas of mobile learning that can pass on a more significant level of instructive guidance. The ideas of mobility can be partitioned into three critical regions which, are mobility of technology, mobility of learning and, mobility of learner (Karim, Abu, Khaja, 2017).

2.2.2 Characteristics of MALL

Different researchers have attempted to find out the main characteristics of MALL and come to a point about the certain features of this way of teaching. For instance, Klopfer, Squire and Jenkins (2002) have shown distinctive characteristics of mobile-assisted learning, which are - portability, social interactivity, context sensitivity, connectivity, and individuality. They have claimed that mobile learning is effective because students can carry it with them because of its small size; they can share and exchange information, data collection using a shared network at any time and any place and, the most important is, the individual learner can use it individually depending on their learning ability.

After that, Chaka (2009) has mentioned some particular characteristics for MALL while he has declared that future language learning would be more dependable on Mobile Assisted Language Leaning (MALL) than Computer Assisted Language Learning (CALL). Chaka (2009), in his paper, said, "the distinctive characteristics of MALL which include mobility, ubiquity, connectivity, portability, handheld ability, convergence, multi-functionality, cross-platform blending, optionality, convenience: access, accessibility, availability, affordability, context awareness, personalization and flexibility" (p. 23). In addition, Huang and Sun (2010) stated that there are two principal qualities of cell phones are portability and connectivity, where connectivity is having the capacity of being associated and spoken with the learning site by using mobile devices which, includes short message service (SMS) and portable email and at the same time, portability empowers students to move cell phones and bring learning materials at any place.

Finally, Miangah and Nezarat (2012) identified that mobile or m-leaning is an informal way of learning which is spontaneous and can be incorporated individually for all. The researchers have also found that the physical characteristics of mobile phones, such as their size, weight, applications, keypad, touchpad, screen size, audio and video functions so on.

2.2.3. Advantages of MALL

Nowadays, institutions, teachers, even students prefer digital learning over traditional learning, specifically mobile learning, because of its multiple advantages. First of all, perhaps the most significant benefits of MALL approaches are portability. Students can contemplate whenever and wherever they prefer. They can attend the learning session at any place when the time is feasible for them (Klopfer, Squire & Jenkins (2002). At the same time, Moreover, MALL also supports collaborative learning, which is regularly carried out through Web 2.0 advancements like Twitter, Facebook, and YouTube (Stockwell, 2012). Thornton and Houser (2005) have shown that cell

phones could be viable devices for conveying language learning materials to students since it they have many benefits, such as – adaptability, minimal expenses, little size and, ease of use.

In addition, another benefit of cellphones and their applications is that they are frequently less expensive than computers. This implies that the utilisation of MALL approaches can be helpful for saving money and they explicitly take students' decisions into consideration to foster their language ability. Finally, Mobile Assisted Language Learning enables Self Directed Learning (SDL) which means students experience tendencies to learn by himself/herself. Through this, students get motivated by themselves and this shows a positive effect on learning and helps to enable cognitive learning experience (Sam & Shalini, 2021)
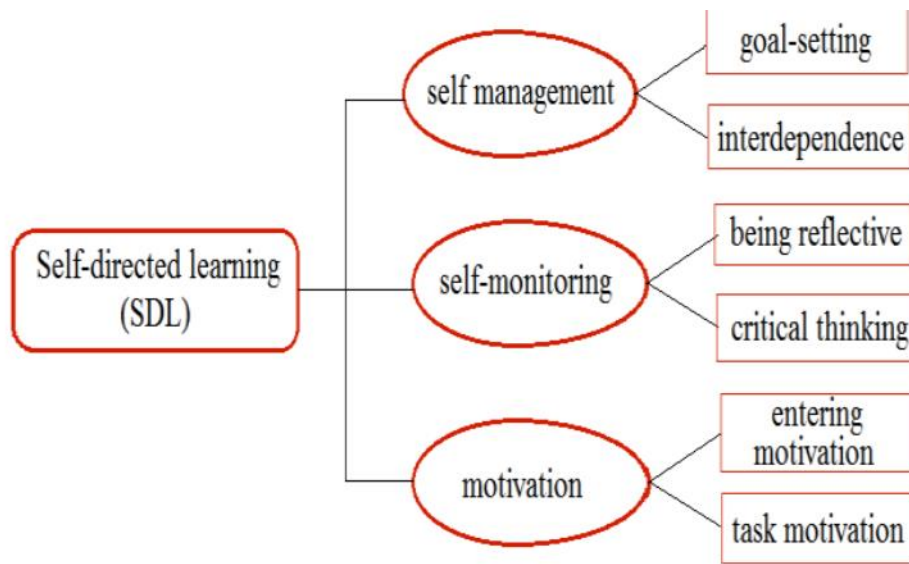
Figure 3: Dimensions of Self-Directed Learning (SDL)

Self-directed learning (SDL) is a learning process where the learners take the initiative of learning something by themselves, with or without help from other individuals. It has three dimensions, which are – self-management, self-monitoring, and motivations; and these dimensions help

learners to set a goal, to work independently, to become reflective, to think critically, and to motivate them to finish the task.

2.2.4. Limitations of MALL

Nowadays, technology is viewed as an incredible mode for instructing and learning measures, plays a significant part on the planet, and influences pretty much every part of teaching and learning (Mohammadi & Shirkamar, 2018). Despite having multiple advantages of MALL, it also has certain limitations. Sam & Shalini (2021) have divided the limitations into three parts. They are – Psychological, Pedagogical, and Technical.

First of all, in the mobile-assisted learning approach, since the information and notes of learning are gathered in mobile devices, students have to use mobile devices for longer hours. Using mobile devices for longer hours has some psychological effects on the human body. Scientists have shown that mobile devices release radiation which causes high blood pressure, brain tumor and other brain and oral diseases (Braune et al., 1998), infertility, eye problem, skin allergies, and many more (Shudong & Higgins (2005); Rupavate, (2016); Zukerman & Kalvin (2017); Davis (2018); Ratini (2021).

After that, the first pedagogic limitation is the mobile-assisted learning approach gives students full responsibility for learning by themselves. As a result, they lack guidance, support, and help from teachers. Since MALL inspires self-learning strategy more, teachers do not have an active role in the process of teaching a language (Sam & Shalini, 2021). The second pedagogic limitation is limited chances of supervising a test by teachers. According to Sam and Shalini (2021), administrating an online test is hard because teachers or advisors cannot actually trust the students that the answers that were sent to them are actually sent by the students themselves. It is easy to

plagiarise a test online since teachers cannot monitor the test personally, and students do it more often. The last pedagogical limitation is not completing the task in time or at all. According to Rovai (2002), more or less 20%-30% of students do not complete their course or assessment who enroll in distance learning mode or in M-learning. Students do not feel the urge to finish their assessment, or they may just lose interest in completing it because of a lack of guidance from teachers like traditional classrooms.

2.3 Part 2: Strategies of implementing Mobile Assisted Language Learning in Classrooms

This section of the chapter discusses the strategies of enabling Mobile Assisted Language Learning in classrooms. Establishing Mobile Assisted Language Learning to learn a language and foster four abilities (reading, writing, speaking, and listening) of language in classrooms needs access to technologies which includes cellphones, internet, device applications, and many more. The modern world, especially the developed countries, have already established this process of language learning using mobile phones and their advanced technology.

2.3.1. Mobile-Assisted Language Learning in Writing Classroom

Ebadi & Ghorbani (2020) examined the accuracy of the grammar structure of students with the help of mixed-method, using the chat histories that were available in Telegram. They only evaluated the grammatical structure proficiency in English and the impact of the MALL applications, in particular, Telegram, on the grammatical proficiency among the EFL learners. The findings of this research suggest that MALL applications such as Telegram can be effective for grammar learning in EFL classes. In addition, BAŞOĞLU & Akdemir (2010), Elnaz & Sasan (2011), and Wu (2015) also conducted a grammatical experiment in Iran with the help of the voice recorder application of the mobile device and Word Learning-CET4, respectively.

Along with grammar structures, prepositions are equally important to improve writing skills in a target language. Wen, Jumaat, Ashari, Na, Abdullah, Samah & Ali (2019) have intended to investigate the effect of using Mobile Assisted Language Learning (MALL) towards students' motivation and academic achievement in learning English prepositions. They have used an application named "Preposition Master" and they had three objectives in this research project, where the first two objectives were about the preparations of students and the motivation level of students; and last but not the least objective was about the progress of students. The researchers initially have identified the first two objectives and did quantitative research on thirty participants from Chinese Vernacular Primary School, and after reviewing the result, they have come to the point that "preposition Master" has a significant role in improving prepositions and with time, this achievement has improved students' motivation level, and as a result, it has enhanced students' performance too.

2.3.2. Mobile-Assisted Language Learning in Listening Classroom

Listening skill is an important skill to understand and foster a foreign language since a learner must understand the foreign language to know the meaning of a conversation inside and outside the classroom. At first, Azar & Nasiri (2014) have attempted to find out the effectiveness of mobile devices on second language listening comprehension and students' achievement on this. Both the authors have arranged multiple tests on thirty Iranian participants using mixed-method research and, in the end, they have concluded with a statement, saying cell phones are indeed an effective tool of improving listening comprehension for those learners who intend and have an interest in learning in an innovative way.

After a few years, Azeez and Bajalani (2018) have conducted quantitative research in Iraq with 57 second-year undergraduate students who were divided into two groups. They have used both pre-

test and post-test on listening skills, using mobile language technology, and finally, they made a comparison between the two test results. The main focus of this research was on students' use of their mobile devices in EFL teaching and learning context in order to improve their listening skill. The researchers got a significant difference between the two groups that shows the effectiveness of mobile-assisted language learning devices on developing listening sub-skills, and the test results have shown that the post-test score among the students was much higher than the pre-test score. Finally, the researchers have come to a conclusion that Mobile assisted Language Learning or M-learning actually has a positive effect on developing students' listening skill.

2.3.3. Mobile-Assisted Language Learning in Speaking Classroom

Moving on to the next language skill, speaking skill is one of the most important skills of a language, and it is the second language skill among four skills which is considered as an ability to communicate effectively. The second step to understanding a language completely and effectively is the ability to speak in a target language. Nguyen, Hwang, Pham & Ma (2018) have contributed to EFL speaking skill in three aspects, and those are – pedagogy, technology, and psychology. They did an experiment on two groups of students to find out the development of speaking skill using an application (ezTranslate) as a tool that supports every device to record students' location, time and activity. The result of their experiment was very promising and has shown a significant difference between the two groups in terms of developing their speaking skill, even when the students are walking or roaming around in their familiar and comfortable environment. At the same time, by conducting this experiment, the authors have also tried to find out how the application could motivate students to perform in their authentic and familiar contexts and engage students in learning. In addition to this, Kessler (2010) and Gromik (2012) have analysed a survey and a case

study of nine participants in Japan on improving speaking skill using an MP3 player and video recorder application of mobile phone devices, and it has the same positive outcome.

2.3.4. Acceptance of Mobile Assisted Language Learning

Mobile-Assisted Language Learning or M-Learning is a very common way of teaching and learning method in the world. The western world or the developed countries have already accepted this innovative form of learning and teaching, and at the same time, their perception towards MALL is very much positive. To support this statement, Campigotto, McEwen and Epp (2013) stated that iOS devices affect the attention and motivation level of special needs students, but in a positive way. They conducted the study in quantitative method with the help of iOS devices and *Myvoice* application, and their result has shown the positive outcome on student perception of success and this increased self-confidence among these special needs students, which enhances the classroom experience.

After that, Liu, Lu and Lai (2016) reviewed their article using the qualitative method with the help of existing 24 journal articles which investigate the effectiveness of using mobile devices to facilitate language learning, teaching, and research and have found that most of the authors of these articles have tried to find out the effectiveness and efficiency of MALL and the approach of using mobile devices is beneficial to most of the people, yet it has some challenges for minority people. In addition, Azli, Shah & Mohammad (2018) have investigated research to find out the perception on the usage of Mobile Assisted Language Learning (MALL) in English as a Second Language (ESL) learning among vocational college students in Malaysia. They have revealed through their research that most of the respondents had positive perceptions toward the usage of mobile-assisted language learning (MALL) to both perceived usefulness (PU) and perceived ease of use (PEoU). One of the most important findings the researchers have got was most of the respondents strongly

agreed with the statement about the easiness of using MALL, which is a clear indication of the positive perception of the role of MALL in enhancing learners' English.

2.3.5 Research Gap

The existing scholarly article on promoting or accepting Mobile Assisted Language Learning in classrooms emphasised using multiple mediums of technology at the tertiary level to improve students' language ability (Campigotto, McEwen & Epp, (2013); Liu, Lu & Lai (2016); Azli, Shah & Mohammad (2018); Nguyen, Hwang, Pham & Ma (2018); Kessler (2010); Gromik (2012); Azar & Nasiri (2014); Azeez & Bajalani (2018). On the other hand, some authors have found out that along with technology, environment or surroundings plays an important role in MALL that helps students to accept the new digital way of learning. However, different authors have shown the problems students face while using mobile devices as their learning tool (Rupavate, 2016); Zukerman & Kalvin (2017); Matin (2017); Davis (2018); Ratini (2021).

Till today, very few studies have been conducted on Mobile Assisted Language Learning in Bangla medium schools in Bangladesh at the secondary level that may help students to improve their English language. So, the current study tries to fill this gap of knowledge. Moreover, the current study also attempts to find out the appropriate solutions to the problems that students face. In addition, most of the previous studies were conducted in developed countries' contexts where it is very easy to adapt technology-based learning since they are already ahead in terms of advanced technology.

2.3.6 Chapter Summary

The first part of the chapter introduced the concepts of Mobile Assisted Language Learning. Then, the second part briefly discussed and described the existing studies on promoting and accepting

technology-based learning in classrooms and various challenges students face. Finally, at the end

of the chapter, the gap of knowledge has been found, and the current study will try to give some

light on this gap.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter, the researcher discussed the steps that are being taken to conduct the study, especially the data collection procedure. Since the main focus of this study is understanding students' perspectives on using mobile devices in English language learning classes and the challenges of implementing MALL in Bangladesh. The researcher has followed the qualitative method, and she has followed multiple case study approaches in this study. The reason behind choosing this approach has been elaborately discussed in the following sections. At the same time, the qualitative paradigm and its philosophical assumptions, the process of participant selection, the researcher's role, data collection procedure, data analysis procedure, and the credibility and trustworthiness of the study have also been briefly in the following sections.

3.2 Qualitative Paradigm and Its Philosophical Assumptions

To conduct research, it is very much important to choose suitable assumptions and having a perfect research paradigm helps the researcher in analysing their collected data precisely. Pragmatism has been chosen for this study among all the research paradigms because it will help the researcher to find out the point of view of students regarding mobile learning through interviews and observation. According to Creswell & Miller (2000), pragmatism is considered as the best way to find out this problem since it lets researchers look at single and multiple realities through human experience. At the same time, Pragmatist scholars (Goles & Hirchheim, 2000, Teddile & Tashahhori, 2011) said that only through human encounters can this reality be checked. Through this paradigm, the researcher has tried to understand single or multiple realities, using the collected

data and participants' interviews where they had shared their experiences. In addition, this paradigm also lets the researcher adopt different ways of collecting data and analyse them using different lenses of pragmatic perspective (McNicholl, Ellis & Blake, 2013). Finally, the pragmatist researchers always choose one version of reality over and another version that actually fulfills their purposes, and as a result, they can use entirely qualitative or quantitative or blends these two to get the perfect outcome (Creswell & Tashakkori 2007, Teddile & Tashakkori, 2011, Wilson 2014). This is why this paradigm design is the best for this study.

Table 3.1: The Philosophical Assumptions of the study

Research paradigm		Philosophical	Assumptions	
	Ontological	Epistemological	Axiological	Methodological
Pragmatism	Various views of individual participants	Knowledge was achieved through the subjective experiences of individual participants	The researcher's value and biases were also taken into account, along with statements of participants	Qualitative Multiple Case Study

The philosophical assumptions of the study are modified from Creswell and Tashakkori's (2007) "Philosophical Assumptions with Implications for Practice'' table. The first philosophical assumption, ontology, is about the nature of reality and how the reality is being viewed through the individual participants of a study (Creswell & Tashakkori, 2007). Ontological assumptions are used as the researcher has collected data through interviews from several students about their experiences of learning the English language using mobile devices and whether they find anything helpful while in the classroom or outside the classroom. Through these interviews, the researcher

got different views of individual students as they shared their own experiences. Also, to show multiple realities in studies, qualitative researchers collect data in many forms and use them in different themes and realities along with real words of participants. Since students shared their different individual experiences, it helped the researcher to present different views of reality using different themes from participants' interviews.

According to Kaushik and Walsh (2019), the epistemological assumption for a pragmatist is knowledge being related to experience. To elaborate, through social experiences, knowledge can be achieved. Pragmatists believe that every person has different knowledge because they experience different realities (Morgan, 2014). As for this study, pragmatism has been chosen, and the researcher tried to see and analyse different knowledge perceived by different persons' experiences through their interviews. Also, for epistemological assumptions, the researcher needs to gather data by getting close to the participants in the field to understand the subjective experiences of participants (Goldkuhl, 2012). However, as the global pandemic is not permitted to conduct the study with fieldwork, the researcher tried to communicate with the participants on the telephone or through emails to get the idea of their individual experiences.

Furthermore, the axiological assumption is about the researcher's position and stating his or her own influence in the study. Through axiological assumption, the researcher has stated the role of his or her own values and biases in the research so that it clarifies the stance of the researcher. Also, it enhances the reliability and validity of the study by defining the researcher's personal values or biases over the data collection or analysing.

At last, for this study, a multiple case study approach has been chosen. Through this approach, the researcher tried to investigate the effectiveness of mobile learning in an English language classroom with multiple cases of students. In qualitative research, the researcher can explore one

or more cases to study that phenomenon in detail. For that, researchers can collect data through multiple sources. As the present situation of the Global Pandemic is not permitting to conduct the study in the field, the researcher collected data through online communication with the participants. According to Creswell and Tashakkori (2007), for multiple case studies or collective case studies, the researcher focuses on one topic and can take a few case studies to explore that phenomenon. He also adds that by following this approach, the researcher can show various points of view on that issue. Through following this multiple case study approach, the researcher tried to present a different point of view of students regarding mobile learning and the challenges of implementing MALL in Bangladesh by analysing multiple cases of students who attended classes using their mobile devices and used the device as their learning tool, which has been achieved through interviews.

3.3 Research Design

The researcher has aligned the research questions to the research design for this study. The pragmatic research paradigm has been followed for this study as it is the only paradigm that looks at one or multiple realities which are perceived through human experience. By using this paradigm, the researcher collected data from participant's interviews based on their experience to perceive single or multiple realities. The goal of the study is to find out the point of view of students regarding mobile learning, the effectiveness of MALL in Bangladeshi classrooms, and how this learning system can be implemented in Bangladesh. To explore this issue, the researcher has chosen a qualitative multiple case study approach.

A qualitative research method has been chosen as it is considered as a process of inquiry to see how people view different social problems (Creswell & Tashakkori, 2007). Also, according to Galvin (2015), qualitative research is the best method to use the studies which are concerned with

understanding participants' opinions, which best goes with this study as well. Other portions of the research design are discussed in detail in the following sections of the chapter.

3.4 The Researcher's Role

As a student of Applied Linguistics and ELT, the researcher has come across many theories and aspects of English Language Teaching; she (R) was always interested in working on something which could help Bangla medium students to develop their proficiency leaving behind the anxiety which makes their struggle harder. As the researcher also is a student of Bangla Medium background and still has hesitations in English, she (R) used to think of why after learning English for long, she (R) still struggles to express her feelings in English. In addition, the researcher has had this question in her (R) mind for a long time, what could be the reasons for Bangla medium students to be weak in English or why the majority of the students of Bangla medium are afraid of English even after studying English for a long time, from nursery to higher secondary level. It was quite rare where Bangla medium students were proficient and fluent in English. The researcher got many reasons behind it, and one of them was the teaching method and the traditional way of teaching, which were also used in her (R) studentship that was faulty. It was the way of teaching that was not technology-based. Students were never exposed to the opportunity to use English for communication inside and outside of the classroom, and it was when the researcher was in school in the early 2000s. However, the scenario has not changed much, not even in this global pandemic, though the institution which is situated in urban areas have tried to use mobile or technology-based teaching-learning and they are somewhat successful. The educational institutions are still following the same old teaching method and they are still lacking behind in terms of technology.

After that, before the pandemic, the researcher had been working as a home tutor for classes 4 and 6 for two years. During her tuition, she had seen that her students' respective institutions have

always encouraged or preferred typical teaching and learning processes instead of using any technology in their teaching process. Even amidst this pandemic situation, these institutions have not conducted their classes online since they are not familiar with this way of teaching. At the same time, all students and teachers do not have the proper technology to attend and conduct classes, and those who live in rural areas do not have a stable connection along with the proper technology. As a result, they lagged behind and could not cope with other institutions which conducted their classes online. So, the scenario is almost the same at present, which was in her (R) studentship in the early 2000s. All these reasons led her (R) to think of this topic that focused on mobile learning and the point of view of students regarding MALL.

3.5 Multiple Case Study Approach

A case study is an approach for conducting qualitative research in which the researcher can investigate one or multiple cases over time through a detailed, in-depth data collection procedure (Rowly, 2002). The researcher can use multiple ways to collect data such as interviews, observations, audio or videotaped recordings, documents and so on (Creswell, 2016). According to Yin (2018), it is appropriate to use the case study approach to investigate a recent real-life incident or event. In addition, there should be three features to follow a case study approach. Those are - investigating something which is occurring in a real-life context, having data from multiple sources and using theory to generalise the results. He also added that by following the case study approach, a researcher could understand the phenomena by studying a smaller group of the society to understand the same incident in a bigger culture or society.

To conduct the study, the case study approach has been chosen because all the above-mentioned criteria are useful to fulfill the goal of the study. At first, the main focus of the study Mobile Assisted Language Learning is real-life phenomena and it is an issue to work with people who are

related to the education sector, which goes hand in hand with the objectivity of having the approach. To fulfill the criteria of having data from multiple sources, the researcher has collected data by taking interviews of students who are from different Bangla medium schools, also by analysing video recordings.

There are mainly three types of qualitative case studies (Creswell, 2016; Muratovski, 2015). The first is the intrinsic case which is used for showing exceptional cases. Then, the single instrumental case deals with one issue at a time. After that, the multiple case study or collective case study in which researcher can investigate one issue by analysing more than one case. Yin (2018) explains that the researcher often chose this multiple case study approach so that she can show different perspectives on one issue. He also added that by using the logic of replication, the researcher could replicate the process for every case. In this study, the research considered each student's interview as an individual case to study multiple cases to analyse one phenomenon of mobile learning. In addition, the multiple case study has been chosen for this study because the researcher can have a holistic and interpretive view of the study (Duff, 2018; Stake 1995). As the researcher has tried to link up mobile learning and its core relation with students' perspectives, it represents a holistic view of this study. Also, the researcher has interacted with the students who have experienced technology-based learning or mobile learning and understands their perspectives to establish the interpretive view in this study.

3.6 Setting

Since the study is focused on mobile learning in an English language classroom in Bangladesh, the setting of this study was different schools that were situated in Dhaka, Bangladesh. The researcher did not choose one particular school so that she could get to know the point of view of different institutions' students regarding mobile learning and what challenges they face while

using mobile devices as a learning tool. However, while choosing the participants, the researcher was concerned about one thing that these students have minimum knowledge about mobile learning or technology-based learning process. As the aim of this study is to understand students' perspectives on mobile learning in secondary level classrooms, the researcher tried to contact those students whose respective institutions had at least conducted online classes during this global pandemic.

3.7 Selecting the Participants

The researcher needed to choose a suitable sampling technique to get useful data for the research. For this study, the researcher thought that the purposive snowball or chain ball technique would be the best technique, thus chose that. This particular technique is considered the best technique to get rich data from limited samples and it falls under the non-probability sampling method (Galvin, 2015). After that, Creswell (2016) states that the researcher can choose participants according to his or her non-probability method to contribute to her study. At the same time, according to Bengtsson (2016), it is actually wise to choose some knowledgeable participants who at least have some basic knowledge or some experience in the related study; as a result, the researcher will get relevant information. This is the reason why the researcher chose this purposive snowball or chain sampling technique for selecting participants. The criteria for selecting participants are given below:

First of all, all the participants have to be students of secondary level from Bangla medium schools in Bangladesh. Then, since the study is about technology-based learning where students will use their mobile devices as their learning tool, they have to have access to their mobile devices to participate in this study. Finally, the students have to contribute to this study willingly.

Usually, the number of case studies is not fixed in the multiple case study approach. It actually depends on the scope of finding relevant case studies. On the other hand, Patton (2002), Galvin (2015) and Bengtsson (2016) suggested finding and analysing data until the saturation occurs or getting the same theme from analysed data.

In the first place, the researcher planned to interview as many participants as she could, depending on the availability of participants. Then, the researcher tried to get contacts with students from different Bangla medium schools in Dhaka who are in the secondary level. The participants were quite helpful and were eager to help the researcher. In addition, they were interested and excited to be part of this study after knowing the purpose of this study.

However, it was impossible to get case studies in the first place due to Covid-19. All the schools closed in this lockdown situation, and it was quite challenging to find participants. The researcher's niece studies in a renowned Bangla medium school in class six, and she helped the researcher to get participants from different Bangla medium schools as she is friends with them. With her help, the researcher contacted them and asked their friends if they wanted to be a part of this study. This is how through the purposive snowball technique, the researcher gained access to 10 participants. After this, the participants were contacted for the interview through Facebook and telephone. Then, when the participants agreed to the interview and to be a part of the study, they were sent consent forms through emails. Finally, the interview was taken through the Zoom app at their convenient time.

3.7.1 Participants Profile

The participants' profiles are presented in the following table, where their pseudonyms have been used.

Table 2: Participant's profile

No	Name & Gender	Medium	Institution name	Class
1	Mishu	Bangla	Monipur High School & College	VI
2	Nidhi (F)	Bangla	Monipur High School & College	VI
3	Sneha (F)	Bangla	SOS Hermann Gmeinar College	VI
4	Saif (M)	Bangla	Dhaka Residential Model College	VI
5	Aryan (M)	Bangla	Adamjee Cantonment Public School	VI
6	Mitu (F)	Bangla	Shaheed Bir Uttam Lt. Anwar Girls' College	VI
7	Arnob (M)	Bangla	BAF Shaheen College	VI
8	Ohi (M)	Bangla	BAF Shaheen College	VI
9	Pramita (F)	Bangla	Mirpur Girls' Ideal Laboratoty Institute	VI
10	Marzia (F)	Bangla	Viqarunnesa Noon School & College	VI

3.8 Data Collection Procedure

A researcher can go for multiple ways to collect data to build up a case study research. According to Patton (2002), the multiple ways can be interview, audio & video recording, observation, documents and so on. The researcher has chosen interview, audio and video recordings to collect the data for answering the research questions. Since the current pandemic situation is not allowing or suitable for observation and fieldwork, the researcher had to conduct this study within this limitation.

3.8.1. Semi-structured Interview

Taking Interviews is a well-known method of conducting qualitative research. There are various types of interviews that can be utilised for various kinds of research. According to Muratovski

(2015), the main types of interviews are - structured interviews, semi-structured interviews, focus groups interview, oral interviews, and in-depth interviews. Among various kinds of interviews, the semi-structured interview has been decided for this exploration, as it gives more scope for the researcher to have a friendly discussion with the participants. Through this process, the researcher attempted to make the interviewees comfortable so that they could respond to questions without reservations (Castillo-Montoya, 2016).

3.8.1.1 Steps of Interview

The researcher adopted Anne Galletta's (2013) framework to conduct the interview for this study. This framework is solely for a qualitative researcher to collect data from the participants who have some sort of relevant knowledge about the topic. The researcher has chosen this framework particularly because it is quite similar to this study. There are three parts of this framework, according to Galletta (2013). These are-

i.   Beginning session where the interviewer starts the interview with the basic information about the topic to engage with the participants.

ii.   In the middle session, the interviewer asks in-depth questions to participants to collect information related to the study.

iii.   Concluding session where the interviewer asks more questions for clarification and they get close to the ending.

In the very first place, the interviewer must have the signatures on the consent form of the participants. To start, the interviewer can show her appreciation towards the members for their commitment to the study. Then, at that point, the researcher discussed the study and its purpose, how the information gathered from the members would be utilised in the study, and guaranteed

the confidentiality of their identity. The researcher attempted to comfort the members and lock in them in the discussion. First and foremost, the discussion began with the rudiments like their educational backgrounds and schools, their study and so on. As in this interview, the participants are not only relied upon to talk precisely about the research question, and the researcher can remember or note a few focuses from the participant's speech which the researcher can relate with or read up later or request further explanation at the end of the interview.

Finally, at the end of the interview, the researcher can ask more questions to clarify the questions or if the researcher finds the information insufficient for the study. The researcher also has the opportunity to ask for explanations from the participants, which she (R) thinks needs to be explored later on. To support this, Galletta suggested that the researcher can ask "Anything else you want to add or share?" to participants. The researcher can ask this question to participants just to give them another chance to share more that they might forget to share earlier. In the end, the researcher thanked all the participants for their valuable contribution to this study and showed her gratitude towards them.

3.8.1.2 Piloting the Interview

In this study, right before taking the final interview with the students from different schools, I piloted an interview with one of my nieces, who is currently reading in a Bangla medium school. The researcher decided to have an experimental learning session through the Zoom app since she is doing her online classes because of the Covid-19 situation, and she is familiar with the technology-based learning process. The reason behind this pilot interview was to refine the interview questions and to find out whether the questions are clearly understandable or not, also for practicing before the final one so that the final interview goes smoothly. The researcher took the final interview through the Zoom app so that she could record the audio and video and analyse

it later on. The researcher had taken consent from the interviewees beforehand for recording their voices and faces. Since the researcher was not familiar with conducting meetings at Zoom app, it was important for her to give a trial with her niece to check whether all the settings were selected appropriately and audio video was used and recorded properly and this pilot interview helped her a lot to practice for the final interview procedure and to record the responses. In addition, piloting interviews actually help researchers to refine their interview questions to up to the mark for their final interview and conduct the final one nicely and get the accurate information for their studies (Alshenqeeti 2014),

3.8.1.3 Conducting the Final Interviews

In the very first place, when the researcher got the consent from the participants for the interview, the researcher had sent the consent form see to the participants so that they could read the written form of their consent and understand it properly and then returned it to the researcher with their signatures. After done with the formalities, the researcher had contacted them and set a designated time for each participant according to their convenience. Since the researcher had taken one-to-one interviews, it was important for her (R) to have a fixed time for the participants so that it does not clash with other participants' interviews. After that, on the day of the interview, the researcher gave them a reminder about the interview. The interviews were taken by using the Zoom app, and recording of the app was used to record participants' responses for further analysing. According to Talmy (2010), it is better to finish the interview within 30 minutes and this is why the researcher tried to take 20-30 minutes for each interview.

Six stages were followed for each interview in this study that had been suggested by Benson (2010) that includes arrival, introducing the study, the opening of the interview, in the course of the interview, ending the interview and after completing the interview. At first, in the arrival part, the

researcher had exchanged greetings and thanked the interviewee for their time and support in this study. Then, the researcher gave them a short introduction and purpose of the study, and then the researcher mentioned the consent form again so that the researcher got verbal consent right before their interviews. For the opening of the interview, the researcher asked them simple questions relevant to the study like their educational background, their schools and so on. In the course of the interview, the participants were asked questions that were set in the mind of the researcher aligning with the research questions (see appendix B, interview questions). Moving towards the end of the interview, the researcher gave them a hint of wrapping up, and after completing the interview, just like Charmaz (2006), the researcher thanked all the participants for their valuable time so that they feel valued and important and asked for their permission to contact them in future if needed.

3.9 Data Analysis Procedure

This particular section is about all the steps which have been taken by the researcher for analysing collected data through interviews, audio, and video recording from the students from different Bangla medium schools regarding their opinion on mobile-based language learning.

3.9.1 Data Analysis Framework

For analysing data of any research, the researcher needs to choose a particular framework that has been introduced by other scholars to interpret their data, and for this study, the researcher has followed the data analysis framework of Griffee (2012).

This framework by Griffee (2012) is particularly for analysing data of interviews and it helps researchers analyse and interpret their interview data correctly. Griffee (2012) said that there are five steps which are needed to be followed for this framework.

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

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

Step three - Selecting themes and coding the responses.

Step four - Writing a summary of coded data.

Step five - Writing a memo for yourself.

In the first step, the researcher needs to listen to the recording of interviews carefully so that he or she can transcribe the conversation accurately. After finishing the transcription part, she needs to read these transcribed interviews again and again so that she can understand the direct and underlying meaning of participants' responses and try to understand the major themes from the interviewee's responses. The major themes that the researcher got from the transcription it is called codes, and they can be written in words or phrases, and this coding is really important for analysing qualitative data (Tuli, 2010). Then, the researcher can search for similar responses in the whole interview, which can be placed under one code and write a summary for different codes. At last, Griffee (2012) suggests that the researcher would write a memo for herself where all the themes along with summaries appeared together, and it would be considered as your findings which the researcher got from the data. After preparing the memo, the researcher had to do coding, categorizing and generating themes.

3. 10 Ethical Considerations

Before starting the data collection procedures, all the ethical issues to conduct research were taken into account. At first, participants were informed about the purpose of the study and how their

interviews would be used as data for the study. They were also informed that their participation is absolutely voluntary. In addition, the interviews would be recorded with their consent for further data analysis. They were also ensured that their identities would be kept private and pseudonyms would be used instead of their real names. By ensuring their privacy, they trusted me to give consent for the interviews and signed the consent form (Appendix A).

3.11 Establishing Credibility and Trustworthiness of the Data

To make research credible and trustworthy, researchers need to establish credibility, transferability, dependability and confirmability of his/her data (Leung, 2015). To make the data of the study credible, the researcher adopted member checking, triangulation, and writing a thick description of the study. Credibility can be established based on how much a research's findings can reflect over the reality (Merriam, 1998). In addition, the participants themselves of the study can also feel whether the study is representing their view correctly or not, and for that reason, the researcher emailed the transcription of individual participants to them to check if she transcribed them correctly to establish credibility of the data.

Triangulation of research can be achieved in different ways. For example, they were using two or more sources to collect data, methods, research paradigms, and approaches to analyse the data of one research problem (Patton, 2002). According to Creswell and Miller (2000), triangulation can be achieved by following any of the various criteria of it, such as triangulation of methods, triangulation of sources, triangulation of theories and analyst triangulation. Among the above-mentioned criteria, in this study, the researcher adopted analyst triangulation for establishing credibility. For analyst triangulation, there should be multiple analysts for the research. In addition, for this study, inter-rater reliability was adopted as analyst triangulation. For inter-rater reliability, parts of interview transcripts were sent to experts through email to rate the themes. The rate of the

agreement by the rater on themes was calculated in percentage for this study. These procedures make the study dependable as well.

For selected cases and procedures of conducting this study, a thick description has been provided to establish credibility (Denzin, 1989) and transferability (Tracy, 2010) of the study. In other contexts, similar studies can be done by researchers for the transferability of the study. Then, an electronic audit trail was maintained by the researcher. According to Johnson (1997), having an audit trail is a good way of establishing confirmability. To ensure the credibility, dependability, transferability, and confirmability of the study, the researcher had taken all the above-mentioned steps, which make the study trustworthy and credible.

In addition, the study has transferability, which makes the study trustworthy as well to show the incident by investigating on a smaller scale but can be applied to the bigger scale in other contexts as the students who have been interviewed were from different schools. Since the research has taken interviews from multiple students and analysed all of those as individual cases, it can be considered as a multiple case study approach, which is one of the types of case study approaches.

Chapter 4

Result & Discussion

4.1 Introduction

The purpose of the study is to understand students' perception regarding mobile learning, where they use their mobile devices as their learning tool and the challenges they face while using it. For this, the researcher tried to understand their feeling about mobile learning through interviews. In this chapter, the researcher showed the finding that she got from the interview of the participants and these findings are described chronologically according to the research questions. The research questions of this study are –

    i.   How do the students react to the English language lessons through mobile phones?

    ii.   What do the students think about using mobile in English language learning?

    iii.   What could be the challenges of implementing mobile-based learning in Bangladesh?

The first section of the chapter briefly discusses how the students react to mobile learning. Section two describes the perception of the students about using mobile devices in English language learning—last of all, the final section reports on the challenges of implementing mobile-based learning in Bangladesh.

4.2.1 Students' Reaction to Mobile Learning

Mobile learning is a new idea of learning for Bangladeshi students, yet the participants had a positive reaction towards mobile learning. One of the interviewees said,

"Mobile learning or learning through mobile devices is really interesting. It is easier, convenient

and effective."

Mobile learning is considered globally innovative (Kim, Rueckert, Kim, & Seo, 2013). This process gives a positive outcome since the teaching and learning can be done at any time and anywhere, where the learners use multiple mobile technologies (Egbert, Akasha, Huff, & Lee, 2011; Hoven & Palalas, 2011). Different mobile devices and apps make the learning process easier for students. Another interviewee said,

"If I could choose between typical classroom learning and mobile learning, I would have

definitely chosen mobile learning over the typical learning. Traditional learning is actually

boring and monotonous whereas mobile learning is exciting."

4.2.2 Students' Knowledge about MALL

The term mobile learning or mobile-assisted learning actually means flexible or convenient learning, which reduces the learning limitations where the learners can virtually start learning at any time and any place (Ravi & et al., 2014). Mobile learning is a new edition in Bangladesh and as for the Covid-19 outbreak, it has become a known topic to Bangladeshi people recently. The participants of this research were familiar with online classes, and they all had experienced it as their institutions were conducting online classes due to the global pandemic. In the interview, when the researcher asked the interviewees about mobile learning, they all referred to online classes. One interviewee said,

"Mobile learning seemed very confusing the very first place since it was completely new for all

of us. But when we got to know about this and experience it, now it seems better than traditional

learning."

All the participants of this research expressed positive reactions towards mobile-assisted learning. They said that instead of a monotonous learning process, they find this technology-based learning process more interesting and exciting where they got to learn and improve their learning proficiency.

4.3.1 Students' Perception of Mobile Learning

Mobile Learning is an opportunity for students to explore their learning experience beyond the four walls of the classroom where the teacher or the authority can control the learning process (Abah, 2016). One of the interviewees, Nidhi said,

> "Mobile learning is a gift for today's world due to the Covid-19 outbreak. If it was not for technology-based learning, our education system would not be able to continue the learning process after March 2020."

Since the technology has become more advanced, learning through mobile has turned out to be more effective nowadays. The result of this study has shown positive perceptions towards mobile learning where every participant strongly supports or prefers mobile learning because they can learn whenever and wherever they want to. It has also suggested that participants were more comfortable with virtual learning rather than traditional learning. Mobile learning allows students to connect to other individual lectures classes beyond their specific areas in a classroom, and students actually enjoy it; thus, this works as self-motivation (Hashim, Choo & Song, 2009). Mobile devices are considered as a learning tool to all the participants because they are continuously learning something while they are using it for learning purposes. Another interviewee, Saif, said,

> "Mobile is my learning companion and it supports my learning."

According to Hashim, Choo & Song (2009), mobile devices have made the learning process so easy that the students can find any information at their fingertips within a second. The advanced technology of mobile devices allows the learning speed to run smoothly and decreases the self-learning barrier. Hence, it has become popular among students.

4.3.2 Effectiveness of Mobile Learning

M-learning is very helpful to recover the study gap during this COVID-19 pandemic time because of its 'multi-functionality effectiveness' (Biswas, Roy & Roy, 2020). In the interview session, the researcher had asked the participants about their perceptions towards mobile learning or using mobile devices as their learning tool. All the 10 participants had said that they had found mobile learning more effective than the previous learning process for them. At the same time, they had learned easily through this learning process. One of the participants, Aryan, said,

"Using mobile devices as a learning tool is a blessing for me as I can complete my exercises and improve myself at any time and anywhere I want. Whenever I do not understand or get the expected answers to my questions, I can always reach out to other people and can solve my problems and it is improving my knowledge. At the same time, since I do not have to go to school, I have got enough extra time to do some extracurricular activities too."

There is a reason why he had given this statement. He is actually a tech person who loves to spend his time with technology. He is a self-learner and prefers to study alone; however, he takes help when he faces difficulties. At the same time, he plays football and he is a member of the school's football team. Since, through mobile learning, he can do his classes at home and finish his tasks any time he wants and can utilise his free time in other activities, he strongly supports mobile

learning. Mobile learning has also enhanced his existing knowledge as he can think outside of the box.

In addition, other participants had shared different perspectives of them about mobile learning. All the 10 participants had mentioned one thing, which is mobile learning is the best way to minimize the study gap during the Covid-19 time. They said that because of the closure of educational institutions, students of all ages had been affected badly. However, mobile learning has shed light on this darkness. According to Dhawan (2020), people can access pieces of information comparatively more easily, and it can reach out to every class of people, starting from urban to rural and remote areas. At the same time, since online education does not cost transportation, accommodation and cuts other expenses related to institution-based education, it is considered a cheaper form of education. One of the interviewees, Mitu, shared an incident and she said,

"My cousin lives in a rural area and he is a brilliant student. But over there, he never got enough support for his studies as the boundaries were set within the classroom. However, because of this pandemic, he started doing his classes online, whereas previously, his classes were not regular, and he actually enjoyed his online classes…………. If I talk about myself now, I find mobile learning is very convenient because it is easier for me to find and access relevant information related to my studies. As a result, my study skills have improved a lot."

Based on Mitu's incident, the researcher had accepted the fact that online mode of learning could actually reach out to rural areas, and it is convenient and easy to find their study materials to complete their studies. Along with this, students can also access different teachers' lectures from different institutions or even different countries to enhance their knowledge regarding their topic of interest. During the Covid-19, it is easier to share class-related documents and discussions both online and offline using mobile devices (Biswas, 2020). In mobile learning, students can access

their learning material without facing any difficulties or restrictions, and this improves their technical and conversational skills and they learn to collaborate the information with their study questions (Emran, 2020).

Furthermore, in the interview, the participants had discussed their improved knowledge and enhanced motivation that they were getting through mobile learning in this pandemic time, and as a result, they could solve their study-related problems easily 'in a digital and fashionable way' (Emran, 2020). Mobile learning actually gives an opportunity to students to think outside of the box and it helps them to improve their existing knowledge regarding any topic or field. One of the participants, Marzia, said,

"Mobile learning actually improved my learning capacity and knowledge about different topics beyond my study syllabus. Now I can gather and keep in mind more useful information than before. Previously, I just had to memorise information from the textbook. But now I can use the whole internet world to get a piece of perfect information. And this is motivating me too."

According to Marzia'a statement, the mobile device is a 'learning companion' (Biswas, Roy & Roy, 2020) to her, which improves her knowledge and motivates her constantly to be a better academic person. She mentioned 'motivation' in her statement, and when the researcher asked for a further explanation for her statement, she added that since digital learning was improving her existing knowledge day by day, she was getting motivated by this enhanced knowledge. She is getting the opportunity to dive deep into the information ocean and she is really excited about this. As a result, she feels motivated to finish her study problems timely and properly. Last but not the least, along with Marzia, other participants had mentioned getting the opportunity to know about other different topics which are not included in their syllabus through mobile learning or digital learning.

4.3.3 Social Media Platforms as Learning Lool

Social media has been deeply connected to people in recent times. It actually influences our lives, work, food habit, fashion, thoughts and many more. Just like all these, it also has started influencing peoples' education after the Covid-19 outbreak as all the educational institutions are closed in the whole world. People depend on social media platforms for educational purposes because it is easier to reach out to other people through social media. (Unknown, 2021) All the participants of the interview session had agreed to the fact that social media is a very good way for fulfilling educational purposes. In the interview session, Arnab said,

"I feel so comfortable about using my social media platforms for my study purpose. Whenever I face any difficulties, I reach out to my classmates and sometimes teachers too on social media as they are more active here after the Covid-19 outbreak to clear out my confusion. Because of social media platforms, I get quick and instant answers to my questions and I do not have to wait for too long for this. And I think the waiting I had to face in a physical setting was discouraging for me previously."

Based on Arnab's statement, the researcher had found out that social media platforms had improved his communication skills since he had to communicate with his teachers and classmates for his study problems. At the same time, he mentioned that the digital learning process had encouraged him to do better and complete his studies properly and accurately. Previously, in the face-to-face setting, he had to wait for the next day's class time to clear out his confusion. However, he is getting instant help now with the blessing of advanced technology. Among 10 participants, everyone had given a positive perception towards mobile learning as they were being benefitted from this study process. At the same time, the participants had admitted that the digital learning process could be an advanced way of learning all the time.

4.4. Challenges of Implementing Mobile-based Learning

Mobile learning is the newest form of technology-based learning in Bangladesh. This process of learning is easy and smooth for both teachers and students. However, it is not easy to implement mobile learning in Bangladesh overnight. The participants had addressed multiple challenges of implementing mobile learning in secondary level Bangla medium schools.

4.4.1 Communication Gap between Teachers and Students

Mobile learning is completely dependent on mobile devices, where students and teachers communicate with each other through mobiles. In this communication, there might be a communication gap between them as they cannot talk to each other directly. When the researcher asked about the challenges of implementing mobile learning in Bangladesh, one of the participants, Mishu, said,

"It is actually difficult to implement here in Bangladesh. I think there will be students who will face a communication gap. Since our culture is to study in front of teachers or our setting is face to face setting. Initially, it will be hard to be adjusted to it. There might be students who would prefer traditional learning over digital learning."

According to Mishu's statement, students and teachers interact with each other through mobile devices using multiple applications; as a result, there is no direct human contact in this process of learning. Every student is unique, and there are some students who need a detailed explanation of any topic. It is actually not possible for the teacher to deliver one-to-one lectures always in mobile learning as the schedule will be fixed for each class or section. As a result, there is a chance for some students to experience a communication gap with their teachers in this mobile learning context in Bangladesh.

4.4.2 Easy to Get Distracted

In the mobile learning process, students use their mobile devices as their learning tools. They join classes, complete their homework or assignments, engage with other activities by using their mobiles, and for this, they need particular applications installed on their devices. However, along with these applications, there are some other applications that they installed on their devices. When they use mobile devices for their study purpose, they can and will also get notifications from other applications. There is a high chance of getting distracted by these notifications. One participant, Ohi, agreed to this problem and said,

"I am enjoying using my mobile devices to join classes and complete my assignment. But I have other social media and games applications installed on my phone. When I browse my phone for study purposes, I also get notifications from these applications and it is really distracting for me. Sometimes I cannot resist myself, and I start checking my social media newsfeed or start playing on my mobile."

According to Abdelaziz (2020), mobile learning applications and the mobile learning environment plays a crucial role in distracting students from their studies. Students lose their concentration when they get private texts, emails, check social media or play games.

4.4.3 Internet Connectivity Issue

In Bangladesh, internet connectivity issue is a big problem. Internet connection and the speed problem are everywhere in Bangladesh and the problem is severe in rural areas. Students of Bangladesh face poor connectivity issues when they try to do online classes, and as a result, it hampers their studies. One of the participants, Sneha, said,

"Internet problem is really bad. I face this almost all the time whenever I try to complete my study problems or I sit for online exams. The funny thing is, in serious moments and emergencies, it feels like the situation gets worse. The connection just does not want to get connected to my device or get really slow".

Developing countries like Bangladesh, India, Pakistan and so on constantly face internet problems. Since the technology is not up to date and these countries do not try to update or improve their technical problems, the students of these countries suffer the most when it is about mobile learning compared to developed countries (Matin, 2017).

4.4.4 Unavailability of Smart Gadgets

To make online learning successful, students need smart gadgets like computers, mobile phones, iPods, PDA, laptops, wifi connections and so on. In developing countries like Bangladesh, students from all over the country do not have access to such devices, unlike urban students. However, for mobile learning, students need mobile phones and internet connections. In the interview session, Pramita said,

"The students who live in town can easily attend online classes and it is easier for them to participate in mobile learning. There are many students who dropped off from schools in rural areas during the Covid-19 outbreak because they did not have sufficient devices to complete their studies online."

According to Sung, Chang & Liu (2016), smart gadgets are required to make mobile-based learning successful. Because of the lack of technology, the students of developing countries get affected the most as their budget is limited and everyone cannot afford a device for mobile learning. Bangladesh is no different from this scenario.

4.4.5 Lack of Training

Since mobile learning is a new theme for Bangladesh, students and teachers need to get training on digital learning that includes how to conduct it, how to find and share study materials and solve study problems smoothly and perfectly. One of the participants of the study, Arnob, was at the village when the researcher had taken an interview. He mentioned this topic and said,

"Students and teachers are not familiar with mobile learning. Even if they can guess it from the name, they are still confused about how it works. On the one hand, they do not have sufficient devices, and another hand, they do not understand it, so it has become really tough for them. They really need proper training for it".

The lack of instructional and technological support is a crucial challenge in implementing digital learning. Without omitting these barriers, mobile learning is impossible. That is why proper training on digital learning is required for both teachers and students in developing countries (Awadhya & Miglani, 2016).

4.5 Solutions for Obstacles of Implementation

Mobile learning is a blessing for the education sector because of its transferability, availability, portability and so on. Developed countries have already adopted this digital form of learning. However, developing countries are still struggling to embrace digital learning because of their poor technical support. To implement mobile learning in Bangladesh, there are some obstacles that need to be resolved.

Firstly, mobile learning awareness needs to be delivered to teachers, students and guardians. Everyone has to know the positive sides of mobile learning so that people can easily adopt this process. After that, the internet connection needs an update or at least make it stable so that

everyone can access study materials and solve problems easily without facing any trouble. Rural areas' condition needs to fix immediately though the connection of urban areas needs to be fixed too. In addition, the shortage of appropriate devices is another major obstacle to implementing mobile learning. To ensure effective mobile learning, every student and teacher needs technological support. Along with the Government, people from every class should come forward to make sure that everyone gets a mobile device for mobile learning. At the same time, low battery life and small storage space need to get an update too with long battery life and huge storage space but it can wait until the major obstacles get fixed.

Mobile learning or digital learning is a blessing for all, but it will be a huge milestone for Bangladesh if it gets implemented at secondary level Bangla medium schools in Bangladesh after resolving the obstacles.

Chapter 5

Conclusion

5.1 Introduction

The aim of this concluding chapter is to summarize the main findings of the study and discuss recommendations. The study attempted to fill the gap of knowledge regarding mobile learning in secondary level Bangla medium schools in Bangladesh. In addition, it also explored the obstacles of implementing mobile learning at schools in Bangladesh. There were three research questions of the study. They were-

1.   How do the students react to the English language lessons through mobile phones?

2.   What do the students think about using mobile in English language learning?

3.   What could be the challenges of implementing mobile-based learning in Bangladesh?

5.2 Major Findings

Firstly, the participants of the study had a positive reaction to the English language lessons through mobile phones. They were really happy and excited about mobile learning since it is very much different from the traditional face to face setting learning process. At the same time, their point of view regarding mobile learning was unexpected because they all agreed to the fact that using mobile devices as a learning tool is effective because it enhanced their existing knowledge, minimized the study gap during the Covid-19 outbreak, cheaper than the traditional learning process, improved their technical and conversational skills and son. However, along with all these advantages, it has some challenges for implementing it in Bangladeshi Bangla medium schools. While implementing it, the researcher had found out that some students face communication gap

with their teachers, students might get distracted as they would receive notifications from other applications when they use mobile devices to solve their study problems, there could be a poor internet connection, shortage of devices and lack of training to students and teachers for mobile learning.

5.3 Recommendation

Based on the findings of the study, the researcher would like to give some suggestions which might be beneficial for policymakers, teachers, volunteers and students.

- Students need to be focused on learning only when they use their mobile devices for study purposes.
- Teachers need to take notes and plan properly how they can conduct online classes smoothly.
- The authority of educational institutions can arrange training for both teachers and students.
- The policymakers should resolve the problems of mobile learning and make a complete guideline on mobile learning, which will follow everyone related to academics.
- The government can take the necessary steps to fix internet speed and connection problems. They have to ensure internet connection for all for successful online learning in Bangladesh.

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LETTER OF CONSENT FOR PARTICIPANTS

Dear Students,

I am Shamsia Saima Mumu, an undergraduate student of Applied Linguistics and ELT at the Department of English and Humanities, BRAC University.

As a part of our degree, we have to complete a thesis for which I have chosen the topic "Mobile Assisted Language Learning in Secondary Level Schools in Bangladesh". I would like to invite you to be a part of a small interview and share your experience and perception regarding mobile learning.

The interview can be taken through Zoom, if you are comfortable with it. Otherwise, it can be a telephone interview as well. The interview will be recorded only for analysing the data and will not be shared with anyone. Please note that the information gathered from you will be used anonymously only for the purpose of the study. I can assure you that none of the information will be misused.

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

Thanking you,

Shamsia Saima Mumu

Student of Department of English and Humanities, BRAC University.

Phone No. 01798596326

E-mail: shamsiamumu12@gmail.com

Research Participation Consent Form

Please read the following statements and tick in the boxes.

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

Phone No.

E-mail address:

Date:

…………………………… ……………………………………

Name Signature

APPENDIX B

Interview Questions for Participants

No.	Interview Questions	Background Information	Research Question 1	Research Question 2	Research Question 3
1	Please share your background	*			
2	have you ever heard about mobile learning?	*			
3	From where have you heard about it for the first time?	*			
4	What do you understand by "mobile learning" or "digital learning'?	*			
5	Have you ever experienced digital learning?	*			
6	Please share your first mobile learning experience.	*			
7	What do you think about mobile learning? Share your point of view.		*		
8	Which subjects did you have online classes from school?	*			
9	Have you enjoyed them all?	*			
10	Was it effective? Please elaborate your answer.			*	
11	Which part have you enjoyed the most? Please share your experience.			*	
12	How did you find study materials and solve study problems? (Probe Quition)				
13	Did you face any problems? (Probe Question)				

14	What do you think of implementing mobile learning at schools in Bangladesh?				*
15	What could be the challenges of implementing it?				*
16	Do you have any solutions of the challenges?				*
17	Did you find any shortcomings of mobile learning?				*
18	Do you have any suggestions to give regarding mobile learning?				