

**Technology Integrated Language Teaching in Rural Areas in Bangladesh- Expectation
versus Reality**

By

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requirements for the degree of

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Declaration

It is hereby declared that

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

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Approval

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Ethics Statement

Research ethics were taken into account and upheld throughout the entire study. In the methodology section, those are covered in greater detail.

Abstract

This qualitative study aims at investigating the secondary level teachers', students' and their parents' perceptions regarding incorporating technology in traditional English language classrooms, challenges and future affordances in the context of Bangladesh. In this qualitative study, I used the purposive sampling technique to collect data from secondary level English teachers, learners from Bangla medium schools and learners' parents. Data was collected through semi-structured interviews, analysed using thematic analysis. The final results show that despite many limitations and difficulties, integrating technology has far-reaching impacts on secondary level education in rural areas of Bangladesh. Furthermore, in remote areas where there are infrastructural issues, financial crisis, unavailability of modern digital tools, electricity problems resulting in poor internet connection and many more, there traditional classrooms and its efficacy in terms of teaching and learning cannot be replaced by solely tech-based education. However, traditional classroom practices and technology integrated classroom practices can go hand in hand in order to facilitate English language education and open the door for innovative alternatives to meet the pedagogical expectations of the 21st century. The findings will be useful for novice teachers, learners, parents, policymakers in Bangladesh.

Keywords: Secondary level, English language education, Online pedagogy, Technology integration, Traditional classrooms, Perceptions.

Dedication

I Would like to dedicate my research project to my family and daughter. To all the special children of God who are differently able.

Acknowledgement

In the name of Goddess Durga, the Most Gracious

At first, I would like to thank God for everything. Then, I cannot thank enough to my parents whose prayers, support, love and care help me to deal with every situation of my life. I am very much grateful to my thesis supervisor Dr. Syeda Farzana Sultana Miss, the most understanding and compassionate teacher I have ever meet who always shares thoughtful insights regarding academic, professional and personal development. I learned a lot from her. She taught me that there is always a room for improvement and I will never forget her contributions in my thesis. Without her guidance and motivation, it was very difficult to complete my study with a complicated pregnancy. I would like to convey warm regards to the chairperson Professor Firdous Azim and thank all my faculty members. Lastly, I would like to thank my husband and friends who were there for me whenever I need support and motivation.

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Chapter 1: Introduction

The Government and The Education Ministry of Bangladesh is trying to incorporate ICT in all three levels of education (primary, secondary and tertiary) of the country for several years in order to keep pace with the increasing demand for technology enhanced advanced education. During pandemic, most of the countries' learners and teachers tried out several unprecedented and innovative strategies to ensure the right to education and used basic to advanced technological tools and platform to conduct classes (Budayová, 2022; Diaz-Núñez et al., 2021; Morgan et al., 2020; Rayuwati, 2020). In Bangladesh, there was very little or no exposure to tech-based education in institutions before the pandemic (Khan et al., 2023), as a result stakeholders have no prior experiences of technology integrated language teaching in traditional classrooms especially in rural areas of Bangladesh. Taking this situation into account, this study aims to investigate the secondary level teachers', students' and parents' perceptions regarding technology integration in regular language classrooms in rural areas in Bangladesh. Moreover, my study also attempts to explore the future affordances and challenges of technology integrated language teaching in rural areas in Bangladesh. To conduct this qualitative study, I used the purposive sampling technique to collect data from teachers (4), students (3) and parents (3) involved with secondary level Bengali medium education in rural areas in Bangladesh. Relevant information to this study is collected through semi-structured interviews. I used thematic analysis approach to analyse my qualitative data.

Findings from my study are intended to help us to understand the reality and further possibilities of technology integrated language education in traditional classrooms in rural areas in Bangladesh. Thus, I hope that this study will have significant contributions for teachers,

learners, parents, policymakers and other stakeholders of secondary level education in Bangladesh.

Background of the Study

The education sector was drastically influenced by the pandemic in both negative and positive ways (Pokhrel & Chhetri, 2021). Keeping the health issues, growing death counts and many other threats related to the COVID-19 pandemic in mind, education ministries of countries all over the world decided to close all the institutions and shifted education to distance learning mode. Furthermore, the stakeholders of all disciplines and education levels went through both positive and negative experiences due to the sudden closure of institutions. For instance, in Nigeria higher education institutes cut down their budget for higher education and lose manpower in the higher education sector. Moreover, there was a huge teaching and learning gap due to the disruption of academic calendar, cancellation of international conferences and reducing opportunities for international higher education (Jacob, Abigeal & Lydia, 2020). Therefore, tech-based education can be considered as a feasible alternative of in-person education in emergency situations, however, it cannot be beneficial for everyone to the same degree. For example, like many other countries, stakeholders of primary and secondary level education in Switzerland were overwhelmed by the increasing tension during the pandemic. A study projected that, while primary school learners' learning slowed down and different opinions and attitudes in terms of learning strategies were evident among the learners, the secondary level learners' learning procedures were totally unaffected by the closure of schools (Tomasik, Helbling & Moser, 2021). On the other hand, learners' and teachers' self-efficacy, motivation, attitude towards tech-enhanced education, academic performance, mental and physical stability were heavily influenced by socio-economic context, access to technology and technical issues. Moreover, though south Asian countries such as Malaysia, Indonesia, Nepal, China, Singapore,

India Bangladesh design several strategies to incorporate educational technology, free online learning materials and resources, zero-free digital educational resources and teaching through television or social media, however the ineffectuality and further aggravated existing inconsistency in education during online learning pushed them to reopen the institution for in-person classes (Balakrishnan, 2020; Tadesse & Muluye, 2020). In such a situation, reforming sustainable education systems is the most important demand of the recent time. Hence, recommendations for post pandemic education include a balance between in-person and tech-enhanced learning pedagogy, training support for everyone in order to imply hybrid learning strategies, sufficient and unified digital tools and educational technological platforms across courses, reduction of students-teachers communication barriers and so on (Munir, 2020).

Adjusting to the Technology Integrated Education

In order to adapt to the new changes to pedagogy in response to the pandemic, practitioners' experiences and attitudes regarding opportunities and challenges are influenced by personal and contextual aspects. First of all, adapting to a new pedagogy initiated a rapid change to the global education system and educators implemented a number of changes to their teaching including various alterations fostering online learning. Moreover, the noticeable changes to teaching were related to technological tools and techniques. For example, universities in Australia, Canada and the United State of America educators use synchronous tutorials delivered through video conferencing in order to achieve learning-teaching goals (Hichling et al. 2021). Moreover, a study carried out in the USA also projected that learners prefer synchronous live lectures and asynchronous pre-recorded lectures or materials with synchronous follow up online classes compared to regular live lectures (Chen et al., 2020). Teachers and students also advocated the creative use of technology, e-learning platforms and materials (Goldschmid, 2020). Adapting to tech-based pedagogy also came up with several difficulties. For instance,

students and teachers in Portugal expressed distinctive concerns about lack of technical skills, increasing workload, anxiety, exam phobia, health issues and so on (Flores et al., 2022).

Variation in adapting to the new pedagogy is also observed in terms of teaching context and gender role. In this regard, Nambiar (2020) argues that in India, teachers from urban areas are more interested in distance learning compared to rural areas. Apart from this, literature showed that in Saudi Arabia female students are good at adapting to the online mode of teaching as they perform well in exams and classroom participation, however male students feel confident as they have good technological competence (Pilotti, El-Moussa & Abdelsalam, 2022).

Furthermore, Samoylenko, Zharko and Glotova (2022) discussed that online learning combines three important aspects such as technological, pedagogical and subject related knowledge. In order to make effective use of online pedagogy students and teachers need to have sufficient knowledge about technological diversity. However, in many countries teachers and students lack digital literacy rate due to lack of familiarity with technological tools, motivation deficiency, financial crisis, lack of required training and many more (Munawaroh, Fitriati & Febriantina, 2022). Digital literacy rate mostly depends on individuals' access to the technological tools and platforms which differs based on their socio-economic status. Apart from these, materials used during pandemic were not appropriate in order to attain aims of online education. Advanced technological learning needs advanced materials to keep pace with learners' needs, however only traditional reading materials cannot fulfill the sole purposes of online teaching (Zapata Cuervo et al., 2022). Thus, though adaptation to technology enhanced education started its journey on a positive note, it needs further reformation in order to be a part of mainstream education.

Significance of Reshaping Education system by Incorporating Technology

After the pandemic, a reformation in the education system is a much-needed action to be executed. Stakeholders and higher education experts of Saudi Arabia stated that the experiences of distance learning during mid-pandemic can be considered as a key investment or component for future reformation of the education system (Ashour, El-Refae and Zaitoun, 2021). Moreover, the new-normal era demands an education system which includes both face-to-face and distance learning together to offer a holistic approach to accomplish effective education. Similar notion has been presented by Raes (2022) and he stated that both in-person and distance learning should go hand in hand as it promotes such teaching techniques which initiate engagement.

Additionally, blended learning offers traditional classroom arrangement with a touch of modern tech-based teaching-learning pedagogy. However, implementing blended learning is quite tough as it has several obstacles. Zhang et al. (2022) argue that institutional adoption and implementation of blended learning is time consuming and it needs professional guidance.

English Language Education in Bangladesh

During the pandemic primary and secondary level English language teachers and students went through more or less similar experiences and challenges all over the world (Siang & Mohamad, 2022). However, in the primary level of education teachers only prefer taking home assignments rather than online examinations as the learners are too young to understand the use of technological tools. As an example, in Malaysia the primary teachers used WhatsApp and they do not find it effective due to lack of personal gadgets and inactive students (Indrian, Ismail & Rashid, 2022). Apart from this, teachers from secondary and tertiary level used several digital platforms such as Zoom, Facebook, Google meet, Google classroom and many more to promote synchronous and asynchronous learning. At present, teachers and students are experiencing some problems such as lack of motivation, lack of readiness, post-pandemic anxiety and depression

and many more. However, few teachers still use several mid-pandemic techniques to enhance learners' English language learning and to engage and motivate them. In this regard, Al-Jarf (2022) suggested that WhatsApp, Duolingo, online dictionary, Kahoot, vocabulary flash card, mobile-based audio books and many more can be considered effective platforms to motivate and engage students through various educative functions in post-pandemic new normal education. However, taking the obstacles in account, researchers suggest that more research should be done in Bangladesh regarding technology enhanced traditional English language education.

These current studies represent several issues related to mid-pandemic situations particularly. The authors focused mostly on the effects and impacts of pandemic in education sectors in different countries, several adaptation techniques and their effectiveness depending on distinctive contexts, digital literacy rate among stakeholders and inadequate materials. Moreover, they also discuss the necessity of education reformation in the post-pandemic era and the challenges of implementing blended learning pedagogy. However, a gap of knowledge remains in the existing literature regarding incorporating technology in secondary level English language classes in rural areas in Bangladesh. Therefore, this study aims to explore the reality and expectations regarding incorporating technology in secondary level English language classrooms in rural areas in Bangladesh.

Statement of Problem

At present, the easy access to technology and internet/broad-band connection influence teachers and students to change their conventional attitudes and encourages them to shift the traditional setting into tech-based teaching and learning environment so that they can attend classes according to their convenience (Li & Ibry, 2020). Keshavarz (2020) states all students cannot be benefited equally by tech-enhanced education due to their distinctive learning processes. He also discusses the dilemma of teachers regarding their teaching models,

authenticity of materials and so on. Such differences between global need to reform the pedagogy and actual reality of the practice field initiate the thought about incorporating technology in secondary level English learning classes.

Like most of the countries, Bangladeshi education stakeholders are also trying to incorporate technology in all levels of education, however, still the question of readiness of the secondary level education stakeholders is there. Most of the studies show that such shifts mostly have negative impacts and most of the teachers and students prefer traditional classrooms rather than remote learning (Khan, 2021; Nasir & Laili, 2021; Singh et al., 2020). Based on their experiences of mid-pandemic online education, secondary level teachers, students and their parents hold mixed perceptions about technology integrated education. For example, some parents think that technology is important for advanced learning, however, other groups of parents think technology-oriented learning can never be fruitful. If people do not change their attitudes towards technology, then the vision of making English language education effective with the help of advanced technology will fail badly.

To find out the reasons for these trending perceptions and behavior, I searched for recent scholarly literature and found that many studies have been conducted on incorporating technology in English language classrooms, remote learning, role of blended learning and so on. However, current relevant literature related to using technology in language education are mostly conducted in the context of tertiary level and in technologically advanced countries. Thus, there is a significant gap in the literature about how secondary level teachers, students and their parents respond to tech-based regular classes for English courses, what kind of difficulties they face, or whether they expect any further possibilities from it or not. Therefore, this study intends to investigate secondary level teachers', students' and parents' perceptions of using technology

in traditional English language classrooms. It aims to explore the challenges and future affordances of technology integrated traditional language classrooms in rural areas.

Central Research Objectives

The primary goal of this study is to portray secondary level teachers', students' and their parents' perceptions of incorporating technology in traditional English language classes in rural areas in Bangladesh. Moreover, this study explores future potentials and challenges of implementing tech-enhanced pedagogies for English language education in rural areas in Bangladesh.

Research Questions

The following research questions have been generated to achieve the purpose of the study:

- i) What are the perceptions of the teachers, students and parents about integrating technology in secondary level traditional English language classrooms in rural areas in Bangladesh?
- ii) What are the challenges and future potentials of integrating technology in traditional English language classrooms in rural areas of Bangladesh?

Scope of The Study

In this study, I tried to explore reality and expectations regarding the incorporation of technology in secondary level traditional English language classrooms in rural areas in Bangladesh. This study has been limited to secondary level English teachers, students and their parents. The reason behind choosing stakeholders from secondary level education is that they have experienced both online and traditional modes of education, however whether they like the conventional ways of teaching and learning or they prefer modern, technology-integrated English language learning needs to be explored. Moreover, secondary level is crucial for teachers and

learners as well because here the fundamental base for higher education is created. Moreover, this study also discusses the challenges and further possibilities of integrating technology in secondary level traditional English language classrooms. Through this study, the advantages and drawbacks, challenges and possibilities will be investigated, thus stakeholders, authorities and policy makers can take these issues into account to integrate technology in traditional English language classrooms. The reason behind choosing a sub-district for conducting this research is that rural areas lag behind in terms of using educational technology. Thus, advantages, drawbacks, further possibilities and challenges need to be addressed so that successful integration of technology can take place in traditional language classrooms in rural areas.

Significance of The Study

In this research field, very little research has been done on integrating technology in secondary level traditional English language classrooms in rural areas in Bangladesh. This study aims to fulfill the research gap. Moreover, this study also discusses the further affordances and challenges incorporating technology in traditional English language classrooms in rural areas of Bangladesh. Hence, this study plays a significant role in integrating technology in secondary level English language classrooms. Teachers, students and their parents can prepare themselves to adapt to the technology integrated education system. By knowing the potential, teachers and students can get motivated to integrate technology in English language learning. On the other hand, by knowing the challenges they can take preparations beforehand. Lastly, by fulfilling the research gap, the study opens up a new window for the future researchers to do further research regarding incorporating technology in traditional English language classrooms in similar contexts.

In this introductory chapter, I briefly stated the problem I wanted to explore in my dissertation, its significance, research questions and scopes of this study.

A summary of the existing literature on incorporating technology in traditional English language classrooms and tech-based language education contexts can be found in Chapter 2. I also discuss the conceptual framework of this study in this chapter.

In chapter 3, a detailed description of the study design is presented. This chapter includes philosophical assumptions of the study, rationale for choosing thematic analysis approach, a description of the context of the study and participants, my positionality as a researcher in this study, along with a detailed description of the data collection process and the way I analysed them to address each of my research questions. Additional information about the data sources can be found in the Appendices.

I report my findings in chapter 4 and include all the prominent themes emerged from participants' interviews related to my research questions. In chapter 5, I discuss my key findings, organised around the two research questions and try to relate with the existing literature.

Finally, this study sums up in chapter 6 with a summary of the study and key findings. Some limitations, implications and recommendations are included in this chapter as well.

Chapter 2: Review of Relevant Literature

The primary focus of this study is to investigate the perceptions of teachers, students and parents about incorporating technology in secondary level traditional language classrooms and explore challenges and future possibilities of it in rural areas of Bangladesh. Thus, this chapter reviews existing relevant literature regarding technology integrated language education.

Moreover, this chapter aims to locate the gap in the literature regarding incorporating technology in secondary level English language classes in rural areas of Bangladesh. This chapter is divided into three parts as following:

Part 1: Technology integrated classes vs Traditional Classes reviews the papers related to the experiences of teachers and students adapting to the technology enhanced language education.

Part 2: Blended learning in English Classrooms reviews the scopes and demand for technology integration in traditional language classrooms. Also explores challenges regarding implementing blended learning.

Part 3: Technology Enhanced Language Education in Bangladesh reviews existing literature on the situations of tech-based language classrooms in Bangladesh.

Technology Integrated Classes VS Traditional Classes

Adapting to The Technology Integrated Language Education

Most of the countries around the globe shifted their education system from traditional to online teaching-learning practices during the COVID-19 outburst. However, practitioners such as teachers and students were struggling with some pedagogical challenges and the question of adapting to the technology integrated education system is still there. Positive or negative adaptation to online teaching and learning among students and teachers is influenced by both personal and context related factors (Flores et al., 2022).

During the pandemic, positive aspects related to students' and teachers' experiences contributed to speed up the adaptation to the technology-integrated pedagogy. Firstly, institutions (mostly schools and universities) have implemented various revived and uncommon methods during the pandemic to ensure the right to education and continuity of the education system (Zhu & Liu, 2020). According to Ashour et al., (2021), university leaders and higher education experts think that, adapting to a new pedagogy related to distance learning can be helpful for future higher education reformation as it offers ideas about alternative strategies and assessments, integration of technology in traditional classes, blended learning or flipped classrooms and so on. They also add, adapting to the new pedagogy creates awareness regarding e-learning platforms among higher education teachers, learners and staff. In recent studies, learners and teachers from different educational backgrounds represent distinctive positive attitudes towards adapting to tech-based education. Wang et al. (2020), mention that medical students express satisfaction regarding remote learning and their previous learning experiences such as watching YouTube videos, learning from recorded lectures and so on are correlated with this new pedagogy. The same notions are presented by Chen et al. (2020), they find out learners from dental schools prefer innovative learning arrangements such as flipped classrooms, hybrid learning and encourage creative use of technological tools for academic purpose. Moreover, instructors of the Architecture department adopted several alternative methods to teach, design their lesson plans in such a way which initiate interaction, assessments and evaluation through digital platforms so that they can adapt to the new pedagogy (Verma & Jafri, 2020). Many studies (mostly conducted in tertiary level of education) portray that, there are many positive attributes of tech-enhanced education which contribute to the adaption to a new pedagogy and provides such as flexibility in learning and teaching, convenience in location, access to recorded lectures, introduction with

alternative technological platform for education, future potentials of online education (Bork-Hüffer et al., 2021; Hill & Fitzgerald, 2020; Rajab et al., 2020).

On the contrary, many studies describe the struggle of the teachers and students regarding adapting to the tech-based pedagogy. For instance, a mixed method long term study represents that courses containing practical demonstrations and laboratory experiments are negatively affected by the conversion of online education and tertiary level students' academic improvement is hampered due to less interaction, involvement (Bork-Hüffer et al., 2021). Moreover, researchers investigate that the disadvantages of tech-enhanced pedagogy are much more prominent than advantages. According to Coman et al. (2020), students find it complex and struggle to process information which results in poor performance. Similarly, inappropriate assessments create frustration among students due to lack of communication and proper instruction. In addition, they also discuss that teachers do not have required technological skills which is responsible for poor adaptation to technology integration. Studies describe that, lack of meaningful interaction, self-efficacy regarding operating technological gadgets, technological disruption, authentic materials, e-learning assessments, higher workload, lack of engagement, depression anxiety, health concerns, socio-economic tension and so on are some significant factors which create negative impressions among teachers and students to adapt to the tech-enhanced pedagogy (Aristovnicet al., 2020; Coman et al., 2020; Rajab et al., 2020).

Recent studies present multifaceted opinions related to the adoption of technology integrated education depending on learners' and teachers' individual differences and beliefs, distinctive learning styles and technological competence, gender role. First of all, adaptation to the new pedagogy encourages learners to reshape their learning strategy to a more continuous habit, as a result the increasing workload of assessments and activities do not affect their

performance (Gonzalez et al., 2020). Students are quite satisfied with this new pedagogy as the online system provides them clear recorded lectures related to their lessons, helps them to achieve learning goals with improvised teaching methods and online interaction with instructors and peers (Chen et al.,2020; Osman, 2020). However, According to Aristovnik et al. (2020), male students have higher technological competence than females which makes male students more confident to adapt to technology enhanced learning. Both female and male teachers prefer online pedagogy and blended learning, teachers from urban areas have more positive attitude towards online education than teachers of rural areas however, in both cases teachers need adequate professional training (Saboowala & Manghirmalani-Mishra, 2020). Thus, different individuals are adapting to the technology integrated language education differently.

Lack of Digital Literacy Rate

Both teachers and students individually differ in terms of their digital literacy rate. Teachers admit that technology integrated education offers flexibility and convenience, however they find it difficult to modify course materials, design assessments using technology, and engage students using various virtual platforms. Similarly, students feel difficulty to cope up with this online mode of instructions (Kebritchi et al.,2017). Udeogalanya (2022) discusses that teachers and students are not properly trained to embrace technology-enhanced education as the sole format of teaching and learning as they were not familiar with digital tools. Studies show that the teachers are not skilled enough to adjust with the online teaching environment as they lack knowledge about the usage of different functions offered by e-learning platforms (Bork-Hüffer et al., 2021; Coman et al., 2020; Udeogalanya2022). Coman et al. (2020) point out that, teachers possess very limited knowledge regarding preparing power point presentations of the subject matters, sharing their screens, using the functions of video conferencing including chat and comments, making high definition and clearly audible video recordings, posting links of

various platforms and so on. He also states, most of the teachers only use basic or less complicated tools and are not interested in making an effort to gain knowledge about technological diversity. On the other hand, experienced teachers with good subject-matter knowledge are reluctant to use advanced technological tools, however, young and novice teachers have a noticeable digital literacy rate (Nazari et al., 2019). Most of the students fail to adapt with online learning due to low digital literacy skills and recent study indicates that students do not have adequate tools for technology integrated education, less motivation, threats of cyber bullying constrain them to explore the functions of advanced technological tools and educative digital platforms (Shuwarto & Machmiah, 2022). Therefore, the lack of knowledge about modern technologies and their functions badly affects the digital literacy rate of students and teachers.

Inadequate Materials for Technology Integrated Education

Recent literature describes that teachers struggle to prepare authentic materials, integrate technology with conventional materials, select materials according to learners' need (Ezra, Bronshtein & Baruth, 2021; Misirli & Ergulec, 2021). Florova et al., (2021) state that, in order to grow interest in tech-based classes students prefer more task based, interaction oriented and charismatic presentation of materials. They also add that traditional materials are not "good fit" for technology integrated pedagogy. According to Dong et al. (2020), materials used during online classes are too much challenging for students with special needs as they increase the screen time which badly affects their mental health and increases anxiety. They also argue that materials including interactive tasks, outdoor gaming, learning through playing, and comprehensible face to face instruction are much more effective than online reading materials. On the other hand, Sepulveda-Escobar and Morrison (2020) argue that due to lack of face-to-face interaction, instructors fail to select suitable materials according to learners' background.

Similarly, according to Muthuprasad et al. (2021), reading materials and recorded video lectures, handouts provided by the teachers during online classes are not enough to cover learners' need as they only include tasks related to reading and writing long exams or assignments, neglecting multi-dimensional learning. Moreover, as learners face technical problems every now and then, sometimes alternative materials initiate stress among them as there are no clear instructions about tasks (Coman et al., 2020). Thus, traditional reading materials are not good to go for technology integrated learning.

Blended Learning in English Language Classrooms

Scopes and Demand for Technology Integration in Traditional Language Classrooms

Language classes need both a communicative environment and technological advancements to be fruitful (Brown, 2000). In this regard, most of the students show a positive attitude towards blended learning, however they do not express a similar attitude for solely web-based education (Sharma & Alvi, 2021). In the same way, educators also suggest a hybrid approach to conduct language classes (Robson, Gardner & Dommett, 2022). According to Ahmed et al. (2020), hybrid approaches can reduce the geographical obstacles and students can attend the class from anywhere. Similarly, this approach allows teachers to include both traditional and technology-based techniques in their classroom strategies. Zhu and Liu (2020) state that this reformation of teaching approach can change the traditional, lecture-based, teacher-centered classes into more learner-centered and task-based classes. In order to do this, we need to rethink the learning and teaching process, reshape the connection among teachers, learners, their roles and teaching materials (Jandrić et al. 2018). Moreover, they suggest that we need to think about combining online and in-person teaching together in order to get a holistic development so that teachers can face any further crisis. Thus, in recent times integration of technology in regular language classrooms has significant scopes and demand.

Challenges in Implementing Technology Enhanced Pedagogy

Researchers have found some challenges regarding blended pedagogy as well. Khan (2021) points out that, electricity problems, insufficient familial and institutional support, poverty, lack of training for teachers to operate technological tools, fundings for buying modern technological tools and gadgets can be some unavoidable challenges in some countries for flipping traditional classes into hybrid classes. On the other hand, Al Amin et. al (2021) investigates that the lack of self-regulated motivation for learning, less interaction between instructors and learners, unstable internet connection, lack of proper training and required technological gadgets, absence of proper materials and assessment strategies are the biggest obstacles for implementing blended pedagogy. Shebansky (2018) describes that technology-adoption decisions of instructors from different backgrounds are influenced by their digital competence and professional development. On the other hand, qualitative data from his study indicate that adopting blended learning is slowed and hampered due to time constraints and lack of technical support. In this regard, Mohamed (2022) states that adoption of blended learning in English language classes needs huge time and professional assistance to be executed as it encounters some challenges such as warm environment of regular classrooms are missing, misinterpretation of non-verbal or virtual instructions, lack of engagement, time management and so on. Therefore, without resolving these issues, implementing blended learning will be a tough job for stakeholders of education.

Technology Enhanced Language Education in Bangladesh

Situations of Tech-based Language Classrooms in Bangladesh

According to Singh et al. (2020), social problems or crises play a significant role in national and educational changes. Correspondingly, COVID-19 immensely affected the education system of Bangladesh and brought a forced shift in mainstream education (Sultana &

Tamanna, 2022). In such a situation, in order to maintain social and physical distance, teachers and institutions prefer an online mode of education. Mousumi (2022) addresses that the sudden shift to remote learning motivates the primary school teachers to explore alternative resources, modern tools, using digital platforms for academic purposes and establish a healthy relationship with the students and parents, however, at initial stage teachers face difficulties adapting to the online education due to lack of pedagogical and technological knowledge. On the other hand, secondary level teachers appreciate online teaching to minimise the loss of institution closure and to adapt to the new pedagogy they use their previous ICT knowledge. However, most of the teachers in secondary level education preferred to take home assignments or home tasks rather than online exams due to lack of proficiency in designing online assessments and content (Farzana, Shabnan & Chowdhury, 2020). In this regard, Hossain (n.d.) argues that content designed for primary and secondary level education are far better than the content presented for madrasahs, though teachers try to reach out to the learners through television and social media, however, contents fail to fulfill needs of learners from distinctive socio-economic background due to less accessibility. On the other hand, recent studies indicate that tertiary level students and teachers both have potentials for adapting to the new pedagogy and using their technological knowledge to facilitate teaching and learning, however, poor internet connection, lack of digital knowledge and previous experience, inadequate materials, insufficient institutional support, mental and physical health status, anxiety, depression, socio-economic tension, lack of concentration are some challenges they experience in transitioning to online education during mid-pandemic (Faisal et al., 2022; Islam et al., 2022; Rouf et al., 2022; Shrestha et al., 2022). Shrestha et al. (2022) mention that in Bangladesh, variation regarding advanced technological tools is not noticed, teachers connect to their students through basic platforms such as Facebook,

Zoom, Viber, Google meet, Google classroom, email, phone calls, Whatsapp, messenger. As a result, most of them consider technology-based learning very mechanical and monotonous.

Therefore, in Bangladesh, individuals hold different opinions regarding technology integrated education depending on their experiences and context.

Language Education in Bangladesh in Recent Days

Taking the drawback of online mode of education into account, stakeholders demand immediate restarting of face-to-face education systems fostering blended learning approaches or flipped classroom arrangements in Bangladesh (Ahmed et al., 2020; Goni & Yerima, 2021; Shah et al., 2020). Moreover, studies reveal that blended learning has further scopes in higher education as it offers both traditional and ICT supported learning in offline and online mode (Al-Amin et al., 2021; Brauweiler & Yerimpasheva, 2021; Dangwal, 2017; Mojsovska Salamovska, 2021; Sing, Steele & Sing, 2021). In this regard, Stoian et al. (2022) argue that in order to ensure a sustainable education system, making a bridge between face to face and digital education is important. On the other hand, Detwyler (2022) discusses that both students and teachers realise the value of using technological tools and platforms to facilitate effective education and most of them address that innovative strategies regarding learning and teaching learnt during mid-pandemic can be considered as future investment for reshaping the education system. However, studies discuss the challenges faced by students and teachers regarding adapting to this new normal pedagogy such as motivation deficiency, inadequate digital tools, physical and mental health issues, writing anxiety, readiness for in-person activities, lack of training for teaching through a blended pedagogy and so on (Cara et al., 2022; Duan et al., 2022; Lamsal, 2022; Pennino et al., 2022). Thus, Pan and Tao (2022) state that post-pandemic or new normal education combines the mid-pandemic positive and negative legacies of distance learning and conventional strategies to adapt to the educational needs of recent times.

Research Gap

Till today, a number of studies have been conducted on the newly emerged online pedagogy and its contribution to the education sectors around the world. Researchers have presented significant amounts of information regarding adjustment to distance learning, advantages and disadvantages of online education, reformation of education using innovative and alternative strategies, individuals' perception on future scope of blended learning based on COVID-19 experiences and so on depending on different context. Moreover, most of the reviewed literature shows that current studies are mostly conducted in tertiary and primary education level and most of them are related to subjects like math, science, engineering, medicine, architecture and so on. However, very few studies portray the reality and the role of technology integration in secondary level traditional language classrooms in Bangladesh. Therefore, this study intends to bridge this gap of knowledge and investigate the perceptions of secondary level teachers, students and their parents about integrating technology in conventional English language classrooms in rural areas in Bangladesh. Moreover, challenges and further affordances of technology integrated language education in rural areas in Bangladesh are explored through this study.

Conceptual Framework of The Study

For this study I combined the “Adoption and use of Educational technology framework” (Gani et al., 2019) and “Systematic model for technology integration in teaching” (Peled & Perzon, 2022) and adapted them according to my research goals. I made my own conceptual framework, “Technology Integration in Traditional Language Classrooms” (figure 2.1) by combining these two models as both of them are related to technology integrated education. The conceptual framework is presented below (Figure 2.1).

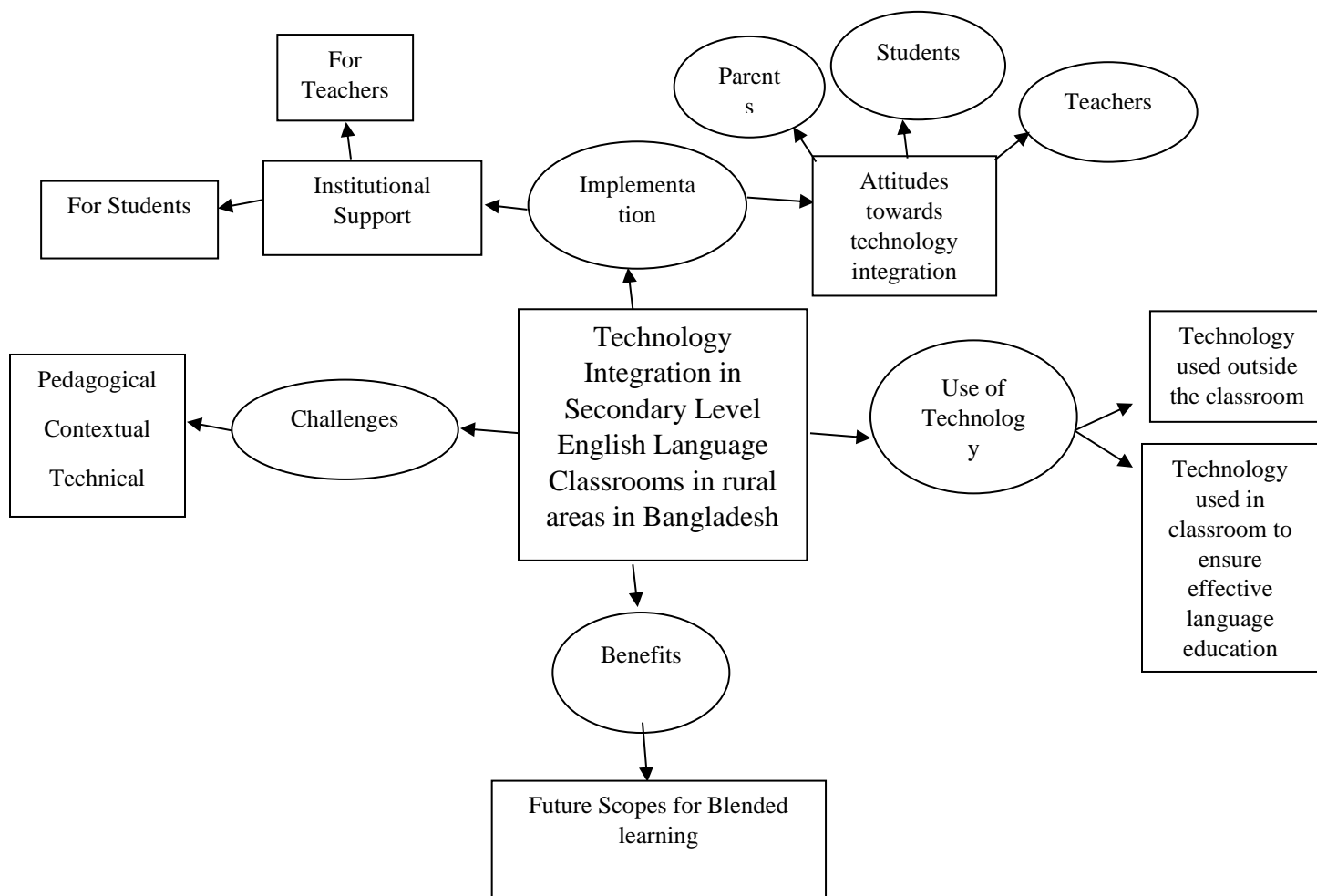


Figure 2.1: The Conceptual Framework of the study

“Technology Integration in Traditional Language Classrooms”

In this chapter, I reviewed existing literature related to my study and tried to locate the research gap. I also included the conceptual framework of the study in this chapter. In the next chapter, a detailed description of the methodology of this study is provided.

Chapter 3: Methodology

In this chapter, the required steps which are taken by me to conduct the study are discussed in detail including data collection procedures and data analysis framework. The main focus of the study is to explore the secondary level teachers, students and their parents' perceptions about incorporating technology in English language classrooms in rural areas in Bangladesh. I followed the qualitative multiple case study approach to conduct the study. Reasons behind selecting this particular approach have been discussed elaborately in the following sections. Moreover, this chapter also discusses the qualitative paradigm and philosophical assumptions related to the study, process of selecting the participants, researcher's role, data collection and analysis procedure along with the process of establishing credibility and trustworthiness in distinctive sections.

The Qualitative Paradigm and Its Philosophical Assumption

Qualitative research method allows researchers to interpret the phenomena in terms of individuals' understanding and perception of it (Kothari, 2004). Therefore, I selected this specific research method to conduct the study as the study investigates secondary level teachers' students' and their parents' perceptions regarding integrating technology in traditional classrooms in rural areas of Bangladesh and explores the potentials and challenges technology integration.

Qualitative research designs depend on philosophical assumptions such as epistemological, ontological, axiological, rhetorical and methodological assumptions related to a particular research paradigm (Creswell, 2014; Rechberg, 2018; Urcia, 2021; Yilmaz, 2013). Among all of the qualitative paradigm, I selected interpretivism to explore the reality and expectations regarding incorporating technology in secondary level English classes in rural areas of Bangladesh. According to Alharahsheh and Pius (2020), interpretive paradigm enables

researchers to consider different factors such as behavioral aspects based on participants' personal experiences which gives a firm idea of reality to the researcher. Furthermore, interpretivism as a paradigm assumes that reality can differ in terms of situation and individual, as a result it leads the researcher towards in depth findings and valuable insights (Moustakas, 1994). Adoption of the interpretivism paradigm leads to generation of high-level validity in data as it is based on personal contribution based on distinctive variables (Myers, 2008). It supported me to be more context based rather than heading towards general view points. On the other hand, conducting qualitative research methods demand a wide range of ontological and epistemological approaches (Johnson et al., 2006). Thus, these features of interpretivism go with the requirements of this study which deals with participants' experiences, perspectives, reflections and so on. This study matches with the interpretivists view that the result of the study is product of researcher and participant's interaction.

The philosophical assumptions of the study are adapted from Creswell's (2007) table of "Philosophical Assumptions with implications for Practice" (p.17). According to Duberley et al., (2012), ontological assumption deals with the gist of the phenomena and reality of their existence. It seeks reality to a research question indicating existing knowledge among participants of the study (Alharahsheh and Pius, 2020). For example, I interviewed teachers, students and their parents to investigate their perceptions regarding incorporating technology during English language classroom practices (RQ 1). Interviews of my participants provided me with a clear view about their perceptions of technology usage in ELT classrooms and their subjective opinion about the role of technology (RQ 1). Moreover, friendly discussions provided me information regarding challenges and further possibilities of technology integrated language teaching in rural areas of Bangladesh (RQ 2). The next assumption is epistemological

assumption, where I tried to be a part of the study by developing knowledge through subjective proof from participants. Here, I gathered knowledge about the researched issue through interaction. The third category of assumption is axiological assumption which defines the role of the values and in this study interpretation of participants' views are the key to contribution along with researchers' values. Fourthly, the rhetorical assumption of the qualitative study inspired me to narrate the study with a first personal tone of voice to represent individuals' thoughts. Finally, the methodological assumption of this study is inductive, qualitative in nature with small samples and a wide range of data are interpreted to gather in-depth information. by interviewing secondary level English language teachers, students and their parents.

Research Design

For this study, the research design has been developed by aligning with research questions which were generated from the reviewed literature related to the study. The interpretive research paradigm has been followed as this particular paradigm interprets people's experience, attitude and behavior to get multi-faced ideas about reality. By using this paradigm, I collected data for this study from participants' interviews based on their experiences and attitudes in order to explore multiple realities. The goal of the study is to portray the perceptions of secondary level teachers, students and their parents about the integration of technology in traditional English classrooms in rural areas in Bangladesh and explore the challenges and future possibilities of it as well. Therefore, to explore this issue, I selected the thematic analysis approach.

I choose the qualitative research method because it is considered as a process of investigation which interprets meaning from different people's distinctive perceptions about any phenomena or social problem (Creswell & Tashakkori, 2007). Therefore, the qualitative research method helped me to investigate the answers of my central research questions and explore the

phenomena related to my study. Rest of the portions of the research design are discussed elaborately in following sections of the chapter.

Thematic Analysis

For this study, data has been analysed using thematic analysis approach. I selected thematic analysis approach as it offers flexible and easily accessible ways of analysing qualitative dataset (Terry et al., 2017). I chose thematic analysis approach suggested by Braun and Clarke (2012) as it helped me to investigate my research questions. Therefore, I followed some steps to analyse participants' interviews through this approach such as transcribing the interviews, generating initial codes from participants' utterances, identifying and organizing the themes according to the research questions, defining themes with words and sentences and lastly preparing a report which answers my research questions. According to Braun and Clarke (2006), thematic analysis method helps to search for important themes or patterns in terms of distinctive epistemological and ontological positions. Therefore, I chose this method to investigate teachers', students', and parents' perceptions regarding technology integrated traditional language classrooms in rural areas and explore challenges and future possibilities of it as well.

Researcher's Role

I have been learning English as a compulsory subject since my childhood. As it is my favourite subject and I want to be an English teacher in future, I am always interested in exploring various issues related to the ELT. Moreover, I belong to a small town and during my primary, secondary, higher secondary education the medium of instruction was Bangla. Thus, I have a genuine passion to work on those aspects which can contribute in improving the English language education scenario in Bangla medium schools in small towns or rural areas. On the other hand, during my schooling and higher secondary education, I did not get any kind of exposure to educational technology in my English classes, however during studying in Applied

Linguistics and ELT in my tertiary level I got to know about them. Therefore, I had this question in my mind that even though technology has such an important role in English language education, why is it not incorporated in fundamental levels of education in Bangladesh especially in rural areas? Therefore, my study aims to explore the issue of technology integrated language teaching in rural areas in Bangladesh.

To conduct this study, I carefully maintained all ethical issues to enhance the trustworthiness of the study. I tried to keep this study free from my biases as much as possible. Moreover, I went through most of the required procedures to maintain the trustworthiness and credibility of the study. I did not manipulate my findings, rather I went through all the interviews of my participants and analyse them according to a particular data analysis framework suggested by Ranner and Taylor- Powell (2003). In order to avoid misguidance and wrong information, the participants were not just picked up randomly, however they were truly interested to be a part of the research, directly connected to secondary level English language teaching and learning practice and selected through purposive snowball chain technique. I used Bengali during interviews to make them comfortable during the conversation.

Setting

This study has been conducted at Mohanpur, a rural area situated in the northern part of Bangladesh, located far from the towns with a very low population density and small settlements. This study aims to investigate the perceptions of secondary level teachers, students and their parents about integrating technology in traditional English language classrooms. Therefore, to collect data I purposefully selected participants (secondary level English teachers, students from class 9 and 10, their parents) from 2 governmental and 2 non-governmental Bangla medium schools situated in Mohanpur. Moreover, the literacy rate of this area is 55.2% and the economic condition of people is average or below the poverty line. Additionally, there is no stable

broadband internet connection. I wanted to explore the challenges and affordances of incorporating technology in traditional English language classrooms in rural areas. Thus, I tried to contact secondary level English teachers and students along with their parents who are from rural areas.

Selecting the Participants

To obtain in-depth and useful information for the study, I selected a particular sampling technique. As an appropriate sampling technique, purposive snowball chain technique has been followed throughout this study. The snowball chain technique allows participants (who are already selected) to encourage other individuals from the same context to be a part of the research. The reason behind selecting this strategy of sampling is that it is considered as the most viable option to get access to the qualified participants which leads the researcher to gain rich data as well (Sharma, 2017). Sharma (2017) discusses that purposive sampling technique offers a wide range of variations. I need to choose few of them which can provide information in detail. Acquiring knowledgeable participants who have experience regarding the phenomena of the study is important in order to get relevant information and avoid misguidance (Bengtsson, 2016). On the other hand, participants are selected based on some criteria. Such as, the participants have to be the secondary level English language teachers, learners and their (L) parents who are directly connected with secondary level education in rural areas in Bangladesh, they need to have experiences of both online and in-person education and participants have to show genuine interest to contribute to the study.

The reason behind selecting participants according to these criteria is, people from the same context provide multilayered information about the reality of the situation (Mackey & Gass, 2017). Moreover, participants need to have both tech-based and traditional education experiences so that their perceptions regarding using technology in traditional classrooms and its future scope

can be discussed based on their experiences, preferences and attitudes. Lastly, it is easy to gain in-depth information from the participants who feel comfortable to participate in the study (Creswell & Poth, 2016). My school teachers and niece (secondary level student) helped me to select participants through purposive snowball chain technique. Once participants agreed to contribute to my study after knowing the purpose of the study, the consent forms were given to them before 2 days of interviews.

Participants' Profile

Participants' profiles are presented in the following table along with their educational qualification and experience of teaching and learning.

Table: Profile of Participants

Profile of Teachers

No	Name	Educational Qualification	Name of the institution	Years of Teaching
1	Halim (Male)	Master in English (B.ed)	Mohanpur Government Boys' High School	7yrs
2	Fatima (Female)	Master in English	Mohanpur Government Girls' High School	9yrs
3	Rejaul (Male)	Master in Political Science	Mohanpur Model High School	5yrs
4	Hossain (Male)	Master in English (B.ed)	Pilot School, Mohanpur	16yrs

Profile of students

No	Name	Educational Qualification	Name of the institution
1	Orpa (Female)	Class 10	Mohanpur Government Girls' High School

2	Rahat (Male)	Class 9	Mohanpur Government Boys' High School
3	Ratul (Male)	Class 10	Pilot School, Mohanpur

Profile of Parents

No	Name	Educational Qualification
1	Mrs. Seema Saha	B. A. pass
2	Mr. Arafat Khan	Class 10
3	Mr. Habib Rahman	B.A in Management

Data Collection Procedure

For this research, I used semi-structured interviews to collect the data for getting useful answers to the research questions. Secondary teachers, students along with parents took part in the interviews as participants. The sections below elaborate the procedure of data collection.

Semi-Structured Interviews

It is quite a common strategy in qualitative research to collect data by conducting interviews. Different types of interviews lead researchers towards different conclusions and are used to fulfill different research purposes (Muratovski, 2015). Among all of them, I selected the semi-structured interview to conduct this study as it provides opportunities to have a comfortable and friendly conversation with the participants. In addition, Mackey and Gass (2017) explain that semi-structured interviews allow the interviewer to maintain a friendly conversation with interviewee based on some predetermined questions (see Appendix B) and give opportunity to record the interview.

Designing the Interview Protocol

I adopted Anne Galletta's (2013) interview protocol framework to design the semi-structured interviews for this study. It is designed for qualitative research which allows collecting data from the participants based on their experiences, feelings, perception, preferences regarding any phenomena, which is quite similar to this study as well. The framework suggested by Galletta (2013) has three different segments. Those segments are mentioned below:

- A. Opening Segment: Creating space for a narrative grounded in participant experience.
- B. Middle segment: Questions of greater specificity.
- C. Concluding Segment: Revisiting the opening narrative for important theoretical connection and moving towards the end. (Galletta, 2013, p. 46-51).

In order to begin the opening segment, I completed all the formalities with the consent form and expressed my gratitude towards the participants. To ensure that the participants feel comfortable, I discussed the purpose of the study, data collection procedure and assured the participants about the confidentiality of the interview. In the beginning, the conversation started with ice breaking questions and participants' personal information. In this phase, I did not jump into the questions directly related to the phenomena rather I started with open-ended questions and gave space to the participants to open up. Interview questions mentioned in the appendix are aligned with central research questions of the study. I attentively listened to the unfolding stories, noted particular details within the narratives that are relevant to the study and demanded explanation.

In the middle segment of the interview, I moved towards eliciting in-depth, context-based, elaborated information as the participants were already engaged and comfortable with me. In this phase questions are not personal rather specifically related to the study. Thus, I asked such

questions which aided the collection of adequate information for the study. Most of the important information came out of this segment as participants shared their experiences without any hesitation. Moreover, I also asked prompt questions which arose during the first segment for better understanding and gaining multidimensional information for my study.

In the concluding segment, I got a chance to ask more questions to the participants. Moreover, I got the opportunity to explore more by asking explanations of the opinions which the participants had shared previously. I requested the participants to share more information if they want to. I provided hints to the participants about the closure and indicated the value of his/her contribution to the study by thanking them. These phases guided me to finalise my interview questions for the study, maintain a smooth chronology of the questions, and look forward to additional prompts to gather essential information for the study.

Piloting the Interviews

According to Mackey and Gass (2017), one way of assessing the utility of interview protocol is to pilot interviews as it allows to phrase final interview questions, maintain their order, gauge the usefulness of the questions and interview structure, gives the researcher prior idea related to the situation. In this regard, after getting suggestions from the expert on interview questions, I piloted the interview questions with three of my participants, one from each group. I selected these three participants for piloting interview questions because I was familiar with them and it was easy to get access to the participants. The pilot interviews helped me to practice how to conduct a spontaneous interview and record responses of the participant at the same time.

Conducting Final Interviews

In order to conduct the final interviews, I had to prepare a consent form and send it to the participants (Appendix A). I requested the participants to read it carefully and give it back to me with their signatures. Afterwards, I contacted them and fixed appointments according to their

convenience. I took one by one in-person interviews and noted down and audio recorded participants' responses. Each interview took 40 mins to 1 hour. I also contacted the participants through phone calls for further clarification of gathered data.

An Overview of Data Analysis Procedure

This section of the chapter discusses the data analysis framework of this study.

Data analysis Framework

In order to establish its data analysis procedures, any research work relies on a particular data analysis framework suggested or used by other scholars to interpret their data. As a result, based on that framework the researcher can analyse his/her data appropriately according to the research questions. As this study is qualitative in nature, to analyse the data for this study I followed the five steps suggested by Ranner and Taylor- Powell (2003) in their article named "Analyzing Qualitative Data". The five steps are mentioned below:

Step 1: Getting to know the data.

Step 2: Focusing on the analysis.

Step 3: Categorizing the data.

Step 4: Identifying patterns and connection within and between categories.

Step 5: Interpretation- bring it all together.

In the first step, called getting to know the data I went through the transcribed interviews several times. I also listened to the recorded phone calls. In the second step I reviewed interviews of each individual to analyse whether their responses are relevant to my research questions or not. Afterwards, according to the third step categorizing the data, I tried to find out the themes and organised them coherently. Following the Fourth step, I decided to organize information according to the themes and titled them. Lastly, in the fifth step, I tried to connect the themes,

illustrated my interpretations with relevant codes, examples, and documented important findings to make the information practical and relatable.

Analysis of the Interviews

In order to analyse the data collected through the interviews of the participants, at first, I transcribed interview notes verbatim manually. After that, those transcriptions were coded by me with the help of the seven-column coding template (Ahmed, 2017). While coding the transcriptions, I used strategies such as open coding and in-vivo coding in two cycles (Saldana, 2015). I coded the entire transcription of each interviewee for the first coding cycle. After that, I chose prominent codes from the transcriptions (see Appendix C.1). Those codes were used to look for emerging themes in each participant's case. Then, all the themes were compared among the multiple cases to create a thematic pattern so that these thematic patterns can reflect the answers of the research questions of the study (see Appendix C.2).

Ethical Consideration

Before conducting the interviews for this study, all ethical issues were taken into account. Firstly, the participants of the study were informed about the purpose of the study and how their interviews will contribute as the data of the study. I also informed them that their interviews would be audio or video recorded with their consent for further data analysis. Participants took part in the research voluntarily. I kept their identities private and used pseudonyms instead of their real names in order to reduce participants' hesitations. I did not manipulate any information and tried my best to avoid personal biases.

Establishing Credibility and Trustworthiness of the Data

I need to follow some essential steps as a qualitative researcher to make my study credible and trustworthy. One of them is to go through other researchers' work and see how they maintain the trustworthiness and credibility of their study to other scholars in the similar field

(Tracy, 2010). To ensure credibility and trustworthiness of a study, the researcher needs to establish credibility, dependability, transferability and confirmability of his or her data (Leung, 2015).

To make the data credible, I adopted member checking, triangulation of data and writing a thick description of the study. Credibility can be maintained based on how much the collected data can reflect the accurate information related to the reality (Mackey & Gass, 2017). The participants of the study can understand better whether the collected information were reflecting their opinions correctly or not. Therefore, after transcribing the interviews, I had to give a copy to the individual participants to check and establish the credibility. None of the participants has any e-mail ID, therefore I needed to give transcription notes in-person.

Secondly, I followed the strategy of triangulation. To establish the credibility of this study, I selected analyst triangulation technique and triangulation of sources. In order to go with analyst triangulation, there should be multiple analysts to analyse collected data. Moreover, for this study, intra-coder and inter-rater reliability were adopted as strategies to conduct analyst triangulation. For intra-coding reliability, I coded the interviews and after ten days, I again coded them to see to what extent both of the coding matches with each other. For inter-rater reliability, parts of interview transcripts were shown to my supervisor through email. These procedures make the study dependable as well. Lastly, to investigate the consistency of information from different sources I used triangulation of sources and thematically analysed information collected from the participants belonging to the three different groups to see whether their viewpoints match or not. Regarding thematic analysis and procedures of conducting this study, a thick description has been provided to establish credibility (Denzin, 1989) and transferability (Tracy,

2010) of the study so that similar studies can be done by researchers in other contexts due to the transferability of the study.

To ensure the credibility, dependability, transferability and confirmability of the study, I took all the steps mentioned above to make the study trustworthy and credible.

This chapter discussed the data collection and data analysis procedure of the study. Moreover, the ethical consideration of the study and steps of making the research credible and trustworthy are included in this chapter as well.

Chapter 4: Findings

In this chapter, I report on the findings that I thematically analysed from the participants' interviews of this study. The main objectives of this study are to investigate secondary level teachers', students' and parents' perceptions about technology integrated language education in traditional classrooms in rural areas in Bangladesh and explore challenges and future affordances of it. Thus, I segmented this chapter into two parts, the first part presents the findings and prominent themes aligned with research question 1 which is related to participants' perceptions about technology integrated language education in traditional classrooms. In the second part, findings and prominent themes related to research question 2 can be found which elaborates challenges and future potentials of tech-enhanced language education in rural areas in Bangladesh.

Findings and Themes Related to Research Question 1

Initiating Flexibility in Language Education Through Technology Integration

In answering the question of what are the advantages of technology integrated teaching in rural areas, the important findings of my study are, most of the participants enjoy the flexibility that comes with technology integrated language learning, however three of them have different perceptions. Participants admitted that they like the innovative teaching and learning practices. They also appreciated the advantages of recorded lectures and resources available on digital platforms. Most of the teachers mentioned that they enjoy the flexibility of teaching from home through digital platforms and maintaining connection with the learners outside of classrooms. Moreover, students also expressed similar opinions regarding the technology integrated language learning. According to the learners, technology incorporation in traditional classrooms will provide them flexibility and ease to catch up with their classes anytime from anywhere. Two of the learners (Rahat and Ratul) discussed that technology integrated language learning provides

them the opportunity to learn from home. They also added, as technology integrated learning introduces them with online learning materials, resources and recorded videos available in digital platforms, it helps them to prepare their lessons in a very short time without even attending in-person classes. As a result, they can use that time to enhance their extra-curricular skills.

However, another participant Orpa stated that those recorded lectures are not enough to learn language properly. Parents also encouraged the flexibility of distance learning in the context of rural areas and described technology integrated language teaching as a great support for continuing the academic activities during any crisis. One of the parents, Mr. Khan said:

Learners can attend classes from home. I mean during the rainy season, in our village every year we have to deal with floods. If children cannot go to school at that time, then with the help of technology, they will be able to attend classes. Moreover, during health problems and any crisis, the academic activities will not stop. Teachers will be able to communicate with students after school as well. (DU KHA 20)

Failures in Ensuring Effective Language Education

Most of the participants admitted that they have confusion regarding the efficacy of compulsory use of technology in ensuring effective English language education. Based on their experience of technology integrated language teaching during online education, teachers described that technology integrated traditional classrooms are unable to serve the actual purposes of quality teaching. They further mentioned that taking influential factors such as time constraints, classroom size, monitoring issues, lack of prior knowledge or experience, workload and many more into account, it is not possible for them to incorporate technology in traditional classrooms and ensure quality teaching at the same time. Therefore, language teachers do not think technology integrated language teaching in traditional classrooms is fruitful. One teacher Hossain asserted technology integrated language teaching as a pure waste of time in the context

of traditional classrooms in rural areas. Similarly, students who contributed in this study mentioned that technology incorporation in traditional classrooms will create more complexity and disturb the discipline of the classroom environment. Two of the learners (Orpa and Ratul) shared their bad experiences of online education and admitted that they fail to concentrate and feel less motivated to participate in tech-based activities. According to the learners, technology integrated language classrooms fail to meet their expectations in terms of achieving learning goals as it lacks clear instruction, teachers' guidance and supervision, and adequate materials. One student, Orpa, pointed out that technology integrated language learning in traditional classrooms makes her frustrated as it increases study pressure. She added, there are some students in her class who are not attentive at all and in traditional classrooms it will be difficult for the teacher to maintain the integrity of the learning environment. Students indicated that technology integrated classrooms do not have the warmth of traditional classrooms. As a result, effective learning fails to take place. It was evident in parents' responses that they cannot rely on technology integrated language classrooms in terms of initiating effective learning. One of the parents Mrs. Saha stated that as both teachers and students in rural areas do not have proper knowledge and experience of tech-enhanced education, it will take a lot of time for them to adjust with the pedagogy. Another parent, Mr. Habib discussed, quality language education is not possible to be ensured just by incorporating some machines in a learning environment.

On the other hand, teachers shared their dilemmas about the efficacy of assessments and materials. They discussed that the tech-based assessment system is not compatible with traditional teaching practices and materials, especially in the syllabus oriented and examination dependent education system encouraged in Bangladesh. They also admitted that most of the teachers in rural areas lack the capacity of designing appropriate assessments for tech-based

teaching. Similarly, students shared that the assessment system in language education lacks variation, feedback and error correction and is unable to fulfill learners' needs. In addition, they said those assessments failed to grasp their attention as there was no opportunity to show creativity and room for improvement. One student (Rahat) mentioned he used to copy the answers from Google, as a result he did not learn anything and used to make the same errors due to less feedback. Most of the students shared that they did not get effective feedback, which later impacted negatively in their learning and caused a learning gap. Parents also expressed similar views regarding the assessments. One parent (Mr. Habib) said he just noticed her daughter writing answers to some comprehension-based questions. One of the parents, Mrs. Saha, mentioned that those written assignments can only help to enhance students' handwriting as they solely focused on writing skills and other three skills were neglected. As a result, their effectiveness in terms of learning English as a language was zero.

Chances of Misusing Technology and Its Potential Threats

During interviews especially parents and teachers expressed their concerns about the misuse of technology. All four of the teachers mentioned that compulsory use of technology comes with some threats and privacy issues for both teachers and learners. Teachers (Fatima and Halim) mentioned that they feel hesitant to incorporate technology in regular teaching in order to secure their credentials and avoid potential threats of using technology. Moreover, teachers mentioned that with the help of technology learners form bad habits of copying assignments from a very early age and use technology only for entertainment purposes rather than to study. Similarly, parents also shared that their children watch cartoons, listen to music while studying through digital platforms. Moreover, one parent, Mr. Habib, mentioned that his child faced difficulties concentrating on recorded video lectures as smartphones kept on notifying people about various newly launched apps and platforms. As a result, while studying his daughter used

to browse other websites which eventually affected her studies and academic results. Parents also expressed their worries about teenage learners' curiosity that can influence them to go through inappropriate platforms.

Compulsory Use of Technology and Its Negative Impacts on Health

Participants mentioned that due to mandatory use of technology, there might be many physical and mental health issues. Most of the teachers mentioned that during online education they get easily frustrated and short-tempered due to workload. On the other hand, students and parents share similar perceptions about mental and physical health issues. Students shared that as technology-integrated education systems increase their screen-time, they suffer from backache, headache, eye-sight problems and many more. Parents stated that their children are struggling with exam phobia, anxiety and depression after attending online classes during pandemic. Mrs. Saha said that her son feels anxious to take part in traditional exams, gets easily frustrated for extra study loads.

Acceptance Issues and Psychological Differences among the Stakeholders

Participants' responses on overall perception about technology integration in traditional classrooms revealed that, people involved with Bangladeshi secondary level education differ in terms of acceptance of technology integration and their opinion varies from person to person even within the same professional groups. Firstly, teachers' perceptions about technology integration varies in terms of their age and experience. For example, aged and experienced teachers like Mr. Hossain shared,

“I feel reluctant to incorporate technology and am about to retire, at this time he doesn't have such enthusiasm to learn new things” (DU HOS 35)

However, young teachers like Mr. Rejaul are very much prone to use technology in traditional classrooms. Moreover, male and female teachers in rural areas are not equally

comfortable in using technology in traditional classrooms. In most of the schools, head teachers and authorities think that technology integration will disturb the discipline of the school environment. On the other hand, in rural areas learners come from different socio-economic backgrounds, their learning aptitude varies. It is not possible for all the learners to adapt to the technology integrated education equally. Parents also express their worries about learners' age sensitivity, cyber security and many more. Most of the parents think that their children are not sensible enough to handle digital tools and platforms. Additionally, though parents of male students did not show that much concern about their child's privacy or security, however, parents of female students expressed a lot of concern about their child's cyber security and social image.

Findings and Themes Related to Research Question 2

Challenges of Technology Integrated Language Education in Rural areas

Unavailability of Digital Tools and Insufficient Digital Literacy Rate

While discussing the challenges of technology integrated education, participants emphasized on the issue of unavailability of digital tools which is affecting their digital literacy rate. Students mentioned that schools in rural areas do not have digital tools and modern facilities. Though governmental schools have computers, students are not allowed to access. Orpa and Rahat shared that they have smartphones and computers at home. However, Ratul shared that "most of the students in my class cannot afford digital tools" (DU RAT 26). Thus, students in rural areas lack digital literacy rate due to less access and unavailability of digital tools. Similarly, teachers admitted that they have very limited knowledge of educational technology and some of them do not have any knowledge at all. Teachers shared in rural areas they cannot afford basic digital tools, and sometimes have to borrow from others. As a result, there is no scope for teachers to enhance their digital literacy rate. Fatima said, "I borrowed phone from my relatives during online classes" (DU FAT 30). All of them discussed that their

school authorities do not provide any support regarding this issue. Rejaul shared that he has knowledge of digital tools, however unable to incorporate his knowledge in teaching due to insufficient gadgets in his school. Parents of the learners, stated that they do not have any technological knowledge at all because they (P) do not have personal smartphones or computers at their home. One of the parents discussed she was unable to help her daughter during online education as she does not know how to use Facebook and that hampered her daughter's study. Mr. Khan also expressed his helplessness as he was unable to provide digital gadgets to his son due to his financial condition. Mr. Habib described that,

“Teachers in rural areas cannot even operate analogue cell phones, thus it is not expected from them to introduce modern technology in classrooms” (DU HAB 44).

Economical Insolvency Leading Towards More Difficulties

Economic crisis plays an influential role in incorporating technology in traditional classrooms in rural areas. Teachers shared that most of them do not have such economic conditions to buy modern gadgets in order to incorporate technology in teaching. Similarly, students also indicated that their parents cannot afford buying technological tools for their studies. Ratul (S) compared tech-based education to a “nightmare” referring to his financial condition. Among Parents, Mrs. Saha mentioned in their area secondary level learners belong to different socio-economic backgrounds and it is not possible for everyone to buy digital tools. Moreover, Mr. Khan and Habib also described that in their village internet connection is very costly and it is difficult to pay the bills.

Technical Challenges

Technical challenges slow down the technology integration in language education in rural areas. Teachers said that due to poor internet connection and electricity issues they are unable to use technology. In addition, they stated that the electricity problem creates a lot of trouble during

regular classes. Students also mentioned that due to unavailability of internet and electricity problems they face a lot of difficulties. Students pointed out they could not download the recorded videos during online education. Sometimes they failed to submit the assignments on time as they were unable to check the instructions from the Facebook page due to the poor internet connection. Parents also shared that due to electricity disturbance and poor internet connection their children had to struggle during online classes. Moreover, most of the participants indicated that the English language classrooms in rural areas do not have proper architectural plans and enough technology experts to maintain technological goods. Teachers mentioned schools in rural areas have very basic gadgets, merely a computer, however those are dead due to poor maintenance. Students also presented similar information regarding infrastructural issues that in their schools there is no technological assistance as their classrooms are not equipped with modern gadgets and settings. Additionally, parents share that schools in their village lack proper infrastructure to integrate technology in the regular classrooms due to insufficient funds. Thus, same problems will remain if technology is integrated in regular classrooms.

Lack of Institutional Support

Teachers and learners both admitted that they did not get any institutional support during online education, the situation is still the same in the case of technology incorporation. All of the teachers mentioned that schools did not provide them enough training and necessary facilities so that they could incorporate technology in language classes. Moreover, institutions focus on academic results of the learners. However, effective learning is neglected. Learners also shared similar attitudes towards institutional help. Learners stated institutions are unable to provide them required support for tech-enhanced learning and do not encourage it as well. Learners'

parents also shared that schools do not provide any technological support facilitate tech-based learning.

Future Affordances of Technology Integrated Language Education in Rural areas

Noticeable Changes in Teaching and Learning Patterns

All the participants acknowledged that technology brings several innovative opportunities and significant changes in teaching and learning patterns. Teachers (Halim and Rejaul) stated that they share educational videos with their students through WhatsApp. Moreover, teachers also mentioned that technology not only helps them to teach in classrooms, but also share contents and clear learners' misconceptions outside of classrooms. On the other hand, teachers also think that, as technology promotes independent or discovery learning, it will help to abolish the coaching center business and enable learners in rural areas to gain knowledge from multiple digital platforms and resources. Similarly, students admitted that technology reduces their dependency on teachers and parents and helps them to learn independently. Moreover, for all the students the facilities available for collaborative learning in WhatsApp and Facebook were very beneficial. Students admitted that technology provided them the opportunities to learn from online materials along with their textbook. For instance, Orpa and Rahat formed habits of online reading, making educational animated videos on YouTube. Parents stated that they observed their children's growing interest towards tech-based learning as they noticed nowadays learners like to study language by using online resources like online dictionary, Google Translator, YouTube and many more. However, parents also emphasized that technology incorporated language learning will make learners tech-dependent and keep them away from academic materials. They think it is threatening, as digital platforms can be misleading. Mrs. Saha appreciated the fact that in rural areas students will get advanced learning facilities similar to the

students in urban areas through technology integration. Mr. Khan also discussed that his son helped him in farming by gaining agricultural knowledge from YouTube videos.

Growing Interest Towards Blended Learning

Participants of this study considered technology enhanced language classrooms as a support for traditional classrooms rather than an alternative. Looking at the contextual and pedagogical challenges of technology integration in traditional classrooms in rural areas, participants stated that it will not be intelligible to fully rely on tech-enhanced language learning. However, they think technology integrated teaching and traditional teaching should go hand in hand. Parents think that technology integrated language classrooms will help their children to be future prepared for higher studies. Additionally, students and teachers mentioned that such classrooms will be a great initiative to continue academic activities during any social or national crises such floods, pandemics, political unrest and many more.

In this chapter, I reported findings and prominent themes related to my research questions which show that technology integrated language education has scopes in rural areas, however challenges are much more prominent than the affordances. In the next chapter, discussion regarding my key findings is presented briefly.

Chapter 5: Discussion

This chapter includes brief discussion on my key findings and I tried to relate those findings with reviewed literature. Discussions are organised based on the themes related to my research questions that are identified from participants' responses. Research questions of this study are:

Research Question 1: What are the perceptions of the teachers, students and parents about integrating technology in secondary level traditional English language classrooms in Bangladesh?

Research Question 2: What are the challenges and future potentials of integrating technology in traditional language classrooms in rural areas of Bangladesh?

In the final chapter of this study, I discussed the implications and suggested some recommendations.

Discussion on the Findings Related to Research Question 1

Excitement for Utilizing Technological Facilities in Traditional Language Education

Studies conducted in the context of tertiary level education portrayed that flexibility of teaching and learning in convenient locations and access to the recorded lectures influenced people's perception of technology integrated traditional classrooms positively ((Bork-Hüffer et al., 2021; Hill & Fitzgerald, 2020; Rajab et al., 2020). Similarly, secondary level education stakeholders (teachers, learners and parents) in rural areas also considered the flexibility in language education and availability of online resources as the most significant advantages of technology integrated traditional classrooms. Though teachers are happy with the conventional way of teaching, they are excited to explore innovative teaching strategies. Based on their learning aptitude, learners also expressed their interest in utilizing technological facilities in their studies to save time and enhance extracurricular skills.

Doubts and Dilemmas regarding Ensuring Quality Language Education

Udeogalanya (2022) discusses that teachers and students are not ready to embrace technology-enhanced education. Similar realities are described by the secondary level teachers and students in rural areas in Bangladesh regarding technology enhanced language learning. They shared doubts and dilemmas regarding its efficacy to ensure effective language learning and teaching. On the other hand, Kılıçkaya (2022) pointed out that immediate feedback and error correction can be considered one of the most significant elements facilitating effective learning. However, secondary students and parents mentioned that teachers are unable to provide effective feedback and error correction. Due to lack of experiences about tech-enhanced teaching, teachers in rural areas lack these qualities.

Several studies I reviewed also talked about how technology integration in traditional classrooms is not a wise decision to ensure quality education from teachers' and learners point of views, none of them included parents' perspectives regarding this issue. Parents have significant contributions to shape learners' learning attitudes and beliefs. Therefore, I believe my study can offer concrete ideas to ensure effective learning through technology integration by presenting parents' opinions.

Consequences of Misusage and Overuse of Technology

Ibrahim et al., (2023) discussed that technology might help learning, however it has dangerous consequences if its misused or used without supervision. In rural areas of Bangladesh, English teachers do not have enough knowledge regarding cyber security. As a result, they feel insecure to incorporate technology into their teaching practices. On the other hand, using technology while studying is common for most of the secondary level learners, they browse and go through several digital platforms without even gauging the consequences. The reason behind this is most of the secondary level learners are teenagers, as a result, they have a very short

attention span and high level of curiosity of learning new things. As parents also have very limited knowledge about technology, they fail to monitor or supervise whether the learners use technology for learning purposes or not. Shama and Iqbal (2000) suggested that the government or authorities should design and implement policies in terms of restriction of accessing inappropriate websites, platforms and apps in order to control the misuse of technology and ensure its use only for educational purposes.

Physical and Mental Sufferings Initiated by Compulsory Use of Technology in Education

Studies describe that, increasing workload, lack of engagement, depression anxiety, health concerns, socio-economic tension are some significant factors which create negative impressions among teachers and students to adapt to the online pedagogy (Aristovnic et al., 2020; Coman et al., 2020; Rajab et al., 2020). Most of the literature I reviewed in chapter 3 described peoples' mental and physical burdens during online education, however very few of them explored the negative impact of mandatory use of technology in people's health in traditional classrooms especially in rural areas. Most participants of my study think that mandatory use of technology will negatively affect their health. Therefore, physical and psychological problems of the teachers and learners should be taken into account before incorporating technology in traditional classrooms.

Distinctive Attitudes of Stakeholders

Nezari et al., (2019) stated that experienced teachers with good subject-matter knowledge are reluctant to use advanced technological tools, however, young and novice teachers have a noticeable digital literacy rate. In Bangladeshi rural areas, language teachers expressed similar attitudes towards technology integrated teaching in traditional classrooms. Moreover, female teachers are more reluctant, less proficient in technology integration and camera shy than male teachers. Thus, it can be said that, due to such differences among teachers' beliefs, it is quite

impossible to train them to incorporate technology in traditional teaching. On the other hand, according to Aristovnik et al. (2020), male students have higher technological competence than females which makes male students more confident to adapt to tech-enhanced learning. Students with good technological skills adapt to the new pedagogy very quickly rather than students who have less technological exposure (Händel et al., 2020). Studies show that female students are better in academic performance (final exams, participation, online discussions) than males in terms of tech-enhanced education (Alves et al., 2020; Bisht et al., 2020; Chang et al., 2014). In Bangladesh, teachers observed similar differences between male and female students. None of the existing studies discussed female students' parents' tensions regarding ensuring their child's cyber security. However, while interviewing parents for my study, I observed that parents of female learners are more concerned than male students' parents about their child's cyber security and social image.

Discussion on the Findings Related to Research Question 2

Challenges of Technology Integrated Language Education in Rural areas

Unavailability of Digital Tools Affecting Digital Literacy Rate

Adedoyin et al., (2020) mentioned the availability of suitable technology and proper knowledge regarding their functions as the most important component of incorporating technology in classroom practices. Studies show that, the teachers were not skilled enough to adjust with the online teaching environment as they lack knowledge about the usage of different functions offered by e-learning platforms (Bork-Hüffer et al., 2021; Coman et al., 2020; Udeogalanya2022). From the participants' responses, it seems that the secondary level English teachers and students in rural areas fail to meet the most important prerequisites of technology integration which are digital tools and sufficient digital literacy rate. This might be considered as a big obstacle in incorporating technology in traditional English language classrooms.

Lack of Technological Facilities

Success of technology integrated classes are highly dependent on the sufficient and uninterrupted supplies of internet connection (Kebritchi et al., 2017). In order to integrate technology in classrooms, the classrooms need to have proper architectural plans and be equipped with modern facilities such as software, hardware, secured networking system, Wi-Fi and many more. However, traditional classrooms in rural areas lack most of them, thus practitioners face trouble.

Expensive Tech-based Education Increasing Socio-Economic Tension

Moscoviz and Evans (2022) state that pandemic boosted up learning inequalities and learning loss or dropout rates drastically increased in primary and secondary level of education as students from low-income countries fail to buy technological tools to continue online learning. In this regard, one of the parents, Mrs. Saha shared that:

I saw students were dropping out from schools during online education due to financial crises and most of the learners' parents do not have such financial ability to bare the expenses of technology integrated education. (DU SAH 32)

Ratul (student) said that he thought of dropping out from school during online education due to financial crisis. Moreover, the area where the study is conducted, most of the people have average or below poverty line economic conditions (see section setting in chapter 3). In such a situation, using technology only for educational purposes seems very expensive to them. Additionally, with modern technologies, school fees will increase eventually. In rural areas, where most of the students and teachers belong to lower middle class, middle class or needy families, it will be very troublesome for them to adapt with such an expensive education system. Very few studies explored the financial struggles of people in terms of regular tech-enhanced

education. Thus, I hope my study will help the policy makers to take this influential issue into account before implementing tech-based education in rural areas.

Lack of Institutional Support is Slowing Down Technology Integration

To incorporate technology in English language classrooms, getting essential support from institutions or schools is equally important. From participants' responses, it is very much evident that the incorporation of technology in traditional language classrooms in rural areas has been obstructed and slowed due to the lack of institutional support. Mohamed (2022) states that adoption of technology integrated learning in English language classes needs huge time and professional assistance to be executed.

Future Affordances of Technology Integrated Language Education in Rural areas

Combination of Tech-enhanced and Traditional Language Education

Pan and Tao (2022) stated the education system nowadays combines the positive and negative legacies of technology based learning and conventional strategies to adapt to the educational needs. In rural areas in Bangladesh, technology will bring a lot of changes in teaching and learning patterns. Additionally, language learning will not be confined to bookish knowledge and classroom learning only, however, technology integration will help teachers and learners to gain multi-faced practical knowledge to enhance both academic and personal skills and be future ready. The most significant affordance of technology integration in rural areas is, it will reduce dependency on coaching centers and save learners' money and time.

Increasing Demands for Maintaining a Balance

Studies reveal that blended learning has further scopes in higher education in post-pandemic situation as it offers both traditional and ICT supported learning in traditional and online mode (Al-Amin et al., 2021; Brauweiler & Yerimpasheva, 2021; Dangwal, 2017; Mojsovska Salamovska, 2021; Sing, Steele & Sing, 2021). In this regard, Stoian et al. (2022)

argue that in order to ensure a sustainable education system, making a bridge between conventional and tech-enhanced education is important. Though the integration of technology in secondary level traditional English language classrooms in rural areas in Bangladesh has many drawbacks, the positive experiences of using educational technology have triggered the stakeholders to explore innovative features of it. Lastly, blended learning has huge scopes in rural areas in Bangladesh.

Chapter 6: Implications and Conclusions

In this concluding chapter, I will provide an overview of my study, summarize the major findings regarding two of my research questions, discuss the future scopes of my study and its contributions to technology integrated language education in rural areas of Bangladesh. I will also share some recommendations to improve the reality of technology enhanced language learning classrooms in Bangladesh. Along with mentioning some limitations of my study, I will sum up this chapter with concluding thoughts.

Overview of the Study

The utmost purpose of my thesis research was to portray the reality and expectations regarding technology integrated language teaching and learning in rural areas in Bangladesh. Moreover, this study also explores future affordances and challenges of tech-based language education in traditional classrooms in rural areas of Bangladesh. In order to explore the reality, expectations, potentials and challenges of incorporating technology in traditional language classrooms, I investigated secondary level teachers', students' and their parents' perceptions related to technology integration in rural areas in Bangladesh. The key findings of this qualitative study represent that despite many limitations and difficulties, technology incorporation has a far-reaching impact on secondary level education in remote areas of Bangladesh. Furthermore, in rural areas where there are infrastructural issues, financial crisis, unavailability of digital gadgets, electricity problems resulting in poor internet connection and many more, traditional classrooms and its efficacy in terms of language education cannot be replaced by solely tech-based education overnight. However, traditional classroom practices and technology integrated classroom practices can go hand in hand in order to facilitate English language education and open the door for innovative alternatives to meet the pedagogical expectations of the 21st century.

Implications of the Study

This study has portrayed the perceptions of secondary level English teachers, students and their (S) parents on integration of technology in traditional English language classrooms in rural areas in Bangladesh. Hence, this study has distinct implications for different groups of people and stakeholders who are directly related to the secondary level of education. Firstly, the social implication of my study is equally significant for the participants from all three groups (parents, teachers, students). Secondary level teachers and learners will be benefited by the study and make themselves prepared for tech-based education in rural areas as they get to know about the challenges and scopes of technology integrated language education in traditional classrooms, learners' belief and other pedagogical issues. At the same time, my study provided in-depth information about the advantages and disadvantages of incorporating technology in traditional classrooms in rural areas from the learners', teachers' and parents' perspectives. This information will be helpful for other people to relate with and enables them to know about the future potentials of incorporating technology in similar contexts. This study also described what kind of challenges the parents of rural areas go through in terms of providing facilities for their children in a tech-based education system. Moreover, in the findings of the study other contextual, socio-economic, infrastructural and technical problems regarding incorporating technology in language classrooms in rural areas are discussed elaborately. Thus, this study will help the Government, Education Ministry of Bangladesh and policymakers of secondary level education to take necessary initiatives.

Secondly, my study also has some pedagogical implications. Results show that teachers want to incorporate technology in regular classroom activities as it helps them to use innovative and learners' friendly teaching techniques facilitated by multiple resources and materials. Teachers mentioned some specific technological platforms which facilitate their teaching such as

YouTube videos and WhatsApp. Thus, this study will give novice teachers the idea about digital tools which can actually enhance their teaching techniques. On the other hand, learners appreciate the fact that incorporation of technology initiates discovery learning and collaborative learning, and offers multiple alternatives for learning materials and resources which help the learners achieve their learning goals. Therefore, the incorporation of technology in secondary level English language classrooms makes both teachers and learners future-ready. The findings of the study will help the learners and teachers to learn about the possible potentials of educational technology and how they can use different functions of technology in order to fulfill their pedagogical needs.

To conduct this study, I combined the “Adoption and use of Educational technology framework” (Gani et al., 2019) and “Systematic model for technology integration in teaching” (Peled & Perzon, 2022) and adapted them according to my research goals. I made my own conceptual framework, “Framework for Technology Integration in Traditional Language Classrooms in rural areas” (see figure 2.1) by combining these two models as both of them are related to educational technology and its implementation. Future researchers can use the conceptual framework of this study to explore or evaluate similar and larger contexts. Lastly, best to my knowledge, only this study has implemented this specific conceptual framework in Bangladesh. Thus, the conceptual framework of the study and its application are significant contributions to the current body of literature.

Lastly, this study has national and global contributions too as it shows the struggles of stakeholders from secondary level education in rural areas. From the findings, it is evident that students and teachers from rural area are technologically much disadvantaged than the teachers

and students from urban areas in terms of access and availability of modern facilities. Thus, this study hopefully will contribute to represent and for further improvement of such situation.

Recommendations

Based on the findings of the study, I would like to provide some suggestions regarding incorporating technology in traditional English language classrooms in rural areas in Bangladesh. These suggestions would be helpful for the secondary level education stakeholders.

- Institution authorities should arrange some demo classes by introducing modern technologies in the traditional classrooms so that it can help the teachers to deal with technology.
- It is not possible to train all the teachers at a stretch as their teaching beliefs, context, techniques are not similar. Thus, teachers who are interested in incorporating technology in regular classrooms can attend both online and in-person training or courses by their own initiatives for personal and professional skill development.
- Schools should arrange meetings involving authorities, teachers, students and their parents where they can share their problems so that they can find effective solutions collaboratively to overcome them.
- Most of the schools in rural areas do not have proper infrastructural settings to incorporate technology in traditional classrooms. These issues should be informed to the higher authorities.
- In every school a trained and certified technology expert should be appointed to handle technological emergencies.
- Teachers should get financial support from the government and schools so that they can buy modern gadgets to upgrade their teaching. In addition, students' whose economic condition is poor should get financial aid from the institution.

- Monthly parents-teacher meetings can be arranged by the school in order to inform parents about misuse of technology and how they can support learners regarding tech-based education.

Limitations of the Study

My study has some limitations. One of the limitations of my study is that because of permission issues from school authorities, I was not able to observe language classrooms. Even though I got some information about classroom activities and environment from teachers', learners' and parents' interviews, classroom observations could provide more informative data related to my study.

I believe particular schools selected for the study has already represented significant findings to understand the reality of technology integrated language teaching in rural areas in Bangladesh as I did not find any similar study taking place especially in the northern part of Bangladesh in my reviewed literature. However, if I could include more schools and a larger sample, this study could be more informative.

Scope for Future Research

As my reviewed literature shows there are still not many research studies available on technology integrated language teaching in traditional classrooms- especially in the context of rural areas in Bangladesh, thus my study tries to fill the gap. I would like to suggest a few possible future research scopes here. Though my study is conducted in a rural area, similar studies can be conducted to explore the reality of incorporating technology in traditional classrooms in urban areas or similar contexts with larger groups of people. I followed the qualitative method to conduct my study, however similar studies can be conducted following quantitative or mixed methods.

I only selected two government schools and two NGO adopted Bengali medium schools from a rural area in the northern part of Bangladesh. However, exploring other private or English medium schools' situation regarding technology integrated language teaching within the same area would yield better or different results.

Concluding Thoughts

To sum up, in the present day's tech-dependent world, it is a demand of time to integrate technology in secondary level traditional classrooms to facilitate advanced and fruitful learning. My study not only attempts to investigate secondary level teachers', students', and parents' opinions regarding technology integration in traditional language teaching classrooms in rural areas, but also explores future potentials and challenges of technology integrated language education. Therefore, in my findings and discussions, it is evident that stakeholders (parents, teachers, learners) involved in secondary level education in remote areas have mixed expressions about tech-based language education. Moreover, they are dealing with lack of digital knowledge and insufficient technological devices, financial crisis, poor internet and electricity connection and failing to ensure effective language teaching and learning and many more. On the other hand, few possibilities also came up from their responses such as emerging changes in teaching-learning patterns, declining dependency on coaching centers, increasing interest towards discovery and collaborative learning, scopes for blended learning pedagogy. Therefore, it can be said that, in rural areas of Bangladesh where people face challenges to ensure basic secondary level education, technology integrated traditional classrooms can open innovative paths for them to improve the reality. I believe that the findings of my study will contribute to improve the scenario of technology integrated language education in traditional classrooms in rural areas in Bangladesh.

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Appendix A

Letter of Consent for Participants

Dear Sir/Madam,

I am Choity Saha, a postgraduate student of Applied Linguistics and ELT at the Department of English and Humanities, Brac University. As a part of my Masters' program in English, we have to complete a thesis paper for which I have chosen the topic "Technology Integrated Language Teaching in Rural Areas in Bangladesh- Expectations versus Reality". I would like to invite you to be a part of a small interview and share your valuable experience regarding online education, educational technology and technology integrated English language classrooms.

The interview can be taken in person, 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,

Choity Saha,

Student of Department of English and Humanities, BRAC University.

Phone No. 01568201206

E-mail: choity.saha@g.bracu.ac.bd

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 Number:

Email Address:

Date:

.....
Name

.....
Signature

Appendix B

1. Interview Questions for The Teachers

- 1) Could you please tell me about yourself? Please focus on your educational background, teacher training experiences and teaching experiences.
- 2) Tell me about your teaching responsibilities in your current workplace- the number of classes, work hours and other responsibilities.
- 3) What medium of instruction do you use while conducting English language classes?
- 4) Do you use any technological tool while delivering lectures? How do you feel about integrating technology in your language classes?
- 5) What kind of technological facilities and assistance are available in the school where you teach?
- 6) Would you please share your experiences of conducting online classes during the pandemic?
- 7) Did you receive any formal or informal training related to online classes or integrating technology while delivering online lectures?
- 8) What type of technology did you use during online classes? What kind of challenges did you face?
- 9) Are you still using those new strategies or techniques of teaching in the post-pandemic education system?
- 10) What kind of assessments did you design during online classes?
- 11) What impacts did those assessments have on your English language students?
- 12) Did you notice any changes in your students or in their learning habits during online classes? Can those changes influence their learning attitudes?

13) Do you see any further advantages/ disadvantages of integrating technology in regular English learning classes?

14) What is your overall perception about online teaching learning in Bangladesh? What do you think are the affordances and limitations of online education in the Bangladeshi context?

2. Interview Questions for the Students

1. Could you please tell me about yourself? Please focus on your educational background and other experiences related to it.
2. When did you start to study English as a compulsory subject?
3. What medium of instruction is used in your English language classes? Do you use English outside your classroom?
4. Do you watch English movies or use the internet to learn English, for example listening to songs or using different types of tools to practice English language?
5. Did you enjoy online classes during the pandemic? Would you please share your experiences of attending online classes during the pandemic?
6. What type of technology did you use during online classes? What kind of challenges did you face in terms of effective English language learning?
7. Do you understand the functions of different educational technologies or can you operate them efficiently?
8. Did the recorded or telecasted lectures help you to learn English properly? Do you think such techniques can be useful for regular language classes as well?

9. What kind of assessments were designed for students during online education? Did you enjoy those assessment systems? Were you able to submit your assignments on time?
10. What impacts did those assessments have on your English language Learning?
11. What strategies did you use to adapt the online pedagogy?
12. Are you still using those new strategies or techniques of learning English in education system?
13. Did you notice any changes in your learning habits during online classes? Can those changes influence your learning styles?
14. Do you notice any changes in your language teachers' teaching techniques after the pandemic?
15. What kind of technological facilities and assistance are available in your school at present? Do you think the quality and amounts of gadgets or tools are good to go for integrating technology in regular language classes?
16. What are your expectations regarding incorporating educational technology in traditional English language classes?
17. What is your overall perception about technology integrated teaching learning in Bangladesh? What do you think are the affordances and limitations of tech-based education in the Bangladeshi context?

3. Interview Questions for Parents

1. Could you please tell me about yourself? Please focus on your educational background, occupation or income source and etc.

2. Which school does your child go (government / non-government school)? How many children do you have?
3. How often do you help your child/children in his/her studies?
4. Did you help your child in online education during pandemic? Would you please share your experiences? Do you like/support/ enjoy such educational system?
5. What kind of difficulties did you face in terms of helping your child to continue his/her online education?
6. Did you notice any kind of changes in your child's learning habits during the transition from in-person to online classes? Do you think those changes can influence their English learning at present days' traditional setting?
7. Do you find educational technology effective in order to learn English in regular language classes?
8. What kind of support your child got from the school during online education? Are you satisfied with that? Do you think his/her school can provide technological facilities in regular language classrooms as well?
9. Do think Bangladeshi English language teachers are enough capable to teach in technology integrated regular language classes?
10. Do you think that technology integrated assessments were useful to facilitate effective English language learning?
11. What kind of further benefits do you expect from incorporating technology in English language classes?

12. What is your overall perception about online teaching learning in Bangladesh? What do you think are the affordances and limitations of online education in the Bangladeshi context?

Appendix C. 1

Sample Of Coding Template

RQ 1: What are the perceptions of the students about integrating technology in traditional English language classrooms in the post pandemic Bangladesh?

Coding of Student's interview

Coding of Orpa's interview

Interview Question (1)	Subordinate key word of question (2)	Subordinate main point from conversation (3)	Elaboration examples from verbal to support the subordinate (4)	Occurrence main idea transferred into the form as key word(s) (5)	Frequency of occurrence (6)	Ordering of discourse unit (7)
So, did you enjoy online classes during Pandemic? Can you tell me some reasons why you did/did not enjoy it?	*enjoy online classes * reasons of enjoying online education	*enjoyed online classes *online classes provide ease and flexibility	“Yes I enjoyed it a lot. ... I do agree that online classes give us the ease and flexibility to attend our classes from anywhere at any time. Recorded lectures were very helpful as	*enjoyed online classes *ease and flexibility *Recorded lectures helped	1 1	ORP (6)

		*Recorded lectures were helpful	teachers were not available to help me.			
Well tell me, did you face any difficulties regarding compulsory use of technology during online pedagogy?	*difficulties *Compulsory use of technology *online pedagogy	*faced difficulties *do not have knowledge or prior experience of using educational technology *Do not feel motivated *No in-person interaction * do not understand online instruction	Yes, I had a lot of difficulties. First of all, I do not have any prior experience of educational technology. I do not understand functions of technological platforms. Sometimes I did not feel motivated at all to study during that time as there was no in-person interaction. I did not understand online instructions.	*Difficulties *lack of prior knowledge and experience * difficulties in understanding functions of technological platforms *less motivation *less understanding of online instruction	2	ORP (8)

Appendix C. 2

Sample Theme Generation Template

Sample theme generation templet using students' interviews

Research question 1:

What are the perceptions of the students about integrating technology in traditional English language classrooms in the post pandemic Bangladesh?

Interview Questions:

1. Did you enjoy the online classes?

Orpa (C1)	Rahat (C2)	Ratul (C3)				Themes
yes... I do	yes I	Recorded				*Enjoyed Online classes
agree that	enjoyed it	video				
online	thoroughly.	lectures				*Flexibility and freedom of learning
classes	Learning	helped me				
give us the	process was	a lot. If				*Recorded lectures were useful
ease and	very	there was				
flexibility	comfortable	any				
to attend	(RAH 9)	emergency				
our classes		and I could				
from		not attend				
anywhere		classes,				
at any time		video				
(ORP 6)		lectures				
		were				

		available for preparing lessons at anywhere/ anytime (RAT 19)				
--	--	---	--	--	--	--