

**Fostering Digital Competence and Enhancing Speaking Interactivity in Bangladeshi
Tertiary Level ESL Classrooms through Innovative Pedagogical Strategies: Perceptions of
Teachers and Students**

By

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

Master of Arts in English

Department of English and Humanities

BRAC University

November 2024.

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Declaration

It is hereby declared that

1. The thesis submitted is my/our own original work while completing a 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

The thesis titled “Fostering Digital Competence and Enhancing Speaking Interactivity in Bangladeshi Tertiary Level ESL Classrooms through Innovative Pedagogical Strategies: Perceptions of Teachers and Students” submitted by Noshin Nawal Tory (21263015) of Fall, 2024 has been accepted as satisfactory in partial fulfillment of the requirement for the degree of Master of Arts.

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Ethics Statement

This research complied with ethical standards by obtaining consent from the participants and informing them of the study's objective and guidelines. The anonymity of the participants is strictly protected through the careful inclusion of all types of information, including their identities.

Abstract

The significance of digital competence is steadily increasing in the contemporary period and its influence has dispersed almost everywhere in the world. Moreover, digital technology has been widely integrated in the education sector as well, and as a result, the teaching and learning method of educational institutions has undergone tremendous changes. This qualitative study explores teachers' and students' perceptions and experiences of utilizing technology-assisted pedagogical strategies to enhance tertiary level students' English-speaking interactivity in ESL classrooms in Bangladesh. The participants were selected through snowball sampling techniques in which few instructors and students at a Private University in Dhaka contributed and assisted in carrying out the research. In order to compile data accurately, semi-structured interviews were conducted to get valuable insights, and this step was enacted by recording the entire session as well as taking notes. Thematic analysis approach was chosen to analyze the findings and to organize the information into several key themes.

Based on the results, most of the participants have acknowledged the role of digital proficiency in education and according to the interpretation of their viewpoints, implementing technological resources in teaching and learning will have a greater impact on enriching students' speaking interactivity and promoting them to a dynamic and stimulating language learning environment. However, the investigation revealed challenges such as lack of adequate teacher training, issues related to access to technology, and lack of technical facilities. In addition, responses of the participants also demonstrated the need for advancing digital technology in Bangladesh's education system with the reform of the curriculum. Finally, conclusive findings underscore the necessity of developing instructional approaches by rendering the incorporation of digital tools a standard practice in the ESL classroom.

Keywords: Digital Competence, Pedagogical strategies, Speaking interactivity, ESL classrooms.

Dedication

First and foremost, I wish to dedicate this paper to the memory of my deceased four beloved ones: my mother, my aunt and my maternal grandparents who have inspired me throughout the journey even in their absence. I would also like to dedicate it to my respected faculty and supervisor Nazah Farhat, whose proper guidance and support enabled me to complete this work.

Acknowledgement

First of all, I would like to express my heartfelt gratitude to Allah (SWT) for everything and I have patience with Him in every step of my life. I have not given up for a moment because He has given me the grace to preserve and has made me aware of His presence in the midst of so many obstacles.

Secondly, I am grateful to my father, my second mother, my uncles and aunts (mamas, khalu and mamis), my younger sister Radia and especially my best friend Mudabbir who gave me the courage to overcome this stage by providing me with their existence and all kinds of support. I thank everyone from the bottom of my heart.

Then, I express my immense appreciation to the participants of my study who actively participated in the interview session and duly provided me with the data.

I would also like to thank all my classmates and friends, especially Orpa, Lea, Prioty, Zarin, Eva, Choity, Mallika and Raghib Bhaia for staying by my side throughout my master's program and bearing me patiently.

Finally, I couldn't be more satisfied with my honorable supervisor Nazah Farhat, whose unwavering support and guidelines helped me reach my desired destination and she displayed her great forgiveness by considering all my mistakes during this journey, which impressed me profoundly. I hold her in high regard and extend my best wishes for her continued blessings.

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Chapter 1

Introduction

The world has become a global village and in this technologically advanced era, English is gaining the status of a prominent and dominant medium for interaction, learning, trade and commerce. The acquisition of this tongue has become a crucial skill for success. However, English as a Second Language ESL classrooms play a key role in development of the linguistic competence of the students. The proficiency to speak English fluently serves as the most vital skill to ensure effective communication. Spoken and written interaction and transmission attributes in individuals of 21st - century are highly preferred when considering for workplace success, which indicates that before any other attribute or qualification level, an employer seeks the above-mentioned skills in an employee for hiring him or her (Rios et al., 2020). In Bangladesh, English holds the position of second language, and ESL classrooms and workshops have been included in various educational stages.

For the last two decades, the Bangladeshi government has focused on initiating various programs and campaigns to strengthen English language proficiency and English education throughout the country. The programs include Secondary Education Development Program (SEDP) and other associations with British Council and various international organizations (Bangladesh, 2023). Similarly, another researcher has highlighted that English has been stretched out in the whole globe widely and is considered as a notable language in the various major fields and disciplines like education, international trade and commerce, and communication (Crystal, 2003). And, Crystal (2003) also highlighted that English is the important common medium for communication and is essential to grasp the achievement of socioeconomic progress.

Organizations and institutes like SEDP and British Council help in building up better teaching standards, introducing digital resources, and improvising towards innovative pedagogical strategies. But somehow, despite these efforts, there are still some issues and challenges left, especially at the level of higher education. This is because of the pre-settled teacher-centered approaches which are dominant in many ESL classrooms instead of student-centered approaches.

With the significant increase in technological advancement in different aspects of daily life, the need to learn and master digital competence is becoming a very important part of the contemporary educational system. While considering the environment of language learning, the use of digital tools can be very helpful and fruitful in providing new paradigms for students to enhance their language speaking skills. Many ESOL (English for Speakers of Other Languages) countries worldwide have been making changes in their state's pre-dominant language policies in the education system to improve and increase the proficiency of individuals in English to increase the students who can compete at global standard easily to ensure the nation's prosperity (Hamid & Erling, 2016). Similarly, the leadership of the state and the acting Ministry of Education, Bangladesh, is also endeavoring to include Information and Communication Technology as a dedicated course in the basic three stages of education system (primary stage, secondary stage, and higher education stage) to align their students according to the growing need for technologically enhanced learning system. This significant shift has encouraged the instructors of language to reconsider their teaching methodologies and includes innovative pedagogical teaching methods that go parallel with students' digital exposure in the process. The increase in the significance of having digital competence skills in an individual with proficiency of speaking English despite of being a second language is particularly notable while considering the setting of Bangladeshi tertiary level ESL classrooms, in which both the instructors and

learners are progressively engaging with modern digital technology tools to enhance the learning process.

1.1 Background of the Study

Generally, English as a Second Language ESL classrooms provide and polish the students by teaching them various linguistic tools and concepts to enhance their language proficiency skills in non-native languages such as English. These classrooms serve as an important environment where students focus on developing their abilities of English and mastering the art of listening, speaking, reading, and writing the language with proficiency. Among the four of above-mentioned skills of English language, speaking the language fluently is regarded as the most important part of the whole process because it includes linguistic accuracy and the ability to convey your message considering social ethics. In this regard, ESL classrooms play a pivotal role and provide learners dedicated environment where they can practice their English language speaking skills with the help of different exercises and activities such as role-play, brainstorming discussions, presentations of interesting topics, translation from native to English language and many other interactive settings assist students to increase their proficiency and confidence in various expandable context (Ibrahim, et al., 2015).

Considering the context of the tertiary education system of Bangladesh, ESL classrooms have an important place in the education system of Bangladesh. Since, Bangladesh is still a developing country and is considered as a third-world nation, English language has a significant position, and the state acknowledges the position of English as official language throughout the globe (Biswas, 2015). The better skills and expertise in English language are often related to good academic progress, feasibility in communicating internationally, and improved employment chances for individuals. The government of Bangladesh is trying hard to and making

considerable innovations in enhancing the teaching language skills at almost all its educational stages but regardless of the policies made by the government in this context, there are still shortcomings and hurdles in strengthening the excellent speaking skills in their students, which is considered as a core part for academic and better employment success of a student (Babu, et al., 2014).

The approach which is used to teach language in ESL classrooms is often teacher-centered and because of this traditional approach of instructors, which mostly based on writing assignments and learning grammar, due to this reason, the students lack behind in grabbing proficiency in English language acquisition (Rahman, 1996). But a significant move-around has been observed in these few years, which includes the new policies by government to introduce new student-centered innovative pedagogical approaches to enhance and improvise the teaching of a foreign language. But unfortunately, in most cases at different tertiary levels education system of Bangladesh, this innovative advancement remains incomplete because of a lack in the training and resources for instructors ultimately creating less opportunities for students to acquire second language in an ESL interactive environment (Rahman, 1996).

In addition to these above-mentioned challenges in educating and acquiring a foreign tongue such as English, the increase of digital technologies and various digital tools has provided new dogmas and ways to enhance language acquisition in ESL classroom environments. The efficient use of digital tools offers significant in learner's engagement and interactivity, providing them with possibilities to express their thoughts with the help of digital visualization, practice language through communicating virtually, and get feedback for it (Mallick, 2020).

In this modern age, digital competence is a skill that is prominently used and applied in almost every domain, which also includes the field of education. Digital competence is defined as “using and interacting with digital technologies confidently, critically and responsibly to learn, work and participate in society. It’s also known as a set of informative knowledge, abilities, and attributes” (European Commission: Directorate-General for Education, 2019). Digital competence is not just limited to acquiring technical skills but also it can be referred to as the skills to utilize these digital platforms and instruments for enhancing meaningful educational progress. Digital competence when proficiently used in ESL classrooms, plays a significant role regarding the better growth of language speaking proficiency because through the use of digital tools, a learner can explore vast sources which provides a more fruitful classroom environment. Platforms such as video calling apps, social media, language learning apps, and virtual student discussion panel provides an opportunity for the students to practice their second language attributes in both ways, which includes, formal and informal interaction (Mallick, et al., 2020).

Digital tools like PowerPoint by Microsoft Office is an example of digital platforms where students can express their thoughts and ideas by visualizing them with written text which ultimately makes it easier to convey their concepts and ideologies more transparently and also provides time to time review of what to speak in the form of bullet text. The use of this tool often increases students’ confidence and also helps enhance the proficiency in speaking attributes of a second language (Hashanat, 2014). Based on the above-mentioned discussion, it can be said that despite the different challenges, the role digital competence plays in ESL classrooms is very crucial for speaking proficiency in English language and attempts to make the learning of English language more accessible, interactive, and more suitable in the modern world.

1.1.1 Fostering Digital Competence Among Students

In the postmodern age that we are living in, digital awareness and the skill to use digital tools in everyday life have become very necessary and significant for the betterment of one's career and progress. And, the need to teach from the beginning stages has been realized by different institutes and they have added digital competence as a compulsory course in their education system. Digital competence is not only learning how to use various digital tools and platforms but instead, encompasses enhancing of the ability of students to take advantage of it to further grow their learning process. For a learner to be called digitally competent, he or she must have the skills to utilize the different platforms and advanced educational technologies in their learning process (Serajuddin, 2023). When narrowing it down to language learning in a ESL classroom environment, digital competence helps learners use different digital resources and practice their language speaking skills on various language learning apps, social media communication platforms, and other multimedia tools to present their language skills with a visual touch of digi-tech.

To develop attributes of computer literacy in students, educators need to apply different systematic approaches which include various online language exercises, video conferencing tools, and other multimedia apps to practice their language abilities through digital media. However, these challenges are not only limited to the teachers but also include the fundamental role of students in it. Many students across the globe do not contain the means of approach to the latest and advanced digi-tech and face certain obstacles while practicing their skills and developing confidence in language media digital tools. The dire need to support and educate students about the practical use of these technologies is very important for language acquisition procedures in ESL classroom environments. The need to address these hurdles is very necessary

because the skill of digital competence is not only vital for academic success of students but also to cope up with the modern digital world.

1.1.2 Context of Bangladesh

In Bangladesh, English language has gotten the position of lingua franca and is considered as a very essential competency for the students in their academic journey, that's why it is regarded as a core element of the state's learning setup. The need for making the students efficient and effective in English, the country's educational policies are being mended accordingly, especially at higher educational stages, in which English language performs the role of a common medium of communication and education in many different courses and disciplines in general. English is considered as a significant way of communication and the enhanced skill of this language helps students perform and interact better in the global market and international economic structure (Jianrong & Yougen, 2018). In the last few years, the government of Bangladesh has shifted its educational policy of English from the traditional Grammar Translation Method (GTM) towards Communicative Language Teaching (CLT) (NCTB, 2012).

The increase in the different multimedia sources and language learning platforms is helpful for students of English language to open the various means of language learning and practicing it, both indoors and outdoors the ESL teaching space (Sarker, 2019). The necessity to foster students' digital competence is also significant to fill the gap between a traditional teacher-centered classroom environment and the need to shift toward a communicative and interactive student-centered approach in modern ESL classrooms (Shahriar, et al., 2021). This particular reform in educational policy is very important to keep up with the growing demands of the modern world, where digital literacy is as important as linguistic competence.

1.2 Statement of the Problem

In the state of Bangladesh, no recent study has been conducted on finding the effectiveness of fostering digital competence to enhance English speaking interactivity in ESL classrooms at the tertiary educational level through the use of various innovative pedagogical methods. Despite the importance of English as a major part of the Bangladeshi education system from the primary to tertiary level, there are still challenges left to meet the way of teaching and developing adequate speaking proficiency in English. In this regard, the educators of the tertiary educational level need to shift their approaches to language teaching towards innovative pedagogical strategies such as introducing communicative language techniques and also incorporating it with modern digital tools to enhance students' language speaking interactivity.

The other participants of the study are the students of ESL classrooms therefore the idea of engaging students' perceptions and their understanding of the particular shift towards innovative pedagogical digital techniques to enhance their speaking skills will be useful for the researcher to analyze the results of teaching with digital competence.

The study will also analyze the issue of the challenges faced by teachers of ESL classrooms while adopting it and educating about the digital tools and innovations to enhance the education course of learners and to increase their interactivity in the language learning process in ESL classrooms at the tertiary level. To know the effectiveness of this innovative pedagogical strategy, it is crucial to find out how participants feel about it, through different surveys and questionnaires, provided to teachers and students of ESL classrooms of tertiary educational level the researcher analyzes the ways to overcome the challenges faced in the process of interactive and effective acquisition of English skills.

Lastly, the research will help the teachers of ESL classrooms to effectively counter the hardships faced by the participating teachers and students in the process of coaching English language through different innovative digital instruments to increase the learner language knowledge and interactivity.

1.3 Purposes of the Study

The primary drive of this research is to observe the thoughts of Bangladeshi tertiary-level ESL classroom teachers about the development of their teaching strategies using various digital technologies to develop the studying environment through the help of various questionnaires and surveys. If the response is beneficial for the innovative teaching pedagogies, then the researcher will focus on the perceptions of learners regarding the effectiveness of these innovative digital technologies on their language speaking interactivity. Finally, the researcher explored the challenges that educators go through and how they overcome them while evolving different teaching methodologies with the touch of digital competence to increase the growth of speaking interactivity of students in ESL classrooms.

1.4 Research Questions

To achieve the objectives of the study, the following research questions were planned:

1. What are the views of Bangladeshi tertiary-level ESL teachers in developing their teaching strategies through digital technology to enhance speaking interactivity in students?
2. What are the perceptions of students of ESL classrooms at the tertiary level regarding innovative digital pedagogical strategies in enhancing their English language speaking skills?

3. What challenges do teachers face while integrating their teaching methodologies with digital tools? How do they overcome these challenges?

1.5 Significance of Study

There is no prior research done regarding the need to foster digital competence among students of ESL classrooms at Bangladesh tertiary educational level to enhance the interactivity of language speaking through various pedagogical strategies. Hence, this study has the potential to help bridge the theoretical gap in existing literature.

The study includes ESL classroom teachers and students as participants and through this, the research seeks to offer an understanding of how digital technology and its proficiency impact today's contemporary society and can be utilized to produce a more efficient, interactive student-centered learning environment at classrooms in Bangladesh's tertiary educational level. The results of this research will offer direct conclusions for legislators, policy making-officials, educators, and the government to enhance their educational program in Bangladesh. By analyzing the various perceptions and views of different teachers and students, the study offers unique suggestions for advancing language teaching methodologies and enhancing literacy of digital competence among learners.

Finally, the design of the current research can be adopted or replicated for future research and can prove helpful for other researchers to carry out their research.

1.6 Definition of Key Terms

1.6.1 ESL Classrooms

ESL classrooms are educational settings where English is taught as a second language to those who are not native English speakers. The primary focus of this type of setting is to enhance

the efficiency and interactivity of a learner in the four major language abilities: reading, writing, speaking, and listening. The basic aim of these classrooms is to provide a dedicated atmosphere where a learner can practice and show interactivity of English language skills through various communicative exercises.

1.6.2 Digital Competence

The said term refers to the ability to effectively use modern digital technology for communication, learning, and solving problems. It does not always require technical literacy but often is related to critical evaluation and using tools efficiently and responsibly. In an educational environment, it enables the learners to enhance their learning progress with digital touch and to evolve with the high demands of the modern era.

Chapter 2

Literature Review

2.1 Introduction

The primary objective of this study is to investigate the impacts of promoting digital skills among ESL students in tertiary education in Bangladesh. Also, it examines how digital skills can improve interaction in language education by using different teaching methods. The following chapter includes different important ideas, academic papers, theories, and methods from scholars who focus on improving the learning process of English as a second language through the development of digital skills. Furthermore, by means of the discussion, this section aims to uncover the deficiency in current research on the importance of digital skills in the process of learning English as a Second Language. Consequently, the last portion of this chapter attempts to emphasize the significance of filling the existing gap in the literature.

2.2 Digital Competence in Education

According to Levano-Francia et al. (2019), the concept of digital competence is not only about knowing how to use digital tools and the latest technology but instead, it is more about enabling critical literacy that is helpful in the interactive utilization of ICT instruments for communication, informative learning, and solving problems. This research focuses on the efforts of higher education to implement advanced ICT equipment in education systems to link the needs of modernized technologically advanced society. Researchers also argued the dire necessity for educators to extend computer literacy and competence abilities and integrate Information and Communications Technology (ICT) skills in their instruction methods. Then, the study highlights the disparity between the advantages of modern ICT technologies and the

impacts of education when put into practice and it also deduces that the factors behind hindering the process are majorly less digitally experienced teachers and a lack of infrastructure. “The manner in which the new digital education is handled will have an impact on a society that undervalues everything connected to the advancement and utilization of new technologies” (p. 586), which emphasizes the significance of the development of the skills of teachers to perform parallel with the technologically driven society.

Moreover, developing professional digital competence is very significant, especially in the context of teacher education. Teachers must foster the skill to incorporate and combine professional ICT technological tools in their pedagogical demonstrating methodologies. In this regard, the teachers’ training programs usually lack the ability to educate the educators to handle digital technology in their classroom setting. Furthermore, the research suggests three primary categories to characterize teachers' digital competence: “basic digital literacy, subject-specific utilization of ICT, and use of digital tools for planning, administration, and communication” (Ottestad, Kelentrić, & Guðmundsdóttir, 2023, p. 248). These above-mentioned digital competencies are important to prepare the teachers for effectively creating healthy and technologically upgraded classrooms and to come up with innovative methodologies that enhance student’s digital abilities.

2.2.1 The Role and Significance of Digital Competence

Ascertaining the significance of digital competence in didactic and informative research over the past few years, keeping in view the policy organization, training of educators, and infrastructure of various organizations, Pettersson (2017) argues that, while discussing the issue of implementing the necessary skills of fostering digital competence in learners, the researchers mostly focuses on the training of teachers for developing the mentioned skills and apply it in

their innovative methodologies but doesn't highlight the role of broader organizational and management context (p. 1006). While highlighting the complex nature of digital competence, which not only comprises technical knowledge but also develops pedagogical and strategic knowledge about how to effectively integrate the benefits of ICT in the educational environment (p. 1007). It suggests that policymakers and management should support the educators in implementing digital competence in their teaching methodologies.

However, a different research project examined the important function of Digital Informal Learning (DIL) by looking at how the digital competency of university students can affect their academic achievement. In this context, the questionnaires were distributed among the 319 undergraduate and graduate students at Shiraz University, Iran, to explore digital literacy, DIL background, and account of academic performance which was self-reported. Through the use of 'structural equation modeling', it was validated that "digital skills positively impact students' DIL and academic achievements. Also, DIL involvement impacted students' academic achievement in two manners: directly influencing their performance and enhancing their digital skills" (Mehrvarz et al., 2021, p. 7). In order to promote digital competence in students, educators and leaders must ensure "students have chances to learn in digital environments outside of formal classes" (Mehrvarz et al., 2021, p. 8).

2.2.2 Aspects of Digital Competence

Engen (2019) explored the cultural and social aspects of the digital competencies of teachers. The study argues that by merely focusing on the digital literacy skills of various tools, educators do not ensure the effectiveness and progress of academic development and the conditions to fit modern information and communication technology in the instruction methodologies of teachers. The concept of "domestication of technology" (p. 10), was

constructed to analyze the process of adoption and redefining of technologies in the context of “appropriation, objectification, incorporation, and conversion” (p. 13). Afterward, the researcher examines certain investigated aspects exploring the implementation of iPads and other ICT digital technologies in Norwegian primary and secondary educational institutes. When iPads were introduced in educational setup, at the beginning the students and teachers faced difficulties in adopting the use of specific technology from private use to pedagogical usage. But, as they get used to it and start preparing assignments and other activities using iPads, the technology is significantly “domesticated” (p. 15), and integrated in the classroom productive environment.

Moreover, a case study of two teachers at the Norwegian educational system focuses on the opportunities for appropriating digital competencies in teachers’ training. Learning these skills includes the command and appropriation of digital tools and also the command in integrating it with cultural tools in one’s identity (Instefjord, 2022, pp. 165-166). The results showed the three dimensions of digital competence in instructors’ educational training such as “Mastery without appropriation, appropriation without mastery, and resistance hindering appropriation” (Instefjord, 2022, p. 168). Ultimately, overcoming this resistance through the assistance of ICT in the teaching process considering all disciplines is beneficial in developing identity-integrated skills of digital competence in teachers regarding their evolving roles in the modern world.

2.2.3 Advancement of ESL Teaching and Learning with Digital Competence

In this contemporary post-modern era, a significant shift in the advancement of ICT can be observed and with that, the advancement of educating and studying progression is prominent with the help of digital competence integration in it. Biletska et al. (2021) talk about how incorporating digital technology in schooling goes beyond simply adding new digital tools. It

requires creating innovative teaching strategies and methods to stay current with digital progress. “Higher education nowadays should prioritize utilizing information technology and widespread interactive e-learning that provides access to digital and intellectual resources for the upcoming generations” (p. 17). In this instance, the researchers put forward a pilot program that covers the preparation of the educators of second languages with the incorporation of modern digital technology which consists of webinars, online forums, and multimedia-based tasking. The results from this above-mentioned program were found helpful in increasing language acquiring development and encouraging the assistance of digital tools in the classroom environment. “To equip prospective educators with the necessary skills to effectively utilize digital technologies in their professional practice, it is crucial to incorporate them into the training program” (Biletska et al., 2021, p. 21).

Likewise, in a literature survey of 42 peer-reviewed experimental studies, digital competence is described as the combination of skills, understanding, innovation, and mindset needed to utilize digital tools in a society based on knowledge. The examination of these articles revealed eight different strategies to support digital competence: working together, awareness of one's thinking, combining traditional and online learning, showing by example, real-world learning experiences, engaging students in learning actively, evaluating progress, and connecting theoretical knowledge with practical skills (Røkenes & Krumsvik, 2014, p. 258). The study further highlights the challenges faced by the teacher in applying ICT pedagogically because of the lack of technical knowledge. While developing digital competencies, the need for emphasizing metacognitive strategies is also important where teachers and students can reflect on the pedagogical value of implementing ICT in teaching methodologies (Røkenes & Krumsvik, 2014, p. 268). Therefore, the stress placed upon the development of ICT knowledge

and digital competence among the teacher educational training programs is very important for producing professionally advanced teachers who can easily integrate modern digital technologies effectively in today's technologically advanced world.

2.2.4 Impact of Digital Proficiency in Developing Bangladesh Education System

As a developing country, Bangladesh has several underlying factors of digital inequality. After analyzing these factors using the affinity diagram grouping method, the factors can be categorized into five elements: scholastic, infrastructural, collective, monetary and functional layout. Among these elements, the educational element aims to enhance the learner's skill to apply and use digital technology and ICT through aspects like lack of basic education and digital literacy. To illustrate, the infrastructural element focuses on stabilizing the issues of digital access and internet connectivity shortcomings in the institutions. The social element focuses on the individuals' perspective about technology and the problems of socio-economic status, and lack of awareness among the citizens. Then, the economic factor aims to resolve the issues including the lack of investments in the governments' digitization policies and exploring opportunities and restrictions on online businesses. And lastly, the usable design focuses on finding out how user-friendly the modern ICT and digital tools are regarding usability, accessibility, and interfaces in native languages. The results of the study show the root cause of the lack behind Bangladesh's digitization phenomena and hindering the progress of the national "Digital Bangladesh" vision (Islam & Inan, 2021).

Additionally,, a study by Nahar (2023) has explored the digital empowerment of female secondary school teachers in Bangladesh to find out gender digital division and its application for professional advancement. The research study at first, focused on the discrepancies in accessibility, abilities, and usage of ICT and digital tools between male and female teachers. It

was observed that in spite of full awareness and access to modern digital technology and its training, female teachers showed different discrepancies in developing motivation and mastery in digital competencies which is the cause of their lacking behind in effective usage of ICT in educational settings. Hence, the results showed that “female high school teachers exhibited digital empowerment across four areas: awareness, motivation, technical access, and digital competence” (Nahar, 2023, p. 390). The investigation also highlighted how “ICT can support effective implementation of pedagogical stages in teaching and learning, something that cannot be achieved through traditional lecture methods” (Nahar, 2023, p. 391).

2.3 Speaking Interactivity in ESL Classroom

2.3.1 *Overview of Speaking Interactivity*

It is essential to promote speaking interaction in ESL classrooms to improve learners' speaking and communication skills and facilitate language acquisition. The strategies include role plays, debates, presentations, and group discussions for enhancing interactivity in the speaking skills of learners. This framework not only enhances speaking fluency but also contributes to developing and exploring vast vocabulary, language structures, and overall confidence of the learners. Moreover, the creation of a safe and comfortable classroom environment also helps in encouraging students to share their thoughts without receiving opinions. In other words, this process not only helps learners to build confidence and get motivated but also helps in creating a sense of community by facing certain linguistic challenges. To conclude the above arguments, it is safe to state that enhancing speaking interactivity in ESL classrooms and adopting different pedagogical approaches in the process of it aids in enhancing the proficiency of students to communicate in English language.

2.3.2 *Major Factors Influencing Speaking Interactivity*

The research study conducted by Leong and Ahmadi (2017), discusses the major factors and their various elements which contribute to influencing learner's speaking interactivity in English, especially for Foreign or Second language learners (EFL/ESL). The researcher points out the first and the major factor that despite its great importance, English speaking skills are often neglected due to over-emphasis on grammar and additional linguistic expertise. "Communicating assists students in enhancing their vocabulary and grammar abilities, thus improving their writing proficiency" (p. 35). Thus, many learners face anxiety and inhibition while expressing themselves verbally in English language which serves as a second factor in hindering confidence in speaking interactivity. This is due to the elements including a lack of basic and topical knowledge, less participation in classroom discussions, and a low tendency to revert to the native language during speaking activities. Indeed, the development of performance conditions to counter these elements is found helpful such as time restrictions and planning opportunities that can impact and directly influence speaking skills of the learner (Leong & Ahmadi, 2017). The researchers also prescribed the significance of a vigorous and encouraging classroom setting that encourages motivation and reduces anxiety, as another crucial factor for enhancing the learners' speaking interactivity (Leong & Ahmadi, 2017).

Similarly, another study conducted at Politeknik LP3I, Medan, about the factors influencing student's speaking abilities, based on a case study consisting of 20 students (both male and female). The researcher investigated the three major contributing factors in influencing speaking interactivity which include: fluency, vocabulary, and a new finding through this specific study which is the English environment. Through the reference of Brown's (1994) theoretical framework, the study explores that an immersive English environment in classrooms helps

significantly improve the speaking interactivity in students because of restrictions and penalties on not using English as a medium of communication in an academic environment, which creates a sense of competition among the students and motivates them to polish their speaking skills. This English-speaking atmosphere in educational academic settings not only enhances the fluency and vocabulary of students but instead helps in motivating them to actively take part in English communications overall (Ramadani & Hamdani, 2021).

2.3.3 Dilemmas in Enriching Speaking Proficiency

To uncover the dilemmas in the process of language learning experience, Nikitina (2020) investigated the development of constructive pedagogy in foreign language learning educational settings. The study is based on the student's digital video-making project consisting of Russian as a foreign language learner. It focuses on the student-centered learning setting and puts emphasize on the construction of knowledge through meaningful interactions and context. In addition, the researcher highlights numerous pedagogical dilemmas that exist when trying to implement constructive strategies in foreign language learning, in which the major relevant dilemma is considered as the need to develop learner autonomy while maintaining the structured learning atmosphere (Nikitina, 2020). The approach of this specific research is grounded on outlining a video creation project carried out by learners at Sabah University, Malaysia. Using assessment rubrics, the developmental elements like language use, content, creativity, and teamwork, with the major stress on linguistic output is observed in the process of reflecting the core objectives of language program. However, the students of the program reflected upon the various challenges faced by them including issues related to linguistics, technical, and teamwork problems but they also highlighted several advantages like enhancement of their language speaking skills and learning to collaborate with colleagues in the process. These dilemmas

indicated the rift concerning the principle and method of constructivism in enhancing and enriching speaking proficiency in learners by providing them with meaningful context for students to apply their language skills (Nikitina, 2020).

2.4 Innovative Pedagogical Strategies for ESL Learners

When talking about the innovative strategies for teaching a second language to the learners, the aspects such as dynamic, creative, and learner-centered academic settings are mostly considered. The modern popular approaches mostly consist of the flipped classrooms concept in which the student is provided with instructional material outside classrooms and inside classrooms mainly focusing on dedicated time for learners to practice their linguistic abilities. Moreover, these target-built education approaches inspire the students to use the marked tongue in various realistic works, like creating vlogs, blogs and podcasts, which gives them opportunities to practice both language related and collaborative abilities. With the progression of ICT and digital tools, accessible online for the users, such as the application-based software called ‘gamification’ and other online learning software, further enhances interactivity and gives immediate feedback, making the language learning process more personalized and interactive.

On a similar note, an empirical study was conducted by Berdiyeva (2024), exploring the perspective of how modern innovative teaching methodologies are influencing and transforming old educational methodologies of teaching. The study also highlights how digital tools help learners to implement their skills in a realistic context, with the help of various interactive software and online platforms. The researcher concludes by asserting that “these benefits empower students to become proficient, culturally aware, and communicatively competent in the languages they are learning” (p. 925).

Similarly, Addo and Ojong (2024), argue that with developing modern technology in contemporary academic settings, digital tools like flipped classroom methods, gamification software, Flipgrid, Google Classroom, and Storybird; helped learners a lot in developing their confidence and fostering motivation collaborative abilities in the process of language learning. The researcher also claims that learners encounter various challenges, “despite the potential advantages of utilizing creative tools for second language learning” (p. 181) This involves “availability, time restrictions, ethical dilemmas, technical challenges, and assessment hurdles” (p. 181).

2.4.1 Hybrid Learning Strategies

Hybrid learning strategies are becoming more common as the latest method in educational disciplines (Hasan & Hashim, 2022), and are presented as a method that combines traditional face-to-face teaching methodology with amalgamation of digital tools in the method. The review aims to put light on the main categories of sources and resources: online sources which include the Zoom video conferencing application, Quizlet platform, online gaming, and social media platforms, while on the other hand, offline resources include textbooks, newspapers, and story books, both of which contribute to enhancing the language skills like speaking, reading, writing, and listening.

Consequently, the results indicate that such digital platforms increase the diversity in teaching methods, making learning more effective and engaging. The findings also assert that hybrid learning strategies impact students’ ESL proficiency positively by providing the learner with a comfortable, flexible, and personalized learning environment to polish their language skills effectively (Hasan & Hashim, 2022).

2.5 Perceptions of Teachers and Students

Having the views of educators and learners is very important to shape the learning process, especially regarding the course of incorporating ICT and the latest digital-media advancements in ESL instructive learning setup. Teachers mostly consider digital resources and the aid of these digital instruments in educational development as a beneficial approach, but at the same time, they also address the challenges faced by them regarding digital literacy and the availability of these resources. Many educators believe that the integration of various digital sources and resources helps in enhancing the speaking proficiency of learners and hybrid approaches mostly go in favor of student-centered learning, which provides teachers with more flexibility and creativity in planning their lessons. But in addition to that, the teachers also put forward their concerns regarding the time required to prepare these lesson plans and the various issues which appear in the way of it.

Moreover, when considering the perception of students, they responded to the application of digital skills in scholastic surroundings positively, reflecting on the interactive and flexible nature of digital learning. Conversely, the students also come forth with the arguments incorporating the lack of infrastructure, accessibility to various digital resources, and the less training of teachers accordingly are the factors hindering their learning experience.

2.5.1 *Teachers' Perceptions of Digital Competence and Pedagogical Strategies*

According to Garzon-Artacho et al. (2021), while examining the digital competence of instructors in Andalusia, Spain, they highlighted the importance and the need of mixing professional computer-assisted skills into their educating methods to meet the increasing demands of the developing modern societal setup. The “quantitative methodological design with

a transversal scope” (p. 3), by using the 140 participating teachers by using the “convenience sampling” (p. 3).

The outcome of the research specifies that despite the satisfactory skills of the teachers, their competency results in content making, informational knowledge, and problem-solving techniques are comparably low scaled, that was only because of different factors affecting digital competence which includes age, pre-training of teachers, and the environment and type of educational system. Notably, the teachers with prior digital training showed better competence compared to the ones with less training background. To sum up, the researcher argues that “there is a necessity for educators to perform their job in a creative way that aligns with the technological progress society is going through” (Garzon-Artacho et al., 2021, p. 7).

2.5.2 Students’ Perceptions of Digital Competence and Speaking Interactivity

According to Pinto-Llorente et al. (2017), who explored the students’ views on using modern technological tools in blended learning to enhance English grammatical skills in primary education as a second language. “Blended learning is rapidly increasing in popularity in higher institutions and offers a significant chance to create innovative formal education programs by altering structure, tools, roles, strategies, communications, and access” (p. 632). In the findings of the research, the learners highlighted the options provided to them to set up and create their own pace for learning the language and also reflected their perceptions about the advantages and efficiency of incorporating and integrating digital technologies in blended learning programs to increase their competence grammatically in English as a second linguistic skill. The learners also highlight the impact of ICT implementation in the educational environment to provide learners a suitable and dedicated natural atmosphere where they can practice the grammar of English in real-world experiences and situational applications of it. Additionally, the study also highlights

the significance and benefits according to the views of learners regarding the efficiency of digital instruments like audio-casting, video creation, internet-based quizzes, web-based glossaries, and various mediums to enhance the experience of teaching English grammar to the learners of English as second linguistic skill (L2) (Pinto-Llorente et al., 2017).

Likewise, on the same concept further investigations were conducted considering students' perceptions regarding the use of the social media application called Instagram to foster learner autonomy in speaking ability. Through applying the qualitative method of analysis which consists of instruments like meetings and notes to gather the information from the learners which is analyzed by the use of reduction, display, and verification process. In the process, the participants reflected on the benefits of Instagram serving as an interactive educational tool to foster engagement, creativity, and confidence in the learning of language as it helps the participants to overcome shyness and build more confidence in speaking by practicing multiple times before uploading their performances publicly online (Dewi et al., 2024). The emphasis is made on the students' "strong eagerness to engage in speaking exercises by promoting their autonomy in controlling their learning process" (Dewi et al., 2024, p. 198).

2.6 Research Gap

After the exhaustive review of published relevant literature till today, in the existing scholarly knowledge, numerous research scholarships have been directed in the domain of linguistics which encounters the issues of fostering speaking interactivity and also developing digital competence among both students and the training of their teacher accordingly, at various educational levels like primary, secondary, higher secondary, and tertiary. However, no initiatives are taken to investigate the process of fostering digital competence to enhance the speaking interactivity skills in the educating and acquiring of English as a second linguistic skill (ESL) in

the scholastic classroom setting. The present study attempts to seal this slit that prevails in the body of existing language and devolves into the perspectives of educators and students regarding the complications and challenges they encounter during incorporating digital competence as an innovative pedagogical strategy to enhance the speaking interactivity in the context of Bangladeshi ESL classroom setup at tertiary platform schooling. In the context of Bangladesh, the existing studies focus on the enhancement of infrastructure and government policies to encompass the skills of instructors and scholars of language acquiring procedures and their teaching and learning methodologies with ways to further improve their approaches. Hence, the present empirical study aims to analyze the influence of innovative pedagogical approaches of teachers in fostering the skills of digital competence and the challenges faced by them through the perceptions of both the agents, educators, and pupils, involved in the said process of learning.

2.7 Conceptual Framework of the Study

Concerning this specific research, the researcher amalgamated the *Adoption and Use of Educational Technology* (Gani, et al., 2019) framework and *Systematic Model for Technology Integration in Teaching* (Peled & Perzon, 2022) framework, and then adopted them in accordance with the three specific research question of the current study undermining the data analysis method of thematic analysis prescribed by the Braun & Clarke, 2006. The researcher made her conceptual framework, “Fostering Digital Competence in ESL Classrooms” (figure 2.1) by mixing the models provided by the above-mentioned scholars because their models are also related to integrating technology in classrooms for a better learning experience. The conceptual framework of the present research study is mentioned below (Figure 2.1) and the findings-based themes of the interview sessions are presented in chapter 4.

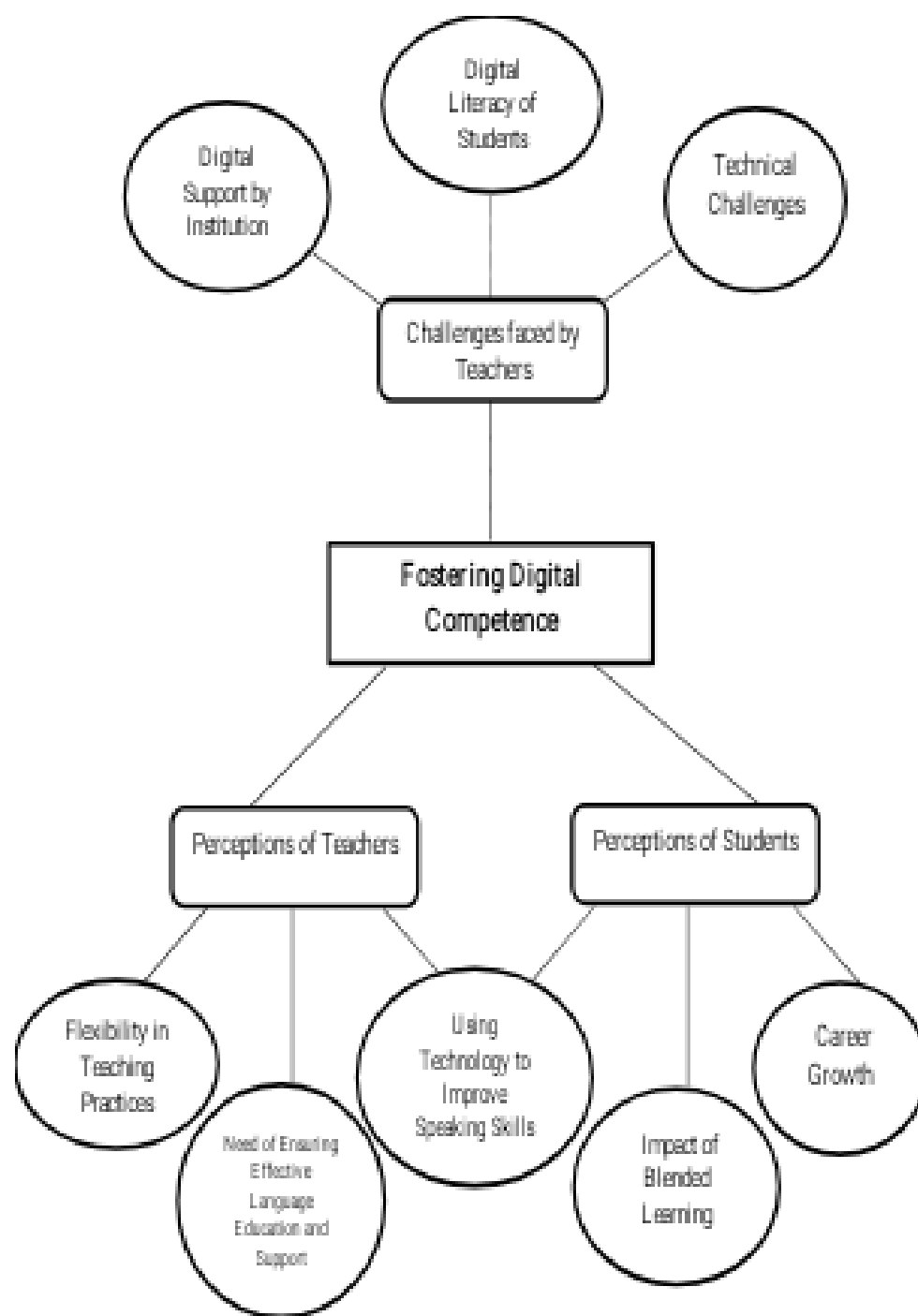


Figure 2.1: The Conceptual Framework of the study

"Fostering Digital Competence in ESL Classrooms"

2.8 Chapter Summary

The first chapter introduced the concepts, role, significance, aspects, advancements, and impacts of digital competence in developing Bangladesh's education system. The latter part has demonstrated an overview of speaking interactivity, major theories and approaches related to enhancing speaking interactivity, major factors influencing it, and dilemmas in enriching the speaking interactivity in learners. The next part of the chapter introduces innovative pedagogical strategies for ESL learners including hybrid learning strategies also. The final part of the chapter presented perceptions of teachers and students in integrating various innovative pedagogical strategies to enhance speaking interactivity, while doing so the gap of knowledge was investigated and highlighted at the end of the chapter with the demonstration of the abstract framework designed for conducting specific research.

Chapter 3

Methodology

3.1 Introduction

This section will discuss the methodologies utilized for conducting this inquiry. The main purpose of the study is to investigate how teachers and students consider the promotion of digital skills and improving speaking participation in ESL classrooms using creative teaching methods at the tertiary education level in Bangladesh. The study is conducted by researchers using qualitative multiple case study methodology. The rationale for choosing this specific method is explained in the upcoming sections. Furthermore, the research questions will also guide the researcher in her quest to achieve the study's objective. Additionally, this chapter includes the research design, pattern and its theoretical conventions, researcher's role, setting, the process of selecting study participants and their profiles, as well as establishing integrity and reliability in different sections.

3.2 Research Paradigm and its Philosophical Assumptions

Qualitative methodology of research permits the researcher to understand any process through the help of understanding of individuals and their perceptions (Kothari, 2004). Therefore, the researcher has opted for the qualitative method because the author of this study's efforts to the insights of teachers and students about fostering digital competence in students of ESL classrooms through various pedagogical strategies to enhance their language speaking interactivity at the tertiary level education in Bangladesh.

Qualitative research is founded on different philosophical beliefs regarding knowledge, reality, values, language, and methods within a specific research framework (Creswell, 2014). Among all the research philosophical paradigms, the researcher chooses interpretivism to investigate the opinions of educators and students concerning the fostering of digital advancements in ESL classrooms in Bangladesh's tertiary-level education. The interpretivism paradigm mostly provides the researcher with finding out the different aspects such as personal encounters and views of participants in a noteworthy communal setting which in turn provides a rigid conception of actuality to the investigator (Alharahsheh & Pius, 2020). Moreover, "interpretivism holds the belief that reality is subjective and can vary among individuals" (Alharahsheh & Pius, 2020, p. 42). The selection and adoption of an interpretive philosophical paradigm provides high-level validation of data because it is based on the personal contributions and perceptions of individuals which is ultimately based on distinctive variables (Myers, 2008). Therefore, the characteristics of interpretivism align perfectly with the needs of this particular study, which focuses on the personal encounters, perceptions, and expressions of the participants. The research aligns with interpretivists' perspective as it is a product of interactions between researchers and participants, leading to the study's findings and results.

The philosophical assumptions for this particular research study are borrowed from the framework of Creswell's (2007) table of "Philosophical Assumptions with Implications for Practice" (p. 17). Basically, ontological assumptions mostly explore the essence of the phenomena and the actuality of their presence (Dubeley et al., 2012). The ontological assumptions seek to dig out factual knowledge of a research question based on the already existing knowledge of the contributors of research (Alharahsheh & Pius, 2020). For instance, the researcher has studied Bangladeshi tertiary-level ESL teachers in developing their teaching

strategies through digital technology to enhance speaking interactivity in students (RQ 1). The interviews of the contributors of the research have provided the author with knowledge regarding the challenges teachers face while evolving different teaching methodologies with digital tools and how they overcome these challenges (RQ 3). In addition to that, the friendly discussions with students provided the researcher with more information regarding their perceptions of ESL classrooms at the tertiary level about the innovative digital pedagogical strategies for enhancing their English language speaking skills (RQ 2). The second conception is related to how the researcher actively seeks knowledge by involving themselves in the process through the subjective viewpoints of study participants, gaining insights on the research problem through their interaction. The following supposition is an axiological belief that outlines the importance of values in combining the perspectives of participants and researchers. Moreover, the rhetorical assumption inspired the researcher to use first-person narrative for the thoughts and perceptions of contributors to highlight the reality of the personal experiences of individuals. Lastly, the methodological assumptions are qualitative because all the data and in-depth information gathered by interviewing the participants such as ESL classroom teachers and students of the tertiary level education system of Bangladesh.

3.3 Research Design

The study's research layout was created based on positioning it with research questions sourced from evaluated scholastic writing. The explanatory study pattern has been utilized to study individuals' experiences and perceptions. Utilizing this approach, the researcher conducted interviews with participants to gather data for this study about their experiences and views on the topic. Because of this, the researcher opted to utilize Braun and Clarke's (2012) thematic analysis method in order to explore this issue further.

The inquiry is based on the qualitative investigation method because, according to Creswell (2007), it is regarded as an investigative process that deduces meaning from the disparate perspectives of individuals regarding any given phenomenon or social issue. To investigate the responses to the central inquiries of the research, the researcher used the qualitative research methodology that is appropriate to the current research. The remaining components of the research layout are covered in detail in the chapter's subsequent parts.

3.4 Thematic Analysis

A thematic analysis approach was employed to examine the data collected from participants' interviews in this research project. The researcher chose this method because it offers easy-to-use and flexible approaches for evaluating qualitative data. (Terry et al., 2017). The researcher decided to apply the particular approach for the study because Braun and Clarke's (2012) thematic analysis made it easier for the researcher to dig deep into the research questions. In order to analyze participant interviews using this method, the researcher transcribed the interviews, created initial codes from their statements, structured themes based on the research questions, depicted themes using words and verdicts, and finally, generated a report addressing study inquiries. Braun and Clarke (2006) describe how thematic analysis aids in recognizing significant themes or patterns through different ontological and epistemic perspectives.

3.5 Researcher's Role

The researcher plays a vital role in the research process by collecting data and conducting analysis (Creswell, 2007). The researcher started studying the English language in elementary school. In this study, the researcher acted as a facilitator-participant, serving as the primary tool for collecting data and conducting analysis. To carry out the study, the researcher adhered to all ethical guidelines to bolster the reliability of this exploration. The researcher ensured the study

remained unbiased and employed a third-person perspective when analyzing the data. The data for the study was gathered by the researcher through detailed interviews with the participants, following the data analysis model proposed by Ranner and Taylor-Powell (2003). Finally, the researcher has assessed and analyzed the data of the participants regarding the enhancement of their speaking interactivity through innovative digital competence strategies.

3.6 Setting

The research has been administered in a private university in Purbachal American City, Kanchon, Bangladesh. The goal of the current study is to explore the perceptions of instructors and students regarding fostering digital competence in ESL classrooms to enhance speaking interactivity. Therefore, the researcher has selected three students in second semester of the BA English (Hon's) program and their four teachers. The rationale for selecting private universities is mainly because of the availability of internet facilities in campus and the accessibility of teachers and students to digital tools and instruments. Moreover, the medium of instruction is English in the classrooms, which will provide a better context for the analysis of the perceptions as the sole drive of the present research is to inspect the fostering of digital competence in students to enhance the language speaking interactivity.

3.7 Selecting the Participants

With the aim of getting comprehensive and valuable data for the research, the researcher chose a certain sampling strategy. Purposive snowball chain methodology has been used throughout the study as a suitable sampling method. With the use of the snowball chain technique, pre-selected research participants can persuade others in similar circumstances to participate in the study. The reason for selecting this sampling method is because it is believed to be the most efficient method to reach eligible participants, while also giving the researcher

valuable data (Sharma, 2017). The purposive sampling technique provides a multitude of options, as discussed by Sharma (2017). The identity of the participants is covered by using pseudonyms to respect their privacy. The researcher has selected a few of them which can give comprehensive information. To obtain important information and prevent misdirection, it is crucial to enlist informed individuals who possess firsthand experience with the phenomenon under investigation (Bengtsson, 2016). Conversely, participants are chosen according to a set of standards.

3.8 Participant's Profile

The following table contains the profiles of the participants of this current research study along with their educational background, current institution, and their experiences of teaching and learning.

Table. Profile of Participants

Profile of Teachers.

NO	Name	Educational Qualification	Name of the Institution	Teaching Experience
1	T1 (Female)	Master in English	A Private University, Bangladesh	12 years
2	T2 (Female)	M.A. English	A Private University, Bangladesh	14 years
3	T3 (Male)	M.A. English	A Private University, Bangladesh	9 years

4	T4 (Female)	PhD in English	A Private University, Bangladesh	12 years
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Profile of Students.

NO	Name	Last Educational Qualification	Name of Institution
1	S1 (Male)	HSC	A Private University, Bangladesh
2	S2 (Female)	HSC	A Private University, Bangladesh
3	S3 (Male)	HSC	A Private University, Bangladesh

3.9 Data Assembly Method

In this research, the investigator employed semi-structured interviews to collect necessary data from university-level educators and learners in ESL classes to address the study's research questions.

3.9.1 *Semi-structured Interviews*

According to Friedman et al. (2022), in qualitative research studies, it is common to conduct discussions to accumulate information from the participants of the study. There are various types of interviews, and each type directs the researcher towards different outcomes. Among these types, semi-structured interviews suited the best for the existing study because this

type of interview provides opportunities for the participants to interact in a friendly environment (Gass & Mackey, 2017). In semi-structured interviews, there is a lenience for the correspondent to hold a pleasant dialogue with the candidate, in accordance with a few pre-planned questions (see Appendix B). The interview was recorded physically, and the researcher avoided any leading questions to ignore all kinds of biases and prejudice.

3.9.2 Designing the Interview Protocol

The protocol for conducting and designing the semi-structured interviews for this research study is adapted from the framework presented by Anne Galletta (2013) in her work *Mastering the Semi-Structured Interview and Beyond: From Research Design to Analysis and Publication*. This particular protocol framework is designed for qualitative research studies which seek to investigate the perceptions, views, thoughts, and experiences of the participants of the study, therefore, it suits the current study regarding its context. The aforementioned framework has suggested three stepwise segments which are mentioned below:

- A. Opening Segment: To create a comfortable environment for the participants and get friendly in conversation with the interviewee.
- B. Middle Segment: Consists of the questions specifically addressing the aim of the study.
- C. Concluding Segment: Revisiting the experiences and asking for explanations to form theoretical connections with the experiences. (Galletta, 2013, pp. 46-51).

At the beginning of the interview, the researcher initiated the conversation with greetings and the usual formalities. Once the participants' comfort is secured, the researcher elaborates on the study's objectives and guarantees the confidentiality of their answers. At first, the researcher posed open-ended questions and then shifted toward personal details pertinent to the study. The

interview questions outlined in the appendix are in complete accordance with the main research inquiries of the study.

In the middle segment of the conversation, the investigator asked more in-depth queries specifically observing the context of the study and carefully listened and recorded the thoughts and views of the partakers on the phenomena. Mostly adequate relevant information was gathered as participants shared their perceptions without any hesitation or biases.

Moreover, in the concluding segment, the researcher asked more questions regarding the explanations of their reflected opinions and perceptions which were shared previously in the first two segments of the interview process. The researcher left the response length and clarity to the will of the interviewees by indicating hints for the closure of the opinions and reflected the value of the significant contribution of the participants regarding the study by thanking them.

To carry out the interviews, the researcher created a consent document (referring to Appendix A) requesting the participants' willingness to take part, and upon receiving their signatures, the researcher scheduled a date and time with each participant for the interview. The researcher conducted face-to-face interviews and recorded their responses as the study gathered data. Each interview lasted approximately forty minutes as the researcher interviewed four teachers and three students from ESL classrooms in tertiary education.

3.10 Data Collection Framework

In conducting the data analysis, the researcher utilized the data analysis model outlined by Renner and Taylor-Powell (2003) as presented in their publication *Analyzing the Qualitative Data*. This framework for analysis is best suited for the qualitative method of research which consists of narrative data, open-ended questions, individual interviews, observations, and case

studies through which the researcher can analyze the data according to the research questions (Taylor-Powel & Renner, 2003). The framework presented the following five steps for analyzing the qualitative data from the interviews taken by participants of the study.

Step 1: Getting to know your data.

Step 2: Focusing on the analysis.

Step 3: Categorizing the analysis.

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

Step 5: Interpretation – Bringing it all together. (Taylor-Powel & Renner, 2003).

In the very first and second footsteps, the researcher goes over all the recorded meetings from the participants and reviews the conferences of each participant to observe whether the data gathered from the participant's interviews is relevant to the current study or not. In the third step, the researcher digs out the relevant themes from the participant's data and categorizes them coherently. Afterward, according to the fourth step, the researcher organized the information gathered according to the themes and provided them with specific titles. Finally, in the fourth step, the researcher connected the themes with the interpretations of the discernments of the educators and learners who were the participants of the study and documented significant findings to riposte the main inquiries of the research. The ideas and concepts were compared with multiple case studies to make a thematic pattern that specifically aligns and answers the research questions of the current study.

3.11 Ethical Consideration

A fundamental role to play as a genuine researcher is to establish oneself as completely impartial, which is referred to as an ethical consideration. Throughout the study, the researcher took this matter sincerely and kept herself away from any kind of bias from the beginning to the end of her work. Initially, the researcher decided to reach out to those who were eligible to be considered for this interview and then contacted them through social media. Later, after a detailed explanation those who were available expressed their interest in participating and a few persons stated that they could not participate due to their personal life commitments. In the next step, the researcher and the participants made a mutual decision to confirm that they would provide their responses by providing voice recordings. The researcher begins her data collection process by getting verbal consent from the participants. Before conducting semi-structured discussions, the investigator requested for a clear statement from the partakers about their privacy and informed them that the information obtained through them will be mentioned in the paper. The researcher was not subjected to any kind of manipulation and bias while using the information gathered from them and since there was no personal relationship of the researcher with the participants, it was flexible to perform the whole process neutrally.

3.12 Credibility and Trustworthiness of the Data

As the current nature of the study is qualitative, there are a few crucial procedures the researcher must take to ensure the legitimacy and trustworthiness of the study. One of them involves reviewing the work of other researchers to determine how they uphold the trustworthiness and legitimacy of their results to other academics working in related fields (Tracy, 2010). The researcher must demonstrate the reliability, transferability, confirmability, and credibility of their data to guarantee the validity of a study (Leung, 2015). Using member

verification, data triangulation, and the creation of a detailed study description is also required to ensure the data's authenticity and the investigator covered all the above steps appropriately. The degree to which the gathered data accurately represents knowledge about reality is a significant factor in maintaining credibility (Gass & Mackey, 2017). Study participants have a better understanding of whether or not the information gathered accurately reflected their perspectives. The researcher had to provide copies of the responses to each participant when the researcher finished recording and writing them to validate and demonstrate the trustworthiness of the facts. Since none of the participants had an email address, the researcher had to provide the response copies of notes in person. Secondly, the researcher employed the triangulation approach. The study used expert triangulation methods and the triangulation of resources to demonstrate the validity of this investigation. Several analysts should examine the data that has been gathered for the purpose of implementing analyst triangulation. Additionally, the study is reliable because of these protocols. Finally, in order to determine whether the information from various sources is consistent, the researcher employed triangulation of sources and thematic analysis of data gathered from participants in the three distinct groups to determine whether their points of view align or not. A thorough explanation of the thematic analysis and method of study has been given to demonstrate the study's transferability (Tracy, 2010), and credibility (Leung, 2015) of the study, allowing researchers to undertake comparable investigations in different settings because of the study's transferability. The study followed all the aforementioned processes to make the research reliable and convincing to ensure its dependability, credibility, transferability, and confirmability. The study methods for collecting and interpreting data were covered in this chapter. Additionally, this chapter covers the study's ethical considerations as well as how to make the research reputable and trustworthy.

Chapter 4

Findings of the Study

In this section, the researcher has outlined the results that were thematically examined from the interviews conducted with participants. The central objective of this study is to explore how teachers and students in tertiary-level ESL classrooms in Bangladesh perceive the application of innovative teaching methodologies to improve language learning by developing digital skills. Hence, this chapter is divided into three sections. The initial portion of the chapter presents results and main ideas that correspond to the primary research question of the study, focusing on how Bangladeshi tertiary-level ESL teachers view using digital technology to improve speaking interactivity in students by progressing their teaching strategies. The second section of the chapter focuses on discussing results and significant themes related to the second research inquiry, which explores the views of tertiary-level ESL students on how innovative digital teaching methods can develop their spoken English abilities. Lastly, the chapter's third section outlines the possible obstacles teachers encounter when combining various teaching techniques with digital resources.

4.1 Findings and Themes Related to Research Question 1

4.1.1 Flexibility in Teaching Practices Because of Digital Tools

In the answer, while asking the question of the benefits of fostering digital technology and integrating digital resources in the environment of classrooms to strengthen the language proficiency of students, the important findings of my study show that among the four participating teachers, three of them- T1, T2, and T4- expressed positive views regarding the fostering of digital technology and they reflected on the benefits of technology integrated

classrooms, however, one of the participating teachers has different views. Participants of the study stated that they liked the digitally integrated classroom environment and through fostering innovative pedagogical strategies in their teaching methodologies, speaking interactivity and the language proficiency significantly increased. The three individuals kept emphasizing the adaptability of teaching language remotely from their residences during the COVID-19 outbreak when education was conducted online. The use of digital platforms also serves as a fruitful approach to learning the language outside the classroom. One of the participating teachers also highlighted the ease and flexibility for the students to revise their learning through recorded lectures and study-related resources available at digital platforms and the university's portal (T4). One of the instructors, T1, highlights the significance of fostering digital competence in teaching methodology when asked the question about the effects of fostering digital competence in ESL classrooms, by her statement.

The effects of fostering digital competence in our teaching practices and lectures came out with significantly positive results. Technologies such as speech recognition software, online discussion platforms, social media platforms, and interactive speaking apps seem to boost and increase the confidence and class participation of the students in speaking the English language interactively. I believe that these digital instruments provide the user with quick real-time feedback, which in turn help the learner with improving their pronunciation and speaking frequency in a more personalized and organized manner. (T1)

4.1.2 Need to Ensuring Effective Language Education and Support

Most participating teachers reflected that they faced problems in fostering digital competence in students of ESL classrooms to ensure effective language learning because of various reasons. Based on their experiences in technology-integrated classroom teaching

practice, the teachers faced some difficulties regarding influential factors such as time constraints, and lack of prior knowledge and experience. One participating teacher, T3, asserts that they are open to adopt digital technology in their teaching strategies but some of the teachers feel that they lack the required training and education to efficiently integrate digital instruments in their lectures while specifically talking about the language learning classrooms. This theme reflects the teachers' desire and necessity for distinct kinds of workshops, resources, and special training for making the language teachers digitally competent enough to find innovative ways and strategies to teach the speaking skills of the English language to learners in ESL classrooms. Similarly, another participating teacher, T1, asserted while talking in favor of digitally equipped classrooms that:

Students learn well in the technologically integrated classroom environment. It is one of the special aspects of the human mind that it responds and memorizes better when anything is taught to it in a visualized manner. But the only factor which is getting in the way of that is the short time duration of classes. (T1)

According to some of the participating teachers, when asked whether the institution lacks any resources that would improve students' digital competence and develop their proficiency level in speaking, one of the instructors, T3, explains that the institute in which he is teaching is a private university, therefore every classroom is equipped with digital tools they need but there could be a space for advancement of power backup issues because it is the main problem when teaching through visual platforms like Microsoft PowerPoint and other slideshows. This also reflects the requirement for institutional infrastructural support for the instructors to adopt digital competence in their students for better language learning experience.

4.1.3 Lack of Technological Literacy Background of Learners

Another prominent finding and theme which the researcher came across while conducting interviews with the participating teachers is the lack of proper educational background of students regarding literacy in basic technological tools and instruments. According to most of the participating teachers, majority of the students in the universities lack basic expertise in educational tools and how to utilize them in their learning process. For example, one of the aged and experienced participating teachers, T1 shared:

“Many students in our institution belong to the rural areas and lack the basic digital literacy to keep up with innovative and modern techniques to teach the spoken language and that is the main reason they are discouraged to perform effectively in speaking sessions.” (T1)

Similarly, another teacher reflects on the same issue when asked the question about how students respond to the technology tools you use and the strategies you apply in your teaching (Appendix B). The participating teachers answered the question by sharing an exemplary experience from her real-time teaching practice with ESL learners when asked about making a video presentation of the personal introduction on Microsoft PowerPoint with the help of written text on the slides, some of the students faced major difficulties in doing it and when asked from the teacher about the reason, the students responded in a negative manner stating they don't know the drill to perform the given task on their own. According to T3, “Students from diverse socio-economic backgrounds have varying levels of learning aptitude”. Thus, it is not easy for all students to adopt the technology-integrated educational setup equally.

4.2 Findings and Themes Related to Research Question 2

4.2.1 Academic and Professional Career Growth

Students expressed their opinion that expertise in speaking skills is essential for them in both academic and professional fields. Academic development requires participation in various interactive programs such as discussions, generating ideas, performing in various oral sessions, etc. Students believe that they can finish their academic career with satisfactory achievements and earn a proper reputation in the institution if they can show their skills efficiently in activities that require oral presentation. In that case, they put more emphasis on being skilled in English speaking. When asked in the interview about what kind of impact does integration of digital educational technology has on language learning environments (Appendix B), by the researcher, the participating student responded that “Not only academically established, but students also feel that the need for speaking on professional sites is more interactive than doing so in traditional classroom environment” (S2). With the experience they have imparted through the transformation of their professional life, they have realized that there is no other way than to acquire the ability to speak English if they want to make themselves effortlessly successful in their workplace.

Similarly, another participating learner, S1, asserts that “I emphasize that it is most necessary to create a network in different work environments where there is a need to communicate in English with people from different countries who speak different languages”. One of the participating students, S3, in her interview, also reflected that the use of various digital platforms has benefited them in fruitful way as sharing their thoughts and views in the English language on digital platforms is way easier than doing it physically in traditionally designed classrooms because it saves them from being under pressure by the audience and

provides instant feedback if they commit any mistake, which in turns enhanced their English language speaking confidence and pronunciation skills. Besides, proficiency in speaking is a mandatory part of acquiring eligibility to apply for any high-class job including organizations that offer walk-in interviews for getting jobs. In this context, students considered improving speaking skills as one of the most important areas for professional development.

4.2.2 Using Technology to Improve Speaking Skills

When the investigator interviewed the participating learners at the tertiary level in the ESL classrooms while asking how the variety of innovative pedagogical strategies using digital tools affect your confidence and interactivity in English (Appendix B), students mostly shared positive perceptions regarding it. Majority of the students responded that the use of technological platforms such as language learning applications, speech recognition software, and online interaction and discussion platforms has made the speaking practice sessions more engaging and interactive. One of the participating students highlights that *“Through the assistance of digital instruments like Facebook Messenger and Instagram, I get more chances to interact and speak in English with my colleagues and foreign native English-speaker friends, during and after the class”* (S2).

According to the participating students, the advantages of digital technology are also highlighted regarding the convenience of using mobile phone applications like Duolingo and Hello Talk, which aims for a more personal and self-packed language practice for the learners. When asked about telling any technology platform that you have benefited from using to improve your English-speaking skills (Appendix B), one participating student points out that *“I use the mobile app, Duolingo, on a daily basis to improve my English pronunciation. The instant feedback that this application provides helps me enhance and improve my speaking proficiency*

better than in regular physical classes” (S1). This finding from the interview suggests that online digital platforms create personalized space for the learners for their additional speaking practice which is unlike in traditional classroom setup. Moreover, some students also highlight the aspect that they often need the teacher’s guidance while using digital tools for language learning more effectively. One of the participating students expressed her experience when asked the question to share your experience of a class where the teacher specifically taught speaking activities using digital technology (Appendix B). S3 asserted that *“I mostly use apps and other digital tools to help me learn the language better, but sometimes I think whether I’m doing it right or not unless my teacher elaborates and instructs me how to use them in class”*. This statement of the participating student clearly remarks the significant role of teacher involvement and support in ensuring the effective and right use of digital technology and various tools related to it. However, the majority of the students responded positively and in favor of using technological tools and platforms to significantly improve their English language speaking skills and abilities and elevate their confidence while talking in English, both indoor and outdoor in the classrooms.

4.2.3 Positive Impact of Blended Learning Strategy

While conducting interviews with the students, most of them shared their perceptions regarding the positive impact of blended learning approaches adopted by teachers to enhance speaking interactivity inside and outside the classrooms. Blended learning combines traditional teaching methodologies with the assistance of innovative advancements in classrooms. Mostly, the participating students showed a positive attitude towards the adoption of the said approach by teachers, by agreeing that intermingling and mixing physical instructions with various online digital platforms significantly improves their speaking proficiency skills in them. Majority of the

students emphasized that the blended learning approach in classrooms enhanced the motivation and confidence to participate in speaking sessions and other speaking activities. One of the participating students adds while asking how a variety of innovative pedagogical strategies using digital tools affect your confidence and interactivity in English (Appendix B), that *“When the teacher asked us to do online activities, such as submitting voice-recording assignments and joining different online debates, I feel more relaxed and confident in speaking English instead of speaking in front of the whole class”* (S2). This shows the role of the blended learning approach in improving the speaking interactivity of learners in more intimidating environments to enhance their speaking proficiency.

Moreover, the students also highlight the flexibility and accessibility that blended learning offers in other different aspects of the learning process. The participants mentioned in their interviews how online platforms such as university’s digital portal have helped them to revisit their learning materials and resources provided by the teachers and practice their speaking skills according to their own pace. Regarding this aspect, one of the participating students, S1 states *“We can revisit and listen to the recorded lectures again and again or also redo speaking exercises online which is provided by the teachers, until we turn it in, which also helps me correct my mistakes”*. This aspect described by one of the participating students serves as evidence to provide more flexibility to the learners and help them take control of their learning process, which makes the blended learning strategy highly effective and fruitful as compared to the traditional classroom setting.

4.3 Challenges Faced by Teachers in Integrating Digital Tools in Teaching Practices

4.3.1 *Basic Digital Knowledge of Students*

During the interview sessions with the teachers of ESL classrooms, several teachers expressed concern about the lack of basic digital literacy in some students of ESL classrooms at the tertiary level in Bangladesh, which serves as a key challenge while the teachers try to incorporate digital advancements and instruments in their instructing methodologies. One of the participating instructors explained his experience that when trying to integrate digital tools in the English language learning classroom, many students did not know how to operate and navigate the specific tools in classrooms. He mentioned that *“At the beginning of the session, a lot of the students of language learning did not even know how to run Google Classroom, which consumed a lot of time and deviated the students from actual speaking practice there”* (T3). As observed from the statement of the participating teacher that the lack of basic digital literacy forces the educators to spend a noteworthy sum of time in teaching the students how to use these digital tools, which slows down the process and detaches the time focused on language acquisition and speaking interaction.

According to the majority of the participating teachers of the study, some students come from socio-economically underprivileged families living in different rural areas which is the reason for less prior technological exposure regarding digital tools, making it hard for them to keep up with the technologically driven innovative classroom blended learning.

“A portion of my class students are using smartphones and laptops first time personally in their lives and they do not know how to navigate the apps that we use to enhance language learning and pronunciation speaking practices. It is a real mess” (T4).

This type of technological gap serves as the major factor leading to the inequality of the students' learning outcomes, as students with a dominant technological and socio-economical backgrounds tend to participate more effectively in online speaking activities than those who lack these basic skills. Overall, according to the perceptions of the participating teachers of the study, the absence of basic computer-related literacy serves as a significant obstacle in the way of making a learner digitally competent in the language learning process.

4.3.2 Proper Digital Support by Institution

Mostly the instructors have admitted that the lack of adequate digital support from the institutions serves as one of the foremost encounters in the course to effectively integrate the digital learning tools in their methodologies of teaching language. Despite being a private sector university, the institution fails to provide a full-fledged digital infrastructure and enough digital resources to effectively implement these innovative teaching methodologies. One of the participating teachers asserts that *"We are expected to use online speaking platforms in language comprehension classes of ESL students by the institution, but they fail to provide stable internet connection which is necessary for running these digital platforms in classrooms"* (T1). Without a stable connectivity server and instant technical support, most of the teachers find it very difficult to manage the effective assistance of various digital instruments in their classes, which in turn hinders the learning process of the students.

4.3.3 Technical Challenges

In addition to the lack of proper digital support provided by the institution and certain connectivity issues, according to some participating teachers of the study, they also faced difficulties in simultaneously running multiple different programs and applications at a time in classrooms. Regarding this specific aspect, when asked about the main difficulties teachers face

in implementing the techniques to improve student speaking interactivity in the classroom (Appendix B), one of the teachers, T2, responded that *“Most of the time, we must use multiple applications and software at the same time. One for speaking and another for listening. Switching between them is time-consuming and sometimes confusing also”*. Moreover, the participant also added that the lack of user-friendly interfaces in some applications and software makes it difficult for both educators and learners to engage themselves effectively in speaking activities on these platforms.

Similarly, according to the perceptions of some participating teachers, device compatibility issues are also an acting problem in the way of equal learning progress of all the students of language classrooms.

“I observed that some students in my class are using mobile phones while others are using their personalized laptop devices to interact with these digital learning platforms. The problem is that some devices, usually smartphones, are not completely compatible with apps and software which we use for language speaking and listening activities. This gap serves as the factor of inequality and technical limitations” (T4).

These inconsistencies in accessing the technological tools equally and flexibly further complicate the integration and fostering of digital competence in the students of second language learners inside the classrooms effectively.

Chapter 5

Discussion and Analysis

In this particular section of the study, a thematic analysis and short discussions of the main findings are presented, with the researcher trying to connect them to the previously reviewed academic literature. The conversations are structured according to the themes of the research questions of the study, derived from participants' interview responses in the investigation. The existing study aims to address the following questions:

RQ 1: What are the views of Bangladeshi tertiary-level ESL teachers in developing their teaching strategies through digital technology to enhance speaking interactivity in students?

RQ 2: What are the perceptions of students of ESL classrooms at the tertiary level regarding innovative digital pedagogical strategies in enhancing their English language speaking skills?

RQ 3: What challenges do teachers face while integrating their teaching methodologies with digital tools? How do they overcome these challenges?

5.1 Thematic Analysis and Discussions on the Findings Related to RQ 1

5.1.1 *Advantages of Flexibility in Teaching Practices by Integrating Digital Tools*

Scholarly studies conducted at the university level portray the advancements and their advantages regarding the effective teaching and learning framework and encourage the assistance of digital instruments in class environments for the flexibility of the teachers, in a quite positive manner (Biletska et al., 2021). Similarly, tertiary educational level participating teachers, according to the outcomes of the study, consider the flexibility in teaching approaches through

the use of digital platforms and the availability of online resources both for the educators and learners serve as a great advantage in the language learning process to enhance the speaking interactivity in students of ESL classrooms. Though the participating teachers showed a positive response regarding the flexibility in their teaching methods due to advancements of various digital technologies. Based on the perceptions of the participating educators, it is observed that those digital instruments provide the students with quick real-time feedback, which in turn helps the learners improve their pronunciation and speaking frequency in a more personalized and organized manner.

5.1.2 Positive Effects of Ensuring Innovative Digital Competence in Teachers

As per the study conducted by Nikitina (2020), highlights the potential dilemmas in constructive pedagogy in foreign language learning educational settings, by digging out the gap between the theory and practice of teachers' constructivism in enhancing and enriching speaking proficiency in learners by providing them with meaningful context for students to apply their language skills. Similar realities are described by the participating teachers of the current study who lack the dedicated training and education to efficiently integrate the ICT instruments in their lectures while specifically talking about the language learning classrooms. This theme reflects the teachers' desire and necessity for various kinds of workshops, resources, and special training for making the language teachers digitally competent enough to find innovative ways and strategies to teach the speaking skills of the English language to learners in ESL classrooms. This shows that due to absence of the prior exposure of teachers regarding tech-based teaching, some of the participating teachers lack the desired skills in their teaching methodologies.

5.1.3 Significance of Learners' Technological Literacy Education

Leong & Ahmadi (2017), explain that several factors serve as a hurdle to effectively integrate innovative pedagogical strategies in teaching practices in which one of the major factors they described is that many learners face anxiety and inhibition during expressing themselves using digital platforms. Similarly, in another scholarly work, researcher examines the certain examined aspects of exploring the implementation of iPads and other ICT digital technologies in Norwegian primary and secondary educational institutes. When iPads were introduced in educational setup, at the beginning the students and teachers faced difficulties in adopting the use of specific technology from private use to pedagogical usage (Engen, 2019). Learning these skills includes the command and appropriation of digital tools and also command to integrate it with cultural tools in one's identity (Instefjord, 2022). Similarly, according to most of the participating teachers, majority of the students in the universities lack basic knowledge of educational technology and how to use it in their learning process. This thematic aspect highlights the importance of basic technological education for the students who seek admission to the tertiary educational level in today's technologically inspired educational setting. According to the outcomes of the study, the lack of basic ICT training and digital literacy serves as a potential barrier in way of effectively integrating innovative pedagogical strategies in the teaching methodologies for educators and tends to slow down the process of language learning through real-time speaking activities by consuming a significant amount of the time of teachers to update the students with the basic use and navigation of digital tools in classrooms.

5.2 Thematic Analysis and Discussion on the Findings Related to RQ 2

5.2.1 Excellency in Academic and Professional Career Growth

According to Ramadani and Hamdani (2021), the immersive English environment in classrooms helps significantly improve the speaking interactivity in students because of restrictions and penalties on not using English as a medium of communication in the academic environment, which creates a sense of competition among the students and motivates them to polish their speaking skills. This English-speaking atmosphere in an educational academic setting not only enhances the fluency and vocabulary of students but also helps in motivating them to actively take part in English communications overall. Academic development requires participation in various interactive programs such as discussions, generating ideas, and performing in various oral sessions effectively. Regarding this thematic aspect, according to the findings of the current research data, the students seem to put more emphasis on being skilled in English speaking. As being part of this technologically driven modern society, the students realized the significance of excellence in being digitally competent while portraying their ideas and thoughts in the English language is very necessary if they want to make themselves effortlessly successful in their workplace.

5.2.2 Role of Digital Technology in Improving Speaking Skills

The findings of the current research study show that using digital competence has shown to have a valuable learning impact on the determination, motivation and interactivity in speaking the English language. According to the perceptions of most participating students, platforms like interactive language learning applications, speech recognition software, and online discussion platforms such as Facebook Messenger and Instagram were found engaging and helpful in enhancing the learning and speaking experience of a foreign language such as English. This

aligns with the existing scholarly research work showing that digital tools assist learners to interact in foreign languages based on real-world opportunities for practicing the language (Biletska et al., 2021). The convenience of social media apps such as Instagram serves as a interactive educational tool to foster engagement, creativity, and confidence in learning of language as it offers personalized feedback which helps the participants to overcome shyness and build more confidence in speaking by practicing multiple times before uploading their performances publicly online (Dewi et al., 2024).

5.2.3 Implementation of Blended Learning as a Hybrid Strategy

Pinto-Llorente et al. (2017) state that “blended learning is rapidly on the rise in universities, offering a significant chance to create innovative educational programs where elements such as structure, tools, roles, strategies, communication, and access are transformed” (p. 632). In this regard, one of the students, S2, shared that “*When the teacher asked us to do online activities, such as submitting voice-recording assignments and joining different online debates, I feel more relaxed and confident in speaking English instead of speaking in front of the whole class*”. According to such responses from the participants of the study, this represents that students of ESL classrooms perceive blended learning strategy as a highly effective and efficient technique to enhance their speaking skills of the English language. According to the findings of the study, the students highlighted the options provided to them to set up and create their own pace for learning the language and also reflected their perceptions about the advantages and efficiency of incorporating and integrating digital technologies in blended learning programs in order to increase their competence grammatically in English as a foreign language. This aligns with the scholarly research which also shows that the blended learning strategy when integrated into teaching methodologies, tends to significantly decrease speaking anxiety and raise

confidence in active participation both, inside and outside of classrooms (Pinto-Llorente et al., 2017).

5.3 Discussion on the Findings Related to RQ 3

5.3.1 Lack of Basic Digital Literacy in Students

Tondeur et al., (2016) mentioned that a lack of digital literacy in students of ESL classrooms can hamper the process of effectively integrating digital tools in the teaching methodologies of teachers. Similarly, studies show that, while examining the digital competence of teachers, the results highlighted the importance and the need of integrating professional digital competence skills into teaching methodologies to meet the increasing demands of the developing modern societal setup (Garzon-Artacho et al., 2021). From the responses of the participating teachers, it was revealed that on many practical occasions, students struggled to operate and navigate digital platforms like Google Classroom, which consumes the valuable time in the language learning process which can be utilized in interactive speaking interactions. Moreover, a technological gap is observed which serves as the major factor leading to the inequality of the students' learning outcomes, as students with dominant technological and socio-economic backgrounds tend to participate more effectively in online-speaking activities than those who are lacking these basic skills. This kind of digital divide (Deursen & Dijk, 2018), shows the need for basic ICT training in students at the primary and secondary level of their education and a solid eligibility criterion of universities while considering the admissions in various disciplines.

5.3.2 Lack of Proper Support by Institution is Slowing Down Digital Competence

In order to foster digital competence in students of ESL classrooms at the tertiary level, the importance of dedicated institutional support is equally important to enhance the interactive language learning of students. Based on the responses of the participating instructors, specifically

in this regard, it is very evident that despite being a private sector tertiary institution, which is supposed to be equipped with latest digital access for educators and learners, the institution fails to provide a full flash digital infrastructure and enough digital resources to effectively implement these innovative teaching methodologies. In addition to this aspect, one of the participating teachers, T1, during the interview session shared that *“We are expected to use online speaking platforms in language comprehension classes of ESL students by the institution, but they fail to provide stable internet connection which is necessary for running these digital platforms in classrooms”*. Studies showed that a digitally equipped English-speaking atmosphere in an educational academic setting not only enhances the fluency and vocabulary of students but also helps in motivating them to actively take part in English communications overall (Ramadani & Hamdani, 2021).

5.3.3 Lack of Technological Facilities

Built on the results of the current research regarding the technological shortcomings and issues from the responses of participating teachers of the study, it was observed that various challenges were faced by the participating teachers who tend to foster digital competence among the students of ESL classrooms by integrating innovative pedagogical strategies in their teaching methodologies to enhance the effective language acquisition mainly due to lack of availability of adequate technological facilities. One of these challenges includes the difficulty of teachers to simultaneously use more than one digital tool at the same time, as one of the participating teachers, T2, elaborates the frustration over the time consumption to switch between language learning aspects, like speaking and listening. The said findings align with the findings from the previously conducted study which reflect on the issue that the usability and integration of digital tools hinder the effectiveness of teachers in adopting innovative pedagogical strategies for the

sake of language instruction (Blau et al., 2020). Moreover, another recurring issue based on the response from the participants of the study is inequality in the device compatibility of the students, where some students were using personal mobile devices while the majority were interacting with their laptops. The participating teachers reflected that mobile devices were lacking full compatibility with digital tools which were used in language learning in ESL classrooms. This code echoes the aspect presented by the existing scholarly literature, which highlights the fact that unequal access to digital technology can result in unequal language learning outcomes in students of ESL classrooms (Selwyn, 2016).

To address these challenges, the effective way is to adopt universal digital platforms that are compatible with all kinds of devices, which must be supported by investments to enhance the innovative technological infrastructure of the institutions. For example, cloud-based software and applications like Google Classroom and Microsoft Teams, can provide easy integration of language teaching activities like speaking, listening, reading and writing on one single digital platform, reducing the need to switch between different tools, which makes it troublesome for both educators and learners. According to Eickelmann and Vennemann (2017), such digital platforms and tools, simplify the language instructing process and significantly increase the student engagement as they are designed to be more user-friendly with compatibility of both mobile and desktop devices and perform various tasks in a single interface. Additionally, considering the above-mentioned solution when combined with the dedicated institutional support regarding proper training and digital infrastructural upgrades will contribute significantly to minimizing technical shortcomings faced by teachers in the process of fostering digital competence in students of ESL classrooms in tertiary-level educational setup at Bangladesh.

Chapter 6

Implications and Conclusion

In this final chapter of the research, the author has delineated the current study, highlighted the key conclusions from the three research questions, and explored future avenues for research by detailing how it can enhance technology-based language teaching and learning in ESL classrooms at tertiary-level institutions in Bangladesh. The researcher will provide important suggestions to enhance the advancement of digital skills in ESL students in tertiary institutions in Bangladesh. In addition to addressing the constraints of the present research, the researcher will wrap up the discussion with final reflections.

6.1 Overview of the Study

The main goal of the current research was to investigate the creative teaching methods used by teachers in ESL classrooms to improve students' digital skills and enhance speaking engagement in Bangladeshi tertiary education, as perceived by teachers and students in Bangladesh. In addition, this study delves into the difficulties teachers encounter when incorporating digital tools to improve students' speaking interactivity, derived from their own teaching experiences. It also discusses innovative pedagogical approaches to address these challenges. The key findings of the data collected from the interview sessions method of this qualitative study highlight and elaborate that despite major challenges and limitations, integrating technology in teaching methodologies has far-reaching positive impacts regarding the enhancement of speaking interactivity, according to the perceptions of the participating ESL teachers and students at a tertiary level educational institution in Bangladesh. Furthermore, the study's analysis and discussions propose that blending traditional classroom methods with technology-driven educational experiences can promote effective language learning in ESL

classrooms and pave the way for innovative teaching approaches to fulfill the pedagogical demands of the 21st century.

6.2 Implications of the Study

This study examines teachers' and students' views on enhancing digital competence in ESL students in Bangladeshi tertiary institutions to improve speaking interaction, as well as the obstacles educators encounter. Hence, this study has distinct implications for various stakeholders and individuals who are related to the tertiary learning system. Starting with the public implications of this research is proportionately substantial for both groups, educators and learners of the English language. Tertiary-level teachers and students will be directly benefited from this particular research study as they have provided a chance to learn the encounters, difficulties, and possibilities regarding digital competence in ESL classrooms, based on teachers' and learners' beliefs and other pedagogical problems in the process. Furthermore, this empirical research also incorporates the advantages of tech-based language learning based on the experiences of stakeholders, educators and learners. The data presented in this research will be valuable for people and other academics to understand and stay informed about the future possibilities of digital skills in college students, in comparable situations. Additionally, the results of the research point out various contextual, socio-economic, technical, and structural challenges related to successfully incorporating digital skills in tertiary-level English language students in Bangladesh. Therefore, this research study holds significant importance for governmental bodies like the Government of Bangladesh, the Education Ministry of Bangladesh, and policymakers in higher education to implement needed actions.

The present research study also has implications for teaching, as it shows that both teachers and students have a positive view on using digital tools. They found that these tools

allowed them to access various resources, materials, and platforms, as well as multitask while learning language on platforms like Google Classroom, Microsoft Teams, and Zoom, according to participating educators' perceptions. Therefore, this research will provide new educators with suggestions for specific digital tools that can help develop digital skills in students. On the flip side, students also considered the positive effects of being digitally literate as a new teaching method, improving their ability to interact in English speaking. Therefore, fostering digital competence in students in tertiary-level ESL classrooms makes both, teachers and students, future-ready.

For this specific research study, the researcher combined the *Adoption and Use of Educational Technology* (Gani, et al., 2019) framework and *Systematic Model for Technology Integration in Teaching* (Peled & Perzon, 2022) framework, and then adopted them in accordance with the three specific research questions of the current study undermining the data analysis method of thematic analysis prescribed by the Braun & Clarke, 2006. The researcher made her conceptual framework, “Fostering Digital Competence in ESL Classrooms” (see figure 2.1) by mixing the models provided by the above-mentioned scholars because their models are also related to integrating technology in classrooms for a better learning experience. Future scholars and researchers can utilize and adopt the abstract backbone of this research to analyze and gauge alike or bigger areas of qualitative data in different contexts.

6.3 Recommendations

Constructed on the outcomes and results of this research, the author has proposed few recommendations regarding fostering of digital competence in students of English language learning classrooms in tertiary education institutions in the context of Bangladesh. The

recommendations will be helpful for the stakeholders of tertiary-level education and educational policymakers.

- Initiatives should be taken in the form of practical workshops to integrate basic digital literacy in the students of primary and secondary level education.
- An eligibility criterion of basic digital literacy regarding ICT should be introduced at the selection stages of tertiary institutions for both educators and learners.
- Practical workshops and training should be provided to the educators for effectively integrating digital tools into their teaching methodologies.
- Institutions must realize the significance of providing upgraded digital infrastructure free from connectivity and other technical bugs in their premises to ignore the challenges raised in the teaching practices of educators in their premises.
- In every tertiary institution, public and private sector, a specialized digitally competent technological expert should be appointed to immediately report any issue regarding technical emergencies.

6.4 Limitations of the Study

The present research study comes with its own set of limitations. The first limitation of this research study is that because of not having permission from the institutional authorities, the researcher was unable to attend and experience the ESL classes physically. While the researcher gathered a significant amount of information regarding their experiences and perceptions on fostering digital competence from teachers and students of ESL classrooms, physical observations of classrooms would offer more detailed data for the research.

Moreover, the researcher believes that particular institutions selected for the sampling of the study's data have previously signified substantial results to comprehend the importance of fostering digital competence in students of ESL classrooms through innovative pedagogical strategies to enhance speaking interactivity in the tertiary educational context of Bangladesh, as no similar study has taken place, especially in Dhaka division of Bangladesh. However, the researcher could include more institutions and larger samples to get this study more informative.

6.5 Scope for Future Research

After the exhaustive review of published relevant literature till today, in the existing scholarly knowledge, numerous research projects have been carried out in the field of linguistics which encounter the issues of fostering speaking interactivity and also on developing digital competence among both students and the training of their teacher accordingly, at various educational levels like primary, secondary, higher secondary, and tertiary. However, there have been no efforts to study how promoting digital competence can improve speaking interaction skills in ESL teaching in the classroom. The present study aims to address the gap in existing research by exploring the viewpoints of teachers and students on the challenges of incorporating digital skills as a pedagogical strategy to improve speaking skills in Bangladeshi ESL classrooms at the higher educational level. Considering the research gap in this study, the researcher intends to suggest potential avenues for future research. While the current research is focused on tertiary education in Bangladesh, similar studies could be carried out on the same topic at primary or secondary levels worldwide, involving a larger number of participants and wider contexts. This research study utilizes qualitative methods for sampling and analysis, but other studies could also use quantitative and mixed methods.

The researcher merely opted for one private tertiary institution in the Dhaka division of Bangladesh. However, multiple institutions of different educational levels of different sectors including a comparative study of public and private sectors in different areas and regions in a similar field might produce improved or altered outcomes.

6.6 Concluding Thoughts

To conclude the study, in the modern era of the technologically driven society of the world, it is the demand of time and almost all professionally renowned organizations to expect effective digital competence in their stakeholders. The current study not only explores the fostering of digital competence in students of ESL classrooms to enhance speaking interactivity through innovative pedagogical strategies at the tertiary educational level but also incorporates the different challenges faced by the educators in fostering digital competence through their innovative teaching methodologies. Therefore, in the findings and discussions of this research study, it is clear that teachers and students in higher education have varying views on digital language learning. Additionally, they face challenges with a lack of digital skills, inadequate digital resources, poor internet connection, and insufficient basic digital infrastructure, which hinders effective language teaching and learning. Yet, some other potential outcomes arose from their feedback including shifting teaching methods, personalized learning, enhanced English fluency, flexibility, and benefits of blended learning methods. Hence, it can be concluded that promoting digital skills in higher education institutions in Bangladesh through diverse teaching methods can create new opportunities for students to enhance their speaking proficiency in foreign languages. The researcher is confident that the findings of this study will help to enhance technology-based language education in conventional classrooms at the tertiary level in Bangladesh.

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Appendix A

Letter of Consent for Participants

Dear Sir/Madam,

I am Noshin Nawal Tory, a postgraduate student of Applied Linguistics and ELT at the Department of English and Humanities, BRAC University. As a part of my Master's thesis, I am conducting a study titled "Fostering Digital Competence and Enhancing Speaking Interactivity in Bangladeshi Tertiary Level ESL Classrooms through Innovative Pedagogical Strategies: Perceptions of Teachers and Students". I would be grateful to you if could help me by participating in a brief interview to share your thoughts and perceptions related to digital competencies, the implementation of technology in education, tech-centered methods in English language instruction.

The interview can be conducted in person if you are comfortable with it, or over the phone if you prefer, all at your discretion. The interview will be recorded only to collect the data which will be analyzed to fulfill the objectives of the study and it is ensured that this record will not be shared anywhere else. You can rest assured of its privacy.

If you are interested in joining, please go through the attached consent form on the following page and sign if you agree to participate. Your valuable feedback would be highly appreciated in contributing to this research.

Thank you for considering the request to assist.

Warm regards,

Noshin Nawal Tory,

Student, Department of English and Humanities

BRAC University

Phone: +8801862-407556

Email: noshin.nawal.tory@g.bracu.ac.bd

Research Participation Consent Form

Please read the following statements and tick in the boxes.

Statements	Agree
1. I have reviewed the information and understood details about the research, along with the data collection process.	
2. My decision to participate in this interview is optional, and I am not being forced to take part in it.	
3. I gave permission to the researcher to record or video the session if he or she felt it is necessary.	
4. If the researcher requires any clarification later, then he or she has permission to reach me out, and I have therefore provided my personal information below.	

Phone Number:

Email Address:

Date:

Name:

Signature

Appendix B

1. Interview Questions for the Teachers

- 1) Could you please describe your teaching experience in ESL context? How long have you been teaching at the tertiary level in Bangladesh?
- 2) How do you incorporate interactive activities into your classroom and motivate your students to participate in these activities?
- 3) What challenges do you face in ensuring student participation in these activities?
- 4) How would you define digital competence, especially in the ESL teaching and learning context? To what extent do you think digital communicative tools can enhance the speaking interactivity of students in your classroom?
- 5) Are there any new innovative strategies you have implemented in your classroom to enhance interactive communication and speaking interactivity among students?
- 6) How do you incorporate technology into your classroom while teaching, to improve students' speaking skills?
- 7) How do students respond to the technology tools you use and the strategies you apply in your teaching?
- 8) Can you give an example where you have used any specific digital communicative tools in your classroom that have effectively helped your students to improve their proficiency in interactive communication and engage students in English language speaking activities?
- 9) What specific training have you received to teach students using technology in the ESL classroom?

- 10) Do you consider yourself adequately qualified to manage a digital ESL classroom? How will the advent of technology tools affect your teaching practice?
- 11) How does your institution support the incorporation of technology in the classroom as well as shifting teaching strategies in your teaching methodologies?
- 12) Do you feel that your institution lacks any resources that would improve students' digital competence and develop their proficiency level in speaking?
- 13) How will you assess the outcomes of your teaching strategies and use of digital technology that are contributing to students' speaking development? What kind of feedback have you received from students in this regard?
- 14) What are the major difficulties you face in implementing the techniques to improve student speaking interactivity in the classroom? How do you prevail over these difficulties?
- 15) What facilities or support would you like in your classroom that would enrich students' speaking interactivity as well as digital competence?

2. Interview Questions for the Students

- 1) Can you please state your current level of study? How long have you been studying as an ESL student?
- 2) How much do you think speaking skills are worth to be fully proficient in English? Do you get enough opportunities to practice English speaking in your class?
- 3) In your class, teacher carries out various activities on English speaking, which activity do you think is more effective to strengthen your English-speaking skills?

- 4) How is your engagement with digital technology in education, especially in ESL learning? In your opinion, what kind of impact can integration of digital technology produce on language learning environments?
- 5) Is there any technological platform that you have benefited from which you are using to boost your English communication skills? Tell me about the most effective digital tool you use that you think helps you to enhance your speaking interactivity even more.
- 6) Do you think it is appropriate to practice English speaking using digital technology? In what areas do you think digital competence helps to enrich your English-speaking ability?
- 7) How do teachers incorporate technology to teach you speaking in the classroom? Please share your experience of a class where the teacher specifically taught you speaking activities using digital tools.
- 8) In the class, which technology-based method applied by the teacher in improving speaking skills by digital competence which seems more efficient to you?
- 9) Are there any teaching strategies that teachers have not yet implemented that you think would make learning interact in English easier if implemented in classroom setting?
- 10) What challenges do you face to learn English speaking with the inclusion of technology? What challenges do you face in fostering digital competence and how you come to a proper solution?
- 11) By practicing speaking using digital technology, do you feel that you have learned many educative things that have helped you to become more interactive in speaking English?
- 12) In your ESL classes, how do a variety of innovative pedagogical strategies using digital tools affect your confidence and interactivity in English?

- 13) How does digital feedback on your speaking performance help to facilitate your learning?
- 14) Does your institution provide adequate support for the use of technology to create effective learning environments to foster digital competence in students? What technology resources do you think your institution lacks that would have led to better learning?
- 15) After all, do you believe that it is important to be digitally competent to be more interactive and engaging in English speaking? In your opinion, what areas of technology in education have room for improvement for the future?

Appendix C

Sample Theme Generation Template

Sample theme generation template using teachers' interviews based on Research Question 3:
What challenges do teachers face while integrating their teaching methodologies with digital tools? How do they overcome these challenges?

Interview Questions

14) What are the major difficulties you face in implementing innovative pedagogical techniques to improve student speaking interactivity in the classroom?

T1	T2	T3	T4	Themes
We are expected to use online speaking platforms in language comprehension classes of ESL students by the institution, but they fail to provide stable internet	Most of the time, we must use multiple applications and software at the same time. One for speaking and another for listening. Switching between	In the beginning of the session, a lot of the students of language learning didn't even know how to use Google Classroom, which consumed a	A portion of my class students are using smartphones and laptops first time personally in their lives and they do not know how to navigate the	* Lack of Basic Digital Literacy of Students * Lack of Digital Infrastructural Support by Institution * Technical Challenges

connection which is necessary for running these digital platforms in classrooms.	them is time consuming and sometime confusing also.	lot of time and deviates the students from actual speaking practice there.	apps which we use to enhance the language learning and pronunciation speaking practices. It is a real mess.	
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