

**Integration of E-Technologies in ESL Classrooms**  
Evaluating the Impact of ICT-Intensive Pedagogy on English  
Speaking Skills of learners of primary schools

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## **Dedication**

Dedicated to my parents, teachers, and husband whose tremendous prayers and support led me to this great achievement!

## Certificate of Originality

I hereby declare that the research paper titled “*Integration of E-Technologies in ESL Classrooms: Evaluating the Impact of ICT-Intensive Pedagogy on English Speaking Skills of learners of primary schools*” is my own work and to the best of my knowledge. It contains no materials previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any degree or diploma at SEECS or any other education institute, except where due acknowledgment, is made in the thesis. Any contribution made to the research by others, with whom I have worked at SEECS or elsewhere, is explicitly acknowledged in the thesis.

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## List of abbreviations

FGDs	Focus Group Discussions
ICT	Information and Communication Technologies
ESL	English Second Language
IDs	In-Depth Interviews
SPSS	Statistical Package for Social Sciences
QDA	Qualitative data analysis
Apps	Applications
E-tech	Educational Technologies
LAD	Language Acquisition Device
FDE	Federal Directorate of Education
ILOs	Individual Learning Objectives
DS	Director Schools
MoE	Ministry of Education
NCEL	National Curriculum for English language
ELT	English Language teaching

## Abstract

The integration of educational technologies to teach English Speaking skills in public sector primary schools in Pakistan lacked due attention. Furthermore, learning objectives set in the Pakistani national curriculum for English language are vague as well as there are no guidelines available for teachers to adopt digital learning resources in their teaching practice. The educators in Pakistan are unaware of the fact that the implementation of E-technologies in classroom practice can ease their task of achieving the learning objectives.

The research is based on a mix-method approach to investigate the impact of the use of digital learning tools and resources in teaching English speaking skills. The ILOs for English speaking skills are proposed and lesson plans are designed to achieve these ILOs through digitized learning activities. The quantitative data (pre-post quasi experimental design) was obtained from 120 participants (9-13 years old) whereas qualitative data was gathered by arranging in-depth interviews from six teachers and focus group discussions from 12 learners in total ( 2 groups). The pre and post APTIS test results were analysed by using SPSS software. However, interviews and FGDs were analysed by using content analysis approach.

The analysis shows that ICT-intensive pedagogy has significantly impacted English speaking skills of learners of government primary schools in Pakistan. The study shows the variance level of 70% after the intervention which is considered substantial. This pedagogy facilitated teachers to deliver lessons efficiently and achieve ILOs faster than conventional teaching methods. It is of the fact that digital tools and gadgets are well incorporated in English speaking lessons that made the learners show high progress in all parts of the English proficiency test. Teachers and learners showed a positive attitude and receptiveness towards the use of digitized activities and they intend to use them in future ESL lessons if they are provided and given free access to digital educational equipment. The research also spots that males and females have similar aptitudes in relation to the use of digital tools and gadgets for the learning process.

The study concludes that high performance and increased confidence level of learners are closely linked to the use of digital technologies and its implementation in ESL lessons. It is the need of the time to train teachers in the field of educational technologies and provide digital resources at all government primary schools with free access to teachers and learners to make them better communicators in the target language. This is the only way forward to progress in education.

# Chapter 1

## Introduction

### 1.1 Background

The language acquisition refers to the developmental phase in which individuals acquire the ability to identify and understand language, along with producing and using words, phrases and sentences to communicate in an effective manner. It happens in early years of child development and growth. Chomsky (1966) proposed the concept of LAD (Language acquisition device) that is an innate mental capability allowing a child to acquire the language. This theory constitutes the Nativist approach. This model emphasizes that individuals are born with an "innate facility" to acquire language. This hypothetical device in the brain aids children to rapidly learn and produce language. Krashen (1981) suggested that there are two independent systems for second language development: 'the acquired system' and 'the learned system'. The acquisition refers to the output of a process that undergoes subconscious of a brain similar to the system a child goes through while acquiring first language. It needs interactions based on meaningful utterances in the target language. The speaker of a language does not only focus on the form but the function of a language in a communicative action.

A large number of researches in the area of foreign language learning among young learners have shown that technological advancements are vital in learning a foreign language. The internet, online gaming and technology may boost language learning in a positive way if applied appropriately. Gee (1996) suggests that internet offers a socio-cognitive approach via authentic activities and task based learning. Online gaming can help to develop lexical competency as well as provide important language feedback (Pensky, 2002). Scott and Ytreberg (1990) elaborate that young learners enjoy using new language ability for online gaming, songs, rhymes, and cartoon stories. It's the internet that provides them the opportunity to practice new language in an interactive manner. Young (2013, p.339) suggests that online gaming improves the language awareness of learners.

It has been commonly observed that in developing countries like Pakistan, learners at primary level are not given enough attention towards listening and speaking skills which goes against the natural abilities of a human being. There has been more emphasis on

reading and writing in spite of listening and speaking skills at early years of education at schools. Consequently, the appropriate English language proficiency level cannot be achieved at later stages of life. It is a vicious circle in Pakistani society where a learner does not achieve desired communicative level of English language. Consequently, he teaches his learners in the same way as he was taught and delivered after being appointed as an English language instructor.

Speaking skills is a key to communication and societal fabric would significantly vary in absence of oral communication development (Laver, 1994). Task based learning activities would enable language acquisition as well as real life interactive and participatory tasks (Aslam, M. 2003). But to attain this it becomes needful for the teacher to possess knowledge of the sound system of the target language and understand the similarities or differences with the first language of the learner (Saif-ul-Haq, M. 2003). A well informed person would be able to differentiate between stress, rhythm, intonation and pitch patterns (Swan, M., 2006). There are a number of teachers who are unaware of modern language teaching techniques. Such a scenario exists in 60 of the KP, Pakistan, government colleges (Aurangzeb, 1992). Teachers having language teaching certifications are better aware of the fact that which tasks or activities are relevant or not (Fayyaz, M.,1992). It is quite true to believe that communicative competence can only be achieved through linguistic competence whereas communicative success is only possible when learners understand the appropriateness of societal conventions (Hedge, 2008). The most vital point is that the way teachers increase motivation among learners while practicing speaking skills and connect speaking activities to their personal interests as well as their school routine, this is how speaking skills may improve (The Commission on English Curriculum, 2009).

## **1.2 ICT in the educational context**

In this part, role and use of e-technologies in schools is explained. It also defines use of technology in educational contexts. According to the oxford online dictionary (2012) the word technology means: *“The application of scientific knowledge for practical purposes, especially in industry: advances in computer technology”*.

As explained by Ritchie and Brindley (2005) the definition of ICT as “the array of primarily digital technologies designed to collect, organize, store, process and communicate information within and outside an organization”. Furthermore, Barba-



Sánchez et al. (2007) understand ICT as a combination of words that stands for numerous array of software and hardware as well as management of information, applications and tools that may be utilized for the creation, production, analysis, processing and packaging, distribution, reception, retrieval, storage and modification of information.

As elaborated by Apulu and Latham, (2009c) ICT is such technology that supports communication. It helps to process and transmit information through electrical means. It will be a high area of interest for policy makers to find new ways through which improved use of ICT in various organizations can be encouraged. Additionally, they are highly devoted to the purpose to employ ICT in all areas of organizational tasks that range over individual to group work, teaching, training and learning (Van Ark et al., 2002).

ICT is employed in a strategic manner to boost teaching and learning that leads to better prospects in teaching. It also supports quality education by introducing modern teaching methods and approaches. Moreover, better learning objectives can be set as well as their delivery. Professionals will always refer to ICT as a source for enhancing performance in a number of professions. It is generally accepted that by employing ICT in education may help in the reformation and improved management of educational systems. ICT is a key driver in providing easy accessibility to education even in far flung areas. Therefore, in recent times ICT has become the core of educational development. Therefore, the shortage of ICT equipment has become a serious threat in the achievement of high quality teaching in Pakistani schools.

The success of any institution in today's modern and globalized world without realizing or endorsing the importance of ICT may not be possible. By the introduction and adoption of ICT in schools will help students to do academic work without time and space limitations. Conventional distance learning has already upgraded to total digitization leading to a range of practices from complete distance learning to full campus based learning. ICT is cost effective in relation to lesson delivery and communication through digital A/V recordings as well as broadcasting the same on internet, TV or radio. It can substantially decrease the cost along with improved output (Jain, 2006). Use of ICT in education or any other field is an environment friendly approach by becoming paperless.

The deficiency of training in ICT and teaching techniques gives rise to concerns in relation to teaching (Wright et al, 2009). It has been debated by Patrick (2006) that the 'implementation of new ways of teaching will require new ways of thinking around expert involvement, teaching, and curriculum methods that license teachers to connect with today's learners". Similarly, a large number of countries take steps to develop policies that may empower the education system alongside the establishment of educational frameworks that will consequently align with international standards.

### **1.3 Motivation**

Presently, in the context of second language learning, English is in high demand and quite popular around many parts of the world. English language has successfully attained the status of an international language. Better English skills may lead to better opportunities in relation to higher education, tourism, job market or just improved living (Crystal, 1997).

### **Relevance to National Needs**

The research will help to improve national curriculum/syllabus for ESL courses specifically dealing with speaking skills as well as explore/identify effective ways to employ innovative technologies to achieve individual learning objectives in ESL classrooms.

### **Advantages**

The study underhand will benefit teachers and learners both. Use of digitized activities/materials to achieve ILOs will actually speed up the process of learning. It will help to build a better understanding among teachers and learners how they can apply latest tech-based solutions to boost learning and impart latest skills as well as promote autonomy in learners. It will also revise ILOs for ESL oral communication which is a continuous process.

### **Areas of Application**

The research findings will be useful for all lower secondary schools across Pakistan as well as for the national curriculum wing to upgrade its ESL curriculum for oral communication skills. It will support schools to take initiative in integrating E-tech tools and resources in their classrooms and relate tech-based learning with current teaching-learning practices.

## **1.4 Problem statement**

Speaking skills in Pakistani ESL (English as a second language) context has been neglected since long and learning objectives in relation to speaking skills have not been set right. It's time that this issue should be addressed and this gap must be filled to benefit future learners so they become better communicators in English language. The research also is a step towards integrating E-technologies in the ESL (English as a second language) teaching practice to achieve ILOs (Individual learning objectives) successfully as we are dealing with digital native learners hence it is essential we use latest gadgets, tools and software to impart learning.

### **Objectives**

- a) Propose ILOs (Individual learning objectives) for speaking skills in the national ESL curriculum
- b) Integrate E-technologies in ESL (English as a second language) classrooms

There is a reconceptualization of teaching practices where teachers are seen as reflective practitioners; reflective thinking leads to the development of relational comprehension of practice that gives rise to the construction of new knowledge and betterment (Carr & Kemmis, 1986). Educational reformers have supported the view that reflecting on teaching practice and justifying one's methods and techniques empowers teachers to understand the demerits of traditional teaching methods and comprehend new teaching-learning approaches that may attain betterment. It's the responsibility of teachers to arrange and organize their professional development throughout their career (Shaw, 1997).

## **1.5 Scope of the research**

The study will focus on investigating the impact of using E-technologies in teaching speaking skills to students of elementary level. The learners are taken from Pakistani government schools. The study is focused on teacher's perspective in delivering lessons on speaking skills at primary level by the help of E-technologies including audio-visuals, interactive videos, power point, web based application, animations, tablets, and online games using computers.

## 1.6 Research Questions

The purpose of this study is to evaluate the effectiveness of digitized ESL (English as a second language) activities set by the defined competencies based on the proposed ILOs in Pakistani English language curriculum. The scope of research addresses the under practice speaking skills and it will propose learning objectives for English language speaking skills to meet learners' needs. Secondly, this will also give opportunity to the learners and teachers to practice digitized activities and analyze the level of effectiveness after piloting the proposed ILOs.

The research question states as:

**What is the impact of ICT-intensive pedagogies on English speaking skills of primary school learners?**

The research statement follows as:

**The ICT-intensive pedagogy has significant impact on English speaking skills of primary school learners.**

## 1.7 Limitation of the study

The intervention in the present study was limited by the number of students admitted in grade five of primary schools. In addition, the number of teachers was limited who participated in the experimental study. Moreover, the number of principals was also restricted to get trained in using digital devices during intervention.

There was a lesser amount of time given to learners and teachers to practice digital tools and gadgets used in the experimental phase. The number of teaching hours could have been more if participants and teachers were available for longer period of time during summer break. The proficiency level of learners was not defined according to CEFR due to high expenses to be paid to British Council for the given sample size of the present study. The results might be different if a different assessment tool was selected to identify English speaking level of learners.

The study was limited to specific schools in Islamabad. It displays the perception of the use of educational technologies among teachers at school level. This can be applied in other schools of various sectors of Islamabad and across Pakistan. The results can be replicated in other situations or context.

## **Chapter 2**

### **Literature Review**

#### **2.1 Introduction**

ICT as defined in the context of education relates to the use of computers, internet, online tools and applications and the availability of audio and visual aids, smart boards and smart gadgets. As put in these words by Tinio, 2003, that ICT is “here to stay” and will keep on contributing in education worldwide.

The contributions of technological developments in the past few years have helped to coin new terms such as e-learning, email where the initial ‘E’ stands for electronic (Selwyn, 2002). Particularly, the spread of internet has greatly supported the improvement of school communication and information processing. Castells (2005) puts forward the point that progression is only possible by adopting ICT. Progress in absence of ICT is synonymous to development without electricity.

#### **2.2 Perceived advantages of ICT usage at schools**

In the developed world use of technology has eased the process of shifting from the industrialized economies to knowledge economies. For example the European commission is of the point of view that governments that are well versed in advanced ICT are vital in encouraging progress of the European knowledge societies (Wimmer et al., 2007).

As put forward by Jaffer (2007), education objectives can be upgraded and updated with the help of ICT that will lead to higher performance in learners as well as improvement in teaching-learning. It is important to reiterate this point that all developed countries have ICT as a component of the curriculum. ICT can bring about positive change in school education in particular although its application is prevalent and important at all levels and forms of education.

Various researches have suggested that the preference in learners to adopt computer based learning directly relates to the fact that ICT driven learning is useful, user friendly,

broad learning prospects as well as a personalized learning experience (Bourgonjon et al., 2010).

Al- Ansari (2006) suggests when university teachers in Kuwait used computers, internet and ICT tools it saved time, search and gather latest information and draw comparisons amongst various other studies. The research further posits that learners and teachers would employ ICT for its benefits in relation to better performance in relation to teaching-learning.

### **2.3 Perceived challenges to implement ICT in schools**

Obstructions in achieving objectives can be termed as barriers. Hence, there are a number of barriers faced by learners to adopt and employ ICT at school level. It is the responsibility of education managers, academic and technical staff to take relevant steps to remove all obstructions to be able to implement ICT successfully. Nonetheless, majority of the developing countries could not benefit to the fullest by implementing ICT in relation to economic growth. Furthermore, in developing countries, many of the institutions do not have ICT driven services. A number of studies have emphasized barriers in relation to ICT at the implementation phase. A great number of researches have been conducted to find out all aspects that effect ICT utilization and acceptance in the teaching-learning process in Pakistan. As suggested in the research findings, ICT infrastructure and facilitation are vital in the implementation of ICT (Yusif 2006, Drent & Meelissen, 2008; Afsshari et al. 2009, Elzawi 2010 Mokaya 2012).

### **2.4 Shortage of ICT Infrastructures**

United Nations (2008b; 2005) reports show that problems related to technological infrastructure are barriers that lead the world to a division of haves and have not in the technological sense. During the years 2007-08 an ICT development index document published the results of 169 countries (ITU, 2010a) in which all the countries showed progress in relation to ICT expansion. However, the developing countries were below the developed countries in the list (ITU, 2010a). Likewise, World Bank reiterated the same aspect that the digital divide in countries with higher per capita income has 416 PCs per 1000 persons whereas lower per capita income countries have only 6 PCs per 1000 persons (World Bank, 2003).

In the view of Afsshari et al. (2009, p: 8) software and networking infrastructure needs to be installed for the integration of ICT and education. According to the study ICT infrastructure stands for the ICT facilities such as computer labs, ICT hardware and software, computers and laptops, networking and availability of internet. ICT facilitation means support available in relation to ICT in schools as well as the presence of ICT technical support and coordination. Hence, the research underhand investigates the role of ICT infrastructure in relation to the use of ICT. According to the study it is assumed that infrastructure impacts the user friendliness of ICT (EIU, 2009; Gil-García and Pardo, 2005; Ebrahim et al., 2004).

## **2.5 Insufficient Teacher Training**

On general terms ICT training in relation to education, particularly in schools, refers to information exchange, skill building, expertise and practices that support all as well as support all contributors in a better education process (students, teachers, community and so forth).

As a whole, the provision of training is essential to be able to use various software and hardware tools and gadgets. The deficiency of ICT related equipment in schools is another aspect that effects the implementation of total ICT supported education. For instance, the frustration of teachers was observed by Manternach (1999) when accessibility to ICT resources and equipment was denied to them. They expressed the fact that due to this lack of access that they were unable to integrate technology in their classroom practice.

Participation of teachers in sharing information and problem solving is vital in attaining mutual understanding. The exchange of ideas among teachers link up new knowledge as well as take in to account other's perspectives, this leads to mutual understanding among educationists and researchers (Rogoff, 2001). Furthermore, similar discussions support teachers to take risks and put in their best efforts to improve teaching practice (Fullan, 1999). As a result, theoretical assumptions of the innovative role of teachers is logical, as they show how it can lead to teachers' learning and consequently, achieving student learning outcomes effectively.

Teacher trainers in pursuit of such a training paradigm strive in the provision of a highly conducive learning atmosphere for teachers as well as reduce negative effects of

conventional teaching practices. They firmly believe that on job training would impact teachers to transform classroom practices positively.

## **2.6 Adoption of technology to teach English language to young learners**

Tech-based online platforms provide such opportunities to young learners and a great deal of resources become accessible for them. Harmer (2007) has mentioned the value of computers and online language learning activities. Teachers need to encourage their learners to search for relevant activities and games that lead to positive language learning. Cameron (2009, p.155) believes that learners need to be encouraged to select topics of interest from the internet. Clements and Sarama (2003) reiterate that appropriate online resources will benefit learners. Furthermore, Harmer (2007) affirms that internet based online language activities boost collaborative learning. In the contemporary modern world computers are like close partners of children and become motivational for them. Tomlison (2009) states that online computer supported activities give learners swift information as well as high quality resources. He further elaborates that the use of multimedia projectors and internet resources motivates learners to learn. Parents are of the same view that computer based language learning makes their children interested in language learning.

It is true that children cannot be focused for a long time when it comes to studies. The usage of fun and authentic resources will help them to stay focused. Internet is a source of authentic resources. Swaffar (1985) elaborates the significance of authentic learning resources and the unlimited availability of cultural information to learners that makes learners attracted to it. Larsen-Freeman and Anderson (2011, p.199) reiterate that ICT makes educational resources accessible and constructs the learning experience for the learners. Additionally, it is stated that online communication, gaming, e-friendships and podcasts can produce high level of interest and involvement by language learners. Young learners usually learn better visually, quite naturally they would prefer learning by seeing. Online learning resources and activities introduce materials that are visually interactive and engaging for learners that will boost their language skills (Larimer and Schleicher, 1999).

Brewster, J. Ellis, G. Girard, D. (2004, p.146) have mentioned that through e-mails, internet, and cable TV young learners understand the importance of English. They are energetic that may lead to difficulties faced by them in a traditional classroom setting.



Smart classrooms are efficient enough to provide them a touch of real life language usage that is fun and interesting. It helps to boost learner understanding about the target language and its uses in real life settings (*İlter, 2015*).

In the developing world the teaching of English as a foreign language is problematic. In Iran English is a compulsory part of the national curriculum and enjoys a high level of importance due to the reason that it is the main language of technology, computers and scientific content. Furthermore, the importance of learning English is enhanced because of unlimited information generated online. Lastly, it's necessary to have English language skills to be able to participate in international cultural and educational exchange programs. Despite the aforementioned reasons a number of researches depict that schools in Iran were unable to achieve the intended goals (Bagheri, 1994; Moradi, 1996a; Rahimi, 1996b; Rashidi, 1995).

Although students in Iran study English throughout their secondary school as well as in higher education, which is quite a long span of time most of the students still cannot communicate in English in real life situations. Due to the reasons researchers are investigating despite all resources and efforts dedicated why are Iranian learners showing low performance (Akbari, 2015).

Behroozi and Amoozegar (2014)'s research depicts the importance of reassessment of teaching approaches used for English language teaching. Data collection depicts that Iranian learners are unable to achieve speaking fluency or communicate in English because of over emphasis on grammar teaching. The research in relation to effective speaking skills: The new era of social and electronic media, mass communication and explosion of information learners need to be empowered to take full advantage of all these developments such as modernized education, research skills, science and business, this can only be possible through better English skills as well as improved communication skills.

A number of factors contribute to English language teaching to young learners. A few of them are listed below:

- Time factor is crucial and an early start will increase the number of years invested in learning a language
- First language learning will compliment second language learning

- Understanding of other cultures through foreign language learning will develop tolerance among learners for variant humans
- Learning a foreign language can help learners to effectively use their first language
- Language learning in general can boost learner memory, critical thinking, perception and creativity.

With regards to language skills fluency, confidence in adolescent and early teen learners is common as well as show alertness. They become well aware of variety of areas for instance literature, history and mathematics. The top students will possess the capability and aspiration to become an expert in all such skills and apply them on newly discovered information and means for individual growth to be able to become valued members of the society (Pretty, 2004).

## **2.7 EFL teaching approaches for Beginners/Elementary learners**

There are long details presented in relation to the age, level and targets of learners. There is innate curiosity prevalent among young learners for new knowledge or information. They actually possess a fearless tendency towards the unknown (Gardner, 1983).

During EFL lessons there is a common problem faced regardless of the teaching method adopted, which is the dependence of learners on their first language patterns but simultaneously as they learn new lexical items of the target language they readily use them in their communication.

Using poems and songs as well as numerous visual aids in EFL lessons are quite effective. Drawing pictures and repetition of similar forms again and again. Learners can listen or sing the same song, read the same poem or watch the same cartoons as many times as they want (Gardner, 1983).

## **2.8 Usefulness of Games in educational practices**

Learning a language is a difficult process during which learners are required to understand, repeat and use the complete range of the target language in oral communication or written texts. Games are supportive in sustaining the learner interest and motivation during the language learning process. Games also are helpful for teachers

to develop contextualized and meaningful language (Skehan, 1998). The importance of drills and repetition of language forms within a time limit is undeniable. Games are a main source of such repetitive use of language forms. If the point that games are a main source of providing intensive and useful practice of language is accepted, it means that games should be considered essential to the teacher's repertoire.

Games can provide drilling and practice for all four skills during the teaching-learning stages. For instance during presentations, drills, recombination and freer practice of language as well as various kinds of communicative functions (e.g. encouraging, criticizing, agreeing; explaining), (Koptyug & Mistakes, 2013).

## **2.9 Digital tools to teach English speaking skills**

According to Guan et. al (2018), computer multimedia assisted teaching practice increases the pace of learning, encourages student centered approach and motivates learners to learn English skills. Ahmad (2012) revealed the results of using media technology for ELT in Saudi universities. The results showed that there is a positive effect found on the accent of learners and above sixty percent of learners uttered eighty percent of words in a correct manner.

Mohammed (2015) argued that teachers and learners have an overall positive approach in using technology for ELT. However, lack of digital infrastructure, finances, in-sufficient time to plan and implement latest educational tools and absence of related teacher training are the main obstacles to integrate digital resources in English language teaching. Bahadorfar et.al (2014) stated the effective technologies to be used in teaching English speaking skills. The study reveals that video conferences, use of internet, speech recognition software and podcasts are the best available tools and resources to teach speaking skills.

## **2.10 Tech-based approach in ESL teaching in Pakistan**

In the last ten years, in Pakistan, reforms in education are emphasized that target a shift from the conventional teaching practice to a more innovational and Tech-based approach to teaching-learning methods/techniques. Schooling merely is not the transference of information and skills; it should prepare 'all students for thinking work—for framing

problems; finding, integrating, and synthesizing information; creating new solutions; learning on their own; and working cooperatively' (Darling-Hammond *et al.*, 1999, p. 2).

Suleman (2011) mentioned that educational technologies are beneficial for improved teaching and learning process at elementary level schools in Karak, Pakistan. However, teachers in high majority do not use the existing digital tools in their teaching practice because they are not skilled and trained in the field of educational technologies.

There is a transformation of teaching focus that is to develop learners socially, morally and on an intellectual level whereas teachers are considered facilitators, to support learners to develop their cognitive abilities, that is, to enhance teaching that aligns itself with the learners' socio-psycho perspectives of learning (Cobb *et al.*, 1991; Ernest, 1991; Jaworski, 1994).

According to Baek and Kim (2008), teachers are not fully prepared to incorporate ICT in their teaching practice due to lack of exposure, insufficient knowledge and skills in relation to use of digital tools. Likewise, Balanskat *et al.* (2007) highlighted a few factors that created hindrance for teachers to avoid using ICT tools in European schools. They are lacking self-confidence, teacher training in relation to pedagogical aspects and non-availability of appropriate educational software.

Harris (2003) pointed out that the instructors of high school using technology effectively in their ESL classrooms are the ones who have computers and free access to the internet. Friedman (2000) indicated that the countries will not progress in the present global economy if people are not well-trained in the field of modern ICT and latest knowledge economy.

The research conducted by Iqbal *et al.*, (2014) explains that Muslim girls are greatly impacted by trained teachers, free access to latest technological tools, digitized content in relation to learning English language. It also point outs the requirement of providing facilitations in terms of using Educational technologies in classrooms which have already been incorporated in the curriculum. This open approach to learn new technologies has high importance to support educational achievements.

The under developed countries (like Pakistan) aspires to implement ICT but taking it on is a challenging process and they are not using ICT in the same way as it is used in developed states (Danowitz, Nassef and Goodman, 1995). The huge cost in creating and

implementing ICT can be one of the major reasons. However, there are other contributing factors that give a proof of failure in a few cases in which finances was not a great issue.

## Chapter 3

### Methodology

This section describes the methodology and tools which are used in quasi-experimental research design. The main objective of this study is to explore the effectiveness of ICT-intensive pedagogies on English speaking skills of students of grade five at Pakistani government schools in Islamabad. This study will utilize a mix-method approach to have an insight into the problem as well as provide statistical figures to check the level of achievement of digitized learning objectives. Moreover, this chapter also defines the research design of the study, sample size, research settings, development of ILOs and lesson plans and integration of digital tools and gadgets in English speaking lessons. Furthermore, it will also elaborate the tools to collect qualitative as well as quantitative data and the tools used for data analysis.

#### 3.1 Research Design and Framework

The data for the study will be collected by using quantitative and qualitative methods. For quantitative data collection, the quasi-experimental approach will be applied where controlled and experimental groups are taught using different pedagogical approaches to determine the impact of digitized ESL (English as a second language) activities against traditional teaching methodologies.



Figure3. 1 – Quasi-Experimental Design

The concept of triangulation will be taken into consideration that will be utilized to combine the data from two different methods that leads to better understanding of the research problem (Rossman & Wilson, 1985). An embedded multi method design is used to integrate, interpret and analyse the data. The quantitative and quantitative data is collected sequentially and one form of data supports the other form of data.

Moreover, the quantitative data is considered as primary data whereas qualitative data is considered as secondary in this research study. The quantitative data will determine the level of experience teachers and participants will go through during an intervention. The in-depth interviews are arranged with 2 school principals and 4 teachers. Moreover, there are two focused group discussions with the students who participated in the experiment with six students in each group. These interviews will highlight a perspective of teachers on ICT-intensive pedagogies in ESL teaching.

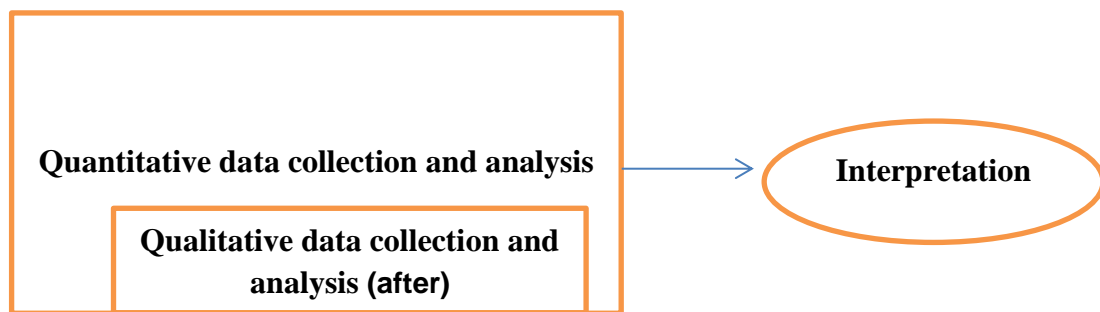


Figure3. 2 – Embedded Design model

### 3.2 Participants, sample size and research settings

The research study has used convenience sampling technique where already designed classes and students are used as controlled and experimental groups. The convenience sampling technique is used because the members of the population (learners) are easily accessible in government schools of Islamabad. Also, it can be effective in piloting the ILOs which are designed for the same type of learners. Furthermore, the proposal of the study has been shared with the Director Schools (Male/Female), Mr. Shahab Saqib to allow us to pilot an intervention in Federal schools of Islamabad. He willingly responded to pilot the program and asked to share the outcomes of the research study with Federal Directorate of Education (FDE), Pakistan.

The sample for the study is drawn from two government schools in Islamabad. Each class has 30 students. All of the participants of each class are invited to take part in the study. It is essential to select the sample size as large as conceivable to lower down the sampling error (Creswell, 2012). The experiment will be conducted on two separate groups for generalization of the results. The sample size will be 60 for each controlled and experimental groups. Onwuegbuzie et. al. (2007) suggested having a minimum sample size of 64 participants to have a reasonable power analysis. By using Lipsey's (1990, p.137) sample size table, the estimated sample size is 65 with statistical significance of

.05, power criteria of .80 and typical effect size of .50. So, estimated number of students in each group should be 65 for this experimental design.

Therefore, total sample size for this study is taken as 120 participants divided in two groups with 60 participants in each group (control and experiment). This sample size is taken because the class sizes consisted of 30 students each and this study has considered previously designed classes for grade five in the selected schools based on the technique of convenience sampling.

### **3.3 Proposed Individual learning objectives for English speaking skills**

The proposed ILOs will be presented using CEFR (The Common European Framework of Reference for Languages) model which is an international standard for describing language ability. Forward Thinking English Testing (APTIS) will be adapted as pre and post-tests for language level identification and to determine level of achievement of proposed student learning objectives. The activities will be implemented using latest educational technologies including, tablets, recorders, game based learning and computer based applications, online learning and interactive videos applicable in real life situations.

Zahid et. al (2018) argues that the curriculum, knowledge of instructors and methodologies implemented by the teachers have a significant impact in order to achieve high English language proficiency level. This research will focus on one part of National English language curriculum. National curriculum for English language has not been revised since 2006. The English curriculum 2006 focused on five competencies. This research focuses only on competency 3; oral communication skills for grade III-V and it has only one standard and four benchmarks. (National curriculum for English language, 2006, p.9)

According to NCEL 2006 (pg.150) itself, listening and speaking skills should be taught in a natural sequence of learning during early years of education. Furthermore, oral English language skills should be taught all through the primary years to develop the relevant competencies. Unfortunately, listening and speaking skills have never been given the desired importance at an acquisition phase of a child at Pakistani government schools. The separate benchmarks should be set for both listening and speaking skills and it ought to be given equal weightage in teaching and learning process. This report will only focus on developing benchmarks for English speaking skills and evaluate the effectiveness of the proposed ILOs using ICT-intensive pedagogy.



<b>English curriculum 2006</b>	<b>Proposed ILOs for English Speaking skills 2018</b>
<b>Grade: V</b>	<b>Grade: V</b>
<b>Competency 3; key learning areas (C3)</b> Oral Communication skills	<b>Competency 3; key learning areas (C3)</b> Speaking skills
<b>Standard; Learning area (S1)</b> All students will use appropriate social and academic conventions of spoken discourse for effective oral communication with individuals and in groups, in both formal and informal settings.	<b>Standard; Learning area (S1)</b> All students will use appropriate social and academic conventions of spoken discourse for improved speaking skills with individuals and in groups, in both formal and informal settings.
<b>Benchmarks; student learning outcomes</b>  <b>Grade V</b> <b>B1</b> Use limited exponents to communicate appropriately for functions and co-functions of opinions, instructions in predictable environment of class and school.  <b>ILO1</b> Identify and use previously learnt and more formulaic expressions for greetings and routine social courtesies according to the age, gender and status of addressee.  <b>ILO2</b> Use appropriate expressions in conversation to <ul style="list-style-type: none"> <li>• express and respond to opinion</li> <li>• offer and accept apology</li> <li>• request and respond to requests</li> <li>• instructions and directions</li> </ul>	<b>Benchmarks; student learning outcomes</b>  <b>Grade V</b>  <b>ILO 1</b> Use personal information while speaking  <b>ILO2</b> Express opinions on given topics
<b>B2</b> Demonstrate through role plays,	

<p>discussions, academic conventions and information/ ideas.</p> <p><b>ILO3</b> Demonstrate conventions and dynamics of group oral interaction to</p> <ul style="list-style-type: none"> <li>• introduce self and others</li> <li>• engage in conversation</li> <li>• take turns</li> <li>• use polite expressions to seek attention</li> <li>• agree/ disagree politely</li> <li>• lead and follow</li> <li>• express needs, feelings and ideas</li> <li>• express joy</li> <li>• make polite requests for personal reasons</li> <li>• take leave</li> </ul> <p><b>ILO4</b> Identify and use appropriate tone and non- verbal cues for different communicative functions.</p>	<p><b>ILO 3</b> Explain similarities and differences amongst situations/people/objects</p> <p><b>ILO 4</b> Interpret and present information from a given poster/picture/video</p>
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**Table3. 1– Proposed ILOs for English speaking skills**

### **3.4 Required Digital tools and resources**

In order to plan and deliver lessons effectively, the selection of digital tools and gadgets was of utmost importance. The following digital learning tools and resources were incorporated in the lesson plans to devise digitized activities; recorders, tablets with specific apps, multimedia, game-based applications, songs, online games and interactive videos. The selection of these digital resources is based upon the type of lesson and the learning outcome to be achieved in the end.

### 3.5 Development and Implementation of Lesson plans

The lessons were designed based on the proposed individual learning objectives. Two hours were dedicated to practice each ILO. The lessons were designed on the CELTA lesson plan format. Each lesson was timed for one hour and it was broken into two sessions. Each lesson was integrated with one or more digital tools and gadgets to facilitate the learning process. The lesson plans also showed various student interactions. Different steps in the lessons were based on student-student interaction patterns. The lesson plans are attached in the appendices. The lessons were delivered in two schools separately. The intervention time at one school was approximately one week. The two lessons were delivered each day due to time constraints and non-availability of teachers and learners for more than one week.

<b>Two Control Groups</b> <b>60 participants</b>	<b>Two Experimental Groups</b> <b>60 participants</b>
Pre-test: 7 <sup>th</sup> August 2018	Pre-test: 7 <sup>th</sup> August 2018
No treatment (Conventional methods of teaching)	<b>Intervention</b>
	8 <sup>th</sup> August 2018: 1 <sup>st</sup> lesson (1hr)
	8 <sup>th</sup> August 2018: 2 <sup>nd</sup> lesson (1hr)
	9 <sup>th</sup> August 2018: 3 <sup>rd</sup> lesson (1hr)
	9 <sup>th</sup> August 2018: 4 <sup>th</sup> lesson (1hr)
	10 <sup>th</sup> August 2018: 5 <sup>th</sup> lesson (1hr)
	10 <sup>th</sup> August 2018: 6 <sup>th</sup> lesson (1hr)
	13 <sup>th</sup> August 2018: 7 <sup>th</sup> lesson (1hr)
	13 <sup>th</sup> August 2018: 8 <sup>th</sup> lesson (1hr)
Post-test: 15 <sup>th</sup> August 2018	Post-test: 15 <sup>th</sup> August 2018

Table3. 2 – Implementation of digitized lesson plans during intervention

### 3.6 Tools for Data Collection and Data Analysis

The quantitative data is collected through control and experiment groups. APTIS test is used as a pre and post assessment tool for the learners before and after an intervention. The test has been adapted and tailored according to the level of learners. An APTIS test is adapted because it is a reliable assessment tool designed by British Council to determine the speaking level of an individual according to CEFR. An IELTS trainer has been hired to determine the speaking level of the participants before and after an intervention by using adapted model for APTIS test. The spoken answers of each participant are recorded

for reference. The pre and post tests are designed by using same test pattern but the questions are different. The age range of the participants is 9-13 years for this study. The initial level of the learners is considered as pre-elementary.

There will be eight hours of teaching during an intervention. The lesson plans are designed using educational technologies including audio-visuals, power point, web based application, animations, tablets, and online games using computers. The teachers of the experimental groups are trained for using educational technologies beforehand. They will be provided with lesson plans and all required resources to deliver the lessons effectively. There will be capacity building of the teachers and they will also be trained in using latest gadgets and tools in the computer labs to impart English speaking lessons with proposed learning outcomes. On the other hand, the controlled group will follow the usual teaching method already in practice. The teachers will be asked to conduct speaking lessons from the book of grade V. The teachers will conduct eight hours of speaking sessions from the book they already teach with their own teaching methodology.

The qualitative data is gathered by using IDIs from teachers and FGDs from learners of treatment group. The semi-structured interviews are conducted from heads and instructors. The questionnaire is designed to explore teacher's viewpoint on the use of digitized activities in ESL teaching practice. FGDs are conducted to get the insights of learners in relation to digitized lesson plans and achieved learning outcomes. The received data is transcribed in English and inter-related themes are generated with the help of content analysis approach. The two data sets are then triangulated to find the similarities and unexpected findings between them.

### **3.9 Ethical Consideration**

The research permission letter from NUST has been provided to the Director schools (Male/Female), FDE. The email has been sent along with permission letter to the director schools to set an appointment. After discussing the proposal, the permission letter from FDE is taken to the principals of the assigned schools. The principals also signed the permission letter and allot the sections and the teachers with an access to computer laboratory. The consent forms are given to the participants to get them signed from their parents as they are young learners. Participant information sheet (Creswell, pg149) is also shared with the parents of all the learners. The participants will be informed that they can withdraw from the study after three weeks of member checking that will help to improve

the validity of the research study. It will also improve the credibility of results. The data will remain confidential and it will be used for research purpose only. The agreement on data confidentiality is mentioned in the consent forms. Furthermore, interview transcripts will be given to the teachers and principals to review and authenticate the information.

## Chapter 4

### Results

#### 4.1 Introduction

The study in hand focuses on investigating the effect of the use of digital tools in teaching English speaking skills to the learners of primary school. The lessons are specifically planned for the elementary level learners that fall in the age range of 9-13 years. The impact of the use of digital tools in the lessons is measured by the use of APTIS test which was adapted and tailored as per the level of the learners.

In the present study, the data is collected and analyzed by using both qualitative and quantitative approaches. The quantitative data is gathered by taking pre and post-tests from both experiment and control groups with 120 participants in total. Each group consisted of 60 participants. Each participant took pre and post-tests (APTIS) in both groups. The two separate tests are used for both pre and post-tests keeping the level of the test similar. The answers for the speaking tests uttered by each participant were recorded and analyzed further by using the already available rubric for APTIS test. The data gathered from pre and post-tests of control and experiment groups are then compared with each other by considering significant values and mean ranks. Furthermore, the data was also analyzed by making comparison within an experiment group (pre and post-tests) to check the level of effectiveness of the data.

The data collected by quantitative method is based on in-depth interviews from teachers who participated in the intervention and conducted the lessons integrated with digital tools and gadgets. Secondly, two FGDs are also conducted having 6 subjects in each group who participated in the intervention. Each group consisted of 3 males and 3 females with two high achievers, two moderators and two low-achievers.

The analysis of the data is performed by using SPSS tool whereas thematic analysis is done by using FGDs and in-depth interviews. The study proceeds under the main research statement which is given in the previous section. However, the research under consideration frames the following hypotheses.

### **Null Hypothesis**

H0: The ICT-intensive pedagogy has no significant impact on English speaking skills of the learners of primary school.

### **Alternate Hypothesis**

H1: The ICT-intensive pedagogy has significant impact on English speaking skills of the learners of primary school.

Considering the null hypothesis, the dependent variable is the total scores whereas the independent variable is ICT-intensive pedagogy. The APTIS rubric (chapter3; Methodology) is used as a tool to collect the data, hence, investigated and stated in this section.

## **4.2 Quantitative Data Analysis**

The quantitative data is examined and analyzed by the use of SPSS software.

### **Comparing and Examining the Scores between Control and Experiment Groups**

The comparison of the data from both groups has been carried out in order to determine the difference in the level of speaking skills of the learners after an intervention in contrast to the level of speaking skills of learners by following traditional teaching methods. It will be reported in this section that what are the results of the ICT-intensive pedagogy on English speaking level of the learners. The comparison will be conducted between pre-tests of control and experimental groups as well as between post-tests of both control and experiment groups.

Before initiating data analysis, the specific assumptions related to independent sample t-test were considered and tested. In order to investigate about the normal distribution of data between two groups, the test of normality was performed (Statistics.laerd.com 2015).

### **Sample/Data Characteristics**

With the aim of testing the normality of the sample data, the Shapiro-Wilk's test with p-value less than 0.05 has been applied. This test is selected to check the normality of the data because it can deal with large sample size and also it gives numerical value to check the normality of the sample data (Shapiro &Wilk1965; Razali&Wah2011).

### 4.2.1. Normality Test applied on the sample data of control group

The normality test has been executed to investigate whether the data for control group is normally distributed or it is skewed positively or negatively. The results obtained from the test are shown below in the tables.

**Descriptives**

		Statistic	Std. Error
Total	Mean	.5333	.08851
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.3581 .7086
	5% Trimmed Mean	.3889	
	Median	.0000	
	Variance	.940	
	Std. Deviation	.96956	
	Minimum	.00	
	Maximum	5.00	
	Range	5.00	
	Interquartile Range	1.00	
	Skewness	2.239	.221
	Kurtosis	5.443	.438

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total	.392	120	.000	.614	120	.000

a. Lilliefors Significance Correction

**Table4. 1-- Normality tests for control group**

It can be observed from the above tables that the dependable variable “Total scores” is not normally distributed as p-value < 0.05 for 120 learners with (statistics .392) and significance value (.000) for control group (Cramer 1998,Crammer & Howitt 2004, Doane & Seward 2011).

### 4.2.2. Normality Test applied on the sample data of Experiment group

**Descriptives**

		Statistic	Std. Error
Total	Mean	2.8833	.22522
	95% Confidence Interval for Mean	Lower Bound Upper Bound	2.4374 3.3293
	5% Trimmed Mean	2.7593	



Median	3.0000	
Variance	6.087	
Std. Deviation	2.46721	
Minimum	.00	
Maximum	11.00	
Range	11.00	
Interquartile Range	4.00	
Skewness	.546	.221
Kurtosis	-.384	.438

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Total	.152	120	.000	.914	120	.000

a. Lilliefors Significance Correction

**Table4. 2-- Normality tests for Experiment group**

According to Shapiro-wilk test, it is perceived that the data is again not normally distributed for the dependent variable “Total scores” in the experiment group for 120 learners with (statistics .152) and p-value=.000 which is less than 0.05.

As per the results of normality test applied, the data significantly digress from its normal distribution. Therefore, non-parametric tests should be applicable on both control and experiment groups. Mann-Whitney is applied to check the differences between the two groups whereas Wilcoxon signed-rank test is applied to check the differences within the group.

### **4.3 Non-parametric tests applied to figure out the significance of the output**

Since the data is non-parametric, therefore, Mann-Whitney and Wilcoxon signed rank tests are applied to evaluate the mean scores of the data sets received from the experiment and control groups.

#### **4.3.1. Testing Assumptions for Mann-Whitney U-test**

There are four assumptions which need to be met before applying Mann-Whitney U-test. First, the dependent variable is based on continuous scale which is test scores. Secondly, the independent variable (ICT-intensive pedagogy) is categorized on two individual groups (2 groups: pre and post-test). Thirdly, the participants in each group are different

and there is no subject being in more than one of the mentioned groups. Finally, the two variables are not normally distributed. However, the distribution of the total scores for two groups of the independent variable; (pre and post tests for the independent variable, ‘ICT-intensive pedagogy’) have different shapes. Therefore, the mean ranks will be compared to find out the significance of the results.

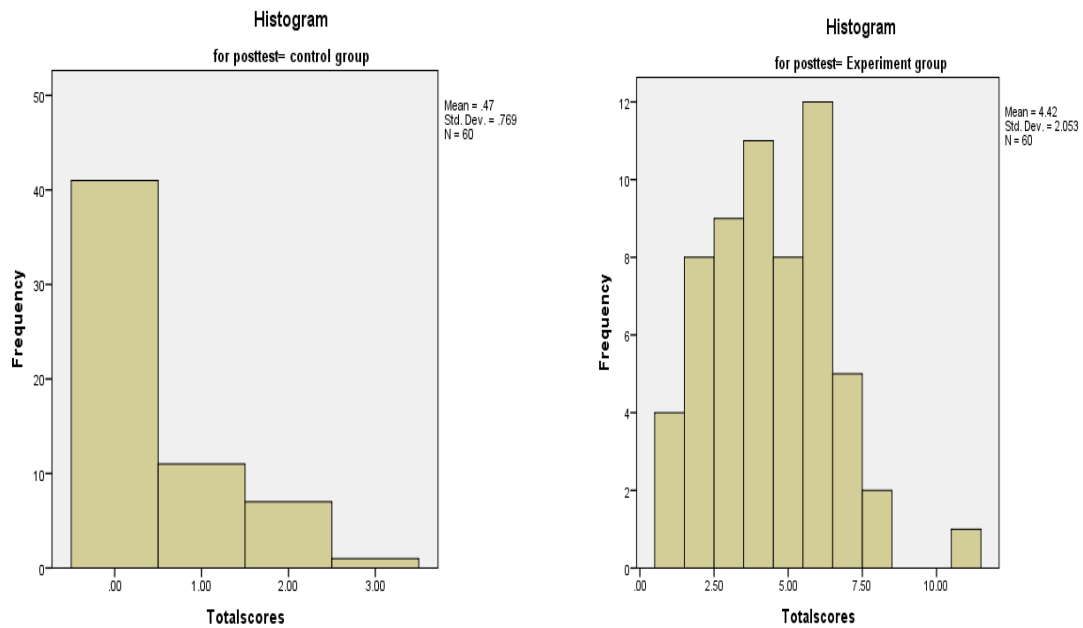


Figure4. 1-- Histogram for post-tests for control and Experiment group

It is visible from the above histograms that both of the distributions for post-tests of control and experiment groups have different shapes. The graph for control group is positively skewed whereas the graph for the experiment group is randomly distributed.

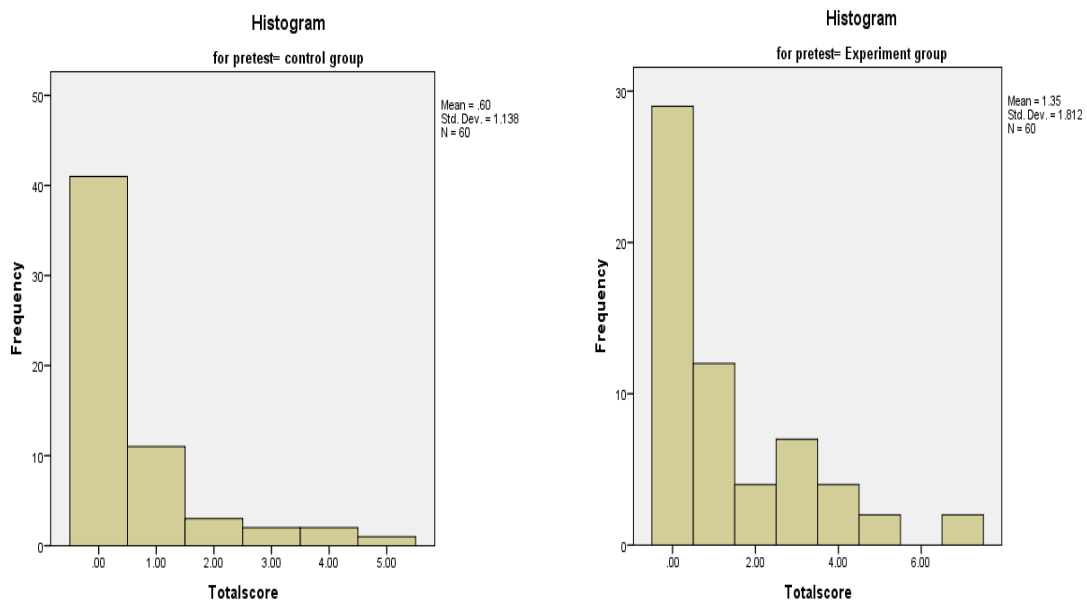


Figure4. 2-- Histogram for pre-tests for control and Experiment group

It is clear from the above histograms that the shapes of the two distributions are different for pre-tests of both experiment and control groups. Therefore, mean ranks will be measured in Mann Whitney U- test.

#### **4.3.2. Tool used in Quantitative data analysis**

APTIS test is used to gather quantitative data for the present study. APTIS is an assessment tool which is used to assess English proficiency level of all language skills level including reading/writing and listening/speaking. This tool is developed by British Council and is available online. The test is cheaper and the results can be obtained quickly.

The test results provide scaled scores and CEFR level (A1 to C) for the applicants. It also provides scaled scores for every skill level to show applicant's aptitude towards each skill individually. This test is used to gather data because it can also provide test scores for only one skill which is speaking skills.

The APTIS speaking test is divided in four sections and it requires almost twelve minutes completing this test on the whole. For speaking section, the answers of the applicants are recorded in the available time limit. The first part covers the questions related to one's own self. Thirty seconds are provided for 3 questions to be answered. In the second section of the speaking test, a picture description is required with time limit of 45 seconds for each question. In the third part of the test, two pictures are given for comparison and contrast. There are three questions to be answered in 45 seconds each. The last section of APTIS speaking test is based on a picture with three related questions. The candidate is given one minute for preparation and there are three questions to be answered in two minutes. Each part of APTIS speaking test is assessed on the basis of given rubrics and the scale provided. The part 1, 2 and 3 of APTIS speaking exam is based on 0-5 scale whereas part 4 is based on 0-6 scale.

#### **4.3.3. Mann-Whitney U-test to compare mean ranks between pre-tests of control and experiment groups**

The two desired tables generated by using Mann-Whitney test provide valuable statistics about the mean ranks of the pre-tests for both groups. The below table entitled "Ranks" gives value for the sum of ranks and mean ranks against the grouping variable 'pre-test'.

	Pretest	N	Mean Rank	Sum of Ranks
Totalscore	control group	60	53.34	3200.50
	Experiment group	60	67.66	4059.50
	Total	120		

**Table4. 3– Ranks- Mann Whitney U-test for pre-tests of control and experiment groups**

The above table indicates the mean rank for control group (53.34) against mean rank for experiment group (67.77). Similarly, the sum of the ranks for control and experiment groups is 3200.50 and 4059.50 respectively. Although the mean rank for experiment group is slightly higher than the control group but it is apparent that there is no considerable difference between the mean ranks of pre-tests of both groups against their total scores.

	Totalscore
Mann-Whitney U	1370.500
Wilcoxon W	3200.500
Z	-2.530
Asymp. Sig. (2-tailed)	.011

a. Grouping Variable: pretest

**Table4. 4– Test Statistics- Mann Whitney U-test for pre-tests of control and experiment groups**

The above table “Test statistics” signifies the U and p-values. It is concluded from the given data that the total scores in experiment group is slightly higher as compare to control group (U=1370, p=.011) but the difference is not noticeable.

#### **4.3.4. Mann-Whitney U-test to compare mean ranks between post-tests of control and experiment groups**

There are two tables which are generated by using Mann-Whitney test namely, Ranks and Test statistics. The mean ranks are compared for both groups for post-tests below.

	Posttest	N	Mean Rank	Sum of Ranks
Totalscores	control group	60	32.08	1924.50
	Experiment group	60	88.93	5335.50
	Total	120		

**Table4. 5 – Ranks- Mann Whitney U-test for post-tests of control and experiment groups**

The above table “Ranks” is quite helpful in giving information related to the outcome of the test underhand. For control and experiment groups, it indicates the value for mean ranks and sum of the ranks against total scores.

It is evident from the above data that experiment group has the highest total scores because it is the group with the maximum mean rank. The mean rank for experiment group is 88.93 against mean rank for control group which is 32.08. Also, the value for sum of the ranks for experiment group is the highest which is 5335.50 against sum of the ranks for control group which is 1924.50. Therefore, it is clear that there is a substantial difference between mean ranks for both groups for their post-tests and the experiment group has the highest value for total scores.

	Totalscores
Mann-Whitney U	94.500
Wilcoxon W	1924.500
Z	-9.167
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: posttest

**Table4. 6 – Test Statistics- Mann Whitney U-test for post-tests of control and experiment groups**

The above table highlights the real significance of the U-test. The table entitled Test statistics contributes the U statistics and asymptotic significant value, also called p-value. It can be concluded from the given data that the value of the total scores in experiment group is statistically significantly higher than the control group with U=94.5 and p=0.000.

#### **4.3.5. Mann Whitney-U Effect size calculation (Post-tests)**

The effect size can be measured for Mann Whitney U statistics. It is called eta-squared ( $\eta^2$ ) (Gignac, 2019). It mainly shows the variance in the ranks for the two groups in terms of the percentage. The formula states as:

$$\text{Eta square } (\eta^2) = \frac{Z^2}{N-1} = \frac{(-9.167)^2}{120-1} = \frac{84.03}{119} = 0.706$$

Where z= -9.167, N=120 (from Table 4.6)

Hence, **70.6%** of the variability in the mean ranks is accounted for the independent variable (post-test) that shows large effect size as per the guidelines given by Cohen (1988; 1992).

#### **4.4. Wilcoxon Signed Rank Test to identify the significance of results within the groups**

The test which is correspondent to dependent t-test is the Wilcoxon signed rank, comes under the category of non-parametric tests. When the assumption related to normality of data is violated, the Wilcoxon signed test is used in place of t-test. One of the assumptions of the Wilcoxon test is that it compares data that is received from the same subjects. This test is also helpful to figure out the expected changes in total scores from one point of time to another for an experimental study design.

There are three assumptions which are met in order to apply Wilcoxon-signed test to get the valid outcomes. First, the dependent variable (total scores) is measured at continuous level. Second, the dependent variable (total scores) is comprised of ‘related groups’. It refers that the same learners are part of both groups. It is due to the fact that each learner is tested on two different instances against the same dependent variable and it becomes clear to understand their performance at different occasions. Third, the distribution is symmetrical in terms of differences between the scores of two groups of the independent variable (ICT-intensive pedagogy).

##### **4.4.1. Control group; Comparison of the mean ranks before and after conventional method of teaching**

The table below is used to generate descriptive and quartile data from SPSS. The table below clearly shows the scores for the participants before and after the conventional teaching method and quartile range can easily be observed.

**Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
Control group;Before	60	.60	1.138	0	5	.00	.00	1.00

Control group;After	60	.47	.769	0	3	.00	.00	1.00
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**Table4. 7 – Descriptive statistics-Wilcoxon signed rank test-control group**

An intriguing data comparison is provided by the table entitled “Ranks” for the same learners as pre (before) and post (after) mean scores. It is evident from the given table that out of 60 participants, 11 learners have scored less after the conventional teaching method, 7 learners have scored higher after traditional teaching method and 42 learners have seen no change in their scores.

		N	Mean Rank	Sum of Ranks
Control group;After - Control group;Before	Negative Ranks	11 <sup>a</sup>	10.32	113.50
	Positive Ranks	7 <sup>b</sup>	8.21	57.50
	Ties	42 <sup>c</sup>		
	Total	60		

- a. Control group;After < Control group;Before
- b. Control group;After > Control group;Before
- c. Control group;After = Control group;Before

**Table4. 8 – Ranks-Wilcoxon signed rank test-control group**

In order to identify the significant difference in the mean scores, the table entitled “Test statistics” will be examined. This table provides information related to Z statistics and p-value which is indicated by ‘Asymp. Sig. (2-tailed)’.

	Control group;After - Control group;Before
Z	-1.277 <sup>b</sup>
Asymp. Sig. (2-tailed)	.201

- a. Wilcoxon Signed Ranks Test
- b. Based on positive ranks.

**Table4. 9 – Test statistics-Wilcoxon signed rank test-control group**

The Wilcoxon test signifies that 8 hours of conventional teaching course has not produced a statistically significant difference in the scores of the participants at

elementary level ( $Z=-1.277$  and  $p=.201$ ). Certainly, the median score rate is 0.00 for both pre and post-tests for control group.

#### 4.4.2. Experiment group; Comparison of the Mean ranks before and after an intervention

The table indicates the descriptive statistics for the same participants before and after the intervention along with their quartile scores.

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
Before intervention	60	1.35	1.812	0	7	.00	1.00	2.75
After Intervention	60	4.42	2.053	1	11	3.00	4.00	6.00

**Table4. 10 – Descriptive statistics-Wilcoxon signed rank test-experiment group**

The Ranks table provides the mean scores for the same learners before and after the treatment. It is quite interesting to note that out of 60 subjects, there is no participant who scored less after the intervention. Also, there is no participant found who have achieved the same scores as pre-intervention. However, all the 60 participants have achieved higher scores after the intervention.

		N	Mean Rank	Sum of Ranks
After Intervention - Before intervention	Negative Ranks	0 <sup>a</sup>	.00	.00
	Positive Ranks	60 <sup>b</sup>	30.50	1830.00
	Ties	0 <sup>c</sup>		
	Total	60		

a. After Intervention < Before intervention

b. After Intervention > Before intervention

c. After Intervention = Before intervention

**Table4. 11 – Ranks-Wilcoxon signed rank test-experiment group**

	After Intervention - Before intervention
Z	-6.764 <sup>b</sup>
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test



b. Based on negative ranks.

**Table4. 12 – Test statistics-Wilcoxon signed rank test-experiment group**

The Wilcoxon-signed test indicates those ten hours of intervention (using ICT-intensive pedagogy) has elicited a difference in the scores of the subjects that is statistically significant ( $Z=-6.764$ ,  $p=0.000$ ). The median scores are 1 and 4 for pre and post-treatment tests respectively.

#### 4.4.3. Experiment group; Comparison of APTIS test (part 1) scores before and after an intervention

The table below shows the mean ranks for the same subjects for the part 1 of the APTIS test before and after the treatment. According to the table given below, it is noticeable that 47 participants got higher scores after an intervention, 13 have seen no change in their scores. However, none of the participants scored less after the treatment in part 1 of the APTIS test.

**Ranks**

	N	Mean Rank	Sum of Ranks
Negative Ranks	0 <sup>a</sup>	.00	.00
Positive Ranks	47 <sup>b</sup>	24.00	1128.00
Ties	13 <sup>c</sup>		
Total	60		

a. Part 1 After < Part 1 before

b. Part 1 After > Part 1 before

c. Part 1 After = Part 1 before

**Table4. 13 – Ranks-Wilcoxon signed rank test-experiment group (part1)**

The test depicts that eight hours of intervention has bring about a difference in the scores of the learners in part 1 of APTIS test that is statistically significant ( $Z=-6.280$ ,  $p$ -value=0.000).

**Test Statistics<sup>a</sup>**

	Part 1 After - Part 1 before
Z	-6.280 <sup>b</sup>
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

**Table4. 14 – Test statistics-Wilcoxon signed rank test-experiment group (part1)**

#### 4.4.4. Experiment group; Comparison of APTIS test (part 2) scores before and after an intervention

The ranks table given below depicts the mean ranks for APTIS test part 2 before and after an intervention. The data clearly signifies that out of 60 subjects, 42 scored higher after the intervention, 18 scored same before and after the treatment. But there is no participant found who scored less after an intervention.

		Ranks		
		N	Mean Rank	Sum of Ranks
Part 2 After - Part 2 before	Negative Ranks	0 <sup>a</sup>	.00	.00
	Positive Ranks	42 <sup>b</sup>	21.50	903.00
	Ties	18 <sup>c</sup>		
	Total	60		

a. Part 2 After < Part 2 before

b. Part 2 After > Part 2 before

c. Part 2 After = Part 2 before

**Table4. 15– Ranks-Wilcoxon signed rank test-experiment group (part2)**

The test points out that there is a significant difference in the scores of the same participants in APTIS part 2 of the test ( $Z=-6.016$ ,  $p\text{-value}=0.000$ ).

Test Statistics <sup>a</sup>	
	Part 2 After - Part 2 before
Z	-6.016 <sup>b</sup>
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

**Table4. 16 – Test statistics-Wilcoxon signed rank test-experiment group (part2)**

#### 4.4.5. Experiment group; Comparison of APTIS test (part 3) scores before and after an intervention

The mean ranks for APTIS test part 3 are mentioned in the table (below) before and after an intervention. It is evident that 40 learners have scored higher after the treatment, 20 have ties, however, none of the participants scored lower than before in an experiment group.

Ranks			
	N	Mean Rank	Sum of Ranks
Part 3 After - Part 3 before	Negative Ranks	0 <sup>a</sup>	.00
	Positive Ranks	40 <sup>b</sup>	820.00
	Ties	20 <sup>c</sup>	
	Total	60	

a. Part 3 After < Part 3 before

b. Part 3 After > Part 3 before

c. Part 3 After = Part 3 before

**Table4. 17 – Ranks-Wilcoxon signed rank test-experiment group (part3)**

The Wilcoxon test indicates that there is a substantial difference in the mean scores of the same subjects in APTIS part 3 of the test ( $Z=-6.019$ , sig. = 0.000).

Test Statistics <sup>a</sup>	
	Part 3 After - Part 3 before
Z	-6.019 <sup>b</sup>
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

**Table4. 18 – Test statistics-Wilcoxon signed rank test-experiment group (part3)**

#### **4.4.6. Experiment group; Comparison of APTIS test (part 4) scores before and after an intervention**

The information given in the table identifies the mean scores for APTIS part 4. It is clearly seen that 28 subjects have scored higher after an intervention but 32 participants have ties that could not score better after the treatment. However, none of the participants have negative ranks or low scores.

Ranks			
	N	Mean Rank	Sum of Ranks
Part 4 After - Part 4 before	Negative Ranks	0 <sup>a</sup>	.00
	Positive Ranks	28 <sup>b</sup>	406.00

Ties	32 <sup>e</sup>	
Total	60	

- a. Part 4 After < Part 4 before
- b. Part 4 After > Part 4 before
- c. Part 4 After = Part 4 before

**Table4. 19 – Ranks-Wilcoxon signed rank test-experiment group (part4)**

The Wilcoxon-signed test mentions that there is a significant difference in the scores of the same participants in APTIS part 4 of the test ( $Z=-5.292$ ,  $p=0.000$ ). But the difference is not large enough because all participants have not shown a rise in the scores before and after the intervention.

**Test Statistics<sup>a</sup>**

	Part 4 After - Part 4 before
Z	-5.292 <sup>b</sup>
Asymp. Sig. (2-tailed)	.000

- a. Wilcoxon Signed Ranks Test
- b. Based on negative ranks.

**Table4. 20 – Test statistics-Wilcoxon signed rank test-experiment group (part4)**

#### 4.4.7. Summary

The Wilcoxon signed-ranked test is used to make comparisons within the experiment group before and after an intervention. After comparing all parts of APTIS test, it can be concluded that none of the participants scored low in the post test for all parts of the test. In part 1 and 2 and 3, there are more participants with higher scores as compare to the ones with no change in the scores. However, in part 4 of APTIS test, the number of participants with no change in scores is comparatively higher to participants having higher scores. Overall, there is a significant difference in the scores of the participants before and after the intervention by using ICT-intensive pedagogy.

#### 4.5. Gender difference for post-tests between control and experiment groups

The bar chart clearly illustrates that there is no significant gender difference in terms of total scores achieved by males and females in the post-tests of control and experiment groups. The red bar shows female and blue bar shows males. The bars on the left shows the total scores achieved by males and females in the post test of the experiment group whereas the bars on the right side depicts the total scores gained by males and females in

the control group. The maximum values for males and females are 4.375 and 4.464 respectively in the experiment group. However, the maximum values for males and females are .433 and .50 respectively in the control group for their post-tests. Thus, it can be inferred that males and females both have an equal ability to learn and respond better in ICT-intensive ESL classrooms.

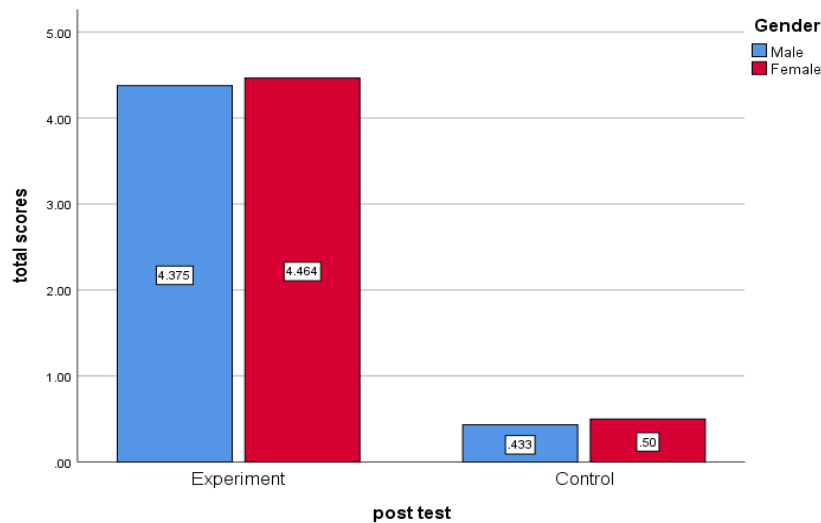


Figure4. 3– Gender divide between post-tests of control group and experiment group

## 4.6. Qualitative Data Analysis

The qualitative data is gathered by using Focus group discussions conducted with the participants of the treatment group and in-depth interviews have been arranged with teachers who piloted the lessons by using ICT-intensive pedagogy. The quantitative data will determine the level of experience participants will go through during the course of an intervention. The qualitative data will answer the following research question.

### Research Question

Q: What is teacher’s perception on the use of ICT-intensive pedagogy during an intervention?

### Qualitative data tools

There are two tools which have been used to collect qualitative data from teachers and participants.

1. Interview questionnaire asked from 4 teachers and 2 principals (who conducted lesson plans of this pilot program). These were conducted after the completion of an intervention.
2. Focus group discussion questionnaire from learners in the end of the intervention.

The other name for qualitative research is “interpretive” research which involves own assessment of the raw data that includes interviews. It requires a data to be converted into computer files for analysis. Before starting an analysis, the raw data (interviews) were first listened and transcribed into English. These recorded audiotapes were converted into text data. The data was hand analyzed further and converted into inter-related themes. The content-analysis method has been used to evaluate interview data and develop themes.

#### **4.6.1. In-Depth Interviews from the teachers and principals (post-intervention)**

The IDIs have been conducted from four English instructors and two principals who were the part of conducting the lessons during an intervention. The principals were also English teachers at their respective schools. The following themes have been emerged from the discussions with English language teachers and principals.

#### **Demographics**

All the teachers and principals have attained their education from public sector institutes and they all have about 10-15 years of service period in teaching. Their salary range is around Rs 40,000 to Rs. 60,000 per month. All have postgraduate degrees as their highest qualification in education or related disciplines.

#### **Level of English language proficiency**

Upon asking their level of proficiency, two teachers and one principal rated themselves at B1 intermediate, two teachers categorized themselves at A1 beginner and A2 Elementary levels respectively. Only one principal rated herself at B2 upper Intermediate level.

## **Inter-related Themes**

### **The effectiveness of approaches/methodologies adopted by teachers during intervention**

Before the discussion on what methodology was adopted during the intervention, it is important to know what teaching methods were used earlier. All of them sometimes use the target language during their lessons and they don't know about LAD (language acquisition device). When inquired about the technique of using "learning through fun", they don't have awareness about this approach. T4 replied, "I have never applied it in my sessions". They are also not well aware of communicative and activity based approaches. P2 added further, "We use book activities". Teachers shared that they mostly use flashcards, worksheets, draw and color and picture description activities with their learners. T1 took this conversation ahead and added, "Speaking is not exclusively practiced". T2 and T4 mentioned that there was no practice and lesson planning for speaking skills. All the teachers use GTM (grammar –translation method) whereas only one uses direct method to teach English speaking skills.

On the other hand, the teachers were inquired about the usefulness of methodology used in the intervention. They shared their experience by collectively favored almost all the activities based on the use of ICT tools. T1, T2 and T3 liked drawing activity by using tablets. T1 said that learners showed a lot of interest while using tablets. P1 and P2 believed that use of games, tablets and recorder during the experiment phase helped learners a lot in their progress. P1 elaborated, "They are learning to enhance their own skills". T2 recognized kahoot as best online application for young learners. T1 further elaborated her view on ICT-intensive teaching, "These days children are technology proficient and have access to smart phones and computers so the best way to teach them is with the help of technology. Using videos can help to improve speaking skills as young learners can easily imitate". According to T2, T3, T4, and P2, use of multimedia, recorder, videos, interactive games, online applications, tablets and computer are effective strategies in teaching English speaking skills.

### **Usefulness of tools/gadgets employed in the intervention**

The heads and the instructors gave examples of how E-technologies can be helpful in teaching speaking skills. They explained that use of smartphones and tablets can be

helpful to improve pronunciation and vocabulary. ICT can be used to teach phonics, dialogue practice and picture description. T2 said, “You can learn about new techniques and learning styles by using ICT”. Teachers and principals further explained collectively that they have never used these tools and gadgets (that are used in the intervention) in their classrooms due to absence of technological infrastructure. T1 said that using the language lab is effective in teaching language skills. Also, to show videos improve interaction and vocabulary for speaking skills. Furthermore, T3, T4 and P1 endorsed that use of audio-visuals, Internet, smart phones, videos, tablets and online applications impact considerably in teaching English speaking skills.

### **Teacher’s perspective on learner’s improvement of speaking skills**

When teachers and principals were asked to show their perspective on learner’s improvement in speaking skills at the end of the intervention, they rated themselves on a scale (strongly agree, agree, undecided, disagree, strongly disagree). All four teachers and two principals ‘strongly agree’ with the notion that employing ICT tools and techniques boost learners’ speaking skills. P1 endorsed by saying, “All technological tools are useful e.g. recorders can help learners to improve their speaking”.

### **ICT skills level of teachers and principals**

Upon inquiring on the ICT skills level of teachers, all of them rated themselves as “slightly proficient” on a scale (Extremely, Very, moderately, slightly, not at all). However, the two principals rated themselves as “very proficient” in using technology. When it was asked whether they would use the same tools and gadgets which are integrated in the intervention in their future teaching lessons, they all agreed to this point. T2 said, “As we used them in the lessons during an intervention, it was interesting. We should focus on speaking skills. Internet and computers need to be available in classrooms”.

### **The role of E-technologies in teaching –A Futuristic perspective**

All the heads and the instructors do not have language teaching certification except T4. Additionally, they have never attended any such training (intervention) on the use of educational technologies in language teaching. They are not even well aware of online ESL teacher training courses except P1. Out of them, four will definitely attend online ESL trainings in future whereas two of them will probably do so. According to teachers



and principals, there is either very little or not enough teacher training available in relation to educational technologies. T2 and T4 pointed out that last time the language training was conducted by FDE before 4 to 5 years. P2 explained that the trainings are generally subject-specific and not related to teaching English speaking skills explicitly. Teachers do not have awareness of online ESL teacher training programs, however, principals know about them but they have never attended any of them. All of them gave their consent that they will definitely attend ESL teacher trainings in relation to use of digital technologies in teaching language skills. Further to this talk, instructors and principals shared their future plans in relation to use of tools and gadgets used in the intervention. P1 said, “We will try to encourage teachers to use them in everyday lessons. Online trainings can be done”. T1 further added that they need all these tools and gadgets to be available in the classrooms to teach speaking skills.

### **Smart classrooms- Teachers’ perspective**

Although four teachers have never used computer lab to teach English speaking skills but on the other hand T1 and P2 have rarely used computer lab. Teachers collectively declared that they do not have anything related to E-technologies used in the intervention available in their classrooms. The only available resources in the classrooms are whiteboard, charts, books, flashcards and text books. The head and instructors want their classrooms to be well- equipped with computers, projectors, internet and tablets to practice digital speaking activities with their learners. The individual laptops are required by each teacher. Together, each one of them replied that they do not have free access to the ICT lab for language teaching. T1 elaborated, “The management encourages teachers to employ technology for teaching learning purposes but classrooms are not well-equipped, there is only one ICT lab which can be used for the students of the entire school.”

### **Obstacles faced by teachers in integrating ICT tools**

There are multiple factors that contribute to the difficulties faced by teachers to integrate technology in the English speaking lessons. First, T3 expressed, “we should not just limit ourselves to the syllabus coverage, and teachers are hesitant to use E-technologies because class sizes are big in terms of learners and there is also a pressure of covering the syllabus”. However, P1 replied, “Teachers are not well trained to use E-technologies but the labs are available although its limited access but we encourage the teachers”. She further added that they don’t have internet access to use these digital tools employed in

the intervention. T2 shared her viewpoint by saying that computer labs have recently been developed but they are not used for ESL teaching. Management is not supportive and as a result, availability and access to the computer lab is limited.

#### **4.6.2. Focused Group Discussions from the participants (post-intervention)**

In order to validate teacher's perspective, the two separate FGDs have been conducted with two groups of participants (12 in total) that went through the treatment phase. Each FGD consists of 6 subjects; 3 males and 3 females each. The participants are selected in this manner; 2 high scorers, 2 medium scorers, 2 low scorers. The FGDs are conducted right after the intervention phase to obtain the real feedback from the learners of an experiment group.

#### **Demographics**

All the participants are from middle-class background and they live in Islamabad. 8 out of 12 have rented-houses whereas 4 live in their own houses. All of them have bigger families including range of 4 to 9 family members. The fathers of nine participants are government servants and 3 have their own private work. The 12 learners have different mother tongues including Pashto, Punjabi, Sindhi, Hindko, Saraiki, Pashto and Mahvati. But all of them speak Urdu at home and at school.

#### **Interrelated Themes**

Various themes have been generated out of each discussion question to get to know about the actual experience participants have gone through during an intervention. The following themes are emerged out of discussion questions.

#### **Level of confidence**

The very first theme is related to the effect of the intervention on their level of confidence in speaking English and they were asked to rate themselves between 0 to 10. Five rated themselves at level 8, five rated themselves at level 9 and two rated themselves at level 10 after the treatment phase. Almost 100% participants agreed that they have achieved higher level of confidence after this training. One of the participants (Du from FGD1)

said, “My confidence has increased and I can talk to anyone now.” And they all agreed on the point that it is due to the use of gadgets that their confidence has boosted up.

### **Conducting English speaking lessons in the computer/language lab**

The participants were asked about their experience of taking English speaking lessons in the computer lab rather than taking lessons in the conventional classrooms. It is surprising to note that all of them took English lessons in the lab for the very first time in their primary education. They all were enthusiastic and had an enjoyable learning experience in the lab. According to them, they like to take language lessons in the lab because they can use computers, tablets and internet and they can use them. Sa from FGD2 said, “In class, we sit in discipline. Here we sit in groups and we use games and tablets.”

### **Encouraging personalized learning**

The participants were asked about an activity that was liked by them the most and helped them in their learning process. Most of them liked all activities which have been practiced during an intervention by using digital tools/gadgets. M.A (FGD2) said, “I used recorder and could listen my voice. I learnt speaking skills and I liked to listen and analyse my own voice”. This shows that the use of E-technologies helped them to become the autonomous learners. Also, Ta (from FGD1) commented, “I like sketching online and presenting. We drew on a tablet. We did picture description through that.” So online games, use of tablets and sketchbook application was highly adored by the participants. According to Tah (from FGD1), playing games on tablet was an enjoyable experience because there were question/answers and it increased his knowledge to be used in speaking skills.

### **Most liked tools/gadgets employed during intervention**

Furthermore, the participants were inquired about the best tool/gadget used in the lessons to improve their speaking skills. They mentioned that they liked to use all tools and gadgets used in the lessons, for instance, online sketchbook, online games, apps on tablets, songs, kahoot etc. However, they all (100%) approved and liked Kahoot (an online application). It is highly liked by them because it was full of entertainment as well as there was a competition among the learners. Secondly, about 90% agreed that they liked to use recorder. Sa from FGD2 commented, “I used recorder and could listen my voice. I improved speaking skills and I liked to listen and analyse my own voice”. About

80% agreed that they could do picture description by using sketchbook on tablets. Sha (FGD2) mentioned that he liked online game on football and he could use the learnt vocabulary in practicing speaking skills. All of them are in favour of using tablets for learning purposes.

### **Use of tablets and computers in teaching/learning English speaking skills**

The members of FGDs are asked to give their views on five good things and five bad things about the lessons. All of them said that they liked everything about the lessons. Altogether, they identified that they worked on computers and tablets which was something different for them. It was surprising to note that they have never used computers and tablets in English lessons before. Tah from FGD1 pointed out, “we like to do speaking a lot because we mostly do writing skills and seldom do speaking practice”. Kha says that they love to play games on tablets and do group discussions. It also encouraged group work among them. Tah highlighted by saying, “we learnt to speak in English, used tablets, did group work and discussed in English.”

### **Use of E-technologies can improve speaking skills**

All of them believed that technology helped them become a better English speaker. The participants pointed out that drawing and presenting, group work and discussion make them a better speaker. Video watching and use of recorder helped them speak in English. They explained collectively that they can use those tools/gadgets after school time to improve their speaking skills. Ai (FGD2) said, “Our speaking will improve through technology.” Du, further added to this point, “I think we can learn more through tablets and computers”.

### **Lack of E-tech resources in public sector schools**

Participants from FGD2 collectively stated that they should take the classes in the language lab so that they can learn English. They should be allowed to use tablets and recorders. Additionally, they ought to be allowed to use internet. Tah (from FGD1) elaborated, “We did not like the internet disruptions during the lessons. We commonly don’t have internet availability in the school.” Tah (from FGD1) claimed that only grade five in their school has an access to the lab so they can use these tools in school lab if permitted.

## **Future prospects**

The subjects were further inquired about their perspective to use same gadgets/tools in future to improve their speaking skills. All the learners deliberately established the notion to use same E-technologies at home which they have used during an intervention. Collectively, they claimed that they will use Kahoot, online games and recorder. They will listen to English songs and use applications in tablets at home. On inquiring about its usefulness, most of them mentioned that it is useful and they should have an access to mobiles and tablets. All these gadgets/tools are important for them to boost their confidence to speak English. The participants from FGD2 collectively elaborated further by saying, “We should use these gadgets to improve speaking skills. We will use internet and smartphones which will improve our motivation to improve language skills. We will use tablets and computers to improve.” Sa replied in continuation of the discussion, “The hesitation is also reduced because I can confidently answer the question if someone asks me a question in English.

## Chapter 5

### Discussion

#### 5.1 Introduction

Technology has an imperative role to improve English speaking skills of learners at an elementary level. This research is conducted in the developing country to find out an impact of ICT-intensive pedagogy to enhance speaking skills of learners in relation to English language at primary schools. Both groups (control and experiment) are evaluated by using APTIS as pre and post-test tool. In addition, IDIs and FGDs are arranged to get the insights from the teachers and participants.

By using standard statistical procedures, SPSS software is employed to analyse the data. The findings of the research study are elaborated in this section. This study has two data sets comprised of pre and post APTIS test scores for control group and pre and post test results from experiment group. The second data set is purely obtained from an experiment group comprised of before and after intervention scores of the same learners within a group. This section will discuss the findings of control vs. experiment group as well as it will discuss the findings of experiment group in particular. Furthermore, the insights taken from IDIs and FGDs are also discussed in detail.

It is reported by Hardersen and Guðmundsdóttir (2012) that young people use numerous digital tools and many parents and teachers take it positively for their learning purpose. The authors (Garrison & Bromley, 2004; Monahan, 2005; Plowman, Stephen, & McPake, 2010; Reedy, 2008; Selwyn, 2007; Waite, Wheeler, & Bromfield, 2007) also approve this point of view by researching to find the impact and role of digital technologies for pedagogical uses in schools.

Furthermore, it is also important to note that the learners of both groups have never used such digital tools and gadgets before. Even it was a new experience for the teachers who were trained and then taught the lessons during the intervention. The learners were highly enthusiastic and motivated to use digital tools in their speaking lessons. It is found from the study that the level of speaking skills of the pupils from experiment group was higher as compare to the level of the learners from the control group after the intervention. The teacher's interviews further clarifies that how digital technologies integrated in their

lessons helped them create an impact on learner's performance. Moreover, FGDs endorse the responses of the instructors.

Plowman & Stephen (2009) recommended that teachers have this capacity to create strong pedagogical lessons for better learning experience for students but it is still an emerging arena of getting knowledge and skills that how digital technologies can be well-incorporated in their teaching practices. Besides major challenges faced to understand the utilization of digital learning tools in ESL classrooms, Iqbal et al. (2017) mentioned even bigger obstacles faced by disadvantaged group of learners who may not have an awareness of how educational technologies can be used for learning purposes as well as no access to digital gadgets at home.

It is encouraged globally that developing countries need to focus on the implementation of educational technologies in their institutes. The discovery of modern educational technologies such as the widespread internet, worldwide web as well as learning applications have brought about substantial transformations in the field of education (Bates, 2005). Recently, Pakistani institutes have undergone significant transformations due to modern technological developments. Various positive impacts are observed in such technologies, for instance, personalized learning takes place as well as learners learn independently. There is an emphasis on employing web-supported resources to encourage learner-centric teaching practice (e.g. Dabbagh & Kitsantas, 2005).

## **5.2 Quantitative Research**

### **Research Findings and Discussion**

The research findings are evident of the fact that ICT-intensive teaching has positive effects on enhancing learner's speaking skills of English language. The learners were taken from grade five between the ages of 9 to 13 years. Furthermore, strong pedagogical lessons were designed with the integration of digital tools and gadgets to investigate the level of improvement of speaking skills among the learners. Keeping in view the previous studies conducted in using E-technologies in teaching speaking skills, it is revealed that use of digital tools improved the performance of learners and shows great significance in creating ICT lectures.

### **5.3. Control vs. Experiment Group**

It is aforementioned that the data set is comprised of scores received from control as well as experiment groups. There were two sets of learners. One group had their regular speaking lessons by using conventional methods of teaching. This group is called control group. However, the other group undergone an intervention phase which is called experiment group. There are separate scores obtained from pre-test of both groups and post-tests of both groups. Also, there are scores received from experiment group against each learner individually before and after the intervention. Their mean rank scores obtained in each part of APTIS will be discussed exclusively below.

### **5.3.1. Pre-tests of control and experiment Groups**

After considering the assumptions of independent sample t-test, normality test has been applied. The data came out to be away from normal distribution; therefore, Mann-Whitney test is applied to compare the pre-tests of both groups. The four assumptions were met for using Mann-Whitney U-test. The test was applied on scores of pre-test for the learners of both groups. The analysis showed that there is no significant difference in the pre-test scores of control and experiment groups. Although the value of mean ranks for experiment group (mean=67) is slightly higher than the scores of control group (mean=53), the difference is too less to be noticeable. So, it means that the level of learners in both groups were similar before going through an experimental phase.

### **5.3.2. Post-tests of control and experiment Groups**

The Mann-Whitney U test was again applied to compare the post-tests of control and experiment groups. The U-test indicates that there is a substantial difference in the mean ranks of data set obtained from the post-tests of two groups. Also, the p-value identifies that the data obtained from experiment group is statistically higher with a huge difference in the scores. The mean ranks are 32 and 88 for control and experiment groups respectively. It is evident from the analysis of given data that the level of speaking skills of learners was considerably improved after going through the intervention.

### **5.3.3. Level of variance**

In order to find out how much level of speaking skills is improved among the participants of experiment group, the formula for variance is applied. It calculates the value in percentage to show how much improvement has been done. The calculated level of variance is approximately seventy percent. It means that the effect size is large. So, it is



inferred that by using ICT-intensive pedagogy in teaching English speaking skills, the rate of improvement goes up to 70% which is large enough according to the Cohen's guidelines for checking the effect size.

#### **5.4. Control group (pre and post-test)**

For the purpose of analyzing data obtained from the same participants of the control group at two points of time (before and after conventional method of teaching), Wilcoxon signed rank test has been applied. The data clearly indicates that maximum number of participants did not show any change in their level of English speaking skills rather a few showed regressions in their speaking skills. In brief, it is inferred that learners did not indicate a significant improvement in their speaking skills after conventional methods of teaching English lessons.

#### **5.5. Experiment Group (pre and post-test)**

The Wilcoxon test is used to analyze the scores of experiment group (before and after intervention). The data signifies that there is a substantial statistical difference in the mean ranks of the same participants who went through the experimental stage. The data is interesting in the sense that all the participants scored higher after taking English speaking lessons integrated with digital technologies. It is also found that there are no learners with same scores or showed any regression. It is concluded that if digital tools and resources are integrated in English speaking lessons, all learner types will equally benefit and show improvement in their speaking skills.

##### **5.5.1. APTIS Part1, 2, 3 and 4**

The Wilcoxon signed test was used to compare the mean scores in four different parts of the proficiency test of the same participants before and after the experiment. In all parts of the proficiency test, there is a significant difference in the mean ranks of the same participants at two points of time. In part 1 and 2 of APTIS, maximum number of learners has high scores and a few got same scores as before. In part 3, although the number of students with high scores has increased again but there is also an increase in the number of learners with no change in their scores. In part 4, there is an increase in the number of participants with high scores; although, the number of subjects with no change in their mean ranks is greater than the ones with improved mean ranks. In summary, it can be concluded that there is an overall improvement in the speaking level of learners in all

parts of the test but the maximum improvement is seen in part 1 and 2 of APTIS test. It can be of the fact that in APTIS test, the level of proficiency increases from part 1 to 4 as per the levels A1 to C2. As there is very less improvement seen in part 4 and it can be due to the fact that the minimum required language level is A1/A2 to complete the tasks in this section. In all sections of pre-test of APTIS for experiment group, the participants were either at A0 or A1 level as per the rubrics. It means that the language was not meaningful and all answers were either memorized or off-topic. According to quantitative data, it can be inferred that all students showed progress from their previous level in all parts of the proficiency test.

## **5.6. Gender divide**

There was an unexpected finding received from quantitative data in relation to gender divide. According to the research, there is no gender divide found among the male and female participants of the post-tests of control and experimental groups. Although females slightly performed better in their speaking tests but the difference is negligible. Therefore, it can be concluded that males and females performed equally better after attending ICT-intensive lessons on speaking skills. In general, it is commonly seen that in developing countries, girls do not have free access to digital tools and gadgets and they are not very much comfortable in using digital devices such as tablets, computers, smartphones etc. But this research endorses that males and females have equal abilities to use digital tools and resources in order to achieve better performance in their English speaking skills.

## **5.7. In-Depth Interviews**

IDIs have been conducted from the teachers and the principals who took part in the intervention. The interviews were taken from them on the last day of the intervention to get to know about their experience related to use of digital tools and gadgets employed in English speaking lessons. Although they have never used digital tools in their English lessons specifically English speaking lessons but they have shared their positive thoughts and feelings about the use of digital tools during the intervention. Various themes are discussed in this section from their interviews that are related to ICT-intensive lessons which they have conducted during experimental stage of the research.

### **5.7.1. Integration of digital tools and resources in teaching practice**

Teachers fully endorsed and appreciated the use of technology in classroom practice during intervention. They shared their positive views on the use of digital tools including tablets, multimedia, computers, online games and applications and use of recorder in English speaking lessons. The highly liked tools and gadgets used in the speaking activities included voice recorder, tablets, online games and computer-based applications. Most of the teachers do realize the fact that the learners are technology proficient and the use of technology is helpful in fully involving the learners in the lessons. So, it becomes important for the teachers to become well-versed in various types of educational technology tools and resources.

### **5.7.2. Benefits of digital technologies**

As mentioned by the teachers and principals as well as evident from the quantitative results that use of technology in teaching speaking skills benefits all i.e, learners and teachers. Teachers strongly agree on the fact that learners are highly technology friendly and implementation of technology in classroom practice makes it easier for teachers to deliver lessons and achieve ILOs. Technology can minimize the negative effects of low speaking proficiency of teachers. It can be done by using online websites and applications. For example, teachers can use Standard English models from audio-visual resources online to teach them pronunciation.

### **5.7.3. Improvement in speaking skills of learners**

The heads and teachers fully endorsed that it is due to the use of digital tools and resources in English lessons that learners were able to perform better at the end of intervention. According to teachers, learners can enhance their English speaking skills if they learn how to use these tools and gadgets in their everyday life. Furthermore, these tools and gadgets ought to be available in the schools so that learners can freely practice their English speaking skills. Their level of confidence has increased greatly.

### **5.7.4. Skill-training and capacity building of teachers**

The proficiency level of teachers and principals were either beginner or elementary level i.e, A1 or A2 as per the CEFR which was not appropriate to deliver the speaking lessons at the intervention phase. It was the very first experience for them to use digital technologies in their English speaking lessons. As teachers were slightly or not at all

proficient in using digital technologies, they still felt interested to get to know about the usage of various tools and resources and their implementation in the lesson plans. Some of them were reluctant to use digital tools due to lack of interest and enthusiasm as well as non-availability of digital resources at school.

Teachers and principals have never attended such training before in which digital technologies are integrated in the lessons to teach English speaking skills. The trainings attended by the teachers before are mostly subject-relevant and are not related to skilled based language teaching. The heads and the instructors added further that they can only use these tools and resources if they are available to them at school. Even if they train themselves well to use digital technologies in their lessons but they would not be able to implement them because of non-accessibility of resources at school.

#### **5.7.5. Teacher's perception on smart classrooms**

It is well noted that teachers have never used computer labs as language labs. The reason being is digital resources are not available. For instance, internet is not accessible at school. Additionally, the classrooms are not well-equipped with ICT-resources. There is only one computer lab available to all the learners of the school which is highly insufficient to cater the needs of the learners at one school. In order to implement the use of digital tools in teaching English lessons, they want their classrooms to be equipped with computers and projectors at minimum level. A few of teachers mentioned that they can't freely access labs; however, management says that they encourage teachers to use digital resources for teaching/learning purpose.

#### **5.7.6. Problems identified by teachers**

Teachers clearly revealed that they want to use digital tools and gadgets used in the intervention in their future lessons but they are abstained by multiple factors including no access to internet, non-availability and free access to computer lab, big sizes of classes, pressure of syllabus coverage and non-serious attitude towards using E-technologies. Furthermore, teachers are not encouraged and trained to integrate and implement digitized ESL activities in their speaking lessons.

## **5.8. Focus Group Discussions**

The FGDs are arranged with 6 students in each group. There were two FGDs in total. A script and a few questions were designed to get the insights of the participants as it is mentioned in the previous section. The following points cover the responses of the learners which have been discussed to understand the teacher's perspective in relation to ICT-intensive pedagogy integrated in the English speaking lessons.

### **5.8.1. Gain confidence**

All subjects who were part of FGDs rated themselves at higher scale for the level of confidence they have gained. It is clearly observed that they have achieved substantial raise in their confidence level after the usage of digital tools and gadgets in their learning process during intervention. Most of them were answering the questions (FGDs) assertively in English which showed their improved level of self-confidence.

### **5.8.2. Access to computer labs and digital resources**

The learners who participated in FGDs openly shared that they do not have an access to computer lab and they have never attended any English speaking lessons in the lab. They also endorsed that they highly liked to attend English lessons in the lab because they can use digital resources. They felt bored when they sit in conventional classrooms. Furthermore, their learning will improve if they use tablets and internet freely.

### **5.8.3. Autonomous learners**

It is validated by all the participants of FGDs that they could take care of their learning process in their free time by using digital tools. Furthermore, it helped them to become independent learners where they can practice English speaking skills as per their level and interest. Technology is the only way to make them personalized learners. For instance, use of recorder aided them to listen to their own voices later which improved their self-confidence as well as helped them to analyze their own speech later. Also, when they used tablets to draw a picture to be described in their speaking lesson, they felt highly motivated and engaged. They were enjoying the process of learning through fun.

#### **5.8.4. Perceptions on using tablets and computers**

Altogether, it was agreeable by the participants that they are supportive of using tablets and computers in their English speaking lessons. They are fond of almost all digital tools and resources used throughout experimental phase. But the use of Kahoot and Recorder was an outstanding experience for them above all. They also liked the use of tablets in their English lessons because it was an enjoyable experience for them. They were working in groups while using tablets and it increased their interaction level which is highly important for the improvement in English speaking skills. They keenly stated that they want to use these digital tools and resources in the future English lessons. Additionally, they want to practice English speaking skills more than writing skills to improve their communication skills in everyday life.

#### **5.8.5. Improvement in English speaking skills**

It was acknowledged by all participants that they became better English speakers than before. It was also emphasized that their English speaking is improved due to the use of E-technologies. The learners added to the point that they can use the same gadgets at home or at school in their free time to further make an improvement in their speaking skills. They got the help from digital tools in spite of taking help from teachers.

#### **5.8.6. Attitudes and aptitude towards technology**

As today's learners are digital natives who feel more comfortable and relaxed while using digital gadgets and tools during their learning process. However, teachers are digital migrants who are not at ease in using digital technologies in teaching/learning process. Due to this gap, learner's attitude towards the use of E-technologies is highly positive whereas teachers are reluctant and hesitant to get trained and implement these technologies in English speaking lessons. Participants further elaborated that they highly feel active to take their English speaking lessons in language labs but they don't have free access to internet and computers. Also, in order to boost English speaking skills and reduce hesitation for public speaking, the digital resources should be available easily for learners and teachers.

## **Chapter 6**

### **Limitations**

#### **6.1. Lack of E-resources**

The greatest challenge faced during the implementation of intervention was lack of educational resources and their functionality issues. First, the number of available tablets was the main problem. There were only thirty tablets available at NUST E-resources bank due to which intervention was done with two groups separately at two different schools. The charging of the tablets was another issue so tablets were fully charged before the start of the intervention and all the required applications were downloaded beforehand. Some of the tablets got stuck in functionality and they were re-programmed at the beginning of the experiment.

There were only a few computers available in the computer lab in the schools that were not enough for individual practice for each learner. So, students were asked to share the computers in order to do the desired activities. Even some computers were not programmed and did not function properly. Additionally, the biggest issue was non-availability of internet at school premises. There was internet connection in the computer lab but it was not working at the time of intervention. So, internet was separately arranged for learners and teachers to train and implement digitized activities. Sometimes the internet connection was bad and created hindrance for the learners during their learning process. So, it was overcome by doing same activities the next day before the start of another lesson for reinforcement.

Another concern was absence of multimedia. In computer labs at both schools, multimedia was arranged by the researcher to implement digitized lessons at their true spirit. The arrangement and connection of multimedia was done every day before the start of the lesson which took a lot of time and effort. Also, there was no place to safeguard tablets and multimedia at schools due to security issues. Therefore, researcher had to collect and hand them over to the principal at the end of each day.

#### **6.2. Availability of learners/teachers and time management**

It was quite challenging to make learners and teachers available for the experiment. The school timing was short during summer break and there were very few slots available for English lessons in the timetable. The principals were contacted and convinced to take learners and teachers for the experiment. Some teachers and learners got absent during the intervention so they were called from the school and asked them to be regular for this experiment. The absent learners were given lessons the other day to keep them remain the part of the experiment group. One trained teacher got her mother sick and she was substituted by another teacher who was again trained to implement the lessons. As a result, it was a recurring challenge on daily basis. In order to manage time of teachers and learners, the number of hours was confined to one week only. Even after the intervention, it was difficult to chase teachers and learners for interviews. As a result, interviews and FGDs were arranged on the same day which was tiresome and hectic task.

### **6.3. Accessibility to schools and ministry of Education**

The very first step to start the process of intervention was to contact Director Schools, FDE and take permission to implement the pilot program. The one to one interview was arranged with Director Schools after setting an appointment on the call. The pilot program was shared with him and he willingly supported this project and contacted a few principals to check their availability. As it was summer time, there were very less number of primary schools which offered summer classes. This whole process was tedious and required physical visits. Therefore, the two schools were finalized and permitted to implement the pilot study by FDE.

Further, the permission letter was taken from FDE to school principals to arrange teachers and learners for pilot program. Also, the availability of E –resources was observed and possible arrangements were made to start the experiment.

### **6.4. Lack of facilitates at research site**

There was hardly any facility available at research sites. Even there was no cafeteria around. It was such a hot weather and the electricity outage made it worse at times. There was very small room assigned to take APTIS test and there was a lot of noise all around made it hard to do recordings of learners. The recordings are done multiple times which was such a mind-numbing task due to repetition. The time of electricity outage was noted and the lessons were executed accordingly as all digital resources required electricity.



The internet also worked only if electricity was available. There was no air-conditioning in computer labs. The digital equipment required cool places to function properly.

### **6.5. Lack of exposure to modern educational tools and gadgets**

The last challenge faced was the training of teachers and learners in relation to digital tools and gadgets which were supposed to be used in the lessons during the intervention. The teachers had never used computers, tablets and web-based applications before and it was such a new experience for them. At the beginning, they were even trained how to switch on and off the devices. How to open the specific tool or gadget? How to use and give instructions to the learners for specific task to be practiced using digitized activity? Learners on the other hand also did not have much exposure to these digital tools due to their socio-economic background; therefore, they were facilitated individually at every step. Learners were also trained beforehand about the specific tool or gadget used in that specific lesson of the day. Learners easily adapted the use of digital devices whereby teachers were hesitant even after the training sessions due to insufficient exposure and lack of awareness. It was time taking procedure for everyone to learn and implement digitized activities.

## Chapter 7

### Conclusion

The findings and discussion on the research in hand reveals that ICT-intensive pedagogy has created a significantly positive effect on English speaking skills of learners at elementary schools. It is because of using digital technologies that developed and improved English speaking skills of primary learners in particular.

Due to the use of technology in the speaking lessons during the intervention, learners and teachers felt empowered as well as lessons were interactive. Lessons were engaging and learners were fully involved in the activities. The role of the teacher was to facilitate and give instructions. Technology minimizes the role and the presence of teacher because learners were busy using the gadgets to practice their language skills. The teacher was only there to monitor and give feedback and to answer their queries.

It was also observed during the lessons that the teachers and learners felt relaxed whereas the delivery was effective. Technology saved a lot of time and energy for both; in addition, it helps to achieve the ILOs faster than the traditional methods and approaches.

It is important to consider that learners had either same or low English proficiency level before and after traditional methods of teaching whereas the level of proficiency rose up to seventy percent after implementing digital tools and resources in English speaking lessons that is considered high level of variance.

Furthermore, all types of learners can get equal advantage and display progress in English speaking skills if digital resources and tools are well incorporated in lesson plans. There is an overall progress seen in all sections of the proficiency test, however, almost all students were either having no meaningful language or memorized scripts before the treatment phase. This study also highlights that females and males show the same attribute towards using digital resources with the aim to improve English speaking skills particularly.

The teachers and principals completely favored the usage of digital tools and resources incorporated in English speaking lesson plans. According to them, the high level of variance is due to the use of digitized activities that made the job of a teacher much easier to deliver and achieve ILOs. Teachers ought to train themselves as it is a need of the time

to be knowledgeable with latest trends in education and how to incorporate digital tools in English speaking lessons. The adverse effects of teacher's low level of English proficiency can be reduced with the help of educational tools and gadgets. The learners felt confident and motivated when they took lessons in the language lab. The classrooms should be well-equipped with latest educational technologies and the free access ought to be provided to teachers and learners for improved communication skills in the target language.

In addition, the students who participated in FGDs agreed that they have gained high level of confidence due to free access to computer labs, tablets and internet availability. The learners as digital natives felt comfortable in using digital tools and as a result they produced better performance in the end of intervention. This teaching method boosted learner autonomy and the concept of learning through fun. It also motivated them to make lots of interactions by doing group work with the help of digital gadgets. They are more interested in establishing their speaking skills for everyday use. They want to change their focus from writing skills to speaking skills to follow the natural sequence of learning a language.

In conclusion, the qualitative data validates the test results of quantitative data. Teachers, principals and learners who participated in the study highly appreciated the use of digital technologies in ESL classrooms. They want to integrate digital tools and gadgets in their teaching and learning process if digital resources are provided to them along with related trainings to get to know how to integrate them in their ESL lessons. It is one of the fastest ways to transfer from conventional teaching methods to innovative methods of ESL teaching incorporated with latest educational technological tools and resources.

## Chapter 8

### Recommendations

#### 8.1. Recommendations on the basis of this research project

1. It should be made compulsory that all teachers should attain recognized English language teaching certifications e.g. CELTA, TEFL diploma, teacher training programs conducted by British Council, NUML etc. It is important for the management to understand that B. Ed and M. Ed are not relevant qualifications for certified language teaching.
2. School management need to understand that computer lab can be used as language lab so they need to be made accessible for teachers and learners at all times as well as classrooms need to be equipped with latest digital tools.
3. Hesitation and fear factor of learners can easily be removed with the help of e-technologies in ESL classrooms specially in relation to speaking skills. Even if teachers have a low level of proficiency, this gap can be covered with the help of technological tools and gadgets in teaching language skills.
4. Today's learners are digital natives whereas most of the language teachers are digital migrants so there is lack of compatibility between the teacher and learner. The only way to bridge this gap is empower teachers with modern ICT skills.
5. Teaching methodology adopted by teachers to practice speaking skills in ESL classroom did not employ E-technologies due to which there was very less learner involvement in the lessons as well as the lessons were teacher centric. The use of E-technologies leads to empowered and independent learners. It is a must for educationists to understand the importance of the use of e-technologies for speaking lessons in their teaching practice.
6. The technological tools used for language learning have no limits of time and space so learners can do language practice outside the classroom.
7. It is important for the MOE, Pakistan to revise the curriculum for English speaking skills as well as train teachers to be well-versed in latest E-technologies. The ILOs need to be rephrased and more specific.
8. It is important for the educational managers to understand that the presence of technology in our lives is permanent and it is important for them to understand the fact and make sure that all school teachers are technology-friendly.

9. A teacher-training program can be conducted on the basis of this research that would help the teachers to integrate digital tools and gadgets in their teaching practice.

## **8.2. Recommendation for future researchers**

The same concept of integrating E-technologies can be applied in teaching other English language skills. In the light of this research, researchers can investigate and design training programs for teachers to integrate technology in the teaching practice. This research was done from a teacher's perspective whereas future researchers may do the same from learner's perspective. Future researchers can also investigate the impact of technology in teaching pronunciation. Furthermore, researchers can also investigate the level of learners as per CEFR.

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## Appendices

### Appendix A: APTIS pre-test

#### APTIS PRE TEST

**Date:**

**Speaking part 1:** In this part you will answer some questions about yourself. Listen to the instructions and speak clearly into your microphone.

In this part, I am going to ask you three simple questions about yourself and your interests. You have 30 seconds to reply to each question.

1. Please tell me about your family
2. What do you like doing in your free time?
3. What's the weather like today?

**Speaking part 2:** In this part you will see a photo and answer three questions. You have 45 seconds to respond to each question.

1. Describe this picture



2. Please talk about how you use your mobile phone?
3. Do you think mobile phones help you in learning English?

**Speaking part 3:** In this part you will see two photos and again answer three questions.

In this part, I am going to ask you to compare two pictures and then I will ask you two questions about them. You have 45 seconds to answer each question

1. Tell me what you see in the pictures



2. What kinds of people play these two sports?
3. Which of these sports is difficult to play and why?

**Speaking part 4:** In this part, you again need to answer three questions but this time you answer them all in one response. You have one minute to prepare a structured response and two minutes for speaking.

1. Do you like shopping for toys? Why/why not?





1. How do you feel when you buy a new toy?
2. What do you think it would be to shop at the store in the picture?

## Appendix B: APTIS post-test

### APTIS POST TEST

**Date:**

**Speaking part 1:** In this part you will answer some questions about yourself. Listen to the instructions and speak clearly into your microphone.

In this part, I am going to ask you three simple questions about yourself and your interests. You have 30 seconds to reply to each question.

1. Tell me about yourself and your family?
2. Please tell me about your hobbies?
3. Please tell me about your best friend?

**Speaking part 2:** In this part you will see a photo and answer three questions. You have 45 seconds to respond to each question.

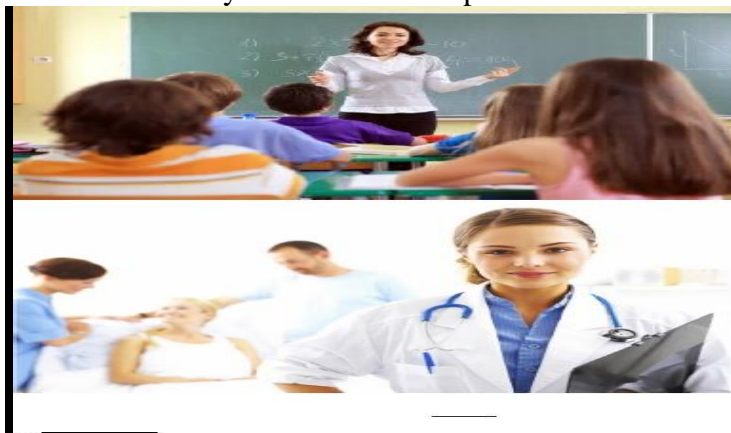


1. Describe this picture.
2. Why is it important to celebrate special occasions with family or friends?
3. Tell me about a celebration in your country?

**Speaking part 3:** In this part you will see two photos and again answer three questions.

In this part, I am going to ask you to compare two pictures and then I will ask you two questions about them. You have 45 seconds to answer each question

4. Tell me what do you see in the two pictures




5. What would it be like to do these two jobs?
6. Which of these types of jobs are better for you?

**Speaking part 4:** In this part, you again need to answer three questions but this time you answer them all in one response. You have one minute to prepare a structured response and two minutes for speaking.

Tell me about the most memorable teacher you had at school.  
How did he/she make you feel in class?  
Do you think teachers can change the way children are in the future?

**1 MIN**  
You now have 1 minute to think about your answers.  
You can make notes if you wish.



**02:00**  
You now have 2 minutes to talk.

Prezi

### Appendix C: Score sheet for grading speaking skills (Control and Experiment groups)

Score sheet for Speaking skills							
School:		Grade V		Group:		Date:	
Sr.No	Name of the participant	Age	APTIS Part 1 Scale (0-5)	APTIS Part 2 Scale (0-5)	APTIS Part3 Scale (0-5)	APTIS Part4 Scale (0-6)	Total
1)							
2)							
3)							
4)							
5)							
6)							
7)							
8)							
9)							
10)							
11)							
12)							

13)							
14)							
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18)							
19)							
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21)							
22)							
23)							
24)							
25)							
26)							
27)							
28)							
29)							
30)							
<b>Sign of Internal Moderator</b>							
<b>Sign of External Moderator</b>							
<b>Sign of the Researcher</b>							

## Appendix D: Rubrics for speaking skills

The areas assessed are task fulfillment / topic relevance, grammatical range and accuracy, vocabulary range and accuracy, pronunciation and fluency. Here is the marking scale.

### Part1

<b>5</b> <b>B1 (or above)</b>	Likely to be above A2 level.
<b>4</b> <b>A2.2</b>	<p>Responses to all three questions are on-topic and show the following features:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Some simple grammatical structures used correctly but basic mistakes systematically occur.</li> <li><input type="checkbox"/> Vocabulary is sufficient to respond to the questions, although inappropriate lexical choices are noticeable.</li> <li><input type="checkbox"/> Mispronunciations are noticeable and frequently place a strain on the listener.</li> <li><input type="checkbox"/> Frequent pausing, false starts and reformulations but meaning is still clear.</li> </ul>
<b>3</b> <b>A2.1</b>	<p>Responses to two questions are on-topic and show the following features:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Some simple grammatical structures used correctly but basic mistakes systematically occur.</li> <li><input type="checkbox"/> Vocabulary is sufficient to respond to the questions, although inappropriate lexical choices are noticeable.</li> <li><input type="checkbox"/> Mispronunciations are noticeable and frequently place a strain on the listener.</li> <li><input type="checkbox"/> Frequent pausing, false starts and reformulations but meaning is still clear.</li> </ul>
<b>2</b> <b>A1.1</b>	<p>Responses to at least two questions are on-topic and show the following features:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Grammatical structure is limited to words and phrases. Errors in basic patterns and simple grammar structures impede understanding.</li> <li><input type="checkbox"/> Vocabulary is limited to very basic words related to personal information.</li> <li><input type="checkbox"/> Pronunciation is mostly unintelligible except for isolated words.</li> <li><input type="checkbox"/> Frequent pausing, false starts and reformulations impede understanding.</li> </ul>
<b>1</b> <b>A1.1</b>	<p>Response to one question is on-topic and shows the following features:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Grammatical structure is limited to words and phrases. Errors in basic patterns and simple grammar structures impede understanding.</li> <li><input type="checkbox"/> Vocabulary is limited to very basic words related to personal information.</li> <li><input type="checkbox"/> Pronunciation is mostly unintelligible except for isolated words.</li> <li><input type="checkbox"/> Frequent pausing, false starts and reformulations impede understanding.</li> </ul>
<b>0</b> <b>A0</b>	No meaningful language or all responses are completely off-topic (e.g. memorised script, guessing).

**Part2**

<b>5</b> <b>B2 (or</b> <b>above)</b>	Likely to be above B1 level.
<b>4</b> <b>B1.2</b>	Responses to all three questions are on-topic and show the following features: <ul style="list-style-type: none"><li><input type="checkbox"/> Control of simple grammatical structures. Errors occur when attempting complex structures.</li><li><input type="checkbox"/> Sufficient range and control of vocabulary for the task. Errors occur when expressing complex thoughts.</li><li><input type="checkbox"/> Pronunciation is intelligible but inappropriate mispronunciations put an occasional strain on the listener.</li><li><input type="checkbox"/> Some pausing, false starts and reformulations.</li> <li><input type="checkbox"/> Uses only simple cohesive devices. Links between ideas are not always clearly indicated.</li></ul>
<b>3</b> <b>B1.1</b>	Responses to two questions are on-topic and show the following features: <ul style="list-style-type: none"><li><input type="checkbox"/> Control of simple grammatical structures. Errors occur when attempting complex structures.</li><li><input type="checkbox"/> Sufficient range and control of vocabulary for the task. Errors occur when expressing complex thoughts.</li><li><input type="checkbox"/> Pronunciation is intelligible but inappropriate mispronunciations put an occasional strain on the listener.</li><li><input type="checkbox"/> Some pausing, false starts and reformulations.</li> <li><input type="checkbox"/> Uses only simple cohesive devices. Links between ideas are not always clearly indicated.</li></ul>
<b>2</b> <b>A2.2</b>	Responses to at least two questions are on-topic and show the following features: <ul style="list-style-type: none"><li><input type="checkbox"/> Uses some simple grammatical structures correctly but systematically makes basic mistakes.</li><li><input type="checkbox"/> Vocabulary will be limited to concrete topics and descriptions. Inappropriate lexical choices for the task are noticeable.</li><li><input type="checkbox"/> Mispronunciations are noticeable and put a strain on the listener.</li><li><input type="checkbox"/> Noticeable pausing, false starts and reformulations.</li> <li><input type="checkbox"/> Cohesion between ideas is limited. Responses tend to be a list of points.</li></ul>
<b>1</b> <b>A2.1</b>	. Response to one question is on-topic and shows the following features: <ul style="list-style-type: none"><li><input type="checkbox"/> Uses some simple grammatical structures correctly but systematically makes basic mistakes.</li><li><input type="checkbox"/> Vocabulary will be limited to concrete topics and descriptions. Inappropriate lexical choices for the task are noticeable.</li><li><input type="checkbox"/> Mispronunciations are noticeable and put a strain on the listener.</li><li><input type="checkbox"/> Noticeable pausing, false starts and reformulations.</li> <li><input type="checkbox"/> Cohesion between ideas is limited. Responses tend to be a list of points.</li></ul>
<b>0</b>	Performance below A2, or no meaningful language or the responses are

	completely off-topic (e.g. memorised script, guessing).
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**Part3**

<b>5 B2 (or above)</b>	Likely to be above B1 level.
<b>4 B1.2</b>	<p>Responses to all three questions are on-topic and show the following features:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Control of simple grammatical structures. Errors occur when attempting complex structures.</li> <li><input type="checkbox"/> Sufficient range and control of vocabulary for the task. Errors occur when expressing complex thoughts.</li> <li><input type="checkbox"/> Pronunciation is intelligible but inappropriate mispronunciations put an occasional strain on the listener.</li> <li><input type="checkbox"/> Some pausing, false starts and reformulations.</li> <li><input type="checkbox"/> Uses only simple cohesive devices. Links between ideas are not always clearly indicated.</li> </ul>
<b>3 B1.1</b>	<p>Responses to two questions are on-topic and show the following features:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Control of simple grammatical structures. Errors occur when attempting complex structures.</li> <li><input type="checkbox"/> Sufficient range and control of vocabulary for the task. Errors occur when expressing complex thoughts.</li> <li><input type="checkbox"/> Pronunciation is intelligible but inappropriate mispronunciations put an occasional strain on the listener.</li> <li><input type="checkbox"/> Some pausing, false starts and reformulations.</li> <li><input type="checkbox"/> Uses only simple cohesive devices. Links between ideas are not always clearly indicated.</li> </ul>
<b>2 A2.2</b>	<p>Responses to at least two questions are on-topic and show the following features:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Uses some simple grammatical structures correctly but systematically makes basic mistakes.</li> <li><input type="checkbox"/> Vocabulary will be limited to concrete topics and descriptions. Inappropriate lexical choices for the task are noticeable.</li> <li><input type="checkbox"/> Mispronunciations are noticeable and put a strain on the listener.</li> <li><input type="checkbox"/> Noticeable pausing, false starts and reformulations.</li> <li><input type="checkbox"/> Cohesion between ideas is limited. Responses tend to be a list of points.</li> </ul>
<b>1 A2.1</b>	<p>. Response to one question is on-topic and shows the following features:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Uses some simple grammatical structures correctly but systematically makes basic mistakes.</li> <li><input type="checkbox"/> Vocabulary will be limited to concrete topics and descriptions. Inappropriate lexical choices for the task are noticeable.</li> <li><input type="checkbox"/> Mispronunciations are noticeable and put a strain on the listener.</li> </ul>

	<input type="checkbox"/> Noticeable pausing, false starts and reformulations. <input type="checkbox"/> Cohesion between ideas is limited. Responses tend to be a list of points.
<b>0</b>	Performance below A2, or no meaningful language or the responses are completely off-topic (e.g. memorised script, guessing).

**Part4**

<b>6</b> <b>C2</b>	Likely to be above C1 level.
<b>5</b> <b>C1</b>	<p>Response addresses all three questions and is well-structured.</p> <input type="checkbox"/> Uses a range of complex grammar constructions accurately. Some minor errors occur but do not impede understanding. <input type="checkbox"/> Uses a range of vocabulary to discuss the topics required by the task. Some awkward usage or slightly inappropriate lexical choices. <input type="checkbox"/> Pronunciation is clearly intelligible. <input type="checkbox"/> Backtracking and reformulations do not fully interrupt the flow of speech. <input type="checkbox"/> A range of cohesive devices are used to clearly indicate the links between ideas.
<b>4</b> <b>B2.2</b>	<p>Responses to all three questions are on-topic and show the following features:</p> <input type="checkbox"/> Some complex grammar constructions used accurately. Errors do not lead to misunderstanding. <input type="checkbox"/> Sufficient range of vocabulary to discuss the topics required by the task. Inappropriate lexical choices do not lead to misunderstanding. <input type="checkbox"/> Pronunciation is intelligible. Mispronunciations do not put a strain on the listener or lead to misunderstanding. <input type="checkbox"/> Some pausing while searching for vocabulary but this does not put a strain on the listener. <input type="checkbox"/> A limited number of cohesive devices are used to indicate the links between ideas.
<b>3</b> <b>B2.1</b>	<p>Responses to two questions are on-topic and show the following features:</p> <input type="checkbox"/> Some complex grammar constructions used accurately. Errors do not lead to misunderstanding. <input type="checkbox"/> Sufficient range of vocabulary to discuss the topics required by the task. Inappropriate lexical choices do not lead to misunderstanding. <input type="checkbox"/> Pronunciation is intelligible. Mispronunciations do not put a strain on the listener or lead to misunderstanding <input type="checkbox"/> Some pausing while searching for vocabulary but this does not put a strain on the listener. <input type="checkbox"/> A limited number of cohesive devices are used to indicate the links between ideas.

<p><b>2</b> <b>B1.2</b></p>	<p>Responses to at least two questions are on-topic and show the following features:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Control of simple grammatical structures. Errors occur when attempting complex structures.</li> <li><input type="checkbox"/> Limitations in vocabulary make it difficult to deal fully with the task.</li> <li><input type="checkbox"/> Pronunciation is intelligible but occasional mispronunciations put an occasional strain on the listener.</li> <li><input type="checkbox"/> Noticeable pausing, false starts, reformulations and repetition.</li> <li><input type="checkbox"/> Uses only simple cohesive devices. Links between ideas are not always clearly indicated.</li> </ul>
<p><b>1</b> <b>B1.1</b></p>	<p>Response to one question is on-topic and shows the following features:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Control of simple grammatical structures. Errors occur when attempting complex structures.</li> <li><input type="checkbox"/> Limitations in vocabulary make it difficult to deal fully with the task.</li> <li><input type="checkbox"/> Pronunciation is intelligible but occasional mispronunciations put an occasional strain on the listener.</li> <li><input type="checkbox"/> Noticeable pausing, false starts, reformulations and repetition.</li> <li><input type="checkbox"/> Uses only simple cohesive devices. Links between ideas are not always clearly indicated.</li> </ul>
<p><b>0</b> <b>A1/A2</b></p>	<p>Performance not sufficient for B1, or no meaningful language, or the responses are completely off-topic (memorised or guessing).</p>

## **Appendix E: In-depth Interview questionnaire for Teachers (Post Intervention)**

### **Demographics**

What is your Educational background?

Private, Public, Madrassa

What is your service period in teaching?

Less than 5 years, 5-10 years, 10-15 years, 15 years and above

What is your level of English Language proficiency?

A1 beginner, A2 Elementary, B1 Intermediate, B2 upper Intermediate, C1 Advanced, C2 proficient

What is your salary range per month?

Rs. 20,000 to Rs 40,000, Rs 40,000 to Rs. 60,000, Rs.60,000 and above

What is your highest qualification?

Diploma holder, Undergraduate, Masters, Phd

Do you have teaching certification? If yes, please specify

Yes or No

### **ICT skills:**

How proficient are you in using computers/technology?

- Extremely
- Very



- moderately
- slightly
- Not at all

How can ICT be helpful in teaching speaking skills? Can you specify with examples.

What tools/gadgets will be effective in teaching language skills? Name any tools/gadgets you already know about?

### **School management and Resources**

What is the role of management in providing ICT support to teachers and learners?

Do you think management performs an effective role to establish ICT-friendly classrooms?

- Very satisfied
- Satisfied
- Neither
- Dissatisfied
- Very dissatisfied

What resources do you have in the classroom? Name them, please.  
What resources would you require for teaching-learning purpose?

Do teachers have free access to the ICT lab for language teaching?

- Most of the time
- Some of the time
- Seldom
- Never

What is the minimum recruitment criterion for English language teachers as prescribed by the ministry of education (MOE)?

Are there any incentives for teachers undertaking professional development?

### **ICT intensive pedagogy employed during teaching intervention**

Which activities go well and why?

Which activities don't go well and why?

What approaches/tools/techniques do you think are effective in teaching English speaking skills?

What type of educational technology tools/gadgets are being used inside the classroom? Specify them.

Do you think employing ICT tools and techniques can boost learner speaking skills?

Strongly Agree

- Agree
- Undecided
- Disagree
- Strongly Disagree

Do you use computer lab to teach English skills?

- Always
- Very often
- Sometimes
- Rarely
- never

### **Teaching methodology**

Do you use target language during the lesson?

- Most of the time
- Some of the time
- Seldom
- Never

Are you aware of the language acquisition device? If yes, please explain its purpose.  
Yes or No

Are you aware of the approach “learning through fun”? If yes, please give example how do you use this approach in English language classrooms?

Are you aware of activity based learning and the communicative approach? If yes, please give example how do you use this approach in English language classrooms?

What activities do you practice with your learners?

How do you plan your speaking lessons?

How do you reduce hesitation/fear in learners to practice speaking skills?

### **Professional Development**

Do you have language teaching certification? (TEFL/ELT trainings)

Yes or No

Is there enough teacher training available in relation to educational technologies?

- To a great extent
- Some what
- Very little
- Not at all

What ESL trainings are conducted by FDE and school management? Please specify

Have you ever attended training on the use of educational technologies in language teaching?

- Often
- Sometimes
- Seldom
- Never

Are you aware of online ESL teacher training courses? (like MOOCS etc.) If yes, please specify with example.

Will you attend online ESL trainings in future?

- Definitely won't
- Probably won't
- Probably will
- Definitely will

What are your future plans in relation to the use of gadgets and tools in teaching English speaking lessons?

## **Appendix F: Focused Group Discussion Questionnaire from participants (Post Intervention)**

### **Demographics:**

#### **Group:**

#### **Date:**

1. How many number of participants are there in one group:
2. Gender: (Write number of male and female participants in the group)  
Male: \_\_\_\_\_ Female: \_\_\_\_\_
3. Socio- economic status of the participants;  
Where do you live?

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What your father does?

---

Do you live in a rental house?

---

How many family members are you?

---

What is your mother language?

---

**Introduction:** We enjoyed number of lessons last week to practice speaking skills and we employed various educational technology, tools and gadgets. The purpose of those lessons was to improve your speaking skills. I would like you to share your experiences about the lessons you studied last week. You can share your responses in Urdu or English.

1. How confident do you feel after the lessons?
2. How did you feel about the lessons in the lab?
3. Which activity did you like the most? Why? What did you learn in that activity?
4. Which technology/tool/app did you like the most?
5. Tell us five good things and five bad things about the lessons?
6. Do you think technology can make you a better speaker? How?

7. Will you use these tools in future to further improve your English speaking skills?

## Appendix G: Participant Information sheet and consent form



### Informed Consent Form for parents of Grade V

This informed consent form is for the parents of children of Grade V at IMS (I-V), G.10/3 and G.10/1, Islamabad, whom we are asking to participate in the research study.

Principal Investigator: Saira Saeed

Name of Organization: School of Electrical Engineering and Computer Sciences, NUST, H-12, Islamabad

This Informed Consent Form has two parts:

- Information Sheet (to share information about the study with you)
- Certificate of Consent (for signatures if you agree that your child may participate)

You will be given a copy of the full Informed Consent Form

### PART I: Participant Information Sheet

#### Introduction

My name is Saira Saeed. I am a researcher at NUST school of Electrical Engr. & Computer Sciences. I am going to give you information and invite you to have your child participate in the research project that I am leading entitled, *‘The impact of ICT-intensive pedagogies on English speaking skills at elementary level at Pakistani schools’*.

#### Purpose

The purpose of this research is to address the under practice English speaking skills and it will propose revised learning objectives to meet learners needs. This will also give opportunity to teachers and learners to practice digitized activities.

#### Participant selection

We are inviting your child to take part in this research because it is important that we test new learning objectives at an early age of a child. For this purpose, we have selected participants of grade V. Therefore, we are asking if you would allow your child to participate. Your decision to have your child participate in this study is entirely voluntary.

#### Duration

The research takes place over seven days in total for two hours a day. The intervention will take place from 6<sup>th</sup> to 15<sup>th</sup> August 2018. During that time, it will be necessary for you to send your child daily during school hours.

#### Benefits

If your child participates in this research, he/she will have the following benefits: the learning process will speed up by the use of innovative technologies in English classrooms. It will also make them independent learners. There may not be any other benefit for your child but his/her participation is likely to help us find the answer to the research question. There may not be any benefit to the society at this stage of the research, but future generations are likely to benefit. The research findings will be useful for all lower secondary schools across Pakistan as well as for the national curriculum wing to upgrade its ESL curriculum for oral communication skills.

### **Confidentiality**

The information that we collect from this research project will be kept confidential. Information about your child that will be collected from the research will be put away and no-one but the researchers will be able to see it. Any information about your child will have a number on it instead of his/her name. Only the researchers will know what his/her number is and we will lock that information up with a lock and key. It will not be shared with or given to anyone except research committee members.

### **Sharing of the results**

The knowledge that we get from this study will be shared with Federal Directorate of Education. Confidential information will not be shared. Afterwards, we will publish the results in order that other interested people may learn from our research.

### **Right to Refuse or Withdraw**

This is a reconfirmation that participation is voluntary and includes the right to withdraw. The participant can withdraw after one week of data collection.

### **Who to Contact**

If you have any questions you may ask them now or later, even after the study has started. If you wish to ask questions later, you may contact research candidate at email address: [ssaeed.msite15seecs@seecs.edu.pk](mailto:ssaeed.msite15seecs@seecs.edu.pk) and telephone number: 03360777505 or SEecs office at Department of Innovative Technologies in Education, NUST school of Electrical Engr. & Computer Science, H-12, Islamabad, Tel: +92(0)51 90852368 or you may contact school principal (Ms.Samra) during office hours.

## **PART II: Certificate of Consent**

I have been invited to have my child participate in research to find an impact of using educational technologies in teaching English speaking skills. I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily for my child to participate as a participant in this study.

Name of Participant \_\_\_\_\_  
Name of Parent or Guardian \_\_\_\_\_  
Signature of Parent or Guardian \_\_\_\_\_  
Date \_\_\_\_\_  
Day/month/year

Signature of Researcher /person taking the consent \_\_\_\_\_  
Date \_\_\_\_\_  
Day/month/year

## Appendix H: Permission letter from FDE (Federal directorate of education)

5<sup>TH</sup> August 2018

### To Whom It May Concern

**Sub:** SCHOOL AUTHORIZATION TO CONDUCT RESEARCH

Dear Principal,

The purpose of this letter is to inform you that I give *Ms. Saira Saeed* permission to conduct research titled “The impact of ICT intensive pedagogies on English speaking skills of learners at Elementary level at Pakistani schools” at *IMS (I-V), G.10/3 and G.10/1 Islamabad*. The expected duration of the research intervention and data collection would be from 7<sup>th</sup> August 2018 to 20<sup>th</sup> August 2018.

This also serves as assurance that the collected data will remain confidential and will be used for research purpose only. Your cooperation to conduct this intervention is highly appreciated.

Sincerely,

Saqib Shahab  
Federal Director Schools (Male/Female)  
051-9260281  
[saqib.shahab@fde.gov.pk](mailto:saqib.shahab@fde.gov.pk)

## Appendix I: Lesson plans

### Lesson plan 1

Name:	Level: Beginner	Length: 1 hour	Date:	Course Day No: 1 Lesson 1	Page No:
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Things to think about (tutor only)	Aims speaking skills	Lesson Procedure Topic: Talk about yourself	Timing / Interact.	Things that went well (Tutor only)
	To set context (To create interest and find what Ss might know about it)	Greet them well. Show students a slide and ask them to guess about me by looking at a word cloud.  Elicit the information to build a rapport. After making a few guesses, I will share my name, my favorite color etc. And have students take turn doing this.	T-Ss ss-ss 3 mins	

	To familiarise students with the text. Find out what they can guess about it.	Show them the video on the following link which is about "Introduce yourself" <a href="https://www.youtube.com/watch?v=jQyEabEcX9Q&amp;vl=en">https://www.youtube.com/watch?v=jQyEabEcX9Q&amp;vl=en</a>  Ask Ss to discuss in pairs and try to describe what is happening in the video.  Feedback: Share the answers with your partner. I will monitor to check if they are discussing about the video. Elicit the ideas	SS-Ss 4 mins	
	Check understanding	CCQs Do the characters talk about themselves ? (Yes) Do they talk about their likes and dislikes ? (yes) Do they talk about their jobs? (yes)	T-ss 3 mins	
	Language bits	<b>Presentation</b> Here are some examples of things you can say about yourself: <i>My name's ...</i> <i>I'm from ... / I live in ...</i> <i>I was born in ...</i> <i>I'm ... years old.</i> <i>I go to ... school.</i> <i>I like ... because ...</i> <i>I don't like ... because ...</i> <i>In my free time / After school, I ...</i> <i>My best friends are ... because ...</i> <i>My favorite (school subject, actor, pop group, sport) is ... because ...</i> <i>I have ... brothers and sisters.</i> <i>In the future, I'd like to ... because ...</i>  <b>Model and drill</b> Elicit word stress and drill chorally and individually	Ss-Ss 6 mins	
	To listen and repeat	<b>Practice</b> Write a list of introduction questions on the board, pronouncing each question aloud as you go. Basic introduction questions include: What is your name? Where are you from? What is your first language? What is your hobby? The handout will be given to the learners to fill in the information about them.  My full name is _____.	T-SS SS-SS 4 mins	

		<p>I am from _____.  My family has _____ members.  My favorite drink is _____.  My favorite color is _____.  The meal I like the most is _____.  My favorite animal is the _____.  On my last vacation, I went to _____.  My favorite TV program is _____.  On the weekends, I love _____.</p> <p>As they work on their answers, students can ask you for help, such as "What does this word mean?" and "How is this pronounced?" Once the worksheets are completed, students introduce themselves to their partner by using the sheet as a guide.</p>		
	Feedback	Monitoring: I will monitor when they ask and answer questions from each other.	SS-SS 2 min	
	To listen for more detail	<p>Tell students they are going to watch the video and this time they will identify if the statements are true or false (Give them a worksheet)  Give Ss a minute to read through the sentences  Play tapescript and pause after they listen to kelvin, play again and pause after they listen to Melissa and then play the remaining script.  Let them answer and correct the false statements  Ask them to check in pairs  Monitor to see if it is necessary to play the video again.</p>	Ss-Ss 6 mins	
	Feedback	Elicit true or false for each and why? How did you get that answer? What will be the correct statement for the false ones?	T-Ss 2 mins	
	Productivity task (speaking skills) Learners produce language in the context of "introducing yourself"	<p>Distribute a cue card to each pair. Ask Ss to discuss the following points in the groups.  Ask them to gather the ideas about the topic given to them.  <b>Monitoring:</b> (To listen to the reasons they talk about for error correction)  <b>Ask students to use Audio recorder in the given tablets to record their dialogues.</b></p> <p>Once the recording is done, each pair will listen to their recordings and do self check.  Play a few recordings of the volunteers to appreciate and encourage them.</p>	Ss-Ss 3 mins	
	Feedback	<p><b>Feedback on the content</b>  Listen to them during the task and give feedback in the end of the lesson. While Ss are speaking, I will note down the errors and write them on the board for feedback. Elicit the correct answers from the students.</p>	Ss-Ss 10 mins	



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## Lesson plan 2

Name:	Level: Beginner	Length: 1 hour	Date:	Course Day No: 1 Lesson No:2	Page No:
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Things to think about (tutor only)	Aims speaking skills	Lesson Procedure Topic: Hobbies and Interests	Timing/ Interact.	Things that went well (Tutor only)
	To set context (To create interest and find what Ss might know about it)	Greet students well. Bring students a relia (book, football) and ask them to guess the gestures (reading, playing etc.)  Elicit different hobbies from them. After eliciting, I will share my hobbies and interests with them.	T-Ss SS-SS 5 mins	
	To familiarise students with the text. Find out what they can guess about it.	Show them the video on the following link <a href="https://www.youtube.com/watch?time_continue=43&amp;v=uS0UfFPPTy8">https://www.youtube.com/watch?time_continue=43&amp;v=uS0UfFPPTy8</a>  Ask Ss to disuss in pairs and find out the verbs used to show likeness and dislikness. Feedback: Share the answers with your partner. I will monitor to check if they are discussing about the video.	SS-Ss 5 mins	
	To unblock the lexis	Ask learners to match the words with the pictures on a worksheet to get to know about different sports. Ask them to check with their partners.  Now Ask students to match the words with their definition. Introduce the verbs like swim, draw, ride, drive, dance and sing	T-ss 5mins	
	Grammar	<b>Presentation</b> When we want to say that we like or don't like doing something we use the pattern:  <b><u>Like/enjoy/hate/love +Verb + ing</u></b> <i>e.g. I like swimming; John hates reading, etc.</i>	Ss-Ss 5 mins	

		<i>Example: I enjoy reading books in my free time</i>		
		<b>Model and drill</b> Drill chorally and individually		
	To listen and repeat	<b>Practice</b> Ask students to match the beginning of the sentence from Column A with its ending from Column B to understand the structure of a sentence.  Elicit the correct answers from the students.	T-SS SS- SS  8 mins	
	Practice	Tell students they are going to play an <b>online game</b> on sports using the following link on their computers. <b>(Web based application)</b>  <a href="https://learnenglishkids.britishcouncil.org/en/games/beat-the-keeper">https://learnenglishkids.britishcouncil.org/en/games/beat-the-keeper</a>  This will help them to reinforce the vocabulary used in sports and will boost their interest in the productivity stage.	Ss-Ss 10 mins	
	Feedback	Students will show their scores on the screens. The one who scores highest will be given a reward.	T-Ss 2 mins	
	Productivity task (speaking skills) Learners produce language in the context of “introducing yourself”	Ask students to work in pairs and speak about their hobbies and interests using the following structure:  <b>Example of a speaking structure:</b> In <b>my free time</b> I enjoy_____ It is_____, because_____ I also like to_____, and_____ I think is fun_____, because_____ (Conclusion)That’s why free time is important to me  Students now will find two classmates who have the same/ similar hobbies and they share their ideas with each other.	Ss-Ss 15 mins	
	Feedback	<b>Error correction</b> Listen to them during the task and give feedback in the end of the lesson. While Ss are speaking, I will note down the errors and write them on the board for feedback.	Ss-Ss 5 mins	

### Lesson plan 3

Name:	Level: Beginner	Length: 1 hour	Date:	Course Day No: 2 Lesson No:3	Page No:
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Things to think about (tutor only)	Aims speaking skills (Describe and express opinion)	Lesson Procedure Topic: Road Accidents	Timing/ Student Interaction	Things that went well (Tutor only)
	To set context (To create interest and find what Ss might know about it)	<p>Greet them and ask them what they did in the last lesson. Ask them some questions to reinforce the language practiced before related to introduction, free time and hobbies.</p> <p>Show the students an animation. Ask them what is happening in the animation.  <a href="https://www.youtube.com/watch?v=kkLkBnqVJ7Y">https://www.youtube.com/watch?v=kkLkBnqVJ7Y</a></p> <p>Elicit the word “accident” from them.</p>	<p>T-Ss ss-ss 5 mins Students are answering questions</p> <p>Ss are watching a video and relate it with background knowledge</p>	
	To familiarise students with the text. Find out what they can guess about it.	<p>Show the picture of a “car accident” on a computer screen and ask Ss to discuss what is in the picture.</p> <p>Feedback: Share the answers with your partner. I will monitor to check if they are discussing about the picture Elicit the ideas</p>	<p>SS-Ss 5 mins</p> <p>Ss are discussing and sharing ideas with each other</p>	
	Language bits	<p><b>Presentation</b> Explain the language used to describe a picture. <b>What is in the picture?</b></p> <p><i>In the picture I can see ...</i> <i>There’s / There are ...</i> <i>There isn’t a ... / There aren’t any ...</i></p> <p><u>Example:</u></p> <p><b>This is a picture of</b> a busy neighborhood. <b>It shows</b>.....</p> <p><b>There are</b> five people in the picture. I think they are at a family event. The man <b>on the</b></p>	<p>T-Ss 10mins</p> <p>Ss are practicing language bits chorally and individually</p>	

		<p><b>right</b> is making a toast.</p> <p><b>I can see</b> many skyscrapers in the background.</p> <p><b>Say what is happening with the present continuous</b>  <i>The man is ...ing</i>  <i>The people are ...ing</i>  <i>It's raining.</i></p> <p><b>Where in the picture?</b>  <i>At the top/bottom of the picture ...</i>  <i>In the middle of the picture ...</i>  <i>On the left/right of the picture ...</i>  <i>next to</i>  <i>in front of</i>  <i>behind</i>  <i>near</i>  <i>on top of</i>  <i>under</i></p> <p><b>If something isn't clear</b>  <i>It looks like a ...</i>  <i>It might be a ...</i></p> <p><b>For opinion</b>  I think that...  Personally...</p> <p><b>Model and drill</b>  Elicit word stress and drill chorally and individually</p>		
	<p>To listen and repeat the language bits for describing a photo</p>	<p><b>Practice</b></p> <p>Watch the video on the following link. Then ask Ss to complete these exercises on an online worksheet available on the link.</p> <p><a href="http://learnenglishteens.britishcouncil.org/exams/speaking-exams/describe-photo-or-picture">http://learnenglishteens.britishcouncil.org/exams/speaking-exams/describe-photo-or-picture</a></p> <p>Exercise 1: Write the correct preposition (in, on, at) to fill the gaps.</p> <p>Exercise 2: Check your understanding: multiple choice – describing the photo</p>	<p>T-SS SS-SS</p> <p>8 mins</p> <p>Ss are doing online exercises related to the topic. They help each other to give the correct answer.</p>	

	Feedback	Monitoring: I will monitor when they are doing online exercises. Note the errors and correct them.	SS-SS 2 min	
	To practice speaking skills with an application in a tablet	Tell students they are going to use an app in the given tablets which is “ <b>Speak English 2, kids game</b> ” They will play a game on listening and speaking skills in which a photo is described. They will listen and repeat the dialogues.	Ss-Ss 8 mins Ss are playing game on a tablet. They are fully engaged.	
	Feedback	Listen to them and note the errors made by them for correction	T-Ss 2 mins	
	Productivity task (speaking skills) Learners produce language while describing a photo	Distribute one picture to each pair. Ask Ss to make the dialogues based on three questions and answers and a few volunteers will present in front of the class. 1. Describe the picture 2. What is happening in the picture? 3. What is your opinion about....	Ss-Ss 15 mins  Ss are talking to each other about a given picture and sharing their ideas.	
	Feedback	Listen to them during the task and give feedback in the end of the lesson. While Ss are speaking, I will note down the errors and write them on the board for feedback. Elicit the correct answers from the students.	Ss-Ss 5 mins  Ss are correcting their errors in language.	

#### Lesson plan 4

Name:	Level: Beginner	Length: 1 hour	Date:	Course Day No: 2 Lesson No:4	Page No:
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Things to think about (tutor only)	Aims speaking skills (Describe and express opinion)	Lesson Procedure Topic: Festivals	Timing/ Student Interaction	Things that went well (Tutor only)
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	To set context (To create interest and find what Ss might know about it)	Show Ss a picture on multimedia and try to elicit the topic “ festivals and celebrations”.  Elicit famous festivals common in muslim culture.	T-Ss ss-ss 5 mins Students are brainstorming.	
	To familiarise students with the text. Find out what they can guess about it.	Separate the students into groups of 4/5. Place a pile of cards with random nouns (names of festivals) in the center of the group. Have students take turns describing the nouns for their group members to guess. The group member who guesses correctly keeps the card in an attempt to have the most cards at the end of the game.	SS-Ss 10 mins  Ss are discussing and sharing ideas with each other	
	Language	<p><b>Presentation</b> Reinforce the language used to describe a picture. <b>What is in the picture?</b></p> <p><i>In the picture I can see ...</i> <i>There's / There are ...</i> <i>There isn't a ... / There aren't any ...</i></p> <p><i>I think.....</i></p> <p><b>Who do you see? Where are they? What are they doing? What do they look like? How do you think they feel? What's in the background?</b></p> <p><b>Model and drill again for reinforcement</b> Elicit word stress and drill chorally and individually</p>	T-Ss  5mins  Ss are practicing language bits chorally and individually	
	Practice the language bits for describing a photo	<p><b>Practice</b></p> <p>Ss will be shown pictures of various Pakistani festivals and each group will be given one picture to describe. They will create description by using the following structure. (group work)</p> <p><b>Structure:</b> <b>This is a picture of .....</b> <b>It shows.....</b> <b>There are/is.....</b> <b>On the right/left...</b> <b>I think....</b></p>	T-SS SS-SS  10 mins  Ss are talking to each other about a given picture and sharing their	

			ideas.	
	Feedback	Monitoring: I will monitor when they are describing the pictures. Note the errors on a piece of paper and correct them while they are speaking in their groups.	SS-SS 2 min	
	Listen and practice	Watch an <b>animation</b> on the activities of Eid celebrations <a href="https://www.youtube.com/watch?v=wdgvQKR0skw">https://www.youtube.com/watch?v=wdgvQKR0skw</a>  After watching a video, Ss will discuss and share what activities they do on Eid day. They will jot down five different activities on a chart paper and the instructor will take the feedback from each group.	T-Ss 8 mins  Ss are watching an animation and writing down five points.	
	Productivity task (speaking skills) Learners produce language while describing a photo	<b>Descriptive Drawing Activity</b> Pair up the students and ask them to create their own situation/festival. They must describe the festival to their partner to draw. They will use an <b>application in the tablet</b> which is “Autodesk Sketchbook”. A few volunteers from each group will describe their sketch to the other groups.  The winner description and sketch will be given an incentive.	Ss-Ss 15 mins  Ss are drawing in an app and talking to each other about it.	
	Feedback	Listen to them when a volunteer from each group will describe their sketch. While Ss are speaking, I will note down the errors and write them on the board for feedback. Elicit the correct answers from the students.	Ss-Ss 5 mins  Ss are correcting their errors in language.	

### Lesson plan 5

Name:	Level: Beginner	Length: 1 hour	Date:	Course Day No: 3 Lesson No:5	Page No:
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Things to think about (tutor only)	Aims speaking skills (Describe, compare and	Lesson Procedure Topic: Using mobile phones	Timing/ Student Interaction	Things that went well (Tutor only)
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	provide reasons and explanations)			
	To set context (To create interest and find what Ss might know about it)	<p>Write the words ‘What am I?’ on the board. Read out the following clues one at a time and tell students to write down what they think the item is that you are describing after each clue (they can guess if they are not sure). At the end, find out which student guessed correctly first.</p> <ul style="list-style-type: none"> <li>- Almost everyone has one these days</li> <li>- I am usually in your pocket or your bag</li> <li>- I can connect you to other people</li> <li>- You can use me to do many different things</li> <li>- I can make phone calls</li> </ul> <p>Elicit the word “mobile phone” from them.</p>	<p>T-Ss ss-ss 5 mins</p> <p>Students are brainstorming</p> <p>Ss are trying to make a guess.</p>	
	To familiarise students with the text.	<p>Ask students to brainstorm different things that people use their mobile phone for. Set a time limit of 3 minutes.</p> <p>Give students a worksheet. Tell them to choose 2 extra uses (they can use some of the ones that came up in the discussion if they are not already on the list). Ask them to rank the different mobile phone uses from 1 (most</p>	<p>SS-Ss 5 mins</p> <p>Ss are discussing and sharing ideas with each other</p>	



		<p>frequent) to 7 (least frequent).</p> <p>Give students a few minutes to complete their ranking, and then ask them to compare their answers with a partner, before feeding back as a whole class. Which is the most common use of mobile phones? Feedback: Share the answers with your partner.</p>		
	Language presentation	<p><b>Presentation</b> Present the language used to agree or disagree.</p> <ul style="list-style-type: none"> <li>• Yes, good point</li> <li>• You are right</li> <li>• I see your point but,</li> <li>• I think so too</li> <li>• I am not sure about that</li> <li>• I couldnot agree</li> <li>• Yes, may be</li> </ul> <p><b>Model and drill</b> Elicit word stress and drill chorally and individually</p>	<p>T-Ss</p> <p>10mins</p> <p>Ss are practicing language bits chorally and individually</p>	
	To listen and repeat the language bits for describing a photo	<p><b>Practice</b></p> <p>Give each student a piece of paper with “agree” written on one side, and “disagree” on the other side. Read aloud a controversial statement about two pictures shown on the computer screen and have each students hold up his/her paper stating whether they</p>	<p>T-SS SS-SS 8 mins</p> <p>Ss are responding by showing one side of a paper.</p> <p>Ss are listening to a short debate.</p>	

		<p>agree or disagree. Choose one student from each side to explain his/her position and participate in a short debate.</p> <p>Use the following structure:</p> <ul style="list-style-type: none"> <li>• In the first picture, I can see... / In the other picture, there are/is.....</li> <li>• Both pictures show/have / I think they both are</li> <li>• There are several differences. / In the top picture is(____) whereas, in the bottom picture</li> <li>• I would choose...</li> <li>• In my opinion (1/2) would be better. because...</li> </ul>		
	Feedback	Listen to them and note the errors made by them for correction	SS-SS 2 min	
	To practice speaking skills with an application in a tablet	<p>Tell students that they will use an <b>application in the tablet</b> named as “<b>Talk; English speaking</b>”</p> <p>Ss will open the category entitled “Cell phone for a kid” and listen to the dialogues and record their dialogues in the application as the</p>	<p>Ss-Ss 8 mins Ss are using an application and recording their voices. They are fully engaged.</p>	

		recorder is in-built in this application for improving speaking skills.		
	Feedback	Monitoring: I will monitor when they are recording their own voices and listening them again for error correction.	T-Ss 2 mins	
	Productivity task (speaking skills) Learners produce language while describing a photo	<p><b>Role play</b></p> <p>Now put students into different pairs so that they are working with someone new. Give each student a letter A or B and distribute the situation cards at random. For lower levels or weaker students ask them to first write a draft of the dialogue in note form so that they know what to say.</p> <p>When students are ready, ask them to sit back to back (to simulate the fact that you can't see the other person during a phone call), and to do the role-play. Monitor and make a note of any good language / errors for correction at the end.</p> <p>You could ask some students to do their role play for the class if they are comfortable to do so.</p> <p>Topic A: Young people under 15 shouldn't use mobile phones. Why (not)?</p> <p>Topic B: Do you think mobile phones in the future will be</p>	Ss-Ss 15 mins	Ss are acting in a role play, discussing with each other on a given topic

		smaller or bigger? Why?		
	Feedback	Listen to them during the task and give feedback in the end of the lesson. While Ss are speaking, I will note down the errors and write them on the board for feedback. Elicit the correct answers from the students.	Ss-Ss 5 mins  Ss are correcting their errors in language.	

### Lesson plan 6

Name:	Level: Beginner	Length: 1 hour	Date:	Course Day No: 3 Lesson No:6	Page No:
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Things to think about (tutor only)	Aims speaking skills (Describe, compare and provide explanations)	Lesson Procedure Topic: Jobs	Timing/ Student Interaction	Things that went well (Tutor only)
	To set context (To create interest and find what Ss might know about it)	<p><b>Warm-up</b> Have a list of vocabulary words prepared related to jobs. Bring a chair to the front of the classroom. Split the class into two teams and have one student from the first team sit in the chair (the “hot seat”) facing the class. Make sure he/she cannot see behind them. Start a timer (one minute) and write the first word on the board.</p> <p>The team must say things related to that word in order to elicit that word from their teammate sitting in the hot seat. Once the student guesses correctly, write the next word. Continue until time runs out. The team with the most correct guesses at the end is the winner!</p>	<p>T-Ss ss-ss 5 mins</p> <p>Students are giving clues to their team member.</p> <p>Ss are trying to make a guess.</p>	
	To unblock the lexis (pre-teach vocab)	<p>The following vocab related to jobs will be taught through “<b>Kahoot</b>”(game-based learning platform). <a href="https://create.kahoot.it/create#/new/quiz/done">https://create.kahoot.it/create#/new/quiz/done</a></p>	<p>T-Ss 5 mins</p> <p>Ss are participati</p>	

		Farmer, bus driver, doctor, teacher, policeman, chef, dentist, hair dresser, soldier, nurse, student Feedback: The winner will be shown in an online game. The wrong answers will be revised with learners.	ng in an online quiz and feeling excited to win the game.	
To familiarise students with the text.	<b>The Jobs song</b> Sing "What do you do? (The Jobs Song)" The first time you play the song, put up the What do you do? (The Jobs Song) song poster on the board. Play the song and sing along doing the gestures.  <a href="https://www.youtube.com/watch?v=ckKQclq uAXU">https://www.youtube.com/watch?v=ckKQclq uAXU</a> (song)  This will reinforce the vocabulary and the language structure to be used related to jobs.	SS-Ss 5 mins  Ss can do gestures as they chant.		
Language presentation	<b>Presentation</b> Structures: <ul style="list-style-type: none"> <li>• What do you do?</li> <li>• I am a ....</li> <li>• My dream job is....</li> <li>• I want to be a.....</li> </ul> Giving reason <ul style="list-style-type: none"> <li>• Because....</li> </ul> <b>Model and drill</b> Elicit word stress and drill chorally and individually	T-Ss  10mins  Ss are practicing language structures chorally and individually		
Practice the language by making the comparison          Feedback	<b>Practice</b> Show the picture of a policeman and an architect. Ask Ss to compare and contrast the two pictures (Group of 3s). Create five sentences using the following structure.  <ul style="list-style-type: none"> <li>• In the first picture, I can see... / In the other picture, there are/is.....</li> <li>• Both pictures show/have / I think they both are</li> <li>• There are several differences. / In the top picture is(____) whereas, in the bottom picture</li> <li>• I would choose...</li> <li>• In my opinion (1/2) would be better. because...</li> </ul>	T-SS SS-SS 8 mins  Ss are helping each other in constructing the sentences.  Ss are presenting the comparison and contrast sentences		

		Listen to them and note the errors made by them for correction	in their groups.	
To practice doing comparison and contrast	Tell students that they will play an <b>online game</b> entitled "Falling clouds game" on the following link. ( <b>Web based application</b> ) <a href="https://www.gamestolearnenglish.com/falling-english/">https://www.gamestolearnenglish.com/falling-english/</a>  Ss will learn how to do comparison between two persons, places or things and practice the correct sentence structure by playing this game.	Ss-Ss 5 mins Ss are playing game on a tablet. They are fully engaged.		
Feedback	Monitoring: I will monitor when they are playing online game and facilitate them in correcting the sentence structure.	T-Ss 2 mins		
Productivity task (speaking skills) Learners produce language while describing their dream job	<b>"My Dream Job"</b> On the board, at the top, write "My Dream Job". Say "I am a teacher" and point to yourself. Then say "But ... I want to be a ...". Don't say anything yet. Under the "My Dream Job" title draw a picture of a job (e.g a police officer) and have everyone try and guess what your dream job is.  Then give out the worksheets and have everyone draw their dream job and write the word. As they are drawing, go around the room asking questions and giving lots of praise and encouragement. When everyone has finished, get each student in turn to hold up their picture and say "I want to be a/an..." "Why do you want to be (a doctor)?"	Ss-Ss 15 mins  Ss are acting in a role play, discussing with each other on a given topic		
Feedback	Listen to them during the task and give feedback in the end of the lesson. While Ss are speaking, I will note down the errors and write them on the board for feedback. Elicit the correct answers from the students.	Ss-Ss 5 mins  Ss are correcting their errors in language.		