



UNIVERSITY *of*
RWANDA

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**THE IMPACT OF INTEGRATING ICT IN LANGUAGE
TEACHING TO ENHANCE STUDENTS' ENGLISH SPEAKING
PROFICIENCY IN RWANDA POLYTECHNIC: A CASE STUDY
OF IPRC KITABI.**

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DECLARATION

I, Jean De La Paix MURAGIJIMANA, certify that this thesis was written solely by me, presents the results of my work and has not been submitted for any other university's earlier application for a degree or other professional certification. Furthermore, unless otherwise stated by references or acknowledgments, the work given is entirely my own.

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Declaration by the supervisor (s)

This thesis has been submitted with our approval.

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DEDICATION

I dedicate this work to the Almighty God, for his mercy, grace, and love.
To my parents and beloved family and other relatives for their love, care, and
guidance throughout the period at school;
to all my friends, classmates, and colleagues for their encouragement.

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ABSTRACT

Technology has been advocated as a means of assisting students in honing their language abilities, including speaking abilities. The most effective resources for training speaking skills are thought to include the Internet, podcasts, video conferencing, videos, and speech recognition software. The current study aimed at exploring the impact of instructional technology on the improvement of speaking skills for first-year students (A.Y. 2020–2021) in all departments at Integrated Polytechnic Regional College Kitabi. The study relied on both qualitative and quantitative approaches. Purposive and census method were used to select a sample of 132 (128 students and 4 lecturers) respondents. Data were collected using questionnaires and interviews and analyzed using SPSS. Generally, the study showed that both students and lecturers have positive attitudes toward using ICT as a learning or teaching instrument to develop their English language speaking abilities. The relevant audiovisual materials were found to be beneficial in improving students' speaking proficiency. It also indicated that both students and lecturers benefited from using instructional technologies towards the improvement of their speaking proficiency (e.g., enabling them to practice speaking anytime, talking to other people more freely, encouraging and motivating them to speak up, imitating the sounds and rhythms of the target language without the assistance of explicit instruction, and paying more attention). However, the study identified some challenges that hamper the efficient use of these technological tools. It revealed that certain students confront a number of obstacles including but not limited to not having personal technological gadgets to utilize wherever and whenever they wish, and lack of enough ICT facilities at the college. Therefore, this study postulates that English language lecturers should effectively use ICT as a teaching tool to develop their English language speaking abilities. On the other extreme, students are encouraged to own their personal ICT facilities for efficient use of them to improve their English speaking proficiency. Besides, due to the lack of enough ICT facilities at the college, the college authorities should consider the importance of ICT as a teaching and learning tool and increase ICT infrastructure to serve the purpose.

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LIST OF ABBREVIATIONS

- AI:** Artificial intelligence
- AR:** Augmented reality
- ASR:** Automatic Speech Recognition
- CAI:** Computer Aided Instruction
- CALL:** Computer Assisted Language Learning
- CBT:** Computer Based Training
- EFL:** English as a Foreign Language
- ICT:** Information Communication Technology
- IPRC:** Integrated Polytechnic Regional College
- LMS:** Learning Management System.
- MALL:** Mobile Assisted Language Learning
- MOOCs:** Massive Open Online Courses
- PLE:** Personal Learning Environment
- RALL:** Robot-Assisted Language Learning
- RP:** Rwanda Polytechnic
- TDMT:** Tourism Destination Management
- TEL:** Technology Enhanced Learning
- TTM:** Tours and Travel Management
- TVET:** Technical and Vocational Education and Training
- VR:** Virtual Reality

CHAPTER I: GENERAL INTRODUCTION

1.1. Background of the study

The most broadly used language for communication worldwide is English. Speaking, listening, writing, and reading are the four skills that students of English must master. Speaking is a skill that is performed in conversation to convey thoughts and feelings. It has been suggested that using technology might help students improve their language skills, including speaking skills. The Internet, podcasts, video conferencing, videos, and speech recognition software are the best tools for honing speaking abilities.

Richards (2008) contends that the emphasis of English language teaching activities should be on assisting students in using and communicating in English. Because speaking ability is frequently used by students to gauge their proficiency in English, this skill is vital. Students should find it simpler to learn the other languages after they have mastered that proficiency. Information and communication technology, or ICT, is used extensively in all facets of life, but especially in education. With current technology, everything is easier for everyone to do. Today, education has captivated potential and significant progress in language learning. Tinio (2002) stated that ICT has a huge impact on education, both for teachers and students, in terms of knowledge acquisition and absorption. Furthermore, ICT provides a variety of media exposure tools, such as films, stimulating information, database use, guided music, and massive open online courses, all of which enhance the learning experience (Finger and Trinidad, 2002).

It is significant to use technology tools since it helps learners practice speaking English by emulating native speakers' pronunciation. Hsu (2010) supported the viewpoint, claiming that using web-based systems via the Internet, with

conversation mode effectively set on computers with microphones and loudspeakers, improves students' English speaking skills sufficiently. Freina & Ott (2015) stated that virtual environments have had a significant impact and have grown in popularity in recent decades in teaching and learning contexts.

According to Dang (2011), technology is readily available for educational reasons and gives information more quickly when it is needed. Students who grow up in ICT-rich environments are therefore exposed to opportunities to practice and improve their abilities through their use both inside and outside the classroom. Richer materials, more accessibility to information, increased interactivity, and more possibilities for pupils to manipulate and use language have all been made possible by technology. When a teacher adds voiceover to text, especially when students can access it without the teacher present, it can provide a unique touch to the learning process for the students.

Many students are still passive in their speaking ability, so teaching English by applying this ICT tool is expected to improve students' language learning skills, especially in their speaking abilities. This information and communication technology are expected to help motivate students, develop their knowledge, and attract the attention of each student. Then when the teacher gives a difficult task, students will find it easier to do it and student participation will reach a higher level when technology is used as part of the learning process.

Based on the recent research done by Chiu, Liou, and Yeh (2007), they discussed how to improve English learners' speaking skills. In their study report, they discussed a novel computer-assisted language learning application called Automatic Speech Recognition (ASR) that can help students engage in meaningful speech interactions. They also looked into the value of Candle Talk, a web-based conversation environment, and found that this program allows learners

to have an external conversation with the computer. Another recent research done by Toumi (2015), integrating ICTs to improve EFL learners' speaking skills, found that integrating ICTs is the best technique for enhancing the students' speaking abilities.

Besides, Uwizeyimana (2018) carried out an investigation at the University of Rwanda on the Effect of Mobile-Assisted Language Learning on Rwandan University Students' Proficiency in English as a Foreign Language. His study noticed that the focused group improved their English language proficiency more than those in the control group. Consequently, EFL learners need to be provided with effective techniques and tools to improve their oral competency and to create a relaxed atmosphere when they can use language.

It is clear from the findings of some of the earlier researchers mentioned above that research on the use of ICT in the teaching process also yields varied findings. ICT should be leveraged to effectively and efficiently enhance pupils' English-speaking abilities. Hence, there is a need for more research so that we can understand how using ICT has helped students' speaking abilities.

1.2. Problem statement

The 21st learners must be able to articulate their thoughts on a variety of topics, make themselves understood by others, and effectively communicate at work and in groups. This requires them to be proficient in speaking a language of instruction, herein, English. Students are mostly judged on how they interact in the second language, whether in or out of the classroom. One of the most significant issues that most students face when learning English as a foreign language is their inability to speak English.

Though there are a variety of reasons for learners' poor speaking skills, one of the most debatable hindrance is a lack of opportunities to be interactive in the classroom, as it is difficult to engage in natural oral communication activities with a large class within a limited time and to incorporate speaking activities into a traditional grammar –focused curriculum. Alharbi (2015) stated that once the curriculum does not provide enough time for learners to practice using language in context due to large number of students in class, students' low proficiency and cultural related factors is in vain.

Similarly, Rwanda Polytechnic's curricula, specifically for English curriculum of level 6 at IPRC Kitabi allocates only 50 learning hours (5 credits) to Pre-Advanced Workplace English which has to be taught within a week. This leads to getting scanty time for classroom speaking practices. Due to the low level of practical activities, students lack communicative and linguistic competence and often code switch to use Kinyarwanda be it in and/or out of class. Kagwesage (2013) puts in that there is a time when both teachers and students codeswitch from the language of instruction to the mother tongue to illuminate, converse, increase the quality of information flow, and engage in classroom activities. However, using ICT that allows students to participate in oral-gap exercises and role-plays outside of the classroom and with or without the participation of the teacher is a potential solution to the lack of classroom speaking practice.

In Rwanda, specifically in Rwanda Polytechnic / IPRC Kitabi, no research carried out on the impact of instructional technology on enhancing English speaking skills. As a result, the purpose of this study was to investigate the impact of instructional technology on the improvement of speaking skills for students at Integrated Polytechnic Regional College Kitabi, once it is used effectively.

1.3. Objectives of the study

1.3.1. Major objective

- ❖ To explore the impacts of ICT on improving English speaking ability of the level six students (A.Y 2020-2021) from all programs at IPRC Kitabi.

1.3.2. Specific objectives

- To evaluate students' and lecturers' perceptions of the use of ICT as a tool for learning
- To enhance English language speaking abilities.
- To determine the benefits of students using instructional technologies towards speaking proficiency enhancement.
- To investigate challenges related to technology access for both students and lecturers.

1.4. Research questions

The current research has sought to address the following questions in order to attain its aims and goals. The main research question of this study is: what is the impact of instructional technology on improving students' speaking proficiency? Additionally, the following questions played a great role to collect more information that efficiently answered the subject matter.

- What are students' and trainers' perceptions of the use of ICT in learning English speaking proficiency?
- What are the benefits of using ICT in learning English speaking proficiency?
- What are the challenges associated with the use of ICT in learning English speaking proficiency?

1.5. Significance of the research

This study seeks to discover the impact of instructional technology on enhancing English speaking skills for tourism students at Integrated Polytechnic Regional College – Kitabi. The study deals with the integration of technology in teaching and learning that have become imperative in this digital era. Besides, it is of great contribution for both students and teachers who want to know whether or not new technology devices are the most effective tools in enhancing English speaking skills. This is a crucial contribution since students who face difficulties in improving their speaking ability or sometimes unmotivated to learn will be motivated.

All in all, the present study can form part of the existing empirical evidence about integrating instructional technology to impact speaking skills. It will also serve as a reference for other researchers who wish to carry out research on the related topic

1.6 Scope of the study

This part defines the boundary of research in terms of time, content and geographical coverage. It briefly states the scope of study in order to show focus on what to be studied. The study focused on exploring the impacts of instructional technology on improving students' speaking proficiency at IPRC Kitabi. IPRC Kitabi is located in Kitabi sector, Nyamagabe District, in the Southern province of Rwanda. As far as time is concerned, the research considered the sampled students from the following departments: Tourism Destination Management "TDM", Tours and Travel Management (TTM), Forestry Resources Management (FRM), Forest Engineering and Wood Technology (FWT), and Wildlife and Conservation Technologies (WCT). They study and learn English as their second

language and the four lecturers of those modules (four lecturers) with a focus of Academic Year 2020-2021.

1.7. Summary

The present research is divided into five main parts. The first chapter is the general introduction that includes a background to the study. The second chapter contains a review of previous works done in relation to the topic. The third chapter is devoted to highlight the methodology used. Then, I will present, analyze, and discuss the collected data in chapter four. Finally, the study will draw conclusion and suggest recommendations basing on the finding in the fifth chapter.

CHAPTER II: REVIEW OF THE RELATED LITERATURE

2.0. Introduction

This chapter focused on difficulties related to learning speaking skills, enhancing learners' speaking skills, educational technologies that enhance speaking skills, computer-assisted language learning (CALL), mobile-assisted language learning (MALL), Augmented Reality (AR), Robot-Assisted Language Learning (RALL). This study is instigated by two schools of thought. Both Constructivist and Connectivist theories have a strong connection to the topic of this study because they make significant contributions to the field of education, particularly in the teaching and acquisition of second languages.

2.1. Definition of key terms

Speaking skills are considered to be the skills that allow a person to be able to communicate effectively. The activity of speaking embodies more than one person, whereby; one speaks and another reacts to what is spoken. Fulcher (2003) stated that, speaking is the use of language to communicate with other. As for Bailey (2000) defined speaking as a process in which speakers intend to interact to share information by the means of producing, receiving and processing information.

Furthermore, Strauss (2013) defined educational technology as the practice of employing appropriate technological tools and resources to facilitate learning and improve performance. Additionally, Januszewski and Molenda (2008) agree with Strauss that educational technology is the research and ethical practice of inventing, using, and managing appropriate technological processes and resources to facilitate learning and improve performance.

2.2. Difficulties related to learning speaking skills

In Africa, many countries utilize English as their primary language of instruction. However, learners do not master this language effectively, and given that learners' skills in the medium of instruction are limited, they prefer to create a bilingual environment.

Speaking skills is the most crucial skill when it comes to learning a foreign language despite its being neglected to be the priority in classroom or in curricula because of the little time allocated to it. Due to this scanty time, most teachers prefer to teaching it by having student memorize the conversations or dialogues or repeat the drills. Conversely, to adapt into the twenty-first century, learners should be taught to think critically and communicate effectively. In other words, teaching speaking skills should assist students enhance their communication skills so that they are able to voice themselves and learn to follow the social and cultural rules that govern each communication setting.

Richard (2008) held that, foreign language learners should emphasize mastering speaking skills. In most cases, language classrooms are essential for the setting in which foreign language acquisition occurs in daily life. However, speaking is the most challenging ability for the majority of English learners, and they are still unable to talk orally in English. This could be due to a variety of factors. One of them is that one of the most severe speaking problems is learner errors. A low motivation is another concern. For a variety of reasons, including the repetition of dull themes and exercises, as well as the use of obsolete materials and methodologies, students are demotivated and fail to respond to oral course.

Another issue that most students face is a lack of practice. Lai (2011) stated that many challenges are associated to the scarcity of practice learners. The first is a lack of vocabulary as a result of the students' lack of experience in practicing the target language. This is mainly due to lack of practice. Once learners are given enough time to practice, the vocabulary will improve. In other sense, lack of practice can impair vocabulary and grammar usage. Consequently, Students' abilities may increase if they practice on a regular basis. Students required practice to improve their speaking skills.

Many studies that looked into issues pertaining to speaking English as Foreign Language have been done. For example, Zhang and Aikman (2007) investigated Turkish EFL the issues that hinder students to communicate effectively during their English classes. According to the survey, anxiety and a fear of speaking English are two of the most significant impediments. One of the causes is fear of being judged negatively if they make a mistake, particularly in front of their friends. According to the study, those who believe their English is "poor" are more uncomfortable and unwilling to communicate in English than students who believe their English is "very good." Speaking requires some degree of audience exposure in real time. Farahnaz et al. (2013) stress this position and advise that teachers routinely encourage students to express themselves in front of the class when teaching speaking. They must be aware, however, that this may cause students to get stressed while participating in speaking exercises.

2.3. Enhancing Learner's speaking skills

Daily, students are negatively criticized that they speak English by putting in their mother tongue accent. It is not an easy act to speak English the way native speakers do. To acquire their accent, sounds, it is difficult and should not be refuted. Astonishingly, Navarro Romero (2009) wrote that, adult people can

masterly and proficiently use English, as foreign language, be it grammatically or phonologically. In other words, students of English can improve their communication abilities if they are effectively assisted by their professors and make diligent follow-up. Teachers need to analyze their students' needs and find practical solutions that can enhance their speaking skills. In words of Navarro Romero (2009), teachers of English language have to stimulate the use of technology and practice different speaking skills that can help them face difficult situations.

One of the core benefit in sorting out the issue of poor speaking ability is to effectively integrate technology in teaching speaking skills of a foreign language. This statement is asserted by the view of Kuppuraj (2017) who highlighted that technological tools provide immediate feedback on language performance. In other words, they support students acquire both verbal and non-verbal communication. So, it is of great importance to use technology as it allows students to repeatedly practice speaking skills in English by imitating the native speakers' pronunciation.

2.4. Educational Technologies that Enhance Speaking Skills

The integration of all the above entities is key to learning how to speak in the most effective way possible. On a regular basis, teachers are given access to new technology that goes hand in hand with English education. Traditional teaching methods such as the chalk and speak approach appear ancient when modern technology is used as a supplement to the classroom teaching method to create a livelier atmosphere than before in the classroom. It is critical to integrate current technologies to improve English training. Instead of viewing the subject as a difficult assignment to accomplish, modern technology may allow students to

fully immerse themselves in English. Old teaching methods being replaced by modern technologies in language learning based on varied intelligence and diverse talents.

Furthermore, technology can encourage learners' playfulness by immersing them in a range of circumstances. Learners can engage in “self-directed practices, self-paced interactions, privacy, and a safe atmosphere in which errors are addressed and specific feedback is supplied thanks to technology”. Because of its capacity to detect faults and link the student directly to activities that focus on specific problems, machine feedback adds value. Qualitative feedback in software is becoming increasingly important. When links to explanations, further support, and references are offered, the value of technology is increased. A revolutionary computer-assisted language learning tool “Automatic Speech Recognition (ASR)” and Candle Talk, a web-based chat environment which permits students to externally interact with the computer, are just a few of the apps.

2.4.1. Computer-Assisted Language Learning (CALL)

Smith and Craig (2013) defined CALL as "any visual, audio, text, or graphic format associated with the conveyance of information via technology, whether synchronously or asynchronously, where learning aid occurs". Many computer-assisted language learning scholars have investigated all possibilities for incorporating virtual worlds and game-based virtual learning into language teaching and learning, (Carrió-Pastor, 2015).

Computers are no longer viewed as a technological instrument in the context of CALL; rather, they are viewed as a tool for teaching and learning language, with students driven to engage with and interact with their counterparts in the target language, including their teachers. Carrió-Pastor (2015) goes on to say that in

order to make successful use of CALL, teachers and students must be continuously trained and informed on how to use current and emerging technical tools in order to improve their teaching and learning processes. Importantly, CALL can be utilized with a number of tools and applications to educate and acquire vocabulary, pronunciation, listening skills, writing abilities, and even reading skills.

2.4.2. Mobile Assisted Language Learning (MALL)

Chen (2013) defines Mobile Assisted Language Learning (MALL) as any type of formal or informal language learning that is aided or supported by the use of mobile phones or other devices. MALL is a relatively recent field in relation to the others. It includes technologies that facilitate language teaching and learning, including personal digital assistants, smart phones, and tablets.

Hazaea and Alzubi (2016) argued that MALL employs any available mobile technology, applications, or programs in both formal and informal educational contexts in order to boost language acquisition. MALL was developed in response to limitations in face-to-face teaching sessions when a teacher could not handle varied learning styles. It promotes learning customization, which prioritizes learner-centeredness by allowing students to learn from anywhere, at any time, and at their own pace. Indeed, for Hazaea and Alzubi (2016), the best MALL practice includes permanence, accessibility, immediacy, interaction, and the location of educational activities. Uwizeyimana (2018) viewed mobile learning to be enduring for it is easy to handle, and can be used whenever and wherever learners need it.

2.4.3. Augmented Reality (AR)

It can be tough to talk about AR and VR separately at times. AR, on the other hand, is related to digital games, whilst VR is concerned with virtual reality gaming through headsets. They are beneficial and fruitful ingredients in quality educational environments, in addition to their extensive use in entertainment.

According to Li and Chen (2014), these technologies have the potential to aid language learning by increasing motivation among EFL students. According to Papa and Chung (2011), "Both AR and VR increase language acquisition outside of the classroom and allow students to interact with course information.

Traditional literacy skills such as reading comprehension, motivation, and vocabulary development have all improved significantly using AR (Mahadzir and Phung, 2013). This clears the way for genuine discussion to take place. According to Holden and Sykes (2011), the use of augmented reality in language teaching and learning is mostly focused on getting students to explore their universities and play games related to locales in order to discover new ways to tell tales.

Other significant elements of mobile-related technologies utilized in teaching language field, according to Reinders and Pegrum (2015), comprise AR. Social interactions and collaborative learning are aided by mobile technology. Another important aspect of language learning seen in AR is internet connectivity and the availability of open resources linked to the target language. According to Benson (2011), AR technologies emphasize self-directed and independent learning.

2.4.4. Robot-Assisted Language Learning (RALL)

Robot Assistant Language learning is regarded as specific language learning because it contacts learners and engages them in the educational process as if they

were native speakers of the target language. It also accommodates real-life behavior (Han, 2012).

When robotic technology is employed properly in an academic setting, it improves interaction between users, as compared to the rest of the TELL kinds, who operate as if they were human (Han, 2012). RALL, in other words, leverages real-life behaviors to involve students in the teaching and learning process. In addition, Thrun (2004) put it that Robots can communicate with people directly without any middleman. Furthermore, RALL enhances classroom activities by allowing learners to easily and actively participate in role plays and group discussions, which are regarded as extremely important outputs in a second language. As a result, in terms of RALL best practice, because robots share many of the same qualities and behaviors as humans, interacting in a foreign language becomes more enticing.

2.5. Theoretical and conceptual framework

This study is instigated by two schools of thought. Both Constructivist and Connectivist theories have a significant linkage to the topic of this study because, they contribute a lot to the field of education and specifically they fit well in the teaching and acquiring the second language.

2.5.1. Constructivist Learning Theory

Driscoll, (2000) termed learning as one's experience and interaction with society which results a lifelong change in man's performance. Constructivism deals with instructions in classroom and also learning environment. According to Piaget (2013) students learn depends on prior knowledge and experience they already have. In other words, this theory encourages the discovery rather than spoon feeding the students. The student's own discovery of the knowledge depends on effective learning resources among which ICT is included.

Constructivism is linked to this study in the way that when students are exposed to the effectively selected educational technology that enhance oral skills, it will stimulate their eagerness in speaking and repeatedly practice this activity more than sitting and reading what is written in the textbooks or what is being lectured. This theory promotes Learner-centred approach with the focus on what students already know. In this regard, learners would improve their speaking skills through interacting with ICT tools in education can bring meaningful and relevant ways of oral competence.

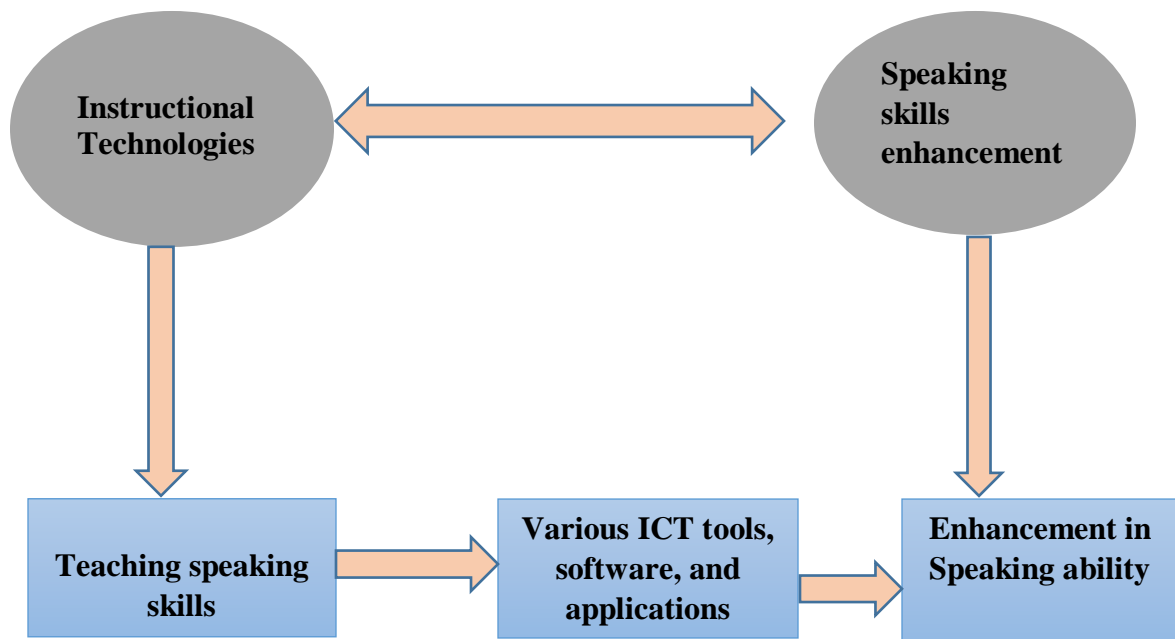
2.5.2. Connectivism Learning Theory

Siemens (2005) defined connectivism theory as a learning theory which accommodates the digital age. Educationally, this theory plainly shows how using technologies opened a number of opportunities in teaching and learning. It is adding an assistance in class sessions. This theory also encourages the learn-centered approach whereby a student can learn anytime, anywhere. In this digital era, technological inventions are released frequently. Students possess personal computers, tablets, radios, mobile phones and even internet connection. This means that much learning can take place online where will act as a guide or facilitator. Connectivism theory persuades students to look for information on their own by using technological devices.

Garcia, Brown & Elbeltagi (2013) stated that use behind this learning theory should depend on how the society changes towards new technologies. The main goal of establishing connectivist theory is to provide a model for teaching and learning that incorporates ICT such as computers, the internet, speech recognition software, podcasts, e-learning, computer-based training (CBT), Technology Enhanced Learning (TEL), Computer Aided Instruction (CAI), Personal Learning Environment (PLE), m-learning, and other tools for better understanding

(Siemens, 2005). The relationship between this theory and this study is that when a lecturer applies technological tools in teaching speaking skills, it allows students to repeatedly practice speaking English by imitating the native speakers' pronunciation anytime and anywhere. They improve oral competence freely and unknowingly.

2.5. Conceptual framework



Primary source: Researcher,2021

2.6. Summary

To sum up, this chapter focused on the use of ICTs to improve English speaking proficiency. I review research done in the field of teaching English as a second language and more precisely speaking skills. It also presented the theoretical and conceptual framework used in the present thesis on the importance of ICT to improve English speaking proficiency. Overall, a constructivism and connectivism learning theory were instigated in this study. The first affirms that

knowledge is best gained through a process of action, reflection and construction; and the second has originated and is unique to the digital world.

Therefore, Difficulties related to learning speaking skills, Enhancing Learner's speaking skills, Educational Technologies that Enhance Speaking Skills, Computer-Assisted Language Learning (CALL), Mobile Assisted Language Learning (MALL), Augmented Reality (AR), Robot-Assisted Language Learning (RALL) in relation to the topic were discussed.

CHAPTER III: METHODOLOGY

3.0. Introduction

This chapter contains a description of the methodology that was used in carrying out this study. It is organized under the following sections: research design, participants, sampling techniques and sample size, data collection method, validity and reliability, anticipated limitation of study, ethical consideration and research instruments.

3.1. Research Approach

This study is explanatory in nature, as the objective is to find out what it would mean for IPRC Kitabi to effectively use instructional technology to teach speaking skills to its students' speaking proficiency enhancement. To this end, the methodological approach to be used to conduct this study was *mixed method*. The mixed method approach has been chosen, as it employs strategies of inquiry that involve collecting qualitative and quantitative data either simultaneously or sequentially (Creswell, 2003). He further affirms that mixed methods research has come of age. To include only quantitative and qualitative methods falls short of the major approaches being used today in the social and human sciences.

A student questionnaire was used to collect quantitative data, which was administered electronically. The qualitative data for the study was gathered using guided interview with English language and communication skills teachers in order to identify factors influencing students' speaking abilities and how they integrate technology in teaching English speaking skills.

3.1.1. The qualitative Method

The qualitative method focuses on processes and meanings that cannot be quantified in terms of number, amount, intensity, or frequency. The qualitative method allows for a more in-depth knowledge of the phenomenon in its context (Ghanatabadi, 2005). On the other hand, quantitative researchers place a premium on the measurement and study of causal correlations between variables. It may be impossible to develop exact hypotheses, research questions, or operational definitions when there is minimal theoretical underpinning for a phenomenon (Sullivan, 2001). Qualitative research is appropriate in these situations since it can be more exploratory.

3.1.2. The quantitative method

Malhotra and Birks (2003) stated that, quantitative research is appropriate for measuring both attitudes and behavior. They added that quantitative research can be used to develop models that predict whether or not someone will hold a given opinion or behave in a certain way based on an observable trait. Quantitative research methodologies use some form of statistical analysis to quantify data. A quantitative strategy was chosen after evaluating two research approaches

3.2. Population

A study population is any group of people who share one or more characteristics that the researcher is interested in, and the entire population that will be studied (Stenbacka, 2001). The research respondents came directly from the Integrated Polytechnic Regional College-Kitabi. These included all 189 first-year level six students (AY 2020–2021) from five programs, namely; Tourism Destination Management, Tours and Travel Management, Forestry Resources Management, Forest Engineering and Wood Technology, and Wildlife and Conservation Technologies. They are studying and learning English as their second language as

well. The target population also includes four lecturers assigned to modules. This implies that the entire target population equals 193 people, as shown in the following table.

Table 1. Distribution of Total Population

Category of respondents	Population
Students	
1. Forest Resources Management	41
2. Forest Engineering and Wood Technology	50
3. Tourism Destination Management	37
4. Tours and Travel Management	24
5. Wildlife and Conservation Technologies	38
Sub-Total	189
Lecturers	4
Grand total	193

Source: Primary 2022

3.3. Sampling Technique and sample size

Higgins (2015) termed a sample as a subset of the population chosen to accomplish the study's goals. In other words, a sample size is a smaller group of people drawn from a large population. He added that this group was chosen with care to be representative of the entire population and to have the relevant features.

Specifically, the kind of sampling to be used for this study is *purposive sampling*. One hundred and eighty-nine first-year level six students (AY 2020–2021) from the five programs named earlier and the four lecturers assigned to the modules were the target population of this study. The focus was on these groups of people

since they best enabled the researcher to answer the following research questions: What are students' and trainers' perceptions of the use of ICT in learning English speaking proficiency? What are the benefits of using ICT in learning English speaking proficiency? What are the challenges? associated with the use of ICT in learning English speaking proficiency?

3.3.1 Sample size I. Students

The sample size is determined by the amount of confidence level, the margin of error that can be tolerated, and the variability in the population being investigated. Since the main population of this study did not have much variability, the research used a confidence level of 95% and marginal errors of 5%. Given that the students' population was 189, the statistics calculations showed that we must choose a sample size of 128 students.

Yamane (1967) established that, the formula of selecting the sample reads as follows:

$$n = \frac{N}{1+N(e^2)} \quad (1)$$

The calculation formula of Taro Yamane is presented as follows.

Where :

n= sample size required

N = represent the number of total population

e = represents marginal error (%)

Substitute numbers in formula:

$$n = \frac{189}{1 + 189(0.05)^2}$$
$$n = \frac{189}{1 + 0.4725} = 128$$

The sample size was calculated by inserting the numbers into the Yamane formula, which yielded 128.35 students. In order to collect credible data, the study rounded down the sample size to 128 students.

3.3.2 Sample size II. Lecturers of English and Communication Skills

Since the population was small, all the lecturers were interviewed in order to gather more reliable information.

Therefore, the following table illustrates the proportion of sampled students from each program and their lecturers. Furthermore, the table summarizes the methods used to sample the targeted respondents.

Table 2. Distribution of the sample

Type of respondents	Population	Sample size	Method used
students	189	128	Purposive sampling
Lecturers of English and communication skills	4	4	Census technique
TOTAL	189	130	

3.4. Data collection methods and research instruments

The data collection tool is commonly recognized as being critical to the effectiveness of survey investigations (Dörnyei & Zoltán, 2011). As a result, this research relies on a variety of data collection methods, including student questionnaires and interviews with instructors. Due to a variety of factors, students' questionnaires had to be conducted online. At the Integrated Polytechnic Regional College-Kitabi, an online survey with open-ended and closed-ended questions was prepared to gather information from the target population about the implications of instructional technology in learning and its impact on English

speaking skills enhancement, while lecturers' interviews were conducted face-to-face with the researcher present. It also included document analysis (prior studies) and the researcher's reflection on historical experiences.

3.4.1. Questionnaire

Students enrolled in the Pre-Advanced English and Team Management Skills (in which communication skills constitute a separate learning unit) courses were asked to complete this survey online. Each department had a representative from each program. Through this study, the researcher hoped to learn more about the students' perspectives on how ICT can affect their speaking abilities.

The questionnaire was broken down into four sections. The first is titled "personal identification of the respondent", the second "The impact of instructional technologies on students' speaking abilities," the third is " the opportunities to practice speaking activities through the use of instructional technology," the fourth " the experience students observe in using instructional technologies to improve their speaking skills," and the fifth "Open Questions".

3.4.2. Interview

Another technique to be used for data collection of this research is an interview that aims to know the lecturers' opinions, attitudes and perceptions about the use of instructional technology to improve their students' speaking proficiency. In that way, the research was to observe the lecturers' experiences of integrating different technologies, and how they incorporate digital technologies into their speaking skill classrooms. Interviews allow participants to explore their perceptions of the environment in which they live and convey how they view circumstances from their own point of view (Cohen, Lawrence, & Morrison, 2007).

The structured interview guide was carried out on lecturers who teach the modules. The researcher chose this strategy because it is significant in the sense that it provides the researcher with more specific information that helped him in answering the study's questions and also in coming up with solutions to the study's problem.

3.4.3 Piloting stage

A Google form was used to create the online survey. It was pre-tested on a group of ten students. During the piloting stage, two students volunteered to represent each program that was being studied. The purpose of the piloting stage was to identify and correct any errors in the research instrument before distributing it to the entire sampled population.

Orodho (2005) found that, piloting research instruments allows the researcher to make meaningful observations by detecting instrument flaws, rephrasing vague questions, and revealing the suitability of the anticipated analytical techniques. It also aids in the evaluation of the research instruments' accuracy and consistency. This pilot test was administered from January 10, to January 13, 2022.

3.5. Data presentation and analysis

After data collection and presentation, the next procedure is to analyze data which aims at organizing, summarizing or synthesizing the collected data to draw conclusion. In this process, a researcher selects useful information that answer the problem stated. In the thoughts of De Vos (2002), data analysis is the process of bringing order, structure and meaning to the mass of collected data.

With the help of figures, tables, and graphs, conclusions were drawn based on the data presented. In this study, these data were empirically analyzed and discussed.

3.6. Trustworthiness/Validity and reliability of the study

Reliability is defined as the stability of findings, whereas; validity represents truth of findings. Therefore, through this study, reliability accounts for increase in transparency, decrease opportunities to insert bias in research and take a consideration of methods used to collect data (Mohajan, 2017).

This was the degree to which the study's findings remained constant over time and the population in general in the study was represented. This aims at finding the extent to which a research instrument has yielded the same result over and over again when subjected to the same conditions

Kothari (2004) put that the validity of a research instrument relates to the degree to which it measures what it is designed to measure". Validity is purely concerned with measurement error or bias. Braun (2005) describes the validity in quantitative research as "construct validity." The content validity of the research instrument for this study was determined through pre-testing to determine if the questions are acceptable, answerable, and well understood. Additionally, the researcher consulted a trainer expert and the university supervisor. Based on their opinion and advice, the questionnaire has emended in order to enhance validity.

3.7. Ethical considerations

Ethical considerations must be acknowledged before commencing your analysis. Kivunja & Kuyini (2017) stressed that ethical matters are important in carrying out a research work. In other words, the research should consider the ethical principle related to privacy, accuracy, property and accessibility of the respondents.

Hence, before conducting this study, the permission to conduct the study was requested from IPRC Kitabi. Furthermore, confidentiality, consent, and anonymity were rigorously adhered to. The respondents' anonymity was emphasized by not recording their names. The researcher used collected information for academic purpose only.

CHAPTER IV: PRESENTATION AND ANALYSIS OF DATA

4.0. Introduction

The data collected through student surveys and lecturer interviews is presented, analyzed, and interpreted in relation to the study's objectives in this chapter. The study's goal was to look into the impact of ICTs towards improving speaking proficiency of level six students (A.Y 2020–2021) from all programs at Integrated Polytechnic Regional College Kitabi. The first section of the chapter provides context for the respondents. This includes their gender, age, and studied programs. The second section analyzes both students' questionnaire and lecturers' interview guide as per objective. The third section is devoted to discussions. SPSS was used to analyze and present the data. The data analysis provided a clear picture of the impact of ICT tools on the students' English speaking proficiency enhancement.

The demographic characteristics of respondents

Table 3. Descriptive statistics of questions

Descriptive Statistics						
Sn	Item	N	Mini mum	Maxi mum	Mean	Study Deviation
1	ICT for English speaking activities	128	1	5	4.16	.934
2	I mess around more when I use ICT	128	1	5	2.65	1.283
3	Using videos to learn speaking skills enables me to excel in pronunciation and speak fluently and freely	128	2	5	4.41	.670
4	I pay more attention when speaking	128	1	5	4.09	.926

	lessons involve the use of ICT					
5	Online audio and video tools (i.e., YouTube, Ms Teams, and MP3 players) are very helpful to enhance my speaking abilities.	128	1	5	4.45	.886
6	Using videos to learn speaking skills enables me to excel in pronunciation and speak fluently and freely	128	1	6	4.46	.773
7	Learning speaking with ICT enables me to practice speaking anytime.	128	1	5	4.05	1.078
8	I can successfully manage my speaking activities with Technology integration within allotted time.	128	1	5	4.37	.868
9	Using ICT when learning speaking helps me to talk to other people more freely.	128	1	5	4.07	1.102
10	ICT encourages and motivates me to speak up.	127	1	5	4.20	.918
11	With technology, you can imitate the sounds and rhythms of the target language without the assistance of explicit instruction can offer rich resources of native speech as good models.	128	1	5	4.02	.909
12	ICT offers rich resources of native speech as good models.	127	1	5	4.13	.777
13	Technology creates an environment	126	1	5	4.18	.804

	that encourages communication and provides increased and more varied communicative opportunities to utilize oral skills.					
14	Because I have my own ICT facilities, it is easy to learn.	126	1	5	3.51	1.171
15	Using ICT to improve my speaking abilities distracts me.	128	1	5	3.48	1.108
16	The internet connection discourages me from using technology in my speaking related activities.	127	1	5	3.23	1.261
17	There are not enough ICT facilities at my college	128	1	5	3.48	1.292
18	I do not have personal ICT facilities to use anytime and anywhere I want	128	1	5	3.57	1.390
19	In order to effectively integrate ICT in class , good internet connection is needed.	128	1	5	4.49	.842
20	I do not have the courage to do an oral presentation using ICT tools	126	1	5	2.69	1.255

4.1. Analysis of students' questionnaire

The questionnaire was administered online to students who were taking Pre-Advanced English and Team Management skills (in which communication skills is a standalone learning unit) modules. Every program was represented. Through the study, the researcher explored the students' points of view on how the use of ICT would impact their speaking proficiency.

The questionnaire was broken down into four sections. The first is titled "personal identification of the respondent", the second "The impact of ICTs on students' speaking abilities," the third is "The opportunities to practice speaking activities through the use of instructional technology," the fourth "The experience students observe in using instructional technologies to improve their speaking skills". Besides, it contained 15 questions.

4.1.2. Characteristics of respondents according to their gender

As indicated in table 1, the number of males was outnumbered the female students participated in this study. 81 males were noted out of 128 making out 63.3%, and 47 females equivalent to 36.7%. The characteristics of the respondents according to their age indicated that all gender participated in responding the provided structured questionnaire. These findings are presented in the table below:

Table 4.Characteristics of respondents according to their gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Female	47	36.7	36.7	36.7
Male	81	63.3	63.3	100.0
Total	128	100.0	100.0	

4.1.3. Characteristics of respondents according to their age

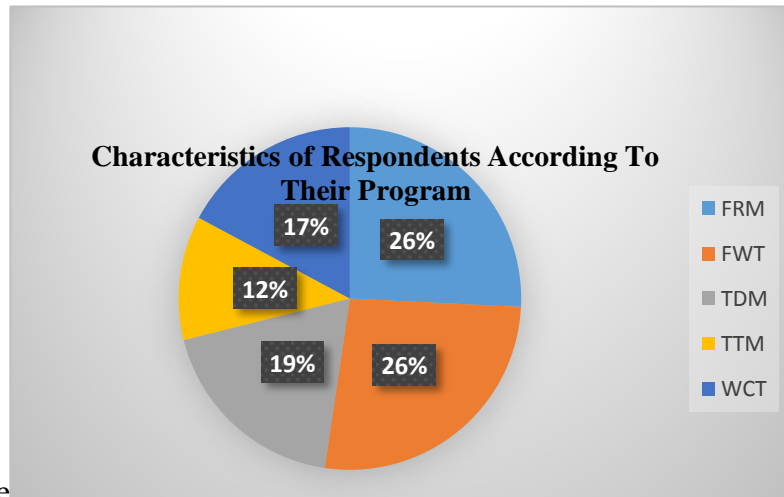
Table 4 indicates that the largest group of students is equivalent to 74.2% (95) of entire respondents are aged between 22-26 years old. At the other extreme, the lowest number of students (3) are aged above 32 years old. If one considers the total number of the students ranging between 22 and 26, this group constitutes roughly two thirds of the total respondents.

Table 5. Characteristics of respondents according to their age

Age	Frequency	Percent	Valid Percent	Cumulative Percent
>32	3	2.3	2.3	2.3
17-21	19	14.8	14.8	17.2
22-26	95	74.2	74.2	91.4
27-31	11	8.6	8.6	100.0
Total	128	100.0	100.0	

4.1.4. Characteristics of respondents according to their programs of study

This figure shows a rather even distribution of the five programs among the respondents. The majority of 26.6 per cent came from the program of Forest Engineering and Wood Technology. On the other hand, the minority of 11.7 per



ce nt were students from Tours and Travel management.

Figure 1. Characteristics of respondents according to their programs of study

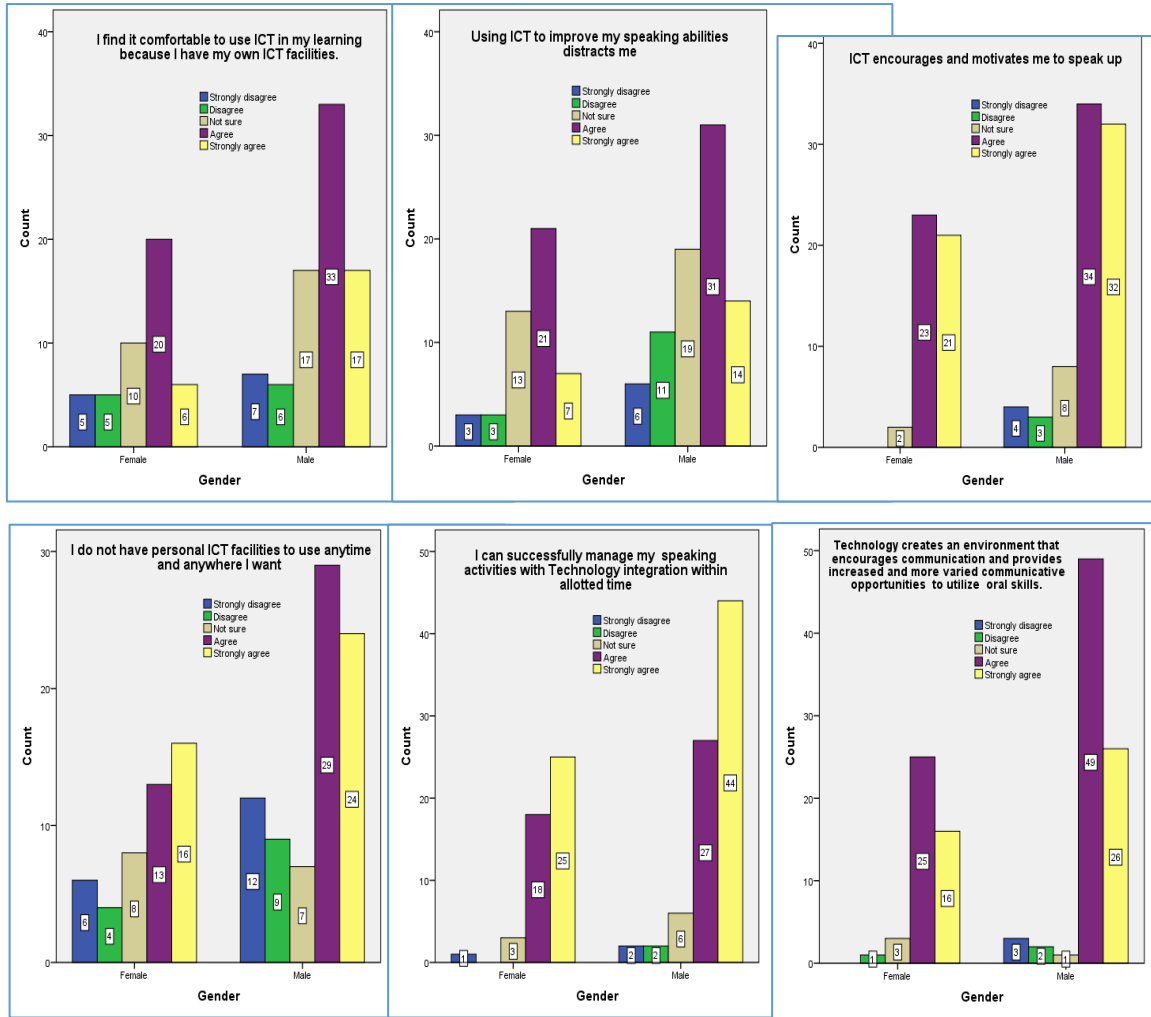
Table 6. Characteristics of respondents according to their program

Program	Frequency	Percent	Valid Percent	Cumulative Percent
FRM	33	25.8	25.8	25.8
FWT	34	26.6	26.6	52.3
TDM	24	18.8	18.8	71.1
TTM	15	11.7	11.7	82.8
WCT	22	17.2	17.2	100.0
Total	128	100.0	100.0	

4.2. Presentation of findings

4.2.1. Students and lecturers' perceptions of the use of ICT as a tool for learning to enhance English language speaking abilities.

Figure 2. The perceptions of students towards the use of ICT in learning to enhance English language speaking abilities per program



In general, the results in figure 2 indicate that the majority of respondents believed that their English language speaking abilities had improved as a result of their use of ICT. Fifty-three students (41.40 percent) agreed that they were comfortable using ICT during their learning because they owned their own ICT facilities, which had become increasingly useful to them. On the other end of the spectrum, the 33 out of 53 students who agreed with the statement were reported

to be males. Furthermore, the statement was strongly agreed upon by a numerical minority of eleven respondents (8.59 percent). Six (4.68 percent) of those in this minority group were men.

Regarding whether the use of ICT has distracted them even if it was intended to improve the respondent's speaking abilities, the majority of 52 (40.62 %) students claimed that, they were distracted by the use of ICT because they had a tendency to navigate to other things that were not intended to improve their oral abilities. Thirty-one (24.21 percent) of the 52 were men. On the other hand, 19 of the 32 students said they were not sure about the statement. At the same extreme, the 3 out of 9 of the lowest number of respondents who strongly stated that they were not distracted by ICT while using ICT to improve their speaking proficient were female.

Furthermore, the majority of respondents stated that they could successfully manage their speaking activities with technology integration within the time constraints. This is demonstrated by 69 (59.90 percent) of the total sampled subjects strongly agreeing and 45 out of 128 respondents agreeing with the statement. According to gender, 44 male respondents strongly agreed with the statement. Surprisingly, the findings revealed that no female disagreed with the now-discussed statement

Implicitly, 118 respondents expressed positive attitudes toward the use of online audio and video tools, claiming that they are extremely beneficial in improving their speaking abilities. The majority of 77 (60.15 percent) respondents strongly agreed that using online audio-visual materials improved their speaking proficiency. Furthermore, 41 respondents, or 32.03 percent, were found to agree with the statement posed. Males outnumbered females in agreeing with this

statement, with 49 out of 77 respondents strongly agreeing that they improved their oral communicative ability through online audios and videos, while 23 out of 41 respondents disagreed. Nonetheless, the results in figure (2) show that no female disagreed or strongly disagreed with the statement. This means that females prefer to use online audios and videos during speaking activities.

The attitudes of students towards the use of ICT in learning to enhance English language speaking abilities per program

Table 7. The students' attitudes on the use of ICT as a tool for learning to enhance English language speaking abilities per program

It is easy to learn because I have my own ICT facilities.						
Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	5	3	8	10	6	32
FWT	1	2	2	20	9	34
TDM	3	3	7	9	1	23
TTM	0	0	6	5	4	15
WCT	3	3	4	9	3	22
Total	12	11	27	53	23	126
Using ICT to improve my speaking abilities distracts me.						
	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	3	1	9	12	8	33
FWT	1	4	4	19	6	34
TDM	3	4	7	8	2	24
TTM	1	3	2	6	3	15

WCT	1	2	10	7	2	22
Total	9	14	32	52	21	128
ICT encourages and motivates me to speak up.						
Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	1	1	2	11	18	33
FWT	0	1	1	20	12	34
TDM	0	1	2	11	9	23
TTM	1	0	3	5	6	15
WCT	2	0	2	10	8	22
	4	3	10	57	53	127
I do not have personal ICT facilities to use anytime and anywhere I want						
Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	6	3	4	9	11	33
FWT	2	1	4	17	10	34
TDM	3	3	3	6	9	24
TTM	2	4	3	4	2	15
WCT	5	2	1	6	8	22
	18	13	15	42	40	128
I can successfully manage my speaking activities with Technology integration within allotted time.						
Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	0	1	3	13	16	33

FWT	0	0	1	16	17	34
TDM	0	0	4	7	13	24
TTM	2	0	0	3	10	15
WCT	1	1	1	6	13	22
	3	2	9	45	69	128

Technology creates an environment that encourages communication and provides increased and more varied communicative opportunities to utilize oral skills.

Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	0	2	1	17	13	33
FWT	0	1	0	22	11	34
TDM	0	0	2	12	8	22
TTM	1	0	0	8	6	15
WCT	2	0	1	15	4	22
Total	3	3	4	74	42	126

Online audio and video tools (i.e., YouTube, Ms Teams, and MP3 players) are very helpful to enhance my speaking abilities.

Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	1	2	2	7	21	33
FWT	0	0	0	16	18	34
TDM	0	0	1	9	14	24
TTM	1	0	0	3	11	15
WCT	2	0	1	6	13	22
Total	4	2	4	41	77	128

Table 7 shows the gender differences in students' attitudes toward using ICT as a learning tool to improve English language speaking abilities. The researcher wanted to see if the variables ages of respondents and statements in table 7 were related. The overall results clearly show that the majority of the people who took part in this study were from the program of Forest Engineering and Wood Technology.

In fact, the highest percentage of 41.40% agreed that they were comfortable using ICT during their learning because they owned their own ICT facilities and the 20 out of 53 students who agreed with the statement were FWT students. Furthermore, the statement was strongly agreed upon by a numerical minority of eleven respondents (8.59 percent) from which no participants from TTM disagreed or strongly disagreed with the statement. This implies that all respondents from TTM feel comfortable when using ICT in the learning speaking related activities.

Even if the use of ICT was intended to improve the respondent's speaking abilities, the majority of 52 (40.62 percent) students claimed that the use of ICT had disrupted them since they had a tendency to navigate to other things that were not intended to improve their oral abilities. Nineteen (14.84%) of them were FWT students. Contrarily, the minority number of 3 (2.34%) opted for the opposite situation and disagreed with the statement. No respondent from the programs of TTM and WCT disagreed with the statement.

Table 7 revealed that the majority of students agreed that they do not have personal ICT facilities to use whenever and wherever they want. The statement was supported by 42 out of 128 people (32.8%). The program FWT has the most students in this group, with 15, while TTM has the fewest, with only two. In addition, 40 (31.2 percent) of the targeted students strongly agreed that they do

not have personal ICT facilities to use whenever and wherever they want. The highest percentage of those who agreed with the above statement was 17 from FWT, according to the results shown below. The lowest portion, on the other hand, consists of four TTM students. Ten of the forty students who strongly agreed that they do not own personal gadgets to use anywhere are from FWT, while two are from TTM. Nonetheless, a numerical minority of 13 respondents (10.15 percent) indicated that they have personal facilities available to them wherever they go. TTM has the most (4 respondents), while FWT has one respondent out of thirteen. In comparison, 82 respondents (strongly) agreed that they do not have enough personal gadgets to use whenever and wherever they want. This is equivalent to (64.06 percent). In contrast, 13 of the target respondents (10.15 percent) chose the opposite statement

Compared to those who did not have personal devices, this minority enhanced their competency as a result of having them. This group stated that they use their personal devices to navigate and access various platforms and social media sites where they practice English. They utilize Facebook, Instagram, YouTube, and WhatsApp, among other social media platforms. These platforms enabled them to create groups or join existing ones with the goal of improving their speaking proficiency through audio and video calls with friends, classmates, and even teachers. They freely share their thoughts and ideas with others, with no charge or aversion to speaking English.

Specifically, on the aforementioned platforms, which are placed on the students' personal devices, there are groups dedicated to studying English language skills. These groups were formed with the express objective of studying English and vocabulary. One of the participants who owned personal gadgets exemplified that the YouTube channel "*English Conversation*" has thousands of EFL subscribers

who submit daily words with illustrations to help them decrease spelling errors while speaking and how to interact with others in daily life. This has helped them a lot in developing their communicative ability. However, this is, not how it is on the side of the highest proportion who do not own these devices because they cannot have access to all these opportunities. In result their communicative ability is not developed as the rest who own personal devices.

4.2.2. Benefits of students using instructional technologies towards speaking proficiency enhancement.

Table 8. Benefits of students using instructional technologies towards speaking proficiency enhancement per program category

Using ICT when learning speaking helps me to talk to other people more freely.						
Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	2	1	3	9	18	33
FWT	0	0	3	20	11	34
TDM	1	0	3	12	8	24
TTM	5	1	0	4	5	15
WCT	1	1	1	9	10	22
Total	9	3	10	54	52	128
ICT encourages and motivates me to speak up.						
Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	1	1	2	11	18	33
FWT	0	1	1	20	12	34
TDM	0	1	2	11	9	23
TTM	1	0	3	5	6	15
WCT	2	0	2	10	8	22
Total	4	3	10	57	53	127

Using technology, you can imitate the sounds and rhythms of the target language without the assistance of explicit instruction						
Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	1	2	5	11	14	33
FWT	0	0	5	21	8	34
TDM	0	0	3	14	7	24
TTM	1	0	2	6	6	15
WCT	1	2	6	7	6	22
Total	3	4	21	59	41	128
ICT offers rich resources of native speech as good models.						
Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	0	2	3	18	10	33
FWT	0	0	3	22	9	34
TDM	0	0	3	13	7	23
TTM	1	0	1	8	5	15
WCT	1	0	3	10	8	22
Total	2	2	13	71	39	127
I pay more attention when speaking lessons involve the use of ICT						
Program	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
FRM	3	0	4	16	10	33
FWT	0	2	2	22	8	34
TDM	0	1	1	11	11	24
TTM	1	0	2	7	5	15
WCT	1	0	1	11	9	22
	5	3	10	67	43	128

The results in table (8) discuss the benefits of students using instructional technologies towards speaking proficiency enhancement per program category. They clearly demonstrated that approximately all students have enhanced their speaking proficiency due to using instructional technology in their learning. Besides, 54 students, equal to 42.18% of the respondents, agreed that learning speaking through the use of ICT has helped them talk to other people more freely. Additionally, 52 out of 128 (40.62) students strongly asserted the aforementioned statement. Nevertheless, the minority number of students (3, corresponding to 2.34%) went against the statement. Precisely, 20 of 54 respondents who agreed that they have been able to freely talk to others due to the use of ICT are from the program of FWT, whereas the lowest number of them (four) is from TTM. Moreover, among 52 members of the target sample who strongly agreed with the statement, 18 of them were students from FWT, whereas five of them were from the program of TTM. Furthermore, 2.34% believed that they didn't enhance their speaking proficiency because of using ICT.

On the other hand, the findings in table (8) below showed that the majority of the students agreed that the integration of ICT has a positive impact on their speaking proficiency as it encourages and motivates them to speak up. This is true since 57 (44.5%) of the targeted students agreed that ICT encouraged and motivated them to speak up, whereas 53, which is equivalent to 41.4%, strongly agreed with the above statement. About 2,34% of 128 students asserted that ICT usage has not encouraged and motivated them to speak up, which did not show any significant impact on their speaking proficiency. Above all, 20 of the respondents who agreed that the integration of ICT in improving their speaking ability has motivated them are from FWT, whereas five of them are from TTM. Of those who strongly agreed, 18 of them are from FRM and five from TTM. Detailed statistical information about the motivation and encouragement provided by ICT

towards the development of students' oral communicative skills is demonstrated in table (8) below.

As stated in the statement "Using technology, you can imitate the sounds and rhythms of the target language without assistance", the researcher wanted to know whether the target students could independently develop their oral communicative ability through the use of technology without the assistance of their lecturers. Fifty-nine students, making up 46,09% of the whole number, stated that they could imitate the sounds and rhythms of the English language without any assistance since technology offers rich resources of native speech as good models, while forty-one students (32,03%) strongly asserted the statement. As far as the program is concerned, 21 of those who agreed with the statement were from FWM, while 6 were drawn from TDM. On the other hand, 14 out of 53 who strongly agreed were from FRM. The minority of target category 3 (2,34%) stated that they could not imitate the sounds and rhythms of the target language without assistance, and the results are shown in table (8).

In reflection on whether ICT can offer rich resources of native speech as good models or not, a numerical minority of two students (1,56%) disagreed that ICT offers rich resources of native speakers as good models to help them improve their oral language skills. In comparison to those who strongly agreed with the statement, 2 respondents (1,56%) strongly opted to do the opposite of the situation. For those who agreed with the stated item, one respondent came from both TTM and TDM, while the strong disagreement was represented by two students from FRM. However, the majority of 128 respondents, seventy-one students (55,56%), agreed that ICT offers rich resources for native speakers of the English language and that this has been a huge opportunity to practice speaking skills related activities. 22 students out of 71 who opted to agree were from FWT,

while 8 of them were TTM students. On the other hand, 39 respondents strongly agreed with the statement. This translates into (30.46%). Yet, it communicates a deep fact that a high portion of the sample recognizes the benefit of ICT as a hub of rich resources for native speakers of the target language, which helps them to enhance their speaking proficiency. The findings are presented in the below table (8).

Moreover, table 6 shows that the largest group of 67 students (52.34%) agreed that they pay more attention when speaking lessons involve the use of ICT. 22 of them were students from the FWT program, while 7 of them were TTM students. At the other extreme, 43 students, making up 33,59% of the entire sample, were reported to strongly agree with the above-stated item, whereby 11 of them were from TDM while 5 were from TTM. In addition, the smallest group of 3 students (2.34%) strongly said that they could not pay more attention when speaking lessons involved the use of ICT. Two of the three students who opted to go against the statement were from FWT.

Benefits of students using instructional technologies towards speaking proficiency enhancement per age category

Table 9. Benefits of students using instructional technologies towards speaking proficiency enhancement per age category

Learning speaking with ICT enables me to practice speaking anytime.						
Age	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
>32	0	1	0	0	2	3
17-21	3	1	3	7	5	19
22-26	5	2	6	42	40	95
27-31	0	0	2	7	2	11
Total	8	4	11	56	49	128

Using ICT when learning speaking helps me to talk to other people more freely.						
Age	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
>32	0	0	0	0	3	3
17-21	3	0	2	10	4	19
22-26	6	2	8	38	41	95
27-31	0	1	0	6	4	11
Total	9	3	10	54	52	128
ICT encourages and motivates me to speak up.						
Age	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
>32	1	0	0	0	2	3
17-21	1	0	4	9	5	19
22-26	1	2	6	44	41	94
27-31	1	1	0	4	5	11
Total	4	3	10	57	53	127
With technology, you can imitate the sounds and rhythms of the target language without the assistance of explicit instruction						
Age	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
>32	1	0	0	0	2	3
17-21	0	1	2	10	6	19
22-26	2	1	16	46	30	95
27-31	0	2	3	3	3	11
Total	3	4	21	59	41	128
ICT offers rich resources of native speech as good models.						
Age	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
>32	0	0	0	0	3	3
17-21	1	0	3	8	7	19

22-26	1	1	8	57	27	94
27-31	0	1	2	6	2	11
Total	2	2	13	71	39	127
I pay more attention when speaking lessons involve the use of ICT						
Age	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
>32	0	0	0	1	2	3
17-21	1	1	1	11	5	19
22-26	3	2	8	49	33	95
27-31	1	0	1	6	3	11
Total	5	3	10	67	43	128

The researcher wanted to assess whether the variables ages of respondents and statements in table 9 are associated with each other. The overall results in table (9) clearly show that the majority of the respondents participating in this study were aged between 22-26 years old respectively. In fact, the highest proportion of 56 (43.75%) informants of the total sample who agreed that learning speaking with ICT enabled them to practice speaking anytime. Among this category, 42 out of 56 informants were in range of 22-26 years old. Moreover, 40 students out of 49 who strongly agreed with the above statement were also aged between 22-26 years old. This indicates that the majority of respondents were in that range of ages.

Regarding whether the using ICT when learning speaking helped the participants to talk to other people more freely, the majority of respondents agreed that they have managed to talk to each other freely due to the use of ICT in speaking related activities. 54(42, 18%) agreed while 52 (40.62) of respondents strongly asserted the statement. As far as age category is concerned, 38 respondents who

agreed with the above item were reported to be aged between 22-26 while 41 out of 52 who strongly stated that they talked freely to each other through the use of ICT during speaking sessions were also aged between 22 and 26. However, the minority number of 3 (2.34%) respondents claimed that ICT didn't abetted them to speak freely to the others. 2 of them were also aged between 22 and 26. Where is impact?

I also asked informants if ICT has encouraged and motivated them to speak up. The reason of this statement was to know if age matter when it comes to using ICT as motivation forces to speak up. The findings demonstrated that 44 out of 57 (44.53%) respondents who agreed that ICT encouraged them to speak up were aged 22-26 years. On the same note, 41 of 53 (41.40%) respondents strongly agreed with the statement and were between 22-26 years. On the other hand, 59 (46.09%) respondents asserted they could imitate the sounds and rhythms of the target language without the assistance of explicit instruction because of using technology and 46 of them were reported to be between 22-26 years old. At the other extreme, 30 of 41 (32.03%) respondents who strongly agreed with the statement were aged between 22 and 26.

Moreover, the highest proportion of 71 (55.46%) respondents claimed that ICT could offer rich resources of native speech as good models. Among them, 57 informants were aged between 22-26 years while 6 (4.68%) were between 27-3. Surprisingly, no respondent aged >32 agreed with the statement. Nonetheless, 27 out of 39 (30.46%) respondents who strongly proclaimed the statement were between 22-26 years old while 3 of them were aged >32 years old. The lowest number of 1 respondent aged between 17 and 21 strongly declared that ICT didn't offer rich resources of native speech as good models.

Lastly, 67 (52.34%) students, emphasized that they have paid more attention when speaking lessons involved the use of ICT. Respectively, 49 making up 38.28% were between 22-26 years old. On the same note, 27 out of 39 (30.46%) of respondents who strongly asserted the statement were aged between 22-26.

4.2.3. Issues related to technology access for both students and lecturers

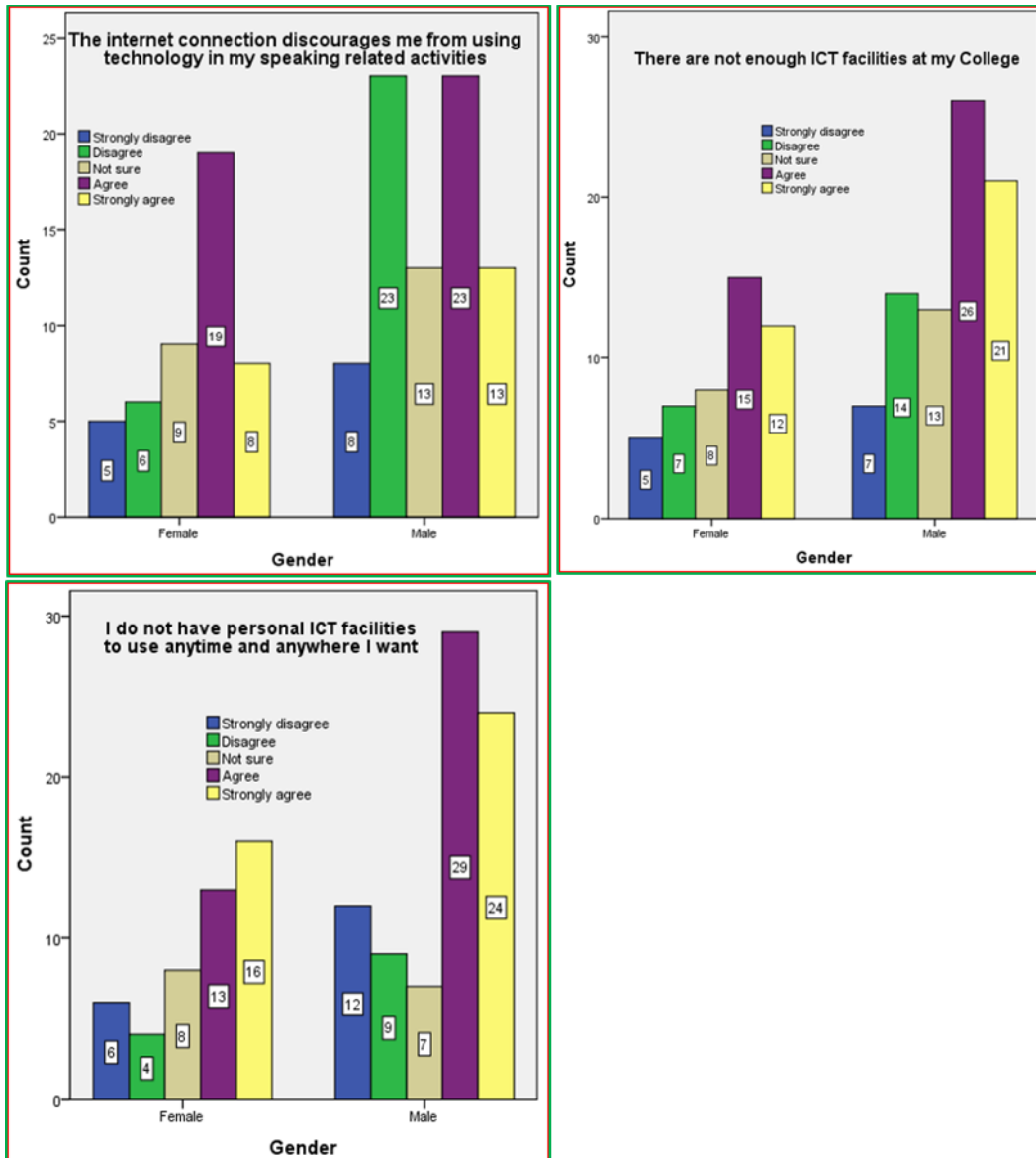


Figure 3. Issues related to technology access for students by gender category

A large number of interviewed students were males (81) equivalent to 67% while the number of females was 47% (33). Concerning the first question as it is tabulated below, Forty-two (42) corresponding to 33% of respondents agreed that the internet connection discourages them from using technology in their speaking related activities. Among from them, males over-numbered females since their proportion equivalent to 58% is high.

Concerning the statement two “There are not enough ICT facilities at my college”, the highest proportion of the respondents (41) corresponding to 32% agreed that they do not have enough ICT facilities at their College. Their agreement upon to this statement was also asserted by 33 respondents, equivalent to 27.78% who strongly agreed with the statement. They do not have personal ICT facilities. This is the highest.

Surprisingly, the highest proportion 42 of the total respondents, equivalent to % stated that they do not have personal ICT facilities to use anytime and anywhere they want. This is of no big difference with the 40 who strongly agreed with the statement. On the other hand, the lowest number of respondents (13) were found to disagree with the statement.

Technological accessibility issues for students per programs

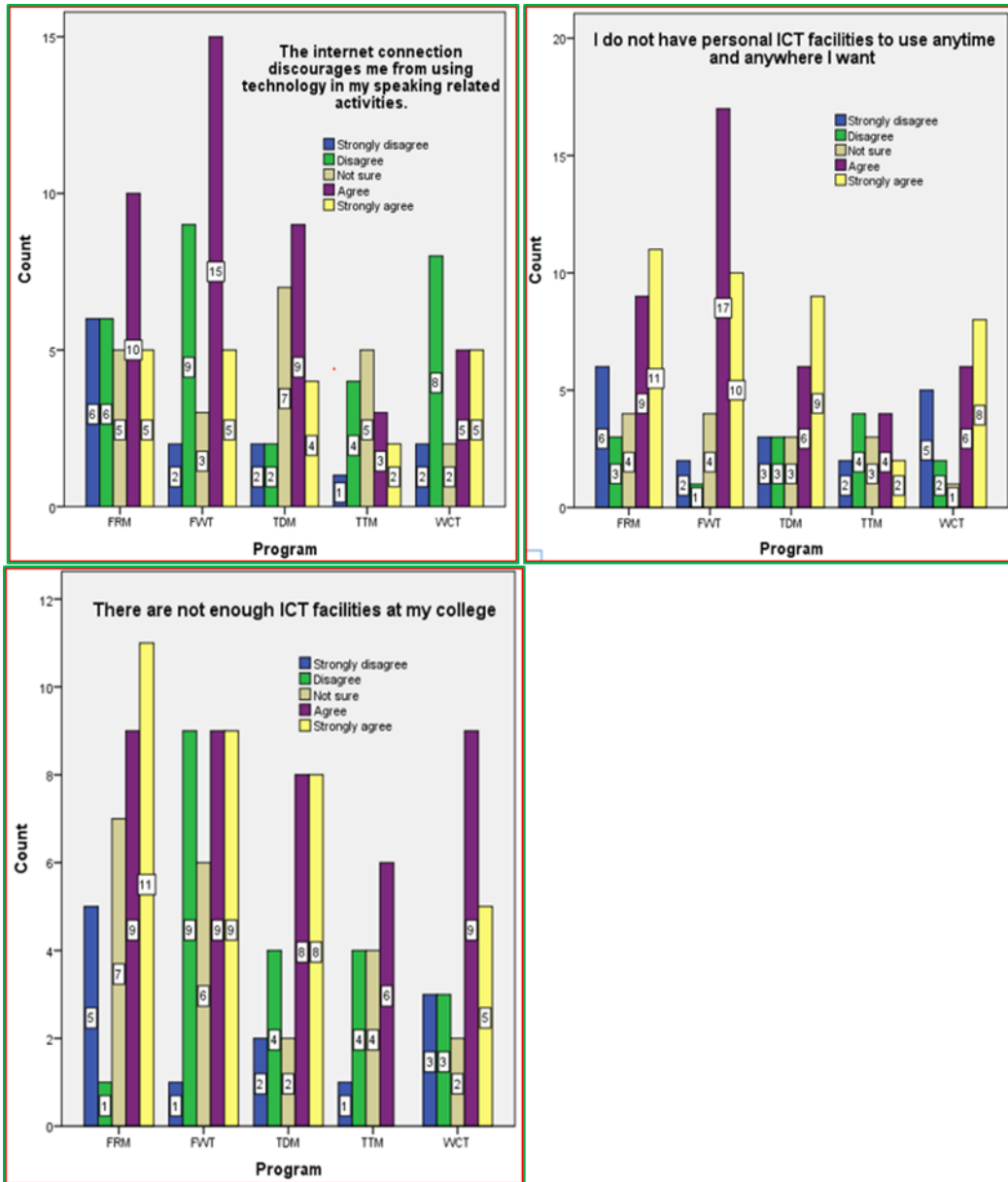


Figure 4. Issues related to technology access for students per programs

The results in figure (4) clearly demonstrated that approximately 42 students out of 128 agreed that the internet connection discourages them from using

technology in their speaking related activities. As far as programs are concerned, among these 42 students, 15 are from the program of Forest Engineering and Wood Technology. This implies that this group are negatively affected by internet connectivity during carrying out their speaking related activities compared to other programs. On the other hand, 29 respondents were reported to disagree with the selected statement. 8 from them, which is the highest proportion, are from the program of Wildlife and Conservation Technologies (WCT). This means that the students from this program are not distracted by internet during its use in speaking related activities.

Besides, approximately 32 % corresponding to 41 respondents out of 128 agreed that there are not enough ICT facilities at their college. 15 out of 41 who asserted the statement are from the program of FEWT whereas 6 of them, which is the minority of the group, comes from the program of TTM. At the other extreme, the minority of 12 respondents, equivalent to 9.4% reported that there are enough facilities at their college. This contrasts with what the majority of respondents stated. A big number of those who disagreed with the statement are five students from FRM whereas the lowest number of this group are 1 from TTM.

On the other hand, the findings in figure (4) below showed that the majority of the students agreed that they do not have personal ICT facilities to use anytime and anywhere they want. 42 out of 128 corresponding to 32.8% asserted the statement. The highest number from this group are 15 from the program of FWT whereas the lowest number are 2 students from TTM. Also, 40 students (31.2 %) of the targeted students strongly agreed that they do not own personal ICT facilities to use anytime and anywhere they want. From the results presented below, the highest

portion who agreed with the above statement are 17 from FWT. On the other hand, the lowest portion is 4 students from TTM. For those who strongly agreed that they do not own personal gadgets to use anywhere, 10 out of 40 students are from FWT whereas 2 are from TTM. Still, a numerical minority of 13 respondents (10.15%) has indicated that they have personal facilities to use anywhere they are. The highest number of them are 4 from TTM whereas 1 respondent out of 13 is from FWT. In comparison, 82 respondents strongly/agreed that they lack personal gadgets to use anywhere they want. This translates into (64.06%). On the other hand, 13 of the target respondents (10.15%) have opted for the opposite statement.

4.3. Analysis of lecturer's interview

The interview was conducted with four English and Communication skills lecturers from Rwanda Polytechnic, Kitabi college. They were interviewed for 15 to 20 minutes per each to explore their personal perceptions and challenges of integration of ICTs to enhance their teaching English speaking classes as well as their students' speaking proficiency development. All interviews were conducted individually and in comfortable settings. The interview consisted of eight open-ended questions with no choices, allowing the lecturers to respond and justify their answers, as well as provide more information if necessary.

4.3.1. The use of ICT tools to improve speaking skills in class

All the four lecturers agreed with the posed question, which means they use these technological tools every day in their personal and professional lives.

It is principally concluded that English lecturers do believe that ICT supports their teaching and learning processes in the English-speaking classrooms. Some extracts from the respondents are as below (EL refers to an English Lecturer):

EL1: "...I agree that ICT are powerful tools of teaching. Compared to printed books, ICT are more interesting. The students will not feel bored when learning English. For example, students can directly watch conversation videos and find many pictures related to the lesson. ICT makes teaching time efficient and makes teaching easier. If we do discussions using ICT, the information that we get is more varied. It makes discussion easier."

EL4 added "It is easier to teach with ICT. One reason for this is that we know that some students learn better through visual or audible cues, which they can obtain through technology."

4.3.2. ICT as a motivating tool for students in English speaking class

All of the lecturers believed that EFL students had good views regarding the usage of ICT since technology has such a strong impact on them outside of the classroom that it keeps them engaged inside.

It was also evidenced by EL4 who declared that ICT acts like a catalyst in English speaking sessions. For him, With ICT, students can watch videos that are closer to real life presentation compared to printed books.

EL4: "...yes, ICT tools work on students' interest. Visualization and deliverance of some contents are easier which makes learners learn quickly..."

4.3.3. English speaking abilities improvement in students after using ICT tools

This question was answered affirmatively by all teachers, indicating that they observe some improvements in their students after using ICT tools in the classroom.

EL3 stated “... after using audio-visual aids, I noticed that my students became more active and engaged in conversations on purpose, they also became motivated and focused and demonstrated a positive reaction towards the used tools....”

Therefore, it should be concluded that students must practice listening to imitate the language in order to build speaking abilities. ICT devices provide a variety of listening options. Oral expressiveness is thought to be significantly linked to listening capacity in humans, and it can be altered with audio ICT techniques. EFL students will learn more about how to participate, communicate, and interact with one another in English by using ICT resources such as headphones, speakers, and data-shows.

4.3.4. Difficulties related to the use of ICT materials inside the speaking class

The participant lecturers elaborated on their point of view. They also virtually unanimously agreed on the reasons why using ICT tools can be difficult at times. For example, they stated that the first and most important cause would be a lack of materials (computers, projectors, speakers, etc.), in which case they would occasionally have to utilize their own personal equipment. Another explanation could be a slow or non-existent Internet connection, or a lack of electricity. They also highlighted the fact that some students confront a variety of challenges, including, but not limited to, a lack of personal technical devices and a lack of ICT facilities at the college.

For instance, EL2 reported that the access to these tools is not always available, which necessitates more labor.

EL2 highlighted "... there are insufficiency of ICT tools and infrastructure in general at the college. We have one ICT Lab with only 70 computers even if all of them are not in a good condition. This does not serve all the target students and lecturers. This hinders the purpose it would serve...."

EL1 added "... ICT facilities are accessible but still limited. For example, the students have to wait for the chance to use the computer library. It would be more efficient if the college provides sufficient ICT infrastructure proportioned to its students' number. We also have a problem of low Internet connection. I often waste time just to deal with internet issues, sound systems etc. So, luckily, I have the tools I need myself. I always bring a laptop, my own router to support me in a case, and a set of loud speaker. But not all students can afford that. More infrastructure is needed if the college wants to make the most use of ICT in teaching...."

4.3.5. The use of ICTs as a main teaching tool in English speaking class

The purpose of this question was to determine whether or not English lecturers who utilize ICT in the classroom consider it a key teaching tool. After collating the responses, three lecturers replied "yes," stating that ICT provides many and various sources of information in a short period of time and that students should have access to technology. It is significant in the way it supports lecturers in arranging the course and designing lesson presentations to optimize student motivation. It also adds to the energy and brightness of the classroom. However,

the other respondent stated that they do not have to be slaves to technology in order to modify how they teach and that they must be flexible enough to satisfy the needs of conventional teaching. ICT tools and techniques at school are accessible but still limited.

For example,

[... the teachers have to wait for the chance to use the projector. It would be more efficient if the school provides one projector for each class so we can use it properly without wasting time to wait for a projector from each other. We also have a problem of low Internet connection. I often waste time just to prepare the tools provided by the school. So, luckily, I have the tools I need myself. I always bring a laptop, a small projector, a set of loud speaker and any kind of cables in my car. But not all teachers can afford that. More money is needed if the school wants to make the most use of ICT in teaching...]

4.3.6. Lecturers' suggestions on how the use of technologies improve speaking skills

Different kind of technological tools were reported to be used by English lecturers during the English speaking sessions. They include computer, projector, internet, and speakers among from others. These ICTs play a great role in improving speaking proficiency of the students. EL4 stated as follow:

They help a lot in presenting content from which students acquire originally the content and that improves their fluency.

4.4. Discussions

In this section, the primary findings are examined in connection to the literature and research done previously. The discussion is guided by the study's objectives. I will go over the demographic data of the respondents and show how it relates to the study's conclusions.

The present study shows both students and lecturers' positive perceptions of using ICT as a learning or teaching tool to improve English language speaking abilities. ICT has been an essential ingredient in today's English speaking related activities.

This study assessed differences in students' perceptions towards the use of ICT as a learning tool to improve English language speaking abilities as per program category, and found that the perceptions and attitudes on the use of ICTs in improving their speaking proficiency varies from one program to the other. The overall results clearly show that the majority of the people who took part in this study were from the program of Forest Engineering and Wood Technology. For instance, 17 out of 69 students who strongly declared that they could successfully manage their speaking activities with technology integration within the time constraints are from the program of FWT.

The ICT use in English speaking class potentially reduces time and efforts when carrying out speaking related activities. The current study proclaims that the participants could successfully manage their speaking activities with technology integration within the time constraints. This is demonstrated by 69 (59.90 percent) of the total sampled subjects strongly agreeing and 45 out of 128 respondents agreeing with the statement. The results show a well-correlated agreement with Khan (2011) whose findings assert that the use of ICTs in classroom reduced the time that is necessary for achieving information for students. This is not only for students but also for lecturers. On the hands of lecturers, ICT allows them to cover speaking sessions within scanty time. For example, in a large class, instead

of recording every single student talking on a particular topic, they might ask their students to record themselves and submit the recording within the allotted time. There are some benefits that can be mutual for both students and teachers, such as saving time and effort.

This study also evaluated participants' perceptions on the use of online audio and video tools in relation to their English language speaking proficiency, and found that the selected relevant audiovisual materials are very helpful to enhance their speaking abilities. The majority respondents of 77 (60.15 percent) strongly agreed that when their lecturers give them a speaking activity, they often use various ICT tools and websites such as YouTube, Ms Teams, and MP3 players among from others. Besides, it was also found that the ICTs offer a great opportunity for every student to select the audio-materials which accommodates their learning style. This corroborates well with assertiveness of Fu (2013) who believes that, the integration of technologies in learning supports access to online resources that use a powerful combination of audio and video prepared by specialists in a centralized facility and delivered to individuals or groups by technology. They further added that these online resources are rich and beneficial to all students to personalize their learning basing on their need and speed or to choose ways that suit their unique learning styles. Moreover, internet is a key technological component that allows people navigate and have access to the aforementioned online audiovisual materials. Its potentiality in offering or creating conducive language learning environment which has rich digital interactive resources for oral communicative proficiency enhancement is fundamental (Young, 2003).

On the same note, it was also evidenced by English lecturers that ICT acts like a catalyst in English speaking sessions. It was found that with ICT, students can watch videos that are closer to real life presentation compared to printed books. Similarly, Madiyoh, Hidayanto, and Putro (2018) looked into how watching

movies affects the development of learners' speaking abilities. It was discovered that students improved significantly indicating that audio-visual media can be employed as a teaching tool to teach speaking skills.

This result agrees with connectivism theory which accommodates the digital age. As put by Siemens (2005), this theory encourages the use of technologies because these technological tools provide a number of opportunities in teaching and learning. It is adding an assistance in in-class session.

The results of this study also highlight the benefits of students in using instructional technologies towards their speaking proficiency enhancement (e.g., enabling them to practice speaking anytime, talking to other people more freely, encouraging and motivating them to speak up, imitating the sounds and rhythms of the target language without the assistance of explicit instruction, and paying more attention). They clearly demonstrated that approximately all students have enhanced their speaking proficiency due to using instructional technology in their learning.

In fact, the highest proportion of respondents (42.18%) asserted that learning speaking through the use of ICT helped them talk to other people more freely while 40.62% students strongly agreed the aforementioned statement. Shamsudin, & Nesi (2006) proclaim that the willingness to communicate reflects students' confidence in language. Students frequently refuse to use English because they are embarrassed by their lack of fluency. In other words, when learning or practicing speaking activities by using the traditional mode of teaching, students fear to carry out this activities because of not being comfortable. However, once integration of technology is relevantly accommodated, it increases the level of confidence and freedom to interact with others. Clément, Noels, & Deneault (2001) suggest that when the interactions

were positive and enjoyable, students were inspired to speak freely. Be it outside or inside the classroom, they interact more frequently in the foreign language”.

Furthermore, the results of the current study revealed that the integration of ICT has a positive impact on their speaking proficiency as it encourages and motivates the participants to speak. This is proven by 44.5% of the targeted students who reported that they were motivated and encouraged to speak up because of using ICTs. Our results agree with Hennessy (2005) who pointed out that, “The introduction of ICTs could serve as a catalyst for teachers and students to experiment with new teaching and learning strategies”.

Integration of instructional technologies in improving speaking proficiency has shown great benefit since it allows students to independently develop their oral communicative ability without the assistance of their lecturers. Fifty-nine students making up 46.09% of the whole sample confirmed that they could imitate the sounds and rhythms of the English language without any assistance since technology offers rich resources of native speech as good models. Onyon (2012) says “Self-directed learning is demonstrated by students who master academic content, think critically and analytically, and communicate and collaborate effectively.” In other words, ICTs encourages self –directed practice of speaking related activities without the necessity of having facilitation from their lecturers. For technology provides variety rich authentic resources that might improve one’s speaking proficiency such as podcast, videos, and audios that can be accessible from anywhere and anytime, this alleviates student’s ownership of enhancing their oral communicative segment.

Besides, seventy-one students (55.56%) declared that ICT offers rich resources for native speakers of the English language and that this has been a huge opportunity for them to autonomously practice speaking skills related activities

and later on enhance their speaking proficiency. The results are supported by Pourhossein (2013)'s views that technology has the potential to drastically alter language instructional techniques. ICT can provide learners with previously unimagined opportunities to practice English and immerse themselves in authentic language environments. Learners can use Skype Chat or social networking sites like Facebook or Twitter for oral practice in this situation.

Despite positive attitudes and perceptions and benefits of using ICT to enhance the speaking proficiency of the participants, this study also examined the issues that might hinder the effectiveness of these technological inventions. It found that the majority of students proclaimed that they do not have personal ICT facilities to use whenever and wherever they want. The statement was supported by 42 out of 128 people (32.8%). Besides, the findings assert that English lecturers experienced some challenges. They stressed the same reasons why using ICT tools can be difficult. They noted that there are instances when the internet is slow or unavailable, or when there is no power. They also elaborated on the reasons why some learners suffer from a variety of issues including but not limited to not having personal technological gadgets and insufficiency of ICT facilities at the college. Similarly, the access limitation, which refers to insufficient equipment or internet connectivity, has a detrimental impact on the application of educational technology (Warschauer et al., 2014). They went on to say that many students might lose interest in technology when they don't have consistent and reliable access to ICT facilities.

The research also wanted to assess if the ownership of personal ICT facilities is influenced by the program. According to the findings, for instance, the program of Forest Engineering and Wood Technology has the most students without personal ICT facilities with 15, while Tours and Travel Management has the fewest, with

only two. The results imply that what areas of specialization might be some factors influencing students to own their personal ICT facilities.

Contextually, students from the department of tourism are supposed to use a number of software in their phones, tablets, laptops etc. They are also supposed to be technology friendly since they deal with people from different high developed country whereby they book online, chat online, use google maps, google translator etc. This imperatively recommend them to buy some ICT facilities to be updated. On the other extreme, students from FWT are wood based technicians. They spend most of their time in woodworking workshop using the fixed machines. They rarely frequent technologies intended to improve communicative ability. Given that their area is mostly done in the wood workshops and that they rarely frequent people who speak English, the FWT students are not eager in practicing English-speaking skills. This also causes the low level of ownership of ICT personal devices that intent to improve their speaking proficiency language. However, they need to improve on their English proficiency even if they mostly deal with wood work and perhaps think that they do not need to interact quite often. The reason would be that in their workshops, they deal with modern technology (machines) and they might need to operate them once they malfunction. They would need to watch tutorial videos on YouTube. They would also need to work on a trendy wood design, which requires them to take a couple of hours and learn through videos or even attend trainings organized or conducted in English. All of these require speaking and interaction. Moreover, as students who are to graduate at the level 7 with the responsibility of being a supervisor or a manager, they need to interact with different stakeholders and partners in certain company whereby English language would be imperative.

4.5. Summary

This chapter presented, analyzed data, and discussed the results. It showed that both students and lecturers have positive perceptions of using ICT as a learning or teaching tool to improve English language speaking abilities. The ICT use in English speaking class potentially reduces time and efforts when carrying out speaking related activities. The current study proclaimed that the participants could successfully manage their speaking activities with technology integration within the time constraints. This result agrees with connectivism theory which accommodates the digital age. As put by Siemens (2005), this theory encourages the use of technologies because these technological tools provide a number of opportunities in teaching and learning. It is adding an assistance in in-class session. The study also highlighted the benefits of students in using instructional technologies towards their speaking proficiency enhancement (e.g., enabling them to practice speaking anytime, talking to other people more freely, encouraging and motivating them to speak up, imitating the sounds and rhythms of the target language without the assistance of explicit instruction, and paying more attention). However, this study also examined the issues that might hinder the effectiveness of these technological inventions.

CHAPTER V: CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

The aim of this chapter is to present the conclusions drawn from the results of the analysis of the students' questionnaires and lecturers' interviews and then make recommendations for further research.

The objectives of the study are restated as follows:

- To assess the students' and lecturers' attitudes towards the use of ICT as a learning instrument to improve English language speaking abilities.
- To assess the benefits of students using instructional tools to improve their speaking abilities.
- To look into issues relating to students' and instructors' access to technology.

The following conclusions emerge from the data

Referring to the first objective, this study examined students and English language lecturers' perspectives of using ICT as a learning tool to increase English language speaking abilities by program category, and discovered that both students and lecturers have positive attitudes toward using ICT as a learning or teaching instrument to develop English language speaking abilities. It was found that using ICT to teach and learn English speaking skills has the potential to save time and effort while performing speaking-related activities. The study shows that students are able to properly manage their speaking activities while adhering to time limits by incorporating technology. Besides, lecturers reported that integrating ICT in their teaching English speaking related lessons has eased the

activity. In this sense, students can cover speaking sessions in a short amount of time. Instead of recording every single student speaking on a specific topic in a huge class, lecturers might ask students to record themselves and submit the recording within the specified time.

Using online audio and video resources in relation to their English language speaking competency were also evaluated in this study. The relevant audiovisual materials are highly beneficial in improving the students' speaking proficiency. These online resources have been shown to be advantageous to all students in terms of personalizing their learning based on their needs and speed, as well as selecting learning methods that suit their individual learning styles. Besides, the study shows that internet is a significant technological component that helps users explore and have access to the aforementioned online audiovisual materials. Its potentiality in delivering or establishing favorable language learning environment which contains rich digital interactive resources for oral communicative skill enhancement is vital.

In terms of the second objective, the study findings indicated the benefits that students get in using ICT towards their speaking proficiency enhancement (e.g., enabling them to practice speaking anytime, talking to other people more freely, encouraging and motivating them to speak up, imitating the sounds and rhythms of the target language without the assistance of explicit instruction, and paying more attention). In addition, English language lecturers who participated in this study convincingly declared that approximately all students had enhanced their speaking skills due to using instructional technology in their study. Furthermore, it was also proven by English lecturers that ICT functions like a stimulant in English speaking sessions. It was determined that with ICT, students may watch films that are closer to real life presentation compared to written texts. Viewing movies affects the development of learners' speaking ability. It was revealed that

students improved greatly demonstrating that audio-visual media can be implemented as a teaching tool to develop speaking skills, legitimate material is utilized. Hence, integration of instructional technology in developing speaking proficiency has demonstrated considerable usefulness since it allows students to autonomously build their oral communicative skills without the assistance of their lecturers.

Finally, despite positive perceptions and benefits of using ICT to enhance the speaking skills of the participants, this study also investigated the challenges that can hamper the efficiency of these technological tools. It was found that the ownership of ICT facilities is a major challenge for participant students. The study also discovered that certain students confront a number of obstacles including but not limited to not having personal technological gadgets and lack of ICT facilities at the college. The majority of them assert that they do not have personal ICT facilities to utilize wherever and whenever they wish. Besides, the findings revealed that English lecturers had also certain obstacles. They mentioned that they periodically experience slowness or lack of internet access, as well as a lack of energy.

5.2. Recommendations

The current study revealed that integrating ICT into teaching and learning English speaking skills impacts efficiently and effectively the oral proficiency of students. Both students and lecturers showed positive perceptions towards the use of ICT as a learning instrument to improve English language speaking abilities. The study also revealed a number of benefits of using ICT tools to improve their speaking abilities. Despite positive perceptions and benefits of using ICT to enhance the speaking skills of the participants, this study also investigated and identified some

issues related to the students' and lecturers' access to technology that can hamper the efficiency of these technological tools.

As a result, it is postulated and suggested that

- More researches should be undertaken on the impact of ICT on developing speaking proficiency of students in TVET school in Rwanda.
- English language lecturers should effectively use ICT as a teaching tool to develop their English language speaking abilities.
- Audio-visual media should be implemented as a teaching tool to develop English speaking skills as well.
- Students are encouraged to own their personal ICT facilities for efficient use of them to improve their English speaking proficiency.
- Due to the lack of enough ICT facilities at the college, the college authorities should consider the importance of ICT as a teaching and learning tool and increase ICT infrastructure to serve the purpose.
- What about extending the duration of English class which is a problem to learn English and now you keep quiet? Do you think ICT is the best solution to improve speaking skills? I did not find anything about how ICT can enhance speaking skills vis-à-vis the working of the technologies themselves in this thesis. I am worried for readers about that.

LIST OF REFERENCE

- Alharbi, H. A. (2015). Improving students' English speaking proficiency in Saudi Public Schools. *International Journal of Instruction*, 8(1), 105–116. <https://doi.org/10.12973/iji.2015.818a>
- Benson, P. (2011). *Autonomy in Language Learning* (2nd ed.). Harlow: Longman.
- Braun, B. (2019). Building global institutions: The Diffusion of Management Standards in the World Economy – an institutional perspective. *Linking Industries Across the World*, 3–28. <https://doi.org/10.4324/9781351153928-2>
- Carrió-Pastor, M. L. (2019). Teaching language and teaching literature in Virtual Environments. (2019). <https://doi.org/10.1007/978-981-13-1358-5>
- Chen, X. B. (2013). Chiu, T., Liou, H. & Yeh, Y. (2007). A study of web-based oral activities enhanced by automatic speech recognition for EFL college learning. *Computer Assisted Language Learning*, 20 (3), 209– 233.
- Cohen, J. (2007). *Statistical Power Analysis for the behavioral sciences*. <https://doi.org/10.4324/9780203771587>
- Creswell, J. W. (2003). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson/Merrill Prentice Hall.
- Dang, X. T. (2013). *Ict in foreign language teaching in an innovative university in Vietnam: Current practices and factors affecting Ict use*.
- De Vos, A.S., Strydom, H., Fouche, C. B and Delpont, C.S.L. (2002). *Research at Grassroots. For the Social Sciences and Human Services Professions*. 2nd Ed. Pretoria: Van Schaik.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. New York: Oxford University Press.

- Driscoll, M. (2000) psychology of learning for instruction. - references - scientific research publishing. (n.d.). Retrieved February 10, 2022, from [https://www.scirp.org/\(S\(i43dyn45teexjx455qlt3d2q\)\)/reference/ReferenceSPapers.aspx?ReferenceID=1173143](https://www.scirp.org/(S(i43dyn45teexjx455qlt3d2q))/reference/ReferenceSPapers.aspx?ReferenceID=1173143)
- Farahnaz, R. N, Parviz, A, Nazila, K. (2013). The Effect of Using Jigsaw to Enhance Female Iranian Intermediate EFL Learners“ Oral Proficiency. *Australian Journal of Basic and Applied Sciences*, 7(9), 315-326.
- Finger, G., & Trinidad, S. (2002). ICTs for learning: *An overview of systemic initiatives in the Australian states and territories*. *Australian Educational Computing*, 17(2), 3-14.
- Freina, L. and Ott, M. (2015)). Immersive virtual reality for virtual and Digital Twins: A Literature Review to identify state of the art and Perspectives.
- Fu, S. J. (2013). ICT in Education: A Critical Literature Review and Its Implications. *International Journal of Education and Development Using Information and Communication Technology (IJEDICT)*, Vol. 9(Issue 1), 112–125.
- Fulcher, G. (2014). Testing second language speaking. <https://doi.org/10.4324/9781315837376>
- Garcia, E., Brown, M., & Elbeltagi, I. (2013). Learning within a Connectivist Educational Collective Blog Model: A Case Study of UK Higher Education. *Electronic Journal of e-Learning*, 11(3).
- Ghanatabadi, F. (n.d.). Impact of entrepreneurs on the process of internationalization of small and medium-sized enterprises in Iran. *The Process of Internationalization in Emerging SMEs and Emerging Economies*, 111–144. <https://doi.org/10.4337/9781781003190.00012>
- Han, J. (2012). Emerging Technologies: Robot Assisted Language Learning. *Language Learning & Technology*, 16(3), 1–9.

- Hazaea, A. N., & Alzubi, A. A. (2016). The effectiveness of using Mobile on EFL learners' reading practices in Najran University. *English Language Teaching*, 9(5), 8. <https://doi.org/10.5539/elt.v9n5p8>
- Hennessy, S. (2005). *Emerging teacher strategies for supporting*. Cambridge, UK: University of Cambridge.
- Higgins. (2015). Organizational research determining appropriate sample size for survey research. *Information technology learning*, 19(1);43-50.
- Holden, C. L., Sykes J. M. (2013). Complex L2 Pragmatic Feedback Via Place-based Mobile Games. In N. Taguchi & J. M. Sykes (Eds.). *Technology in Interlanguage Pragmatics Research and Teaching* (pp. 155–184). Amsterdam, Philadelphia: John Benjamin's publishing.
- Hsu, Mei-Hua (2010). Proposing an interactive speaking improvement system for EFL learners. *Expert Systems with Applications*, 37 (1), 414-418.
- Januszewski, A., & Molenda, M. (2008). *Educational technology: A definition with commentary*. New York: Routeledge.
- Kagwesage, A. M. (2013). Coping with English as Language of Instruction in Higher Education in Rwanda. *International Journal of Higher Education*, 2 (2): 1 – 12.
- Khan, S. A., Bhatti, R., & Khan, A. A. (2011). Use of ICT by students: A survey of faculty of education at IUB. *Library Philosophy and Practice*, 1.
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, 6(5), 26. <https://doi.org/10.5430/ijhe.v6n5p26>
- Kothari, C. P. (2004). *Research Methodology* New Delhi: Wiley Eastern limited
- Kuppuraj, K (2017). *ICT to Enhance Speaking Skills*. Sri Krishna College of Technology.
- Lai, E.R. (2011) *Motivation: A Literature Review*. Pearson Research Report.
- Li, S., Chen, Y., Whittinghill, D., & Vorvoreanu, M. (n.d.). A pilot study exploring augmented reality to increase motivation of Chinese college

- students learning English. *2014 ASEE Annual Conference & Exposition Proceedings*. <https://doi.org/10.18260/1-2--19977>
- Madiyoh, R., Hidayanto, N., & Putro, P. S. (2018). The Effectiveness of Authentic Short Movies in Enhancing Students Speaking Skill.
- Mahadzir, N. N. (2013). The use of augmented reality pop-up book to increase motivation in English language learning for National Primary School. *IOSR Journal of Research & Method in Education (IOSRJRME)*, 1(1), 26–38. <https://doi.org/10.9790/7388-0112638>
- Malhotra, & Birks. (2003). *Marketing research: An applied approach: 3rd european edition*. ePrints Soton. Retrieved July 7, 2022, from <https://eprints.soton.ac.uk/37070/>
- Mohajan, H. K. (2017). Two criteria for good measurements in research: Validity and Reliability. *Annals of Spiru Haret University. Economic Series*, 17(4), 59–82. <https://doi.org/10.26458/1746>
- Navarro Romero. B (2009). Improving Speaking Skills. *Servicio de Publicaciones de la Universidad de Alcala*.
- Orodho, J. A. (2015). Policies on free primary and secondary education in East Africa: Are Kenya and Tanzania on course to attain education for all (EFA) goals by 2015? *IOSR Journal of Humanities and Social Science*, 19(1), 11–20. <https://doi.org/10.9790/0837-19151120>
- Piaget, J. (2013). The construction of reality in the child. <https://doi.org/10.4324/9781315009650>
- Reinders, H., Lakarnchua, O., & Pegrum, M. (2015). A trade-off in learning: Mobile augmented reality for language learning.
- Richard, J. (2013). Developing theory from practice. *Enhancing Practice through Classroom Research*, 143–157. <https://doi.org/10.4324/9780203146200-17>
- Shamsudin, S., & Nesi, H. (2006). Computer-mediated communication in English for specific purposes: A case study with computer science students at

- Universiti Teknologi Malaysia. *Computer Assisted Language Learning*, 19(4-5), 317–339. <https://doi.org/10.1080/09588220601043164>
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3-10.
- Smith, K., & Craig, H. (2013). Enhancing the autonomous use of call: A new curriculum model in EFL. *CALICO Journal*, 30(2), 252–278. <https://doi.org/10.11139/cj.30.2.252-278>
- Sullivan, P. (2001). Gender differences and the online classroom: Male and female college students evaluate their experiences. *Community College Journal of Research and Practice*, 25(10), 805–818. <https://doi.org/10.1080/106689201753235930>
- Thrun, S. (2004). Toward a framework for human-robot interaction. *Human-Computer Interaction*, 19(1), 9–24. https://doi.org/10.1207/s15327051hci1901&2_2
- Tinio, V.L. (2002). ICT in Education: UN Development Programme. (Retrieved from <http://www.eprmers.org> on January 2020)
- Toumi, M. (2015). Integrating ICTs to Improving EFL Learners' Speaking Skill. *Republic of Algeria: Mohamed Kheider University of Biskra*.
- Uwizeyimana, V. (2018). An Investigation into the Effect of Mobile-Assisted Language Learning on Rwandan University Students' Proficiency in English as a Foreign Language. *Stellenbosch: Stellenbosch University*.
- Warschauer, M., Zheng, B., Niiya, M., Cotten, S., & Farkas, G. (2014). Balancing the one-to-one equation: Equity and access in three laptop programs. *Equity & Excellence in Education*, 47(1), 46–62. <https://doi.org/10.1080/10665684.2014.866871>
- Young, R. (2003). Using technology tools in the public school classroom. *University of Wisconsin*
- Zhang, P., & Aikman, S. (2007). Attitudes in ICT Acceptance and use. In J. Jacko (Ed.), *Human-Computer Interaction, Part I* (pp. 1021-1030). Syracuse, NY: Springer-Verlag Berlin Heidelberg.

APPENDICES

1: Consent Form

Name of the study: The Impact of Integrating ICT on Students' English Speaking Proficiency Enhancement in Rwanda Polytechnic, Kitabi College
Researcher's name: Jean De La Paix MURAGIJIMANA
Address: University of Rwanda, College of Education
E-mail address: peomuragije55@gmail.com

Dear participant,

I am a student at the University of Rwanda, College of Education, pursuing a MEd English program. I invite you to join in this study and help me with my thesis. The aim of this study is to explore the impact of integrating ICT on students' speaking proficiency enhancement.

It is on a voluntary basis to participate in this study, and the data will be used only for scientific studies. The participant's profile will be kept confidential. If you need more information about the study, contact me via peomuragije55@gmail.com

If you accept to be a participant for this study, please sign this form.

This is a study in which I am voluntarily participating. I understand that the data I provide will be utilized in scientific investigations. (After signing the form, return it to the implementer.)

Participant's name:

Signature:

E-mail:

Phone:

Date: .../.../2022

2: Students' Questionnaire

The Impact of Integrating ICT on Students' English Speaking Proficiency Enhancement in Rwanda Polytechnic, Kitabi College

Dear participant,

My name is Jean De La Paix MURAGIJIMANA, and I am a researcher and student in the Master of Education in English Education at the University of Rwanda, College of Education. I am introducing you to the questionnaire below in order to collect data for my research topic, "**The Impact of Integrating ICT on Students' English Speaking Proficiency Enhancement in Rwanda Polytechnic, Kitabi College**". The purpose of this study is to explore the impacts of educational technology on improving English speaking ability of the level six students (A.Y 2020-2021) from all programs at IPRC Kitabi. Hence, you are kindly requested to express your thoughts on the use of educational technology in order to impact your speaking skills.

I absolutely guarantee you that the information you provide will be used solely for the purposes of this research, and that your responses will be kept strictly confidential.

Thank you for your assistance!

Section 1: Respondent personal identification

Please give sincere responses to the questions below.

1-Gender: Male Female

2- What is your age?

Between 17-21 21-25 25-30 30-more

3- Please specify your program?

- Tours and Travel Management
- Tourism Destination Management
- Wildlife and Conservation Technologies
- Forest Engineering and Wood Technology
- Forest Resources Management

Please indicate one choice for each of the following statements.

1=Strongly disagree, 2 =Disagree, 3 = Not sure, 4 =Agree, 5 = strongly agree

	1	2	3	4	5
Section II. The impact of instructional technologies on students' speaking abilities					
1. I take part in English speaking activities for ICT encourages me.					
2. Speaking is fun without ICT					
3. ICT helps me to learn speaking better, because I can					

see examples in pictures, in Video or other things that I can look at.						
4. I mess around more when I use technology to learn speaking skill.						
5. I can study longer without losing my concentration when using technologies to learn speaking.						
6. Learning to communicate using ICT has made me more aware of how to pronounce English sounds efficiently..						
7. ICT helps me to learn speaking better because I can listen to various examples that are given in sound.						
8. I pay more attention when speaking lessons involve the use of ICT						
9. Online audio and video tools (i.e., YouTube, Ms Teams, and MP3 players) are very helpful to enhance my speaking abilities.						
10. The variety of ICT tools used in learning speaking helped me.						
11. Using ICT to learn speaking helps me to express myself well.						
12. I usually use YouTube videos to improve my speaking skills						
13. using videos to learn speaking skills enables me to excel in pronunciation and speak fluently and freely						
Section III. The opportunities to practice speaking activities through the use of Instructional technology						

1. When using ICT, I find all speaking activities fascinating.						
2. Learning speaking with ICT enables me to practice speaking anytime.						
3. Learning speaking without ICT grasps my attention better.						
4. I like learning speaking with ICT because it helps me work better with students.						
5. Working with other students when using ICT in speaking helps me to learn better.						
6. Using ICT learning speaking helps me to finish tasks that sometimes would be difficult to finish without it.						
7. Using ICT when learning speaking makes me interested in study by helping me improve my speech performance.						
8. Using ICT when learning speaking helps me to talk to other people more freely.						
9. Doing speaking activities using ICT gives me a satisfying feeling of accomplishment.						
10. ICT is completely inappropriate to excise speaking activities.						
11. ICT encourages and motivates me to speak up.						
12. Tools such as video-conferencing also offer the opportunity to link to other people around						
13. Technology gives renders the advantage of communicating in real-time conversations with English speakers						

14. Due to Technology you can converse with native speakers right from your phone						
15. Through the use of technology, you can imitate the sounds and rhythms of the target language without the assistance of explicit instruction. can offer rich resources of native speech as good models.						
16. ICT offers rich resources of native speech as good models.						
17. Technology creates an environment that encourages communication and provides increased and more varied communicative opportunities to utilize oral skills.						
Section IV. students' observations in using instructional technologies to improve their speaking skills						
1. Speaking is more fun without ICT						
2. I find it easy to use ICT in my learning.						
3. I find it comfortable to use ICT in my learning because I have my own ICT facilities.						
4. With technology integration, I am able to efficiently manage my speaking activities within the allocated time.						
5. Using ICT to improve my speaking abilities distracts me.						
6. The internet connection discourages me from using technology in my speaking related activities.						
7. There are not enough ICT facilities at my college						

8. I do not have personal ICT facilities to use anytime and anywhere I want						
9. ICT use in class will be better if there is good internet connection.						
10. I do not have the courage to do an oral presentation using ICT tools						

Section V. Open Questions

Please answer the following questions briefly

1. Do you use technologies to improve speaking skills? Yes, or no, please elaborate.

2. Do you have access to technologies? What kind of technologies? Please give some specific reasons.

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.....

3. What is your experience in using ICT in English and communication skills in order to enhance your speaking proficiency?

.....

.....

.....

4. Please give us your suggestion on using technology tools to enhance speaking skills.

Thank you for your collaboration!

3. Lecturers' interview guide

The Impact of Integrating ICT on Students' English Speaking Proficiency Enhancement in Rwanda Polytechnic, Kitabi College

Dear lecturer,

My name is Jean De La Paix MURAGIJIMANA, a researcher and student in the Master of Education in English Education at the University of Rwanda, College of Education. I am introducing you to the questionnaire below in order to collect data for my research topic, " **Instructional Technology in Learning: The Impact of Integrating ICT On Students' Speaking Proficiency Enhancement** ". The main aim of this interview guide is to explore the extent to which the use of instructional technologies or integration of ICT tools can improve the speaking skills of the first year level six students (A.Y 2020–2021) at Integrated Polytechnic Regional College–Kitabi. I would be very grateful if you gave me time to share your experience of using instructional technologies in teaching speaking related lessons by answering the questions below.

I. Respondent's basic information

1. Gender:

a. Male

b. Female

2. Degree:

a. Bachelor

b. Master

c. Doctorate

3. How long have you been teaching English related courses?

.....years

II: Questions related to the impact of integrating ICT on students' speaking proficiency

1. Do you use ICT tools to improve speaking skills in your class?

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2. Do you notice any improvement in students after using ICT tools? How?

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3. Have you ever faced any difficulties inside the class using ICT related materials?

a. Yes

b. No

if yes, mention some

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.....

4. Do students seem motivated during the use of ICT tools.?

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5. What do you suggest concerning the use of technology to improve speaking skills?

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6. Please, list the kind of technology tools you use and how do they support to enhance your student English speaking proficiency?

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.....

7. Does using technologies contribute to improving speaking skills? Please specify How

.....
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.....

8. Please, give you suggestion on how to integrate the use of technologies to improve speaking skills.

Thank you for your collaboration!

RESEARCH AND INNOVATION UNIT

Rukara, 2nd February, 2022
Réf: 03/DRI-CE/014/EN/gi/2022

The Principal
IPRC-Kitabi
Nyamagabe district
Southern Province, Rwanda

Re: Research recommendation letter for Mr. Jean De La Paix MURAGIJIMANA

On behalf of the University of Rwanda-College of Education (UR-CE), I am pleased to introduce Mr. Jean De La Paix Muragijimana, a post-graduate student at the School of Education of UR-CE. Mr. Muragijimana is writing his thesis on: **“Instructional Technology in Learning: The Impact of Integrating ICT On Students' Speaking Proficiency Enhancement”** to complete his Master of Education in English Education.

He wishes to explore the contribution of instructional technology to improving the English speaking ability of the level six students (A.Y 2020-2021) from all programs taught at the IPRC Kitabi. Thus, he is requesting permission to collect data from the above-mentioned students and their English teachers from your college.

Mr. Muragijimana's research project passed successfully through an internal collegial ethical process. Thus, the University of Rwanda-College of Education: Directorate of Research and Innovation confirms that this research adheres to ethical standards and principles. Therefore, we kindly request you to accord him your cooperation in this research.

If you need more clarification, please do not hesitate to contact us at wrceresearchin@gmail.com. We very much hope to get your usual cooperation in serving our nation.

Yours sincerely,



Digitally signed by
UR (Rukara, Directorate of Research &
Innovation)
Date: 2022.02.02
Time: 11:05:10 +2'00

Assoc. Prof. Eugene Ndabaga
Director of Research and Innovation
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Cc:

- Principal, UR-CE
- Postgraduate Program Coordinator, School of Education
- Dr. Anne Marie Kagwesage (Supervisor)