MALL AND CALL TECHNOLOGIES AS MEANS TO ENHANCE LEARNING ENGLISH IN HIGHER LEARNING INSTITUTIONS: CHALLENGES AND STRATEGIES TO DEVELOP STUDENTS' SPEAKING SKILLS

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January, 2022

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A dissertation submitted to the University of Rwanda-College of Education, in partial fulfillment of the requirements for the Degree of Master of Education in English-Education

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January, 2022

DECLARATION OF ACADEMIC HONESTY

I hereby declare that this dissertation is entirely my own work and that it has never been submitted as an exercise for a degree at any other University.

Signature

Place: Kigali

Date: January 27, 2022

SUPERVISORS' APPOVAL

This is to acknowledge that this dissertation has been submitted with our approval.

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 Date: January 27, 2022

ABSTRACT

Many graduates leave Higher Learning Institutions incompetent in communication skills in English and, thus, fail to successfully compete on the labor market. This thesis aims to examine the contribution of MALL and CALL as new technologies to teach English speaking skills in Rwanda Higher Learning Institutions (HLIs). The research was conducted in seven HLIs. The HLIs located in Kigali city were chosen using simple random sampling while HLIs from provinces were selected using purposive sampling. Questionnaire and interviews were used to sound out views of informants about the issue. One hundred and forty (140) informant students and ten (10) Lecturers gave their views. The results of the study reveal that the methodology used currently in HLIs leads to the traditional approach focusing on grammar and vocabulary, because of a large number of students and a short time allocated to the English programmes. Consequently, students lack opportunities to practise speaking skills. All interviewees (100%) stated that MALL and CALL may improve speaking skills. Thus, students should be given tasks that involve speaking to upgrade their accuracy and fluency even outside the classroom. In this regard, the classroom will not be the only source of learning. However, the impact of Mobile Assisted Language Learning (MALL) and Computer Assisted Language Learning (CALL) on speaking skills will be felt if the strategies proposed in this thesis to overcome the challenges have been adopted. Those strategies include, among others, closely monitoring tasks given to students, training lecturers in ICT, financial assistance to students, well equipped language laboratories and commitment of lecturers and students. Stakeholders of HLI should also work together to facilitate the use of MALL and CALL to promote the English speaking skill in HLIs.

Key words: **MALL and CALL, new technologies, speaking skill**

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LIST OF ABBREVIATIONS AND ACRONYMS

ALM: Audio Lingual Method

AUCA: Adventist University of Central Africa

CALL: Computer Assisted Language Learning

CBE: College of Business and Economics

CMHS: College of Medicine and Health Sciences

CLT: Communicative Language Teaching

CNN: Cable News Network

CST: College of Sciences and Technology

DM: Direct Method

EAC: East African Community

EFL: English as a Foreign Language

ELT: English Language Teaching

ESL: English as a Second Language

FL: Foreign Language

GTM: Grammar Translation Method

HLI: Higher Learning Institution

ICT: Information Communication Technology

KIST: Kigali Institute of Sciences and Technology

L2: Second Language

MALL: Mobile Assisted Language Learning

MINEDUC: Ministry of Education

NISR: National Institute of Statistics of Rwanda

PDAs: Personal Digital Assistants

PLATO: Program Logic for Automated Teaching Operations

SLA: Second Language Acquisition

SMS: Short Message Service

 SPSS: Statistical Product and Service Solutions

TELL: Technology-Enhanced Language Learning

TESOL: Teaching English to Speakers of Other Languages

ULK : Université Libre de Kigali

UNILAK : Université des Laïcs Adventistes de Kigali

UoK: University of Kigali

UR: University of Rwanda

US: United States

UTAB: University of Technology and Art of Byumba

UTB: University of Tourism, Technology and Business studies

ZPD: Zone of Proximal Development

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ACKNOWLEDGEMENTS

The completion of the present thesis was possible with the support of several people. I would like to express my sincere gratitude to all of them.

My greatest consideration is directed to my supervisor Dr. Jean Paul Ngoboka. His valuable guidance, relevant corrections, consistent encouragement and fruitful pieces of advice through this research work contributed greatly to its completion.

I am also grateful to my co-supervisor Dr. Patrick Ujwiga Anguru. Despite his various responsibilities, he agreed to co-supervise this dissertation. His wise guidance, understanding and encouragement helped throughout the writing of this thesis.

Many thanks are furthermore due to the entire staff of the College of Education for fostering my intellectual growth and all academic advice during our study time together.

I would like to address my deep recognition to Senior Managers from the University of Tourism, Technology and Business studies. Thanks to the workload reduction while I was studying, my goals have been successfully achieved.

Regarding financial support, I would like to express my gratitude to the University of Rwanda, through the tuition fee waiver policy.

Sincere and profound thanks go to all respondents for having kindly accepted to be involved in my research. I remember people who helped me identify each and every respondent of this study; their cooperation and input enabled me to complete this work.

Finally and above all, I cannot forget to express my unfailing gratitude and love to my husband, Prof. Denis Ndanguza who has supported me throughout this research period and has constantly encouraged me when the tasks seemed arduous and insurmountable.

DEDICATION

This thesis is dedicated to

My husband Dr. Denis Ndanguza

My sons: Ganza Cedric Ndanguza

Bigwi Crispin Ndanguza and

Barute Armand Ndanguza

CHAPTER I. GENERAL INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

English and other languages are taught through four skills i.e. listening, speaking, reading and writing. Scholars have conducted research on how the teaching of languages in general and the teaching of English in particular may suit both native and non-native speakers. The methodology to use has undergone many changes. Among the language skills, speaking has been emphasised as an important skill that learners of English need to cope with on the global market and be able to communicate with people from different parts of the world where English is used. Among the methodologies used, the use of new technologies is the current one and can help Second Language (L2) or Foreign Language Learners (FL) to continue learning a language wherever they are.

The present chapter introduces the thesis and it is subdivided into five sections namely: background to the study, statement of the problem, research objectives, research questions, significance of the study and the thesis outline.

1. 2 Background to the study

English language is an international language used in various parts of the World. This language is used by around 380 million people as the first language or mother tongue while around 380 million people use English as L2 or FL (John, 2019). Like other languages, English can be taught through four skills (listening, speaking, reading and writing) using either traditional or modern technologies. Speaking is the focus of this thesis because a great number of authors have found it the most important skill. In this regard, Chaney (1998) and Coulthard and Condlin, (2014) argued that among the four skills, speaking is the skill by which students will be judged upon in various circumstances. This indicates that knowing a language means speaking that language (Karanezi & Rapti, 2015). Lack of proficiency in English among students is often reported. This might be attributed to the kind of methodology used to teach the language. Students complain about the method of memorization through which they are facilitated in their respective classes (Martins Kremer & Valcke, 2014). During the 19th century, traditional methods in language teaching such as grammar translation method and direct method were emphasized (John, 2019). Traditional methods created passive recipients of knowledge in learning L2 or FL (Hazarika, 2017), because these methods were archaic and they caused students to remain in same place triggering lack of motivation, a serious challenge in teaching and learning a language, since they did not foster communicative competence. The introduction of new technology in language teaching in the early 1960s and 1970s (Abbasova & Mammadova, 2019;

Bahadorfar and Omidvar, 2014; Mohammed 2017) assisted teachers in teaching second language learners how to speak well. The role of teachers was to monitor learners' interaction or use a central control panel (Hazarika,2017). Since then, technology has developed worldwide and has become vital in English language teaching, and this helped learners to easily acquire second and/or foreign language. For instance, Ros I Solé et al. (2010) witness that portability of mobile devices brings new methods that can shape learning styles and pedagogies as it makes the learning more personalized and encourages ubiquitous learning hence promoting English language teaching and learning. Vogel et al. (2010) added that thanks to mobile phone uniqueness, the use of mobile technology devices for learning may even have a bigger potential than e-learning. For Hashim et al. (2017), Computer-Assisted Language Learning (CALL) and Mobile-Assisted Language Learning (MALL) are the predominant areas that reveal the implementation of technology to support English language learning. Moreover, both CALL and MALL have influenced language acquisition and have differentiated modern language classroom from traditional language classroom in the way that the learning of English language is smooth and attractive to students. Since CALL was first introduced in the 1960s through the PLATO (Program Logic for Automated Teaching Operations) project (Park & Slate, 2014), ongoing activities have proved the evolution (Bax, 2003; Garrett, 2009 ; Warschauer, 2000) and the development of relationship between approaches to second language acquisition (SLA) and CALL (Garrett, 2009). The PLATO project initiated in 1960 at the University of Illinois (Chicago) became innovative in the quick development of CALL (Hart, 1981). The courseware developed in the PLATO project system reinforced audio, graphics and flexible response exploration (Marty, 1981). PLATO emerged as a famous tutorial system based on behavioristic learning design and it developed special hardware with a central computer, including various materials such as broad tests and linguistic clarifications (Abdulaziz et al.,1986), facilitating the learning process as well as the acquisition of the second language in an independent way.

Warschauer (2000) identified three stages of CALL namely: (i) Structural CALL that consisted of Behavioristic learning system, using CALL for drill and practice activities to achieve accuracy. (ii) Communicative CALL came the second and was interested in matching the move to a more communicative language teaching approach, involving more communicative exercises with an objective of fluency and creativity. (iii) Lastly, Integrative CALL is the current trend focusing more on using computers for authentic discourse adding learner assistance into the purposes. The discovery of new technologies in teaching and learning English led many countries to adopting the new methodology of teaching in classrooms. In Europe, the majority of teachers (90%) use ICT to prepare

lessons (Chhabra, 2012) and this seems to be the same in many other countries where ICT is preferred to teach and learn English language. In the US, the institution in charge of technology has developed a plan to transform education through the power of technology (Motteram, 2013). In the same country, the classes of EFL are shifting from the usual methods of teaching to the use of ICT (Abbasova, 2019). Teachers then have responsibility for preparing students to speak English in real world outside the classroom and knowing effective components to focus on while teaching English speaking. To this extent, Kuning (2019) highlights where to underscore while teaching English speaking. Indeed, Kuning's emphasis is on teaching how to correctly produce the English speech sounds and stress words and produce sentences with proper intonation patterns and rhythm in the L2.

Furthermore, teaching oral skills requires the selection of the appropriate content in line with the topic, the event, the time and the place, people to talk to, and there is a need to teach how to speak quickly and confidently with limited uncertainties (Nunan, 2003 in Kuning, 2019). Smith and Craig (2013) add that CALL as a new technology in teaching English is used for any visual, audio, text or graphic format linked with the spread of information through technology where learning support occurs simultaneously or separately. Thus , CALL studies focus on diverse topics that range from the use of synchronous and asynchronous communication software such as e-mail, Skype, and internet sources to the use of social networking applications, blogs and games on computers for language learning purposes.

Unlike developed countries, African countries including Rwanda, the teaching of English as L2 or FL faces challenges. Rwanda is a multilingual country using four languages: English, French, Kiswahili and Kinyarwanda, the mother tongue and national language spoken throughout the country. From the Belgian colonial period up to the end of the 2nd republic of Rwanda i.e. from 1890 to 1994 the years during which Rwanda faced genocide perpetrated against Tutsis, French was used as a medium of instruction in teaching subjects (LeClerc, 2008 & Munyankesha, 2004). From 1996 to 2008, primary and secondary students learned either English or French as their first language of instruction, and took Kinyarwanda as a subject. On the other hand, university students were taught in either French or English (Nkubito &Uwababyeyi, 2017), depending on the language they felt comfortable with. In 2008, the Government of Rwanda announced that French would no longer be the medium of instruction (McCrummen, 2008 & Mwaura, 2008) and it was replaced by English, the current medium of instruction in all schools. Giving an advantage to English over French was motivated by the benefits that Rwanda would reap from being part of East African Community (EAC) and its wish to become a sub-regional leader in trade, tourism and science and technology

(MINEDUC, 2008). Rwanda strived to train all teachers how to teach well in English to cope with the new reform (Gove and Cvelich, 2011), and these trainings were facilitated by Rwandan teachers and a few from Uganda and Kenya with good proficiency in English. Despite the effort of many teachers with French background in learning English, their English proficiency remained insufficient due to late and limited exposure to English. Similarly, many graduates are unable to express themselves in different settings (Niyibizi, Sibomana, Perumal, 2019 & Tabaro, 2015). This challenge is common to African countries. The existing literature shows that L2 learners from Africa lack skills in English as the language of instruction (Alidou and Brock-Utne, 2011; Brock-Utne, et al, 2005; Kyeyune, 2010; Mwinsheike 2002; Rubagumya 1997; Rugemalira 2005; Vavrus, 2002; and Webb, 2004). Although English is preferred due to its importance in political, social and economic domains (Tam, 2011; Trudell, 2010; Samuelson and Freedman, 2010; Kagwesage, 2013), teachers and learners' effective use of this language is doubted by scholars.

Rwanda is not an exception. The gap takes roots from English teaching background since nursery, primary and secondary schools, where students are not supported in the same way (Taylor and Robinson, 2019). Some schools are equipped with enough teaching and learning materials, while other schools are deprived of those advantages. Besides, Kinyarwanda is spoken nationwide and thismay hamper the learning of other languages since practicing them outside the classroom will be very limited. As it is argued by a number of authors (Brock -Utne & Alidou, 2006; Heugh, 2000; Webb, 2003; Kagwesage, 2013), the failure to use a language taken as the medium of instruction in the proper way blocks progress in education.

Thus, as a way of addressing the issue, the Ministry of Education (MINEDUC) launched one laptop per child (OLPC) programme in 2009 from primary four to facilitate the use of English. Moreover, in 2015, laptops, computers, tablets to mention but a few, were provided by a computer manufacturing company after an agreement with Rwanda. All these ICT tools came following an arrangement between Rwanda and the company to support the education sector; the devices were inexpensive and trusted (Kozma & Isaacs, 2011). In 2016, MINEDUC initiated ICT in Education Master Plan which included the SMART Classroom Initiative to hasten the use of ICT from low level to HLI. The SMART Classroom initiative, indeed, aimed to change from a simple to a powerful ICT network focusing on curriculum and content growth (Kozma & Isaacs, 2011). After observing that the lack of internet hampered the success of using OLPC properly, Rwanda initiated laptops redistribution targeting areas with electrical network (Isaacs, 2007). During that period a number of learners and teachers had access to ICT and the target was to expand ICT in all levels of education. Thus, students

from secondary schools needed to increase their knowledge after laptops distribution in primary school. According to Taylor and Robinson (2019), there are currently more schools equipped with ICT tools in Rwanda than those lacking ICT tools, and many instructors are comfortably using the ICT devices in the teaching and learning process.

Studies have clarified the teaching of English as L2 or FL, highlighting how ICT has addressed challenges related to teaching and learning English across countries (Abbasova & Mammadova, 2019; Bahadorfar & Omodvar, 2014; Mohammed, 2017). These challenges are direct consequences of the traditional methods of teaching and learning English. In Rwandan context, MINEDUC (2008) emphasizes the country's effort to promote education system using English as a medium of instruction. Despite the Government's effort, challenges of speaking English in HLIs still persist (Niyibizi, Sibomana, Perumal, 2019; Tabaro, 2015). It is in this context that MALL and CALL, which Hashima et al. (2017) have underlined as the predominant technologies in teaching English, are the concern of the current study with the purpose to investigate, whether or not, these new technologies may bridge the existing gap.

1.3 Statement of the problem

English language is one of the four official languages used in Rwanda. Kinyarwanda, English, and French were declared official languages in 1995 (Kagwesage, 2013; LeClerc, 2008; Samuelson & Freedman, 2010), and Kiswahili language was added in 2017 (Taylor & Robinson, 2019). Among the four languages, English performs the most functions, especially in the education sector. It has been approved by the government as the medium of instruction in Rwanda since 2009 (Pearson, 2014 & Mwaura, 2008) replacing French that was formerly used as the medium of instruction. Since the establishment of English language, the government of Rwanda has made much effort providing various teaching and learning materials in different primary and secondary schools and training teachers. However, it is noticed that many students enrolling in HLIs of Rwanda still have a low level of English proficiency (Niyibizi, Sibomana, Perumal, 2019; Tabaro, 2015). The authors have discussed various causes including, for example, the fact that the vast majority of teachers are native speakers of Kinyarwanda and are not proficient in English (Uwizeyimana, 2018; Nzitabakuze, 2012; Uwambayinema, 2013; Pearson, 2014). Consequently, Rwandan students are more accurate than fluent in English language (Sibomana, 2010). Indeed, as Sibomana (2010) notes, the focus is on the production of right written sentences using vocabulary and grammar, rather than on the oral production through spoken messages. In addition, the classroom is the only place where learning English takes place, and outside the classroom there is no other way the teacher can continue

facilitating learners to use English language outdoors (Banegas, 2009). Hence, learners are unable to develop the speaking skill, the most difficult skill to boost in L2 classes. Furthermore, some students fear to talk thinking that their peers will laugh at them and this may negatively affect learners of FL (Du 2009) and may be a greater cause of language worry.

Many Researchers (Kagwesage, 2013; Lightbown and Spada, 2001) have focused on how English is taught in HLIs in Rwanda after replacing French as the medium of instruction. Moreover, the effort made by Rwandan to integrate technology into teaching and learning English language has been revealed (Kozma & Isaacs, 2011). However, so far, to the best of my knowledge, no study has been conducted on the use of modern technologies in teaching language skills in Rwanda, more specifically their contribution to the teaching of English speaking skills in HLIs of Rwanda. It is against this background that this thesis has been interested in finding out whether or not the use of modern technologies MALL and CALL may be a good solution to observed challenges in HLIs of Rwanda.

1. 4 Objectives

1.4.1 Overall objective

The overall objective of this study is to analyze the extent to which MALL and CALL can contribute to students' learning English speaking skills in HLIs in Rwanda.

1.4.2 Specific objectives/research outcomes

➢ To investigate the current methods and approaches used at HLIs in the teaching of speaking skills in Rwanda.
➢ To determine components of speaking skills that can be improved with the use of MALL and CALL in HLIs in Rwanda.
➢ To identify the challenges and suggest possible strategies for teaching and learning English speaking skills using MALL and CALL in HLIs in Rwanda.

1.5 Research questions

➢ What are the current methods and approaches used at HLIs in the teaching of speaking skills in Rwanda?
➢ Which speaking skills components can be improved with the use of MALL and CALL in HLIs in Rwanda?

➢ What are the challenges and strategies for teaching and learning English speaking skills using MALL and CALL in HLIs in Rwanda?

1.6. Significance of the study

The result of findings will help the researcher to fulfilling the partial requirements for the award of Master's degree in English with Education from the School and College of Education found in the University of Rwanda. The result of findings will further be a contribution to knowledge about the use of new technologies MALL and CALL in enhancing English skills with particular reference to speaking skills of students from HLIs of Rwanda.

1.7 Outline of the thesis

This thesis is divided into five chapters: Chapter one comprises introduction and background to the study, problem statement, research objectives as well as research questions. Chapter two is the literature review covering theories of teaching English in general and English speaking skills in particular and the definition of key words. Current methods and approaches used in teaching speaking skills in HLIs of Rwanda are discussed in detail. Further, the speaking skills components to focus on while teaching English speaking using MALL and CALL in HLIs are clarified. Challenges of teaching and learning of speaking skills using MALL and CALL in HLIs in Rwanda are highlighted and possible strategies proposed. Chapter three explains the research methodology that has been used. In addition, the chapter clarifies the techniques used to select respondents and case studies. Chapter four includes data presentation, analysis and interpretation of results. The feedback from questionnaires were filled by students and from semi-structured interview with lecturers is in relation with the set objectives and research questions. Chapter five comprises a summary of findings, the conclusion and recommendations.

CHAPTER II. REVIEW OF THE LITERATURE

This chapter reviews the literature on the use of MALL and CALL in teaching the speaking skills in HLIs. The first part provides and discusses theories of teaching and learning speaking skills. Traditional and modern language methods are explained based on the set objectives, research questions and previous works in the area of language teaching. The chapter also discusses how MALL and CALL technologies are applied. Teaching speaking skills with support of MALL and CALL in HLIs have been emphasized and explained in detail. The current methods and approaches used at HLIs in teaching English skills in Rwanda are equally highlighted. Finally, challenges of teaching and learning the speaking skill in English using MALL and CALL in HLIs are identified and possible strategies to overcome the enumerated challenges are highlighted.

2.1 Definition of key terms and theories of teaching speaking skills

Some authors proposed theories that can be used in teaching skills in general and the English speaking skill in particular. Before explaining theories of teaching speaking skill in English, which is the focus in this study, it is worth defining what speaking skill is. Speaking is one of the four language skills besides listening, reading and writing. Speaking is a productive skill that necessitates practice and consists of producing meaningful utterances that build and share meaning via verbal and nonverbal symbols in a variety of contexts (Florez, 1999; Chaney, 1998; Burns and Joyce, 1997). Speaking skills means being able to speak fluently, accurately and communicate messages effectively. To do so, learners have to develop components of speaking skills such as pronunciation, grammar, vocabulary and other sub skills of oral communication (Fu, 1998).

Nunan (1995, p593) defines speaking as, "to say words orally, to communicate as by talking, to make a request, and to make a speech". Some scholars argued that speaking is a process that includes a true statement of opinions, information, or feelings wherein a conversation happens anytime and in any situation between two or more people. In this regard, (Eckard and Kearny 1981; Florez, 1999; Howarth, 2001 and Torky, 2006) reiterated that speaking is a language skill where words are combined and produced in a right order to give a sense. It is a collaborative practice of building meaning that comprises producing, getting and handling information (Burns & Joyce, 1997).

On the other hand, Leong and Ahmadi (2017) voiced that speaking is taken as one of the most difficult aspects of language learning in which many learners find it hard to express themselves in the spoken language they learn. They generally face challenges to use a foreign language to express their opinions successfully, and prefer to stop talking because they are psychologically disturbed and feel

unable to quickly find appropriate words and expressions to their ideas on a discussion topic. Moreover, Zyooud (2016) emphasized that before teaching speaking skills, teachers should fix the goal for students to improve communicative abilities since speaking is considered as a central part of L2 learning and teaching. Thus, speaking is taken as the production of logical messages orally in moderate speed. As such, it is worth considering that, speaking happens where participants interact in person. This contributes to communicative act and it is necessary to know that this skill occurs in real time. This is why, before talking, the speaker may think of what to say, how and when to say it and to whom the message is to be addressed (Torky, 2006). In the spoken language, the message is well understood when the speaker masters the components of speaking skill i.e. pronunciation, fluency, accuracy, grammar and vocabulary, and sub-skills of the target language, whereas written language necessitates the correct use of punctuation to make good connection of words in the built sentences. Nunan (1989) pointed out that speaking can have both transactional and interactional purposes. The Former is said when an individual delivers the message to the audience while the interaction purpose refers to the members' interaction. Yet, Kingen (2000) acknowledged that the two modes of communication are most of the time combined to communicate easily. In fact transaction is applied during individual presentation whereas interaction is at play in the case of group presentations. The tutor's feedback is required to help learners correct errors or mistakes made during presentations.

Due to the importance of the speaking skill, Torky (2006) claimed that learners must perform the language they study and be able to understand the context of the spoken and written messages and at the same pace, and they must show fluency if they want to master this skill. Bygate (1987) points out scholars put forward two main approaches, i.e. the bottom-up and top down to define speaking. The bottom-up approach consists of using body movement while speaking with an intention to transmit the clear information and get feedback from the listener. Hence, the massage may be perfect enough through the combined sounds and well-ordered utterances in the produced sentences for the hearer to acquire the meaning. The top-down approach, on the other hand, supports the systematic way in teaching a language, starting from the smallest sounds to end with discourse (Cornbleet & Carter, 2001). The weakness of the bottom-up approach results from countering much on social aspect of interaction with emphasis on the psychomotor sense. Indeed, it is hard to compare and ensure a satisfactory transition from the supposedly learned classroom skills to real life use of the skill. Proponents of the bottom-up approach, to this end, suggest that, learners may participate in spoken speeches to study small units later (Nunan, 1989). Thanks to the smaller elements gained, learners

will try to elaborate more on the interactive nature of speaking (Burns & Joyce, 1997). A clear understanding of the above approaches e is much needed in L2 classes. The bottom-up approach encourages oral communication and motivates learners to speak fluently, regardless of the rules governing the language. As for the top- down approach, it consists in learning rules of language, which can lead to accuracy. If combined, the two approaches may facilitate learners of a language to become both fluent and accurate speakers of the language.

After going through the above approaches two major theories comprising cognitive psycholinguistic tradition and socio cultural theory of teaching speaking skill are discussed referring to (Pakula, 2019). The cognitive psycholinguistic tradition emphasizes individual learning processes. This style of learning is explained as implicit learning that leads to automated process and explicit learning with conscious inspection (Long & Doughty, 2003; Kiernan, & Aizawa, 2004). During the learning process, proceduralization makes learners master the rules of the language given its frequent use. Learners progressively acquire practical knowledge and develop a habit after some repetitions of the same rule. With time, learners automatize this habit and they unconsciously fix the rules.

As a matter of fact, the end product of this method is not always positive to all learners learning a language; proceduralization is good to initiate before encouraging fluency in speaking a language (Pakula, 2019). In this regard, therefore, the view of sociocultural theory in teaching speaking skills is that society plays a vital role in learning a language (Block, 2003; Lantolf, 2000). For this reason, to acquire a language, the individual must start communication with other people, slowly gain a language and finally makes it the own property. Pioneers of this theory believe that learning of a language obliges interactions, and thanks to problem-solving activities, individual capacities are attained (Pakula, 2019). It means that the achievement of learners depends on tasks performed inside or outside the classroom. Tasks assigned by the teachers should include listening to native speakers individual, pairs and group presentations; by regularly speaking and receiving the feedback from the teachers, students can become fluent speakers.

2.2 Brief review of language teaching methods

Language teaching methods are different ways of teaching languages. It will be shown that teaching methods have changed over time. This section is concerned with traditional and modern language teaching methods. The focus will be on the two methods of language teaching in general but particular attention will be given to the teaching of the English language speaking skill.

2.2.1 Traditional methods of language teaching

Traditional language teaching styles provided primacy to grammatical proficiency as the foundation for language skill, and they were used until the late 1960s. These methods were centered on the idea that grammar could be acquired via direct teaching, and through a style that used too many repetitions and drillings (Richards, 2006). On the other hand, Pakula (2019) argued that the traditional approach is the result of psycholinguistic theories of oral skills. This theory is characterized by cognitive psycholinguistic tradition that focuses on individual learning processes (Long & Doughty, 2003). The method for teaching of language rules was a deductive one i.e. students were taught grammar rules and then gained occasions to practice them. To understand well how the deductive approach was used, it is better to start by defining its opposite, which is the inductive method.

The use of inductive method consists of giving students examples of sentences containing a grammar rule that leads them to discover the rule. The use of deductive method is based on the assumption that language learning aimed at making a large collection of sentences and grammatical forms, and learning to produce these correctly and rapidly in the suitable condition (Richards, 2006). After the acquisition of simple knowledge of the language through oral drilling and well-ordered practice, the four skills were introduced, commonly in the order of speaking, listening, reading and writing. The techniques that were often used involved memorization of dialogues, question and answer exercises, substitution drills and numerous forms of directed speaking and writing practice. From the beginning phases of language learning, perfect pronunciation and mastery of grammar were emphasized, since it was believed that if students made mistakes, these would rapidly become a permanent part of the learner's speech (Richards, 2006). Walia (2012) pointed out that Grammar Translation Method (GTM), Direct Method (DM) and Audio Lingual Method (ALM) are ranked among popular approaches of teaching language. The three modes of teaching were related to the performance in the written language mostly its grammar rules, and the native language was used as the medium of instruction. The constraints of traditional methods of language learning consist of focusing on and emphasizing generally the learning of grammar rules and vocabulary, without paying much attention to the four skills recognized in any language. In writing, students refer grammar rules to their mother tongue and translate them in the targeted language. In reading, GTM made habits indicative of translating and not of reading (Tyler, 2008). Students attempt to comprehend the meaning and grammar usage of each word whereas this is not a condition that would help the learner to get meaning of the reading text. Similarly, Finney (2002) objected that in the traditional methods, speaking skills

motivating learners to express themselves orally are ignored and much attention is directed to writing skills and memorizations.

Despite the criticism of the tradition method in teaching oral skills of languages, speaking fluently is the result of what Pakula (2019) calls proceduralization that takes place when learners use repeatedly the information stored in memory, including morphosyntactic rules. The repetition of the same rules makes learners slowly form practical knowledge, then progressively automatize this habit and finally develop the contained knowledge. While Pakula (2019) found the mastery of morphosyntactic rules a suitable way leading to speaking a language fluently, Canale and Swain (1980) stated that the above mentioned methods did not consider a language as a skill for communication; isolated rules and vocabulary were mastered, leading to the lack of the oral production ability that learners need in their daily life.

2.2.2 Modern methods of language teaching

The observed challenges resulted from traditional methods in teaching and learning languages led scholars in this domain to think about the appropriate method that can be successful in language teaching and learning. Walia (2012) argued that the emergence of Communicative Language Teaching (CLT) or modern language teaching approach in 1970 brought many innovations in the field. It originates from the enormous human trading, emerging in North America and Europe as immigrants and guest workers. The new movement resulted in language teaching for specific purpose, and its combination with functional-notional level of language learning formed a cohesive Communicative Language Teaching. Nowadays, this modern language teaching has resulted from many experiments and modifications, focusing the teaching process on handling activities.

Therefore, the modern methods of language teaching integrate activities in the learning process that make learners to learn by doing, take decisions and exchange the produced activities individually, in pairs or in group so as to achieve in the suitable way the speaking skills. That is why, Turky (2006) avowed that the use of tasks is a vehicle to facilitate L2/FL acquisition and the idea is highlighted by Canale & Swain (1980) saying that while speaking a language, learners make their own evaluation of speaking skills, moderate speed in speaking, and retain the learned forms allowing them to develop linguistically. The new knowledge from accomplished tasks, then, results from the step achieved rather than from the language learning as Adams (2003) emphasized it. Similarly, while teaching FL, tasks are encouraged by Long's "interaction hypothesis" (1996). This theory states that learners get meaning and understand better through talking with others. All means the students use to comprehend

the message, like asking questions or requiring to more clarify the delivered message, develop L2/FL of learners. This is finally supported by Vygotsky (??…)'s socio-cultural theory encouraging the interactive tasks in learning a language. According to Myers (2000), this may be done considering three concepts 'interaction, activity and intervention".

Burns and Joyce (1997) discussed five categories that make the CLT curriculum. It involves language arts recalling various activities in learning English. Furthermore, CLT involves language for specific purposes, consisting of teaching language with consideration of the learner's purpose of communication. Besides, it contains personal language, considering the learner as an individual with unique background. Theatre arts is another category and entails teaching through role plays, giving the learner an opportunity to play many characters to understand the meaning in real context. Berns, (1984) stated that CLT involves social activities and has a strong connection with society. In this context, language study has to consider the function of language in linguistic context or in the social or situational domain, with the primordial goal to promote oral communications. Hence, speaking is the most important in learning a language. Essossomo (2013) clarifies that CLT originates from a multidisciplinary field including at the minimum; "linguistics, psychology, philosophy, sociology and educational research". CLT aimed, among others, at adopting approaches and contents that promote students' oral communication and enable them to be efficient through all possible angles (Savignon, 2002).

Moreover, the CLT method advocates the teaching of language for communicative purposes; not just for the purpose of passing an examination. CLT is the result of instructors and linguists who had grown disappointed with the Audio-lingual (AL) method and GTM of foreign language teaching. Thus, instructors and linguists found that students were not learning language in appropriate ways, since communication using appropriate social language like gestures or expressions were lacking. Communication is a process to follow. For this reason, the knowledge learners need is discussion competence as result of the learned forms, meanings and functions (Larsen-Freeman, 2000). This is in line with Savignon's (2007) observation that, regardless of much time needed to promote learners' oral production, teachers may design activities targeting the speaking of language and improve forms and meaning of that language. The CLT approach is learner-centred as it gives learners a logic of learning (Brown, 1994) and this makes learners dynamically engaged because they are listened to and listen to others through the classroom procedures and activities (Richards & Rodgers, 1986). In this framework, the teacher plays a role of facilitator and cooperates with students in handling the same activities (Larsen-Freeman, 2000). In addition, the teacher behaves as an analyst, counsellor,

adviser and a supporter for all students. Finally, the concepts of communicative competence have been elaborated in Canale and Swain (1980) and Walia (2012). Canale and Swain briefly state that to be competent in a language performance in grammar, interaction and discourse are needed. As Walia (2012) suggests, the traditional teaching method seemed to be old-fashioned. Therefore, the modern teaching methods appeared as an approach of CLT taking oral communication as the opportunity and goal of the approach in learning of L2/FL through various activities. CLT brings learners to the environment beyond the classroom. All this makes students familiarize themselves with language used in various real life situations and contexts.

2.3 CALL and MALL: modern technologies used in teaching English speaking skills

CALL and MALL are two modern technologies chosen among others in this research to show how they may contribute to teaching and learning English speaking skills in HLI. Before exploring how CALL and MALL can be used in teaching English speaking skill in and outside the classroom, it is necessary to understand well the background and meaning of the two new technologies.

2.3.1 The concept of the modern technology CALL used in teaching English speaking skill

CALL has been defined by different scholars. Levy (1997) stated that this new technology is the exploration and the study of language teaching and learning facilitated by computer. On the other hand, Beatty (2003) stated that CALL is any means offered by computer and as a result, learners improve their language. Moreover, Egbert (2005) considered CALL as a case where learners learn language in any context surrounded by computer technology. A number of authors such as Bax (2003); Warchauer (2000) explained the way CALL changed the method of learning inciting students to think and come up with result. Then, the socio-cognitive view came second and encouraged not only to think but also to cooperate with others via computer.

Warschauer (1996) divides the evolution of CALL into three phases: "Behaviouristic CALL (1960s-1970s), Communicative CALL (1970s-1980s) and Integrative CALL (1990s-)". The last is currently up-to-date as learners benefit from internet and computer assistance while learning. For Yaman & Ekmekçi (2016), CALL has brought an independent method of learning L2 or FL with the help of computer; this differed from previous methods that relied on the classroom and tradition materials facilitated by teachers. Finally, the big computers were replaced by smaller ones and some had even the pocket size. The development of computers extended also in the system and the used software.

In brief, CALL usage stimulated learners' independence, universal learning, and corrected errors immediately. Besides, the new technology offered huge materials including books or audio-visual

resources. What is more, learners using CALL had the opportunity to listen to native speakers of English or other languages (Dudeney & Hockly, 2007; Egbert et al., 2002). CALL has developed its style into the conventional teaching of L2 nationally and globally, and the upcoming of CALL is openly associated to language teaching (Hubbard, 2008). A number of researchers discovered that students using CALL achieved better than students not supported by CALL (Grgurovic, Chapelle, & Shelley, 2013). The teaching and learning of L2 can be deepened by the use of technology, and the quality of teaching remains with or without teacher-student interaction, and the learning goals are not disturbed (Hoopingarner, 2009). According to Bush (2008), students enjoy using computer. For this reason, students may manipulate computer tools in the appropriate time and learn a language. The new tools in education improved the way of teaching, which are beyond the traditional lecture. With new technologies, group works orient its style into learning environments with games and activities.

2.3.2 The concept of the modern technology MALL used in teaching English speaking skills

MALL stands for Mobile Assisted Language Learning, and it is a new technology used for teaching and learning a language. It motivates formal or informal learning, facilitated with handheld mobile devices such as smart phones and tablets available to use anytime and anywhere. MALL emerged following the use of CALL in teaching a language and is characterized by its mobility that offers students freedom to learn anytime and anywhere and to remain in contact with the lecturer (Wang & Ryu, 2009). Using MALL tools, students manage to continue learning and are not limited by the classroom setting. The unlimited time allows students to comfortably exploit their free time moving or steady (Kukulska Hulme, 2009). In any position they are, students may get resources from MALL tools and learn in a smooth way (Juniu, 2002). Among the handheld devices used in teaching and learning languages, (Kukulska-Hulme & Shield, 2008 and Valarmathi &Chandrasekaran, 2011) mention mobile phones and tablet with internet capability. For Thornton and Houser (2003) and Kukulska-Hulme (2005), MALL devices are found in three categories, namely, "cell or mobile phones and smart phones (including iPhone or iPad.), MP3 or MP4 players (e.g. iPods) and Personal Digital Assistants (PDAs) (e.g. Palm Pilot, Blackberry, etc)".

The use of MALL was initiated in 2001 and from that time, many MALL applications have been developed (Chinnery 2006; Kukulska-Hulme & Shield, 2008) and many of them have been evaluated. In using MALL devices, basic components like vocabulary and exercises from the given texts are targeted (Thornton & Houser, 2003; Garcia, 2002; Kukulska-Hulme, 2005). Various studies have revealed the benefits of using mobile devices for English language teaching and learning. Such benefits include the fact that mobile devices possess characteristics that make them suitable tools for

modern education, particularly with regard to providing, discovering and distributing learning contents (Ally, 2009; Dickey, 2001). According to Pachler et al. (2010), the characteristics of Mobile devices can be summarized referring to their movability, functionality, ubiquity, effectiveness and connectivity. Such characteristics positively contribute to learning English as a Second Language (ESL).

Using MALL allows learners to access the desired learning materials Dickey (2001) and this encourages independent learning as students are free to choose their own learning activities according to their learning pace (Yedla, 2013). In this case, students are able to think critically and they are aware of their competencies. Further, Wi-Fi technology in mobile devices facilitates students to access extra learning materials and the same technology and devices are used by teachers to communicate and send learning materials to their learners at any time convenient to them. (Ally, 2009; Klopfer, Squire and Jenkins, 2002) explained exceptional educational features of mobile devices which could reflect the use of MALL. These features are sociability because the mobile devices put the users in contact; context sensitivity shown by real data provided by mobile devices in learners' position environment and time; connectivity, meaning the devices connection to each other sharing network, as well as individuality wherein the devices allow individual learning. Moreover, the mobile devices nature provides opportunity to enhance teaching and learning a language through oral or written communication usage (Khaddage et al., 2009). Due to its portability characteristic, Naismith et al. (2004) stated that mobile devices remove barriers of learning, where teachers and students may organize their time to collaborate and learn a language.

After the discussion of CALL and MALL, it is vital to see whether both new technologies are equally important or not and why one of the two new technologies should be used instead of the other. Extensive research has been conducted in relation with MALL in teaching languages (Abbasi & Hashemi, 2013; Baleghizadeh & Oladrostam, 2010; Barrs, 2011; Çakır, 2015; Kétyi, 2013; Muhammed, 2014; Rahimi & Miri, 2014; Rosell-Aguliar, 2014; Saran, Seferoglu & Cagiltay, 2009; Tafazoli & Jam, 2015; Thornton & Houser, 2005; Wu, 2014; Yaman, Şenel &Yeşilel, 2015). Jarvis and Krashen (2014) wonder whether CALL has become archaic and associate it with MALL and Technology-enhanced Language Learning (TELL). MALL offers new opportunities to learn a language either moving or stable (Kukulska-Hulme & Shields, 2008). Previous MALL devices were used without internet. Among them we can mention cassette players and MP3/4 players. The current MALL devices are more practical in language teaching and learning; they are enhanced by internet connection (Yaman & Ekmekçi, 2016). Despite the current MALL devices reputation, MALL is not

more important than CALL; the two technologies complement each other in learning languages and both of them have benefits and limitations. Remaining at the same place, CALL tools can be used while MALL devices may be more supportive when learners are moving. According to Yaman and Ekmekçi (2016), the simple research done in 2010 on Google Scholar explains which of the two technologies is more important. A simple search of CALL produced around 16600 results while search for the term MALL yields 1580 results. These figures clearly show that CALL-related studies hold a vast dominance over MALL-related ones in terms of quantity in the literature. That is, CALL is preferred to MALL in the learning and teaching domain (Yaman & Ekmekçi, 2016).

In the following sections, various authors explain the content relating to objectives. The main headings include: The current methods used by Rwandan HLIs in teaching English language in general and English speaking skill in particular, the role of MALL and CALL in teaching components of speaking skill and challenges that are observed while using the two new technologies and possible strategies to address them.

2.4 Current methods and approaches used at HLI in teaching English skills in Rwanda

This section is concerned with the method and techniques currently used in teaching English in HLIs of Rwanda, to see whether they are suitable approaches that can support learners to improve their speaking skills or to identify where the gap is. Then, the methodology that can be used in teaching components of speaking skills and how modern technologies MALL and CALL can contribute in the process of teaching speaking components in HLIs. For example, Richards & Rodgers (2002) explained the change in language teaching arguing that after Chomsky, the organizational language teaching methodologies based on traditional method's activities lost their popularity towards the end of 1970s, in the benefit of CLT, which motivated communicative activities in language teaching and learning (Richard & Rodgers, 2002). After conducting a research in HLIs, Kagwesage (2013) found that Kinyarwanda was almost fully used in group works and sometimes in the teaching process to clarify concepts and clear up confusion.

This habit observed in group discussion hampers the learning process of learners as they are discussing in the language other than the language they are studying. In this case, they cannot improve and learn from one another the targeted language. Moreover, some lecturers, mostly Rwandans, sometimes translate difficult words in Kinyarwanda. Some lecturers who do not speak Kinyarwanda sometimes fail to explain in Kinyarwanda some content during the lecture. This results in deficiency in the mastery of the medium of instruction, which requires extra practice and mentorship sessions.

In this case, learners discuss the learned course in their mother tongue while alone so as to understand it better. As emphasized by Dara and Niloofar (2014), students may not benefit from this method since success of courses occurs when both teachers and learners are familiar with the language of instruction. In this regard, teachers deliver the content and give constructive examples freely, and learners collaborate with enthusiastic attitude. However, the interaction in HLIs classes of Rwanda is most of the time impossible due not only to the observed lack of English knowledge, but also to overcrowded classes

Lightbown and Spada (2001) argued that the teaching of English in Rwanda is done in a traditional instructional environment. They add that this is a barrier to the improvement of English language. The idea is explained by the methodology used in the teaching process, focusing on vocabulary and grammar rather than on component leading to fluency. Further, the classroom is the only place where students are exposed to the English language and teachers are the only source of English language to learners (Banegas, 2009). Moreover, as already explained, some of the teachers are not proficient in this language of instruction (McGreal, 2009; Nzitabakuze, 2012; Pearson, 2014). This is the reason why these authors state that learners in Rwanda develop more accuracy than fluency (Sibomana, 2010). As a matter of fact, Sibomana (2014) suggests that learners who rely on the classroom as the only place of learning English develop more their grammar than speaking skills. Consequently, it is difficult for Rwandan learners to produce output, which Yule (2014) considers difficult to provide in L2 classes. Then, interactive activities while teaching and learning languages are highly advised (Canale and Swain, 1980; Howatt, 1984; Richards & Rodgers, 2001; Scheckle, 2009; Andrewes, 2011; Illés, 2012). However, according to Scheckle (2009), effective strategies may be adopted in the country like Rwanda where the targeted language knowledge is not mastered by some teachers who facilitate learners.

Even if many lecturers from HLIs do their best to teach English, the classroom alone is not enough; it has to be complemented by informal settings or the street (Lightbown & Spada, 2001). Really, promoting English in Rwanda took an interesting step through advertisement, posters and businesses owned by people from Anglophone countries. Similarly, various churches also offer services in English (Kwibuka, 2013). However, although the number of Rwandans speaking English increased (NISR, 2014), the learners in this country still need to learn how to communicate effectively in and outside the classroom. Lightbown and Spada (2001) state it will be possible once learners are permanently surrounded by enough materials offering vocabulary and structures. Learners also need to interact with native speakers of English and to take part in various events using English language

(Lightbown & Spada, 2001). Once these strategies are not explored, the challenges may be everlasting in Rwanda, especially given that Kinyarwanda language is spoken in all areas of the country and every sphere of life. Another challenge in learning English in Rwandan HLIs is the fear of being judged causing many hesitations while talking. As Du (2009) puts it, when L2 learners think that they are not impressive in speaking skills, the fear of negative evaluation occurs. Wang (2006) stated that thanks to discussions, students look themselves for solutions. This is reinforced by sociocultural theories, saying that learning takes place when assistance is provided and offered in the Zone of Proximal Development (ZPD) (Vygotsky, 1978). The ZPD includes all of the knowledge captured by the learner with assistance. Wang (2006) and Chitanana (2012) added that learners benefit from their experienced peers to well accomplish tasks and give feedback.

Many scholars investigated how students may adjust challenges faced during learning English language in HLIs (Andrade 2006; Evans and Morrison, 2011; Praxton, 2009; Ramsey, 1999; Van der Walt and Dornbrack, 2011); some studies were interested in students learning L2 in Anglophone countries such as US and Australia (Andrade, 2006; Ramsey, Raven and Hall, 1999). Their conclusions are not far from those made in non-Anglophone countries (Evans and Morrisson, 2011; Praxton, 2009; Van der Walt and Dornbrack, 2011); they suggest working hard, collaboration among students, and instructor's motivation of their students. These help students to easily learn technical vocabularies mostly through reading texts. In a different environmental situation but similar linguistic setting where English is L2 or FL to students, Praxton (2009) believed that translation may be a key learning practice. Praxtom gives an example of South Africa where this evidently and certainly occurs in the classroom or in peer learning groups since they switch from English to their local languages to better understand new concepts. In the following paragraphs, we are going to discuss the components of speaking skills to emphasize while teaching English, and how the two new technologies may contribute to its mastery.

2.5 Speaking skills components to be focused on while teaching English speaking using MALL and CALL in HLIs

This topic discusses the components that can be considered while teaching the speaking skill of English language. The methodology shows how the selected elements can be taught using the new technologies MALL and CALL. The content is guided by influential theories of teaching and learning the speaking skill of English language. The theories are traditional cognitive and sociocultural theory proposed by (Pakula, 2019 & Block, 2003), while discussing the appropriate methodology of teaching speaking skills components. According to the sociocultural theory, language is built in interaction

with others and is slowly internalized and ultimately becomes the property of the individual (Block, 2003; Lantolf, 2000).

The contribution of CALL and MALL, the new technologies in teaching and learning speaking components is confirmed by specialists in language domain. However, MALL and CALL do not replace the usual role of teachers. MALL and CALL support educators in teaching students in and outside the classroom. Before their application, teachers are required to have knowledge and commitment to successfully engage students to cope with the new technologies and enhance the quality of speaking English as foreign and second language. Many languages of the world including English are only spoken with no writing script. Many languages, even those with a proper writing system, use their spoken forms, more than the written ones. Indeed, language is learnt by speaking it first, after a lot of listening to the sounds, words, phrases and sentences from the environments (Anuradha, Raman &Hemamalini, 2014). For Yükselir and Kömür (2017), the use of new technologies like MALL and CALL have contributed positively to language learning and teaching process. With regards to language and linguistic skills, MALL have supported a lot in teaching language skills like listening and speaking, especially in the learning of English vocabulary and English pronunciation (Agca & Özdemir, 2013; Basoglu & Akdemir, 2010). The main components important to know in order to increase speaking skills are classified by Brown (2001) as pronunciation, fluency, accuracy and vocabulary.

Pronunciation is the first component of the speaking skill that is discussed. It is defined as the manner a sound or many sounds are made (Richards & Schmidt, 2013) and covers the way speakers produce clear language when they speak. To be able to successfully communicate, speakers of a language have to produce understandable message to the listeners through important elements of pronunciation such as stress, rhythm, and intonations. These elements of pronunciation may be taught referring to Stard's (1998) idea. The author suggests that communicative FL teaching is not based on the idea of merely acquiring language knowledge (lexis and rules); rather, its goal is using language for meaningful communication, which is a characteristic of the participation metaphor, i.e. learning through doing activities that are on-going. Using the new technologies MALL and CALL and respecting the methodology advised by Huang, et al. (2012) about teaching pronunciation, the teacher may share activities helping students to correct errors they make while pronouncing words. The activities may be through different learning styles, i.e. auditory, visual, tactile, and kinesthetic learning.

The teacher may share audio visual materials with students to prompt them to listen to the native speaker's voice. Students may do the task even outside the classroom using the tools of the new technologies MALL and CALL and try to acquire native-like speech rhythm. The sociocultural theory explained by Pakula (2019) will then be applied. For example, students present in class what they have summarized and get feedback from the teacher and peers. In using this method, students will solve various problems including missing final consonants, misplaced stress in sentences and misused intonation patterns. Further, activities related to the correction of these errors are designed to meet students' different learning styles, namely auditory, visual, tactile, and kinesthetic learning (Huang, et al., 2012). When students do these kinds of tasks, they learn what Rodomanchenko (2014) calls the micro skills of speaking. The micro skills are, for instance, clarification of differences between English phonemes and allophonic variants and use of a suitable number of words in order to accomplish pragmatic purposes. The micro skills may include tasks like reflections, questioning, summarizing and paraphrasing.

To better understand what perfect pronunciation looks like, Brown (2001) listed down the aspects of pronunciation as follows: the study of pronunciation intends to produce fluent speech at different rates of delivery and promotes grammatical word classes such as noun and verbs in a real way. Clear pronunciation requires interconnected strategies in spoken discourse and suitably accomplishes communicative functions according to situations, members and objectives. Pronunciation further, obliges the use of facial features, kinesics, and body language together with other nonverbal signals along with verbal language. The mastery of pronunciation is finally being able to prompt meanings, improve and use a battery of talking strategically, highlighting key words, reshaping and delivering a context for construing the sense (Brown, 2001). According to Çakır (2020), in order to teach and learn pronunciation in a better way, it is relevant and advisable to listen to native speakers' voice through the application of new technologies like CALL and MALL.

Levy (2009) stated that CALL technology is user-friendly with speaking skills when compared to other language skills. This technology helps its users exploiting numerous voice presentations, comprising both audio and video recorded or live talk. Users have the opportunity to communicate with other members, and the style used together with the practice makes it a noble strategy in L2 learning. To ascertain the contribution of new technologies in teaching English as a second language, Kirkgoz (2011) used a task-based speaking course to increase the speaking skill of L2 students. While speaking the L2, learners used technology and recorded their voices, and this contributed to the reputation in the use of technology. This practice allowed learners to listen and correct pronunciation

related errors. The conclusion was that the improvement in pronunciation can depend on the interaction with new computer courses (Hoopingarner, 2009). Kim's (2012) conducted a study in which participants improved their L2 accent. Using the Technology Enhanced Accent Adjustment software helped student to improve pronunciation due to the given feedback. Kim's study (2012) confirmed that the pronunciation of L2 learner may be improved by CALL. Similarly, Lord's (2008) research concluded that L2 students have the ability to expand phonetic, one of aspects of the second language, and improve speaking pronunciation in general, using podcasting technology. Bahrani's (2012) added that involving L2 students to audiovisual technology in unplanned situations can improve their L2 speaking proficiency. As for Abuseileek (2007), using CALL to interact with peer helps to improve the L2 students' speaking skills. Testimony was given after an exploration done by Lin. The Author explained that a video-based CALL enabled students to improve their knowledge of verbs, nouns, and adjectives with different level of proficiency (Lin, 2010). The learning is facilitated by social media that offer teachers resources to expose learners to accurate materials, and this offers significant interaction with L2 (Istifci, Lomidazde & Demiray, 2011).

As part of CALL, podcasting is a method of publishing files on the internet, for learners to download, the content usually at no charge (Panday 2009). The blending of iPod and Broadcasting is currently being used in many parts of the world, and it is a method that facilitates interaction (Panday, 2009). Moreover, podcasting is the best way of using music devices, especially mp3 players, for the purpose of education. Mp3 players symbolize activities such as listen, enjoy and learn (MacDaily News, 2005). This method offers content rich in accuracy, provided by native speakers and covers subjects other than languages, such as news, football, or radio programming. On the other hand, Podcasts comprise language sequences designed for language learning. They include audio recordings of texts, oral tests, oral feedback and vocabulary items. A good use of the two kinds of content offered by podcasts may support language learners of L2 to improve language accuracy and fluency.

Besides pronunciation, fluency and accuracy are also very important components of speaking skill to learn. Fluency is the talent to keep on going the conversation naturally when speaking spontaneously. In this case, a fluent speaker is a person who speaks quickly and freely in a discussion. Torky (2006) defined fluency as the learner's capacity to use speaking competencies (linguistic, discourse and pragmatic) and their sub-skills in real time without unnecessary pauses. Torky (2006) noted that currently fluency is seen as a dynamic concept comprising the principal cognitive mechanisms and the social environment that can be related to profound learning and total development of proficiency. Thus, the activities focusing on fluency need to be conducted in the appropriate way by the teacher

Harris and Hodges (1995), to make students fluent speakers of the target language. The application of Communicative and Integrative CALL, the current movement which focuses more on using computers for teaching dialogue and adds learner assistance into the objectives (Warschauer & Healey, 1998) is encouraged, as it involves more communicative exercises, with a fluency objective.

Pakula, (2019) expanded on that, saying what fluency is. However, he avowed that research on how to teach fluent speaking is scanty (Derwing, 2017). Nevertheless, it is possible to find tasks that promote fluency development. For instance, task repetition has been revealed to increase oral fluency (Bygate, 2001; Bygate & Samuda, 2005). The task repetition may be facilitated in or outside the institution using MALL or CALL devices. The task consists of the repetitions of the same task and thanks to this activity proceduralization takes place and frees up attentional resources, which are then available to the speaker for selection of words, morphemes and syntactic structures. The example is given by De Jong and Perfetti (2011) who used timed task repetition in which students recorded the same speech three times, using first 4 minutes, then 3 and finally 2 minutes (Nation, 1989). Thanks to this exercise, students gained the number of words and increased vocabulary for each repetition. De Jong and Perfetti (2011) explained that proceduralization of linguistic knowledge achieved a change in the fundamental cognitive mechanisms, the result of fluency improvement.

Lambert, et al. (2017) found that direct aural-oral same task repetition led to improved fluency irrespective of proficiency level. This kind of repetitions has been advised by psycholinguistic research confirming that the task is necessary for automation (Hulstijn, 2001). In addition to this research, Pakula (2019) proposes another methodology of teaching fluency. The program starts with an awareness raising phase (input) in which learners listen several times to a native speaker with informal discussion. For the first time, they listen without much attention, then, they listen carefully. In the automation phase, the learners imitate the recorded voice until they get the appreciative speed, pauses, lexis, and formulaic sequences in particular. Next, the learners do dictogloss and mingle jigjaw tasks. In dictogloss, students read twice a text rich in formulaic sequence from the input phase, with aim to develop not only grammar awareness but also automaticity and fluency. In the mingle jigsaw activity, learners memorize a number of formulaic phrases from the input text on paper. Thus, they exchange their phrases or sentences with colleagues, and write all the formulaic language that they have obtained (Wajnryb, 1990). The mingle jigsaw deals with repetition to encourage automatization and fluency, and the next activity involves sharing experience in an interaction circle. The practice stage is finally initiated where learners prepare and share a talk of 4 minutes to peers.

Then, they do the same activity in three to end with two minutes. The purpose of this activity in different paces (Nation, 1989) is to learn fluency until it becomes perfect.

Accuracy is another component important to teach in order to help students improve speaking skills. Accuracy is defined by Longman Dictionary (2002) as the facility to make correct grammatical sentences or sounds while speaking a language. According to Brown (2001), an accurate person is the one able to produces understandable, articulate, grammatical and phonological correct language. In the other words, to speak perfectly, the speaker desires to follow the rules of the language such as grammar and structure. Further, Pakula (2019) stated that accuracy concerns the extent to which the language is produced, in terms of grammar, vocabulary, discourse and pragmatic features. Accuracy shows the extent to which learners try to produce correct but possibly limited language (Ellis, 2003). To explain how accuracy can be taught, we discuss its main components, referring to works on language teaching and learning theories discussed above. While it is impossible to teach students everything that is necessary for them to interact appropriately in the target culture (Ishihara 2011), teachers should prepare students with the content that takes into account accuracy and the necessary motivation to facilitate their further learning outside the classroom independently, using new technology's devices.

The methodology of teaching grammar, pragmatic and discourse as important features of accuracy is clarified. Traditional methods of teaching a language are good methods to use while teaching grammar, pragmatic and discourse. The methods imply the psycholinguistic approach focusing on individual learning as far as the teaching of speaking a foreign language is concerned (Pakula 2019). However, learning rules and vocabulary items in isolation could not produce the desired learning output in order to use the language effectively. It is advisable then to mix theories wherein sociocultural theories are practiced after the learning of rules in class. If this is not the case, students will become "fluent fools" as declared by Bennett (1997), stating that the failure of mastering language rules leads to inappropriately communication in a language.

Grammar is one of the elements of accuracy with greatest importance to be taught in organized ways (Munzaki, et al. 2016). Grammar is a description of the rules that govern how sentences are formed in a given language and attempts to explain why a sentence is acceptable (Thornbury, 1999). The teaching of grammar has been done through different methods. Grammar Translation Method (GTM) is the first method applied in teaching grammar. Richard and Roggers (2007) said that this method was dominant in Europe from 1840s and it is still in some foreign language currently. Through this method, is teacher is to use mother tongue while teaching. It focusses more on words not than

sentences and is used in teaching vocabulary focusing on word meaning and its form. This method allows translating and this encourages and helps students to better comprehend the impact of one language on another and correct routine errors. The Direct Method (DM) came second at the end of nineteenth century and was against translation. DM are of the view that learners may be active in the classroom, and the suitable approaches may be used in explaining grammar rules (Rodger and Richard, 2007). The DM view is that learning English as a foreign language is helped by the first language. Children learn language from their mother, which makes this method the natural approach, because the learning process occurs naturally.

CLT is the third method used in teaching grammar. Some practical ways of applying CLT are described by Larsen and Freeman (2000) as following: The teacher gives a topic to students to be discussed, facilitates students to communicate during the task, and provokes students to discuss the given topic and finally the teacher become co-communicator to engage in communicative activities with the students. To apply the CLT method well, Bilingual Method (BM) is a suitable method to support CLT. The teacher gives materials to the students such as a dialogue or text he/she introduces the topic which would be taught by giving explanation and function, in order to stimulate students to speak. Then, the teacher provides an outline of the material, writes a sentence and its meaning. Then, students create the sentence following the teacher's instruction. Finally, the teacher explains the meaning or difficult word that has been stated by using the mother tongue to avoid misunderstanding (Larsen and Freeman, 2000).

Pragmatics is another component necessary to know in order to be accurate in L2/FL language. Pragmatics is a part of language acquisition and one of the main components in language learning as discussed by many linguists (Karthik, 2013). Pragmatics studies the factors that govern our choices of language in social interaction and the effects of those choices Scott, 2008). In pragmatics, context may be defined as the set of suppositions which have critical effects on the production and interpretation of communicative acts. Murray (2010) defines pragmatic competence as an "understanding of the relationship between form and context that enables to accurately and appropriately express or interpret intended meaning in terms of speech acts".

It is important that sociolinguistic norms are taught through explicit explanations in L2 classrooms. In this case, students can avoid communication mistakes and interact successfully in the target language and culture. One important aspect of sociolinguistic competence is speech acts. One example of a speech act is when a person requests something from someone else. In uttering the request, the speaker is actively involving the person they are talking to. This is because once the

request is uttered it requires the interlocutor to respond to the request. Other examples of speech acts are apologies, refusals, invitations, to mention but a few. The frequency, function and form of these speech acts vary cross-culturally and thus, it is essential for L2 learners to understand these differences. In order for classroom instruction to be successful in assisting students with this, pragmatics need to be taught through clear and accurate explanations, followed by realistic practice. Classroom discussions that are focused on cultural aspects of complimenting can be applied. Topics like who to give compliments to, how to structure compliments, how best to respond to compliments, and when to give compliments can be co-constructively learned. By having classroom discussions on speech acts, students can better understand the L2 culture and learn to behave accordingly in interactions in the target language (Burk, 2021).

Finally, discourse analysis including the study of both spoken interactions and written texts is a necessary component of accuracy. According to Torky (2006), discourse analysts are interested in studying greater portions of language as they flow together. Their concern is how to interpret the relationship of grammatical forms of utterances to given speakers and meanings expressed through discourse. For example, as a grammatical rule, the interrogative form is often used to elicit information, to make requests, offers, and suggestions, or to precise beliefs of speakers. For instance: Did she come? This is a question". Would you mind if I stayed with you?" It is a polite request. "Would you like me to organize a show?" This is an offer. In discourse analysis, an imperative is usually used to make commands. However, a variety of other moods can be used to perform this function: "Type this letter!" (Imperative). "I want you to type this letter for me." (Declarative). "Would you type this letter, please?" (Interrogative). Discourse analysis includes the study of both spoken interactions and written texts. It identifies linguistic features that characterize different genres as social and cultural factors that support our understanding.

The improvement of fluency and accuracy by new technologies have been promoted progressively through what Bax (2003) calls consolidated analysis of CALL that happened in three phases: First, "Restricted CALL' that was limited on the use of computers and mainly focused on accuracy, involving closed drills and quizzes; second, "Open CALL" which highlights the use of computers for imitations, games, and forms that facilitated communication; and lastly, "Integrated CALL', a recent phase which mixes computers with language skills through the natural use of computers. Thanks to quality of new technologies and the excellence of Internet connection for the devices, the recent technological environment enables stabilization of mobile devices into our daily life and facilitates

the language speaking skills acquisition through the mastery of vocabulary, in addition to components observed above.

Vocabulary is the last component chosen among others that should be well taught to contribute to English speaking skill. Vocabulary implies a set of lexemes including one words, complex words, and idioms (Richards & Schmidt, 2013). Without a huge vocabulary, it is difficult to use English accurately and brightly (Burton, 1982). A speaker of a FL will speak confidently and correctly if he or she acquires ample vocabulary and has capability to use it perfectly. Therefore, the teacher should conduct activities allowing students to improve vocabulary, using new technologies. For instance, through drilling, learners prefer to use MALL to practice and learn the target vocabulary. In order to gain appropriate language input, learners utilize SMS and e-mail messages (Thornton & Houser, 2005), WhatsApp messages, as well as audio and video functionalities of the mobile devices (Başal, et al., 2016). Learners and teachers can utilize such MALL tools for multiple purposes to teach and practice pronunciation (Ducate & Lomicka, 2009; Godwin-Jones, 2008) to support vocabulary learning (Lu, 2008) and to control quizzes (Saran & Seferoglu, 2010).

With regard to the above view, Jaelani (2013) advises that when the teacher wants to increase the vocabulary of students in class, he/she may present the new ideas to the students. The teacher should set a topic according to experiences and interests of students and require them to discuss the topic in groups. The teacher can also request students to read a text on the topic that is being discussed in order for them to acquire some vocabulary from it (Hadfield, 2008; Wallace and Walberg, 2004). After this exercise, students can organize presentation in a variety of different ways. Then, students can practice speeches in pair or with the whole class using the learned new vocabulary. Teachers can also support learners to make them familiar with speeches and informal discussions so as to correspond to the intended audience. Learners need to know how speakers differ from one another and how particular circumstances influence different forms of speech and they can learn how speaking styles affect listeners (Wallace and Walberg, 2004). A study conducted by Thornton and Houser (2005) on two students learning vocabulary revealed that the one using mobile devices performs better than the student learning the same vocabulary in a classroom. Also, Lu (2008) finds that mobile phones are supportive tools that can be used to learn vocabulary as they are different from pen and paper, the tradition materials that were used in teaching and learning vocabulary.

Since mobile technology could act as an efficient mediator for enhancing English language learning; MALL is proposed to support learners to learn and achieve languages, regardless of time and space (Messinger, 2011). For this reason, speaking lessons require strategies to improve the speaking

competence. Teachers may guide learners systematically, by initiating multiple activities to increase their motivation to learn the language and trying to find policies helping them to overcome challenges faced during the teaching and learning process.

2.6 Challenges of teaching and learning of English speaking skills using MALL and CALL in HLI in Rwanda and possible strategies

In the section above, the importance of using new technologies MALL and CALL in teaching English speaking skills through its components has been discussed in detail. However, each method and technique of teaching and learning a language has its benefits and challenges. The following sections will focus on the challenges as well as the strategies that have been suggested in the literature to overcome the challenges.

2.6.1 Challenges of teaching and learning English speaking using MALL and CALL in HLI

The difference between using MALL and CALL lies in the facilities or constraints each new technology comes with. MALL devices may be used anywhere as they are moved easily, which is not the case for using CALL tools. The use of CALL requires the user to remain in the fixed place like at the University, at school or at home due to its big size. Another difference is the size of content available from both new technologies. The content from a computer is more readable than the one offered by MALL devices. Various studies have pointed out the challenges and disadvantages related to the use of MALL and CALL as observed in the following paragraphs.

Starting with challenges relating to the use of mobile devices, mobile technology is not always effective due to some challenges. Among the challenges one may mention the cost imposed by both telecommunications for access and mobile devices price and screen size (Thornton & Houser, 2003), as well as limited presentation of graphs (Kim & Albers, 2001). Finally, the lack of mastery of MALL technology by both learners and teachers is another main challenge as explained by Chinnery (2006). The author said that the success in using mobile technologies depends on the teachers' capacity to handle them. The new technologies are only useful tools in the hands of qualified and successful teachers. In the same study, Chinnery (2006) supports this idea, highlighting certain hindrances of using MALL either resulting from its own nature or from the tutors themselves. Battery life and slow downloading are other constraints related to the use of mobile devices for learning English (Corlett et al., 2005). More identified usability issues concern small keyboards as a constraint to mobile learning (Wentzel et al., 2005) as the small size can cause viewing difficulties, eyestrain or can be

difficult for individuals with reduced vision. In addition, web pages are not always designed for small screens (Alexander, 2004; Bachfischer et al., 2008).

Apart from that, limited storage, memory and document editing capabilities may also limit mobile academic activities (Shudong & Higgins, 2005). Furthermore, limited availability of wireless access (Lawrence et al., 2008) may hinder MALL implementation. Multitasking sometimes also causes mobile learner's distraction, which consequently compromises the remembering of learning contents (Dolittle et al., 2009). For instance, using mobile devices in class might disturb students' concentration and hamper the learning process. Other drawbacks and problems while using MALL devices relate to technical limitations and lack of proper network coverage (DuVall et al., 2007; Savill-Smith & Kent, 2003). After discussing MALL's constraints in teaching and learning English, there is a need to be aware of challenges resulted from using CALL.

Even though the existing literature shows that teachers are eager to integrate technology into their classrooms and benefit from CALL based activities, what they did in their computer courses may not facilitate using CALL-based activities (Wentworth, 1996; Keirns, 1992; Hargrave & Hsu, 2000). When the research on technology and the training of teachers were revised, two approaches emerged: The first approach was focusing on the teaching of technology and was found to be limited and too technical. The second concerned the technology combination throughout teacher education. It consisted on exposing teachers to continuous technology (Peters, 2006; Wong & Benson, 2006; Desjardins & Peters, 2007; Lambert, Gong, & Cuper, 2008). Further, using computer in education depends on teachers with positive attitude towards computer technology in teaching English language (Abdullah et al., 2006). Resources may also become another constraint as pointed out by Termit and Ganisha (2014) that, without adequate resources both in the form of materials and human support, the integration of ICT in class instruction cannot be carried out properly, even though all the other conditions are met.

In brief, challenges of using MALL devices are explained on the side of learners. This may result from students' need to continuously learn regardless of time and place. On the other hand, Writers revealed constraints of using CALL that can be observed on the teachers' side. With CALL, teachers may prepare content and share with students being at fixed places. The last part of literature review proposes strategies that may help to overcome challenges of using modern technologies in teaching and learning English speaking skills.

2.6.2 Suggested strategies to overcome the observed challenges

Strategies to overcome challenges observed while using MALL and CALL in teaching English as L2 are very important to know before the application of these new methodologies, in order to apply suitable methodologies leading to success in teaching English speaking components.

To start with, teachers must join their students to benefit from technologies and they must be comfortable with daily activities, facilitated by MALL and CALL in and outside the classrooms (Barsotti & Martins, 2011; Gray, Andrews & Schroeder, 2012). This will help teachers to adapt learning processes differently from traditional classroom (Volman, 2005; Larsen-Freeman & Anderson, 2011). Moreover, it is important for teachers to make students aware of the advantages of using mobile devices for learning, particularly for learning English as SL. Pedagogically, teachers may take some aspects into consideration while mobile devices are integrated in learning. Wang et al. (2009) state that students prefer using MALL tools for entertainment rather than for educational purposes.

In addition, training and technical support are important in encouraging ESL learners to use MALL. It is, thus, very important for the education institutions, to stay committed to the success of using these modern technologies for learning English language and to show such commitment to students. Additionally, customized or personalized services must be required, as students have indicated a desire for personalization. ESL lecturers can moreover promote students' intention in using the new technologies by adding value to their traditional teaching methods. However, it is to be realized that ESL lecturers themselves need to be familiar with this new technology and be ready to be involved in the implementation plans. There is a necessity to motivate and increase instructors' awareness of MALL and CALL and provide them with sufficient training. The results also indicated that the plan and strategies have to be provided referring to students' targets, and all acute success factors for the viable placement of MALL and CALL are crucial to establish in order to enhance English language learning (Hashim,Yunusa, Embib , Ozira, 2017). Above all, the guidance has to be encouraged through the vast amount of information and materials to be organized around pedagogical tasks. The facilitator should monitor learners and empower them to accept more responsibility for learning (Hashim, Yunusa, Embib, Ozira, 2017). A purse connectivity and mobility mode for the computer or mobile devices should be considered for making easy the download of materials and store what is needed for most of the learning process. This will allow to be able to function with little or no connection for long periods of time (Orr, 2010).

More strategies to overcome languages' barriers are proposed by Krashen (1983). Krashen stated that the target language must be a tool for conversational management, comprehensible, interesting and relevant, not grammatically sequenced. The target language must be quantitatively enough, and must facilitate the high level of affective filter. According to Krashen, the use of mobile technologies contributes to learners' clarity, acquiring and understanding the meaning of new words in the target language (Krashen, 1983). New technologies make a relevant contribution to helping the learners to acquire the new words that they need for the success in their everyday activities and the new words that are relevant to the learners' contexts. The new technologies may use grammatical arrangement to make available the materials which help learners to understand indirectly the target language grammatical rules (Park & Slater, 2014).

Above all, there is a need for guidance through the large amount of information and for those materials to be organized around pedagogical tasks. Accordingly, it is essential to provide different options of providing assistance in learning and technology which include access to peers and experts and task-specific help for learning activities. The facilitator should monitor and empower the learners to accept more responsibility for learning.

In several studies (Peters, 2006; Wong & Benson, 2006; Lambert, Gong, & Cuper, 2008), the authors found that a single tanning in using new technologies is not sufficient, though it motivates trainees about the positive effect of technology use. In contrast to these studies, Thieman's (2008) findings in a longitudinal 5-year study, conducted with 223 pre-service teachers, showed that 85% of teachers adopted the use of new technologies in their teaching process. Kressler's (2007) web-based survey of 108 graduates of TESOL master's degree programs concluded that the level of teachers' confidence in understanding the role of CALL differs from how they integrate this new technology in their teaching activities. To feel confident in use of the technology tools, teachers need enough practice on how to use methodological approaches to their own teaching (Daniel, 2010). Then, the satisfaction outcome in teaching will depend on how teachers perceive and implement technology (Motteram, Slaouti & Onat-Stelma, 2013; Mumtaz, 2000). Teachers seeking to use technology should behave differently from their fellows practicing traditional methods. As Hubbard and Levy (2006) proposed, CALL and MALL teacher roles can be associated with being a specialist, developer, researcher, and/or trainer.

All in all, MALL and CALL could bring more benefits than constraints. It is however important to take limitations into consideration, to ensure successful implementation of MALL and CALL as part of ESL methods to enhance learners' English skills. The application of these modern technologies

however, requires the cooperation of all education stakeholders to successfully promote the use of English language in general and English language speaking in particular.

This chapter on literature started with the definition of key terms and provided a brief review of the theories of language learning. It has highlighted the strength and weaknesses observed while teaching English currently in the HLIs in Rwanda. Moreover, English speaking components, subskills and the methodology to use in order to promote English speaking skills in HLIs have been discussed. Tasks to be assigned to students to do inside and outside the classroom have been also clarified. These tasks can contribute to bridging the gaps observed in teaching English in HLIs as the challenges observed will be solved thanks to the revealed strategies in using MALL and CALL in teaching English in HLIs in Rwanda.

CHAPTER III. RESEARCH METHODOLOGY

The methodology adopted in this study was both qualitative and quantitative and focused on the analysis of the use of new technologies MALL and CALL in teaching English speaking skills in HLIs in Rwanda.

Simple random sampling technique where each and every participant from the population has an equal chance of being selected (Taherdoost, 2016; West, 2016) was used for all HLIs found in Kigali city. In provinces, purposive sampling was used, focusing on the HLIs location and accessibility. Hence, three urban HLIs, one public and two privates and four rural HLIs were selected as a sample. This made it possible to generalize the results for all HLIs of Rwanda. Only one college among the three Colleges of UR that deliver bachelor's degree in Kigali city was selected. As private HLIs are seven in Kigali city, two of them were identified. Moreover, one HLI from each of the four provinces of Rwanda were purposively chosen taking into consideration their location and accessibility. In fact, the selection of targeted group consisted of non-probability sampling technique, to give a chance to privates HLIs located in the four provinces. In this type of sampling, some elements of the population have no chance of selection.

Within the sampling, two targeted groups were students and lecturers. Two institutions of higher learning have only one lecturer and some of HLIs have only one permanent lecturer, and others are part-time lecturers; so it was difficult to identify individual informants. Lecturers from 7 HLIs were identified: 1 English lecturer from four privates HLIs and 2 lecturers of English language from each of the three remaining HLIs numbering 10 lecturers all together. The lecturers were coordinators of centers, full time or part-time. Furthermore, 20 students, 10 from first years (5 males and 5 females) and 10 from second years (5 males and 5 females) in each HLI, were identified. Students from third year were not targeted as many of them had completed their studies or were busy with their final exams. The total number of respondents from seven HLIs was 150 respondents. The distribution of respondents was as follows: 10 male students and 10 female students, 1 or 2 English lecturers were purposively identified in each HLI. The lecturers from each case study totaled 10 respondents. These were interviewed and all student respondents were 140. This kind of non-probability sampling resulting in the total number of 150 people was used to generalize the findings for the whole population of staff and students in HLIs. Only lecturers of English language were preferred among other lecturers due to their background knowledge in teaching and learning languages; and students facilitated by English lecturers were judged suitable informants in the identified case studies.

The case study included the following seven HLIs targeted: From Kigali city, College of Sciences and Technology (CST), Adventist University of Central Africa (AUCA), and University of Kigali (UoK) were selected. From the four provinces of Rwanda, University of Technology and Arts of Byumba (UTAB) was chosen from Northern Province, Catholic University of Rwanda (CUR) from the Southern Province, Université Libre de Kigali (ULK), Gisenyi campus from the Western Province, and Université des Laiques Adventistes de Kigali (UNILAK), the campus found in Rwamagana from the Eastern Province of Rwanda. As previously said, simple random sampling technique was used to identify the three HLIs in Kigali City, but purposive sampling was used to identify one HLI from each province. The names of the three colleges from UR namely College of Sciences and Technology (CST), College of Business and Economics (CBE) and College of Medicine and Health Sciences (CMHS)) were written on small papers. After mixing up papers, CST was picked among the UR colleges. To identify two HLIs among the seven located in Kigali City, names of seven HLIs found in Kigali city were considered. These included Mount Kenya, AUCA, UoK, UNILAK, ULK, Kepler and Akhilah. After mixing up the papers, AUCA and UoK were picked. The University of Tourism, Technology and Business Studies was ignored to avoid any bias during data collection because the investigator works at the institution. The four provinces mentioned were purposely chosen because of accessibility. The institutions and number of respondents are summarized in the following Table 1.

Table III.1 Statistics of respondents and higher learning institutions

Higher Learning Institutions		CST	UTAB	AUCA	UoK	UNILAK	ULK Gisenyi	CUR	Total Respondents
Lecturers	Female	0	0	0	0	1	0	0	1
	Male	2	2	1	1	1	1	1	9
Students	Female	10	10	10	10	10	10	10	70
	Male	10	10	10	10	10	10	10	70
TOTAL Respondents									150

Source: Field, primary data, 2021

The tools used to collect data in order to analyze and interpret results are semi-structured interview with English lecturers and an audio recorder was used to gather and preserve the data. As for students, a structured questionnaire was used to collect data. Data collection process was carried out in three

HLIs located in Kigali City and in four HLIs located in Eastern, Southern, Northern and Western provinces of the country. The exercise took one day in each HLI found in Kigali City and provinces. Each leader of language center in HLI or HOD was first contacted by telephone to identify respondents. The identification included their location, their phone numbers, their offices or their classes. The following day was used to approach and ask them to fill in the questionnaire or respond to semi-structured interview. Respondents' availability for the activities was guaranteed.

Before administering questionnaire to students or conducting interviews with lecturers, the interviewer and interviewees introduced themselves for five minutes, and the interviewer explained the purpose of the research assuring respondents of the confidentiality of their answers. This data collection process was completed after fifteen days from 15 May 2021 to 1 June 2021. After data collection, the next step was to analyse each set of data and organize them by grouping the responses together and arranging them. As responses from students consisted of quantifiable data, they were analysed and presented into tables and then interpreted. This was done in chapter four which is devoted to data presentation, analysis, and interpretation of the findings.

CHAPTER IV. DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

This chapter provides an analysis of results from questionnaire submitted and collected from the mentioned seven HLIs located in Kigali city and in different provinces of Rwanda. The analysis consists also of data collected from semi-structured interview held with 10 lecturers of English, working in the said HLIs. Among 140 respondents expected to fill in questionnaire, 135 of respondents accomplished the task, but all 10 lecturers were available during data collection. The first part of this chapter includes results from students as respondents. After the analysis of raw data in tables, the interpretation of result from each table is provided.

4.1 Results from students' questionnaire

Questionnaires were distributed to 140 students but 135 filled them in. The first five tables tackling results from students have been analyzed using SPSS software. The analysis in five tables was simple; each respondent had to provide one answer. The question in line with objective two about English skills by order of importance was asked to respondents, and it is found among the questions asked in appendix two. Answering the question, 130 among 135 rewrote the skills following the order presented to them on the questionnaire. The Researcher found that the information from question two was not contributing to the objective and decided to remove the question. However, the question was maintained for the semi-structured interview with lecturers. The tables that follow include the combinations of results as respondents were allowed to choose more than one answer. It was not easy to use SPSS; consequently, results are analyzed using Microsoft Words.

Table IV. 2 Respondents age range

Age range	Frequency	Percent
18-22	56	41.5
23-27	29	21.5
28-32	24	17.8
32 and above	26	19.3
Total	135	100.0

Source: Primary data 2021

Table 2 above reveals the highest number of respondents (56) between 18 and 22 years old (41.5%) of all respondents, followed by 29 respondents found between the age range of 23 and 27 (21.5%). Further, the age range of students between 32 and above comes to the third place (19.3%). Twenty

four students (17.8%) makes the lowest respondents, ranged between 28 and 32 age. It is clear from these results that all categories of age were considered during data collection.

Table IV. 3 Gender of respondents

	Frequency	Percent
Male	64	47.4
Female	71	52.6
Total	135	100.0

Source: Primary data, 2021

Table 3 shows that the number of female students is the highest with 71 respondents (52.6 %). Male respondents are 64 (47%) of all respondents. From the respondents' number along with corresponding percentage, it is seen that both genders responded to questionnaire, but female respondents were more available than male respondents.

Table IV. 4 Respondents' year of study

Year of study	Frequency	Percent
Year 1	75	55.6
Year 2	60	44.4
Total	135	100.0

Source: Primary data, 2021

As clarified in table 4 above, respondents from year one are 75 (55.6%) and respondents from year two are 60 (44.4%) of respondents. The difference of numbers according to levels in which respondents study and percentage, results from one HLI in which only the respondents from year one were present at the moment of data collection.

Table IV. 5 Distribution of respondents per HLI

Higher learning institutions	Frequency	Percentage
UR (College of CST)	20	14.8
AUCA	16	11.9
UoK	20	14.8
UTAB	20	14.8
UNILAK	20	14.8
ULK	20	14.8
CUR	19	14.1
Total	135	100.0

Source: Primary data, 2021

Table 5 includes frequency of respondents and percentage. The five HLIs specifically, UR (CST), UoK, UTAB, UNILAK and ULK comprise 20 respondents (14.8%) each, followed by CUR with 19 respondents (14.1%) and the lowest number is from AUCA (16 respondents representing 11.9%). The target respondents from each HLI were 20 making 140 in all of HLIs. However, as observed in the table, questionnaires from the second and the last HLIs were returned incomplete. This means that some of the selected respondents did not fill in the given questionnaire.

Table IV. 6 Methodology used while teaching and learning English module in HLIs

The learning process of English module	Frequency	Percentage
Following lecturer's explanation from the beginning to the end	2	1%
Following the lecturer and sometimes do exercises	11	8%
Prepare the given task and present.	24	18%
Following lecturer's explanation and following the lecturer and do exercises	4	3%
Following lecturer's explanation and prepare and do presentations	23	17%
Following the lecturer and sometimes do exercises, prepare and present	39	29%
Following lecturer's explanation, following the lecturer and sometimes do exercises, prepare and make presentations	32	24%
Total	**135**	**100%**

Source: Primary data, 2021

Table 6 shows that 135 respondents answered the questions concerning how they study English module. The highest number of respondents equal to 39 (29%), stated that three methodologies are used in their classroom as follows: Students sometimes follow lecturers' explanation from the beginning to the end or they follow lecturers' explanation and occasionally do exercises relating to the lesson of the day or they prepare the given topic and do presentations. The second category of 32 respondents (24%) stated that they are most of the time facilitated through three activities. They follow the lecturer's explanation and sometimes do exercises and prepare and do presentations during the lesson.

 In addition, the third category of 24 respondents (18%) chose the preparation and presentation as the activity that is mostly done while studying English. Twenty-three respondents (17%) said that the methodology used is to follow lecturer's explanation and make presentations. Eleven respondents (8%) agree that they follow lecturer's explanations and sometimes do exercise. Further, four respondents (3%) confirmed that they follow lecturer's explanation and follow lecturer with doing exercises sometimes. Finally, 2 respondents (1%) declared that the methodology used while teaching English is following lecturer's explanation from the beginning to the end.

Table IV.7 Components emphasized and encouraged while teaching English speaking skills

Components	Emphasis			
	yes	%	No	%
Vocabulary	126	93%	9	7%
Phonology	94	70%	31	23%
Stress	42	31%	72	53%
Grammar	129	96%	2	1%
Intonation	72	53%	36	27%

Source: Primary data, 2021

Table 7 above comprises components emphasized by lecturers while teaching the English module. Respondents were requested to choose one or more among the proposed components. Obviously, respondents' answers were Yes/No and to each frequency, the percentage is shown. The total number of respondents is more than 135, the expected respondents and the percentage of yes and no goes beyond 100%, due to many responses allowed to one respondent. Respondents equal to 129 (96%) mentioned grammar as the highest component taught in class of English, followed by 126 respondents (93%) who revealed vocabulary among the components emphasized while teaching English. Furthermore, 94 respondents (70%) declared phonology among the suggested components, as for 42 respondents (31%) stated stress, but this component was selected by the lowest number of respondents.

All the Respondents who declared that some components are not considered by lecturers while teaching English subject, confirmed this through the results presented in the table as follows: Stress was stated by the highest number of respondents equal to 72 with the percentage of 53%. Intonation came second chosen by 36 respondents, (27%) and Phonology was indicated by 31 respondents (23%). Further, 9 respondents (7%) declared that they do not study vocabulary in English module. Finally, 2 respondents (1%), which is the lowest number of respondents, said that grammar is not considered among the components studied in English lesson.

Table IV. 8 Activities done in and outside the classroom relating to English speaking

Activities	In class				Outside the class			
	Yes	%	No	%	Yes	%	No	%
Individual presentation	121	90 %	8	6%	21	16%	48	36%
Group presentation	127	94%	7	5%	23	17%	48	36%
Drama	49	36 %	37	27%	51	38%	53	39%
Debate	87	64%	9	7%	44	33%	44	33%
Group discussion	85	63%	13	10%	44	33	33	24%

Source: Primary data, 2021

Results included in table 8 illuminate activities done in or outside the classroom. Respondents were allowed to choose more than one activity. This resulted from the number of more than 135 respondents contacted during data collection. Also, the addition of yes and no answers for activities done in or outside the classroom goes beyond 100%. For this reason, the place of total respondents and percentage is not available in the above table. Further, it is unusual to conduct individual or group presentation activities outside the classroom, but this style of learning is possible with the use of new technologies. Asking this question, the Researcher intended to know whether the speaking skill is facilitated beyond normal classes using the new technologies: MALL and CALL. The production of speaking activities may be done through online platforms such Moodle, Teams, among others.

In comparing results, the interpretation starts from the highest to the lowest number of respondents who provided a yes answer for the activity done indoor and the corresponding number of respondents who said no for the activity done outside the classroom, as well as their percentages. According to the activities done in class, 127 respondents (94%) answered that they prepare and do group presentations in class and 7 respondents (5%) responded no. Individual presentation was revealed by 121 Respondents (90 %) as an activity done in class during English lessons. 8 respondents equal to (6%) said that this activity is not done in class of English. Moreover, debate comes third as an activity done while studying English lesson as revealed by 87 respondents (64%). 9 respondents stated that debate is not encouraged while studying English. Group discussion was responded by 85 respondents (63%) as one of activities done in English class and 13 respondents (10%) said that this activity is not done during English lesson. The lowest number of respondents equal to 49 (36 %) declared that drama is an activity done in class and 37 respondents (27%) said that drama is not handled in class

while doing English classes. It is unfortunate that drama is the least initiated activity in HLS; yet it is very important for students studying English as L2. In fact, Drama allows the participants to improve their pronunciation and vocabulary and helps to practice a language in real situation.

The analysis of activities done outside the classroom put out results as follows: Drama is the first activity responded by 51 respondents as an activity done outside the classroom (38%). 53 respondents (39%) confirmed that the same activity is not done outside the classroom. Debate and group discussion occupy the second place as confirmed by 44 respondent each (33%) as an activity done outside the classroom. 44 respondents (33%) said that debate is not done outside the classroom and 33 respondents (24%) said that group discussion is not done outside the classroom. Further, 23 respondents (17%), said that group presentation is done outside the classroom and 48 respondents (36%) said that group presentation is not done outside the classroom. Finally, 21 respondents (16%) stated that individual presentation is done outside the classroom and 48 respondents (36%) said that individual presentation is not done when students are outside the classroom.

At the end of the above analysis, we can see that activities encouraging speaking skill are more conducted inside the classroom more than outside. Observing the activities done outside the classroom, respondents who answered yes are less than those who answered no to each activity with the exception of drama. Drama activity stands as the last activity done in class of English but occupies the first place as an activity done outside the classroom. Finally, among all activities, only debate maintains the same number of respondents who mentioned yes and no.

Table IV. 9 Challenges faced during learning English module

Challenges	Frequency	Percentage
A big number of students in class	24	18%
Lack of opportunity to talk	19	14%
Lack of native a speaker voice	15	11%
A big number of students in class and lack of opportunity to talk	26	19%
A big number of students in class and lack of native a speaker voice	17	13%
Lack of opportunity to talk and lack of a native speaker voice	11	8%
A big number of students in class, lack of opportunity to talk and lack of a native speaker voice	23	17%
Total	135	100%

Source: Primary data, 2021

Table 9 shows results regarding challenges faced by respondents while studying English module. Other challenges (different from those presented in table) were proposed among the written challenges in questionnaire. Given that very few respondents (10) commented on other challenges and the consideration of these few students increased the length of the table, due to more than one question respondents had to answer, the researcher decided to discuss the answers from others qualitatively. The discussion of others is made after the analysis of challenges found in the table.

The highest number is made of 26 Respondents (19%), who mentioned that a big number of students in class and lack of opportunity to talk are the two challenges faced by students, while studying English module. A big number of students in class, lack opportunity to talk and lack of a native speaker voice are the three challenges faced by students while studying English. This is revealed by 23 respondents (17%). Lack of opportunity to talk occupies the third place as confirmed by 19 respondents (14 %). Further, a big number of students in class and lack of a native speaker voice make the forth challenges revealed by 17 respondents (13%). Fifteen respondents (11%) stated lack of native speaker voice as a challenge faced, to end with lack of opportunity to talk and lack of native speaker voice as revealed by 11 respondents (8%) among the challenges faced while learning the

English module. The interval among the revealed challenges above is not high, since the highest respondents are 24 and lowest of them are 11, to mean that almost all challenges are considered serious by informants. However, lack of opportunity to talk and lack of native speaker's voice are the most serious challenges faced by students while they are studying the English module. As mentioned above, only 10 respondents among 135 consulted commented on other challenges. Six of them stated lack of sufficient time to practice the speaking skills. Two students said that another challenge is the lack of laboratory and two students said that in presentations, students laugh at those who make mistakes.

Table IV.10 Strategies that can be used to overcome challenges

Strategies	Frequency	Percentage
Few students in class	12	9%
Listening to native speakers	4	3%
Having more activities allowing to speak	2	1%
Speaking English even outside the classroom	5	4%
Few students in class and listening to native speakers	2	1%
Few students in class and having more activities allowing to speak	6	5%
Few students in class and speaking English even outside the class	5	4%
Listening to native speakers and having more activities allowing to speak	3	2%
Listening to native speakers and speaking English even outside the class	7	5%
Few students in class, listening to native speakers and having more activities allowing to speak	16	12%
Few students in class, listening to native speakers, having more activities allowing to speak	0	0%
Few students in class, having more activities allowing to speak, speaking English even outside the class	16	12%
Listening to native speakers, having more activities allowing to speak, speaking English even outside the class	16	12%
Few students in class, listening to native speakers and speaking English even outside the class	37	27%
Total	135	100%

Source: Primary data, 2021

In Table 10, respondents suggested strategies that can be used to overcome the observed challenges while studying the English module. The analyzed results revealed that a small number of students in class, listening to native speakers and speaking English even outside the classroom come first as good solutions to the observed challenges. Sixteen respondents (12%) is the number of respondents that has appeared three times in the table, suggesting that, few students in class, listen to native speakers

and have more activities that allow them to speak and few students in class, having more activities that make them speak, speaking English even outside the class and listening to native speakers, having more activities allowing to speak, speaking English even outside the class may be good solutions to overcome challenges faced while studying English module. In addition, 12 respondents (9%) confirmed that the little number of students in class may be a good solution the observed challenges.

Further, 7 respondents (5%) declared listening to native speakers and speaking English even outside the classroom as a nice solution, 6 respondents (4%) answered Little number of students in class and speaking English even outside the class, 4 respondents (3%) chose listening to native speakers as a solution to the observed challenges, 3 respondents (2 %) selected listening to native speakers and having more activities allowing to speak and 2 respondents (1%) appeared twice and declared having more activities allowing to speak and little number of students in class as well as listening to native speakers as good solutions to overcome challenges faced by students while studying English module. Few students and listening to a native speaker's voice were proposed 9 times by respondents as noble solutions to the observed challenges while studying the English module, having more activities allowing students to speak and speaking English even outside the class appeared 7 times. Few students in class and listening to a native speaker voice are the two variables proposed most by respondents.

4.2 Results from semi-structured interview with Lecturers of English language

As already explained, the semi-structured interview was conducted with ten English lecturers from the seven HLIs, located in Kigali city and in four provinces of Rwanda. Eleven questions were answered one by one, while interviewer was recording results of the interview using a phone. As observed in the appendix, the first five questions required interviewees to tick the right response. The interviewer took time to read each question and tick the right response given by the respondent. Answers to questions were spontaneously written down. After completing the semi-structured interview with 10 lecturers, the analysis of responses from four questions including age, gender, qualification and experience of respondents was made in tables. After each table, interpretation of results was made. Regarding the question 3 concerning nationality, there is no need to analyze this in the table, since all of respondents are Rwandans. Findings from the question six up to the last one i.e. eleventh, the analysis is pure qualitative, where similar responses are analyzed and interpreted under the same themes. Sometimes percentages were indicated to clarify the highest rate of respondents to the interpreted questions.

4.2.1 Demographic distribution of respondents

The first question from semi-structured interview answered by lecturers of English involves gender and age of respondents as summarized in the table below.

Table IV. 11 Demographic characteristics of respondents of interview

Gender/Age	25-32	33-40	41-48	49-56	Above 57	Total	%
Male	1	2	4	1	1	9	90%
Female	0	0	1	0	0	1	10%
Total	1	2	5	1	1	10	100%
Percentage	10%	20%	50%	10%	10%	100%	

Source: Primary data, 2021

Table 11 clarifies gender and respondents' age range. 9 respondents among 10, (90%) are male and 1 respondent (10%) is female. The highest number of respondents is between 41 and 48 age range, occupied by five respondents (50%), followed by 2 respondents found between 33 and 40 age range (20%). Further, 1 respondent is aged between 25 and 32 age range and the age range between 49 and 56 comprises also 1 respondent. Finally, 1 respondent is found in the age range of 57 and above.

As far as gender is concerned, we can conclude that a great number of English lecturers are male, i.e. 9 male respondents with only 1 female respondent. Concerning respondents' age, a big number of respondents (5) is in the range between 41 and 48. Two respondents are found in the range between 33 and 40 and occupy the second rate. The result shows that respondents are mature enough to answer relevantly the given questions.

4.2.2 Respondents qualification and experience

Table 12 below comprises qualification and experience of respondents. The analyzed results allow us to conclude whether lecturers from HLIs are knowledgeable in the domain they are working, in order to cope with the modern technologies while teaching English in HLI.

Table IV. 12 Respondents' qualifications and experiences

| Qualification | Experience | | | | Total | Percentage |
	Less than 1 year	Between 1-5 years	Between 6-10 years	More than 10 years	10	
Bachelor	0	0	0	0	0	0%
Master	0	3	1	5	9	90%
PhD	0	0	0	1	1	10%
Total	0	3	1	6	10	
%	0%	30%	10%	60%	100%	100%

Source: Primary data, 2021

Table 12 above elucidates qualification and experience of respondents. 9 respondents (90%) are master's holder, one respondent (10%) possesses a PhD and none of respondents has bachelor's degree as the highest qualification. Further, 6 respondents (60%) have experience of more than 10 years, between 1 and 5 years are 3 respondents (30%) and 1 respondent (10%) has between 6 and 10 years of experience. The results from lecturers' qualification showed that all lecturers are able to teach and adopt new technology since all of them are at least masters' holder. Regarding their experience, the highest number of respondents have more than 10 years of experience and none of the respondents has less than 1 year. This shows that English is taught by experienced lecturers in HLIs of Rwanda.

4.3 Questions related to research objectives

Analysis and interpretation of results in the following sections is qualitative and the analysis is done by themes. The percentage of respondents is sometimes presented to show the difference and relationship between variables as observed in the following section.

4.3.1 English skills in order of importance

To this question, listening, speaking, reading and writing were ranked in order of importance. Nine respondents (90%) ranked speaking the most important of English skills and only 1 respondents (10%), said that listening skill is the most important. Moreover, 8 respondents (80%) of respondents

said that listening is the second important skill among the four skills. One respondent (10%) said that writing skill is the second most important skill and 1 respondent confirmed that speaking comes second important among the four skills. Writing and reading were ranked third and each of the two skills was mentioned by 5 respondents (50%) as the third important skill. Moreover, reading was ranked last by 5 respondents (50%), writing by 4 respondents (40%) and listening by 1 respondent (10%). Even though skills of English were ranked in order of importance, almost all respondents said that it is not easy to rank English skills this way, since all of the four skills are interrelated. However, even if all skills complete one another, one respondent said that productive skills i.e. speaking and writing are the most important skills followed by listening and reading considered as receptive skills.

According to respondents, speaking is the most important skill because, it is a skill that engages people to interact with community and show the master of a language. They added that speaking facilitate not only the interaction between two or more people, but; also it deals with the issue of everyday life. According to some respondents, whatever message lecturers want to convey to learners, they do it through speaking. In speaking, people express themselves and express different ideas and different thoughts freely and confidently. One respondent ranked speaking first. A possible explanation is that, there are people who cannot read or write, yet; they can communicate easily because, they have acquired the speaking and listening skills. This is why, respondents consider speaking and listening first. Respondent who mentioned listening as the most important among the four skills said that people in general and learners of a language in particular especially native speaker, start by listening and very quickly they learn how to speak.

The second productive skill considered by the highest number of respondents is the listening skill. Respondents who chose listening as the second important skill declared that speaking and listening are interrelated. One respondent said that listening comes the second because; when you are speaking, you need to listen to the feedback and this fosters communication. For instance, after speaking, the learner will get some comments through peers or lecturers. Then, students need to master the listening skill. Writing is ranked second because it comes second because, what is not understood through speaking can be communicated through writing. Thus, writing is second since in everyday life most of the time at work, writing is required to produce different documents such as letters or reports. One respondent among those ranked writing and reading the third important skills said that, these skills are gained after being learned at school. Reading comes last, but according to respondents, this skill is also important, because people need to get information from reading different documents, extra

reading activities or reading for pleasure. Moreover, one respondent said that reading is also very important as it develops vocabulary and different expressions.

Therefore, speaking was ranked the first important skills by respondent, and this is matches with what a number of authors confirmed in the first chapters. Even though many respondents ranked writing and reading the third or last important skills as observed above, respondents said that all English skills are very necessary and interrelated, and knowing of them shows the mastery of a language. As indicated by respondents, you cannot teach one skill apart because, if you teach speaking, writing will somehow be improved.

4.3.2 Methods and approaches used while teaching English to promote peaking skills

This section deals with methods and approaches used in teaching English in HLIs of Rwanda. Respondents were asked what they do to promote the speaking skill where they are working and their answers are summarized below.

Most respondents stated that, the learner-centered or communicative approach is the method they mostly use while teaching English. One respondent explained that he encourages students to come together and hold discussion after getting a topic. Also, the lecturer added that, they always groups students and encourages them to discuss. Another respondent stated that he ensures that teaching and learning go hand in hand. For this reason, the respondent encourages communicative approach by inviting students to communicate with one another. Students who keep quiet are not preferred; instead, peer discussions are encouraged because they are very important in learning languages. Another respondent confirmed that, they encourage students to be active by responding to asked questions and interacting among themselves. According to him, students learn trough each other Lecturers use different techniques while teaching. For instance, they encourage discussions, where debate is involved and they encourage students to speak and be creative while speaking to acquire good pronunciation. Two respondents stated that, when students are encouraged to discuss in English, they are given topics involving opposition like in debate. However, when the lecturer is not around, students discuss in Kinyarwanda because it is their culture to communicate among themselves in Kinyarwanda their native language.

"*I keep on reminding them that they know enough Kinyarwanda and that they may try their best to speak English, because it is their target language. They do not need to improve the Kinyarwanda language*". The lecturer said.

Moreover, some informants said that to encourage speaking skills is not really easy because of very big classes and limited time. One of respondents explained the issue in the following words.

"We have a very big number of students. Sometimes we have even 300 students. In the class we are teaching, students are usually required to prepare presentations and give feedback in class, hoping that this will improve their speaking skills. We also use dialogues, but it is challenging because of the big number of students with short time. We have only 24 hours of face to face class the whole semester and once a year. 24 hours times two makes it 42 hours only in three years, as in third year they do not study English".

The respondent said that, the above issue is very challenging but lecturers try to encourage presentations or sometimes dialogue. They also encourage group discussions by giving a topic to discuss or sometimes lecturers encourage story telling.

"You require them to tell story but it does not take long because we have very limited time. We have really short time to improve the four skills we are talking about".

One informant confirmed to use student centered active learning as this method seems better than others. Therefore, they give students authentic experiences using the language. They said that, lecture-me or lecture-memorization as a teaching style makes it harder to learn. One respondent specified that, they use direct method while teaching speaking and this method stipulates what a thing represents without translating it in mother tongue. He gave an example saying that, if someone says "this is a pen", a student sees the pen. There is no need to translate how to say it in Kinyarwanda. The same respondent said that you can even use drawing or dictation. Some sentences are dictated to students and then, students can speak. When students say a word wrongly, the lecturer can correct students' errors and when words are corrected, students are able to improve in terms of speaking.

Respondents expressed that, it is really hard to encourage students to speak English outside the classroom. Lecturers said that they encourage students by giving them some tasks including speaking exercises in English. For instance, students are tasked to prepare public speaking or panel discussion, and this is done when they go home. In free time they meet and prepare group discussion and will present in the classroom. However, lecturers confirmed that, they still have challenges as it is hard to control students outside learning. One informant said: "Our culture is also hindrance of learning English. Outside the classroom, students are not interested in speaking foreign languages as in all areas of Rwanda people communicate in Kinyarwanda. So, my success is very limited".

Two lecturers indicated that learning a language is demanding. For this reason, wherever students are, they have to keep learning. They are encouraged to listen to the radio, English news and native speakers as well. Learners can even search for difficult vocabulary in dictionaries. When they are

outside of the institution, they have to make effort; otherwise it will not be easy. Further, students are required to watch different TVs that use English like CNN, Aljazeera and they may talk to different people with different accent but respondents said that to control these activities is not easy as they are not with students. Sometimes students are asked to watch a movie and make a summary to present the following day. However, students copy from Google and do not paraphrase text as confirmed by one respondent. Facilitating students to continue learning English outside classroom is not an easy task, especially, in a country like Rwanda, where one language is used everywhere. The respondent said that most of the times, students receive different activities via e-mail or Moodle platform while they are outside the institution, and are given the deadline of presenting the feedback.

4.3.3 Speaking skills components considered most important

This section focuses on the most important components to consider while teaching English speaking skills. To answer this question, respondents tried to comment on their choices.

Respondents explained the most important components to consider while teaching English speaking skills. Six respondents (60%) talked about pronunciation with various reasons. If you pronounce something wrongly, people may lose meaning of the pronounced words. For example, when lecturers are teaching English sounds, they give student tasks like dialogues, sketches, debate or any other communicative activities to check whether they are good at pronouncing some words. Their feedback is needed to help students improve pronunciation. Some words are written in the same way but pronounced differently. For instance, the word "desert" has two meanings but is pronounced differently. While differentiating the pronunciation of this word, intonation and stress are emphasized and phonetic and phonology have to be considered. Thus, this helps students to communicate correctly so that the message passes through. Further, lecturers emphasize pronunciation by asking students to repeat the said word. Similarly, one lecturer said that he teaches phonetic transcription and uses computer to help students to hear the right pronunciation. Students repeat the pronounced words but given the context and the number of students, this exercise cannot work satisfactorily.

Vocabulary is also very important in the learning/teaching of any language. One respondent gave an example of a customer and a waiter in a restaurant. .If the customer says he/she wants to eat roast meat and the waiter does not know what roast means, the/she may continue asking what the customer wants and this is the consequence of not mastering vocabulary. Therefore, to develop students' speaking skills, lecturers first need to know the right words in the target language. From vocabulary development, students understand meaning and pronunciation of words that are necessary for

communication. If they understand what another person is saying and they know what vocabulary to respond with, they are halfway to effective communication. Grammar also occupies an important place allowing the learner to speak a language. Mastering grammar helps learners to use tenses and structure sentences correctly. In addition, grammar helps the speaker to convey information clearly.

Another respondent reported that all components are very necessary and for this reason, lecturers must seek to improve each and every component which is related to these skills with particular attention to listening and speaking. These are skills that should be acquired by each and every learner. One of the informants added that there is no preference among components, what the respondent simply do is to develop students' fluency so that, they can know how to combine words, to make sentences and to communicate fluently. Speaking fluency is something that naturally develops as children go through school, as they are using and practicing speaking skills every day. Also, reading widely is a good way to improve fluency as it introduces children to new vocabulary and reinforces their knowledge of spoken language. The more fluent the students are in English, the more interesting, exciting and insightful conversations they can hold.

4.3.4 Use of the new technologies MALL and CALL to improve vocabulary, pronunciation, fluency and accuracy

In this section, Respondents were asked to explain whether or not the use of the new technologies MALL and CALL can be helpful to increase vocabulary, pronunciation, fluency and accuracy of students in HLIs. The Respondents' answers are summarized below.

All respondents equal to 100% confirmed that the new technologies MALL and CALL can be helpful to increase vocabulary, pronunciation, fluency and accuracy. However, one of respondents confirmed that e used these new technologies while teaching English lesson inside and outside the institution. Respondents said that practice makes perfect. The more you listen to something, the more you assimilate it. The new technologies are considered very important because, if a person regularly listens to native speakers, they can improve considerably. Using devices, manipulators find some programs rich in teaching English speaking skill such as audiovisual materials. For this reason, students may be encouraged to select and listen to educative programs.

For example, in using new technologies, students may listen to a native speaker and this may help avoid language interferences. The way words are pronounced is different from how a first language speaker of English pronounces them because natives of a language speak naturally .Students have to refer to those native speakers, and they can help in that sense. For instance, when you encourage

students to use their phone or tablets to download audiovisual activities from YouTube and download some of the scripts, these activities may be very helpful. Activities one respondent assigns to students are for example how to use speaking skills for invitation or apology. Students can also use internet or any other website that provide listening activities and learn how people use those expressions.

One lecturer said that, when they ask students to check on YouTube videos through their phone, or when the give   them some videos to listen through their phone, they are exposed most of the time to native speaker of English. In this case, students get new accent and right pronunciation from the native speaker. Thus, students who are really willing to improve English and who have access to those technological tools can do different exercises themselves, learn pronunciation themselves and learn more vocabulary thanks to programmes downloaded. One respondent said the help students to use new technologies sometimes in classroom, using computer and encourages them to listen to a native speaker's pronunciation. But outside the institution students are not helped.

 The respondent who uses new technology in teaching English module in and outside the institution explained it in the following words.

> "*I initiated this methodology not from the beginning when I reached the HLI, but in the middle. We sometimes have workshops with some organizations of teachers I belong to and we learn best practices from one another. Teachers from native speaker or those who studied abroad share with us this experience. I download and send audios or videos to students' WhatsApp group to learn some vocabulary as well as pronunciation from native speakers*".

The same respondent said that, these new technologies may increase English components. If students access language lab or have access to their own computer or laptops, it is a good opportunity. If they are looking for English materials or when they are chatting with colleagues in English, they definitely learn These are young people most of them are curious, they sometimes visit some video from You Tube or any other platform, which cannot be accessed in case they do not have these devices. The respondent declared to benefit from the access students have on these devices and task them some activities to deal with.

4.3.5 Challenges of using MALL and CALL in teaching and learning English speaking skills

The content under this heading deals with the challenges that may occur with the use of MALL and CALL in and outside the classroom. The challenges are of different kind and may be on the side of students or lecturers as explained by Respondents.

According to Respondents, challenges may result from either learners or lecturers. For instance, some learners not committed in learning, when they are not controlled or monitored, they are distracted.

Students may be interested in listening to other programs different from the given tasks like using the devices for leisure means. In this case, these digital media can distract instead of encouraging learning.

Students' poverty can also prevent some students from using the new technologies. Even though many students have devices like mobile phone, some of them cannot afford the devices, appropriate for learning. Moreover, internet bundles are expensive and if students do not have good network to download activities from internet, this may be a challenge. So, it is difficult to continue to learn and students may prefer the traditional way of teaching. In addition, on campuses students may get good connection but when students are outside the institution, it is difficult to get connection. Respondents said that, the use of new technologies requires strong internet network, whereas network does not reach the whole country.

Another challenge is that, students may not understand native speakers' accent or understand every single vocabulary. Further, the fact that Kinyarwanda, as the mother tongue, is used in the whole country, it is another factor that can lead to the failure of learning speaking English skills outside the institution.

Finally, in some HLIs of Rwanda it is strictly prohibited to use telephones or other devices in the classroom. This can challenge the use of MALL and CALL inside the classrooms and students lack the chance to benefit from native speakers voice.

On the side of lecturers, there are insufficiency of ICT devices, insufficiency of internet network and computer illiteracy for some. Further, ignorance about ICT facilities in teaching languages and lack of motivation to use digital communication channels is another challenge. Moreover, lecturers may not be able to follow up on or identify students' challenges during their learning process. Also, at the university, there is no well-equipped language laboratory which can really facilitate students to be familiar with language learning. In addition, lecturers may resist in using new technologies or they may be less performing than some learners and manipulation of those technological tools. Finally, lecturers may lack a suitable methodology of using new technologies. The revealed challenges may hamper the use of MALL and CALL in teaching English speaking skills. Thus, strategies to overcome challenges are proposed in the point below.

4.3.6 Possible strategies to overcome challenges in teaching English speaking skills using MALL and CALL.

Ten respondents from seven HLIs found in different areas of Rwanda, proposed strategies to overcome challenges that may be observed in teaching English speaking using MALL and CALL, such as: Monitoring and controlling tasks given to students. For instance, lecturers may give students a limited time to do activities in order to control them, and it is better to mark that activity. Lecturers may keep on requiring students to report what they have done using these tools and students may have 3 minutes to present. This will help them to be focused. Financial assistance also must be provided by the government, institution or parents. Students may also support themselves if they get jobs and buy megabytes to be used in learning or doing tasks.

Also, teachers need training in digital teaching in order to develop awareness of the global move towards ICT use in various daily activities to help them think of using appropriate digital devices confidently. Another strategy is having well equipped language laboratories as confirmed by respondents. However, using devices is not enough; students and lecturers can have personal commitment which is very important in learning a language. "No matter how you understand and whatever you understand, personal commitment is very important. Otherwise, it cannot work," said one respondent. In laboratory students may have access to their own screen and if they are given a link, they can download an assigned task and deal with the individual or group work. Even outside the classroom, students may keep communicating with their lecturers, and be guided on how they can benefit from the materials downloaded.

In addition, the government may help learners in both public and private institutions to get devices and bundles. One respondent said that, students from public institutions are more helped by the government than students from private institutions, and think that even parents may help their children.

> "There have been programs where learners in public institutions were given computers in all level of studies from primary to HLI. My son is studying at the former KIST he got a computer and it is helping him. Even parents can do their best to provide these tools to their children".

HLIs also may buy devices for lecturers teaching English and regular trainings of teachers may be provided. Lecturers must keep on updating their skills and knowledge about using those new technologies to adapt well to the situation.

The chapter four covers results from questionnaire responded by 135 students and interview held with 10 lecturers from the mentioned HLIs. The key findings are in relation with objectives and research

questions including: the current methodology used while teaching and learning the English module in HLIs in Rwanda, components emphasized and encouraged while teaching English speaking skill, activities done in and outside the classroom relating to English speaking, challenges faced during learning English module as well as strategies that can be used to overcome the revealed challenges. To the questions responded by students, the most English skill emphasized while teaching English and the question to know whether the use of the new technologies MALL and CALL to improve speaking skills are the more questions added to the interview answered by 10 lecturers.

4.4 Discussion and interpretation of findings

This section is concerned with comparing the results from students and lecturers responses to opinions from various authors in the literature review of this dissertation. The analysis of the two sources of information is built on objectives and research questions that guided the present research.

To start with the discussion of students' results, one of the questions was about the most highlighted component in English teaching in HLIs of Rwanda. Respondents equal to 129 (96%) mentioned grammar, followed by 126 respondents (93%) who said vocabulary was the most highlighted component. Thus, this teaching methodology in HLIs in Rwanda relates to what Lightbown and Spada (2001) referred to as traditional instructional environment of teaching English in Rwanda Respondents stated that some components are not considered by lecturers while teaching English. Among the components not considered, stress was stated by the highest number of respondents equal to 72 with the percentage of 53%. Intonation was confirmed by 36 respondents (27%) and phonology was indicated by 31 respondents (23%). It is unfortunate because these are very important elements of pronunciation that may be taught referring to Sfard's (1998) idea. According to Sfard, communicative FL teaching is not based on the idea of merely acquiring language knowledge (lexis and rules); rather, its goal is using language for meaningful communication, which is a characteristic of the participation metaphor. Çakır (2015) stated that in order to teach and learn pronunciation in a better way, it is relevant and advisable to listen to native speakers' voice through the application of new technologies such CALL and MALL. Regarding the activities done in class, 127 respondents (94%) answered that they prepare the given task and do group presentations. Individual presentation during English class was mentioned by 121 Respondents (90 %). The analysis of activities done outside the classroom revealed the following: Drama is the first activity stated by 51 respondents (38%) as an activity done outside the classroom and group discussion occupies the second place as confirmed by 44 respondents (33%). The analysis shows that activities fostering the speaking skill

are more conducted inside the classroom than outside. In this regard, Sibomana (2010) is of the view that learners who rely on the classroom as the only place of learning English develop more their grammar than speaking skills.

Challenges faced during the learning of English module were also specified. The highest number of respondents (19%) mentioned that a big number of students in class and lack of opportunity to talk are the two challenges faced by students while studying English module. Similarly, two students indicated that in presentations, students laugh at those who make mistakes. In this regard, Du (2009) confirmed that some students fear to talk thinking that their peers will laugh at them and this may be a greater cause of language worry.

Most of interviewees indicated that the learner-centered or communicative approach is the method they mostly use while teaching English. However, when the lecturer is not around, students discuss in Kinyarwanda because it is their culture to communicate among themselves in Kinyarwanda, their native language. The same challenge was revealed by Kagwesage (2013) after conducting a research in HLIs of Rwanda. She found that Kinyarwanda was almost fully used in group works. Two lecturers said that learning a language is demanding. For this reason, wherever students are, they have to keep on learning. This is in line with Lightbown & Spada's (2001) observation that learners need to interact with native speakers of English and to take part in various events using the English language. Respondents highlighted the most important components to consider while teaching English speaking skills. Six respondents (60%) indicated pronunciation, which is defined as the manner a sound or many sounds are made and covers the way speakers produce clear language when they speak (Richards, & Schmidt 2013). According to lecturers involved in the study, vocabulary is also very important in the learning/teaching of any language. A study conducted by Thornton and Houser (2005) on two students learning vocabulary reveals that one student using mobile devices performs better than the student learning the same vocabulary in a classroom. From vocabulary development, students understand meaning and pronunciation of words that are necessary for communication. Lightbown and Spada (2001) stated that the mastery of English vocabularies will be possible once learners are permanently surrounded by enough materials offering vocabulary and structures. Grammar also occupies an important place allowing the learner to speak a language. Grammar is a description of the rules that govern how sentences are formed in a given language and attempts to explain why a sentence is acceptable (Thornbury, 1999). For this reason, mastering grammar helps learners to use tenses, to structure sentences correctly, and to convey information clearly.

All respondents equal to 100% confirmed that the new technologies MALL and CALL can be helpful to increase vocabulary, pronunciation, fluency and accuracy. However, one of respondents confirmed that he uses these new technologies while teaching English lesson inside and outside the institution. The confirmation of respondents corroborates Banegas's (2009) view that in HLIs of Rwanda, the classroom is the only place where learning English takes place, and that outside the classroom there is no other way the teacher can continue facilitating learners to cope with English language. When they use devices, manipulators find some programs rich in teaching English speaking skill such as audiovisual materials. The way words are pronounced is different from how a first language speaker of English pronounces them because natives of a language speak naturally. That is why Wallace and Walberg (2004) advised that learners need to know how speakers differ from one another and how particular circumstances influence different forms of speech and they can learn how speaking styles affect listeners.

Results from interviewees suggest that challenges of using MALL and CALL are faced by both learners and lecturers. Even though many students have devices such as mobile phones, some of them cannot afford devices appropriate for learning. Moreover, internet bundles are expensive. Thornton & Houser (2003) support respondents' views by stating that challenges of using MALL and CALL include, among others, the cost imposed by both telecommunications for access and mobile devices price. Termit and Ganisha (2014) argues that without adequate resources both in the form of materials and human support, the integration of ICT in class instruction cannot be carried out properly, even though all the other conditions are met. Also, respondents said that the use of new technologies requires strong internet network, whereas, paradoxically, the existing network does not cover the whole country. As similar view is held by Corlett et al. (2005), who states that the device battery life and slow downloading are other constraints related to the use of mobile devices for learning English. Orr (2010) revealed the same issue and advised lecturers to download materials and store what is needed for most of the learning process. This will allow students to be able to function with little or no connection for long periods of time. The ten respondents from seven HLIs found in different areas of Rwanda proposed strategies to overcome challenges that may be faced while teaching English speaking using MALL and CALL such as monitoring and controlling tasks given to students and training lecturers in digital teaching. Chinnery (2006) clarified that success in using mobile technologies depends on the teachers' capacity to handle them. Also, using devices is not enough; students and lecturers can have personal commitment which is very important in learning a language. The idea is in line with Abdullah et al.'s (2006) view when they state that using computer in education

depends on teachers with positive attitude towards computer technology in teaching English language.

 After the analysis of respondents answers and views from the literature, the researcher confirmed that the two sources of information are in congruence. For each objective and research question, respondents' corroborate the views in the literature according to which using new the technologies MALL and CALL may help to overcome challenges observed in classes of HLIs in Rwanda, by developing English language in general and English speaking in particular.

CHAPTER V. SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

This chapter includes a short summary of the findings of this study on how the use of modern technologies MALL and CALL can contribute to teaching and learning English speaking skills in HLIs in Rwanda. Results from respondents clarify the main points from chapter four and confirm whether or not that findings from questionnaire and semi-structured interview respond to the objectives and research questions set from the beginning and explained in chapter two. The summary is followed by a conclusion and recommendations to beneficiaries of this study.

5. 1 SUMMARY OF FINDINGS

The study aims to find out whether the use of new technologies MALL and CALL may contribute to the improvement of the English speaking skills of students from HLIs in Rwanda. The results from questionnaire filled by students and semi-structured interview conducted with English lecturers are summarized in this section. The summary starts with results from students' questionnaire followed by results from the semi-structured interview. Each summary considers all the objectives of the study. With regard to the current methods and approaches used in the teaching of English speaking skills in Rwanda HLIs, respondents' responses show that the style of teaching is the traditional method, which does not enable students from HLI of Rwanda to learn the speaking skill in the appropriate ways. The methodology used in teaching and learning English was described by students as follows: Following lecturers' explanations from the beginning to the end, following lecturers' explanation and occasionally doing exercises relating to the lesson of the day, or sometimes preparing based on given topic and do class presentations.

 Regarding activities done in class, a high number of respondents reported that they prepare and do group or individual presentations. Concerning the suitable methodology of learning English, students said that the best approach that should be used in studying English is listening to native speakers and encouraging activities that motivate speaking. Most lecturers stated that the learner-centered or communicative approach is the method they mostly use while teaching English. However, students discuss in Kinyarwanda once they are not monitored. Lecturers further indicated that they keep reminding students to continue learning English even outside the classroom through TVs and radio. The skill highlighted more by lecturers while teaching English is speaking, followed by listening. They said that the two skills are very necessary to master while learning a language. Even though reading and writing skills are ranked last, respondents said that these skills are also very important to acquire while   learning a language. Regarding the question of whether or not the use of CALL and

MALL can help students from HLIs to speak English, all lecturers interviewed confirmed that the new technologies MALL and CALL can be useful. According to respondents, MALL and CALL can be used to increase vocabulary, pronunciation, fluency and accuracy. Lecturers indicated that all speaking skill components are very important. For this reason, lecturers must strive to promote each component relating to the speaking skill.

Challenges revealed by lecturers that can hamper the teaching of English speaking using CALL and MALL are the following: insufficient ICT devices, insufficient internet network, computer illiteracy for some and ignorance about ICT facilities in teaching languages, and lack of motivation to use digital communication channels. Moreover, the monitoring of students is not easy mostly outside the classroom and lecturers may lack a suitable methodology for using new technologies. Moreover, lecturers may resist using new technologies or they may be less performing than some learners in using those technological tools. Another challenge is that the universities that were concerned by this study do not have a well-equipped language laboratory which can really help students to familiarize themselves with language learning. Finally, the cost of devices and bundles, distraction of learners, lack of skills to use the new technology or resistance to adapt to change, may hinder the suitable use of new technologies.

The strategies to overcome challenges proposed by lecturers are the following: Monitoring tasks given to students, marking tasks in a limited time, and continue requiring students to report what they have done using these tools. Financial assistance should also be provided by the government, institutions or parents. Students may also support themselves if they get jobs and buy megabytes to be used to learn or do tasks. Also, teachers need training in digital teaching in order to develop awareness of the global move towards ICT use in various daily activities to help them think of using appropriate digital devices confidently. Another strategy is having well equipped language laboratories as suggested by respondents. Personal commitment is also very important. Teachers should join their students to benefit from technologies and they should be comfortable with the daily activities, facilitated by MALL and CALL in and outside the classrooms. Lecturers should make students aware of the advantages of using mobile devices for learning English as L2. Higher learning education need to develop strategic plans and provide guidelines. A full connection should be considered in order for students and lecturers to download and store what is needed for most of the learning process.

5.2. Conclusion

The mastery of English skills is very important but speaking English in a suitable way is most important. The general objective of this study was to analyze the extent to which MALL and CALL can contribute to teaching English speaking in HLIs in Rwanda.

The research was guided by specific objectives and research questions. From the results obtained, all objectives have been achieved. MALL and CALL are new technologies that may contribute to improving English skills in general and the English speaking skill in particular. However, the new technologies do not replace the usual role of lecturers; success in using the new technologies lies in the commitment of lecturers in teaching the components of the speaking skill. The most important components that can be taught to promote the speaking skill identified in the literature are among others: pronunciation, fluency, accuracy and vocabulary. In HLIs of Rwanda, the current methodology used in teaching English does not encourage students to speak English. A number of challenges were identified in this study including, but not limited to, a big number of students in class, few hours assigned to teaching and learning English, lack of native speakers' voice and the use of Kinyarwanda, the mother tongue, throughout the count. The use of new technologies may contribute to English learning inside and outside the classroom.

With regard to theories of teaching and learning languages, cognitive psycholinguistic traditional by Pakula (2019) is necessary for individual learning. On the basis of this theory, morphosyntactic rules are taught and this enables individuals to speak fluently. According to the sociocultural theory language learning is a social process. For this reason, students need interaction with others. Lecturers are advised to regularly assign students tasks and monitor them wherever they are. Moreover, students' effort is highlighted to cope with the use of MALL and CALL. Lecturers may equip students with audiovisual materials to listen to the native speakers' accent outside the classroom. Lecturers ensure that the tasks assigned to students motivate feedback though individual or group presentations. During the learning period, students are required to use devices of MALL and CALL with education purpose inside or outside the classroom. To properly use MALL and CALL with the aim of improving the English speaking skills, it is worth taking into consideration challenges discussed in this thesis in order to implement strategies highlighted in the literature review by various authors and by the respondents to this research in chapter four. The application of these modern technologies requires the synergy of all education stakeholders to promote the speaking of English language in HLIs.

5.3. Recommendations

In this unit, recommendations are addressed to a number of people, taking into consideration the identified challenges that hamper the development of speaking skills in HLIs in Rwanda.

5.3.1 To leaders from HLIs

The higher learning institutions should allocate a manageable number of students in classes of English, equip the institution with laboratories allowing students to have access to their own screen, in order to learn English speaking and download audiovisual materials to go with when they leave school. Also, HLI should allow the use of telephones in the classroom for the learning purpose. HLI should finally facilitate lecturers teaching English by providing them with suitable devices strong internet connection in and outside the institutions. Furthermore, regular trainings should be organized for lecturers to enable them to master the manipulation of devices and use of MALL and CALL.

5.3.2 To lecturers from HLIs

Lecturers should monitor tasks assigned to students, mark tasks in a limited time, and give feedback to students. Further, lecturers should attend trainings relating to digital teaching, in order to develop awareness of the global move towards ICT use in various daily activities, to be able to use the digital devices appropriately and confidently. Lastly, lecturers should have personal commitment and willingness to cope with the use of new technologies.

5.3.3 To students from HLIs

Students should consider the time of studying as a serious moment and forget other distractive activities that may results from the use of devices in the classroom. Also, students should be committed while using new technologies MALL or CALL bearing in mind that they are the ones to benefit from the furnished effort. Students should do all activities assigned by lecturers and respect the deadlines. Finally, students should keep on speaking English even outside the classroom.

5.3.4 To parents and guardians

Parents and guardians should help learners from HLIs to get devices and internet bundles. This will facilitate students learning speaking English with confidence.

5.4 To future researchers

Future researchers should conduct research on the use of MALL and CALL in teaching the remaining three skills of English i.e. listening, reading and writing.

REFERENCES

Abbasi, M., & Hashemi, M. (2013). The impact/s of using mobile phone on English language vocabulary retention. *International Research Journal of Applied and Basic Sciences*, *4*(3), 541-547.

Abbasova, M., & Mammadova, N. (2019). The Role of Digital Technology in English Language Teaching in Azerbaijan. Retrieved from http://webmail.khazar.org/bitstream/20.500.12323/4018/1/The%20Role%20of%20Digital%20Technology%20in%20English%20Language%20Teaching%20in%20Azerbaijan.pdf. Accessed on September 19, 2021.

Abdulaziz, M., Smalzer, W., Abdulaziz, H., Ahmad, K., Corbett, G., Rogers, M., & Sussex, R. (1986). *The computer book: Programming and language skills for students of ESL*. Prentice-Hall.

Abdullah, N. A., Abidin, M. J. Z., Luan, W. S., Majid, O., & Atan, H. (2006). The attitude and motivation of English language teachers towards the use of computers. *Malaysian Online Journal of Instructional Technology*, *3*(1), 57-67.

Abuseileek, A. (2017). An integrative approach based on using annotations and computer-mediated feedback to support learners' proficiency in the English language. *International Journal of Learning Technology*, *12*(2), 165-185.

Adams, R. (2003). L2 output, reformulation and noticing: Implications for IL development. *Language Teaching Research*, *7*(3), 347-376.

Agca, R. K., & Özdemir, S. (2013). Foreign language vocabulary learning with mobile technologies. *Procedia-Social and Behavioral Sciences*, *83*, 781-785.

Alexander, B. (2004). Going Nomadic: Mobile Learning in Higher Education. EDUCASE September. Retrieved from https://er.educause.edu/articles/2004/1/going-nomadic-mobile-learning-in-higher-education, accessed on September 15, 2021,

Alidou, H., & Brock-Utne, B. (2011). Teaching practices–Teaching in a familiar language. *Optimising learning, education and publishing in Africa: The language factor*, 159-185.

Ally, M. (Ed.). (2009). *Mobile learning: Transforming the delivery of education and training*. Athabasca University Press.

Andrade, M. S. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International education*, *5*(2), 131-154.

Andrewes, S. (2011). Communicative language learning: Communicating for what purpose? *Modern English Teacher*, *20*(2), 5-12.

Anuradha, R. V., Raman, G., & Hemamalini, H. C. (2014). *Methods of teaching English*. Hyderabad: Neelkamal Publications.

Bahadorfar, M., & Omidvar, R. (2014). Technology in teaching speaking skill. *Acme International Journal of Multidisciplinary Research*, *2*(4), 9-13.

Bahrani, T., & Sim, T. S. (2012). Audiovisual News, Cartoons, and Films as Sources of Authentic Language Input and Language Proficiency Enhancement. *Turkish Online Journal of Educational Technology-TOJET*, *11*(4), 56-64.

Baleghizadeh, S., & Oladrostam, E. (2010). The effect of mobile assisted language learning (MALL) on grammatical accuracy of EFL students. *Mextesol Journal*, *34*(2), 1-10.

Banegas, D. L. (2009). Content knowledge in teacher education: Where professionalisation lies. *ELTED Journal*, *12*, 44-51.

Barrs, K. (2011). Mobility in learning: The feasibility of encouraging language learning on smartphones. *Reading*, 228-233.

Basal, A., Yilmaz, S., Tanriverdi, A., & Sari, L. (2016). Effectiveness of mobile applications in vocabulary teaching. *Contemporary educational technology*, *7*(1), 47-59.

Basoglu, E. B., & Akdemir, O. (2010). A comparison of undergraduate students' English vocabulary learning: Using mobile phones and flash cards. *Turkish Online Journal of Educational Technology-TOJET*, *9*(3), 1-7.

Bax, S. (2003). The end of CLT: A context approach to language teaching. *ELT journal*, *57*(3), 278-287.

Beatty, K. (2013). *Teaching & researching: Computer-assisted language learning*. Routledge.

Bennett, M. J. (1997). How not to be a fluent fool: Understanding the cultural dimension of language. *New ways in teaching culture*, 16-21.

Berns, M. S. (1983). Functional Approaches to Language and Language Teaching: Another Look.

Block, D. (2003). *The social turn in second language acquisition*. Georgetown University Press, 3240 Prospect Street, NW, Washington, DC 20007.

Brock-Utne, B., & Alidou, H. (2006). Experience II-Active students-Learning through a language they master. *Optimizing Learning and Education in Africa-The Language Factor*.

Brown, L. (2001). *Fables of modernity: Literature and culture in the English eighteenth century*. Cornell University Press.

Burk, B. (2021). Collaborative Classrooms: Incorporating Pragmatics and Technology in Language Learning with a Focus on Generation 1.5.

Burns, A., & Joyce, H. (1997). Focus on speaking. Sydney: National Center for English Language Teaching and Research. Retrieved July 27, 2019. On https://is.muni.cz/th/zmjkc/THESIS_Solcova_text.pdf

Bush, M. D. (2013). Computer-assisted language learning: From vision to reality? *CALICO journal*, *25*(3), 443-470.

Bygate, M. (1987). *Speaking*. Oxford University Press.

Bygate, M. (2001). Effects of task repetition on the structure and control of language. Retrieved from https://benjamins.com/catalog/tblt.1.15eff. Accessed on August 5, 2021.

Bygate, M., & Samuda, V. (2005). Integrative planning through the use of task repetition. Retrieved from https://www.jbe-platform.com/content/books/9789027294647-lllt.11.05byg. Accessed on July 7, 2021.

Cakir, I. (2015). Opinions and Attitudes of Prospective Teachers for the Use of Mobile Phones in Foreign Language Learning. *Online Submission*, *6*(3), 239-255.

Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied linguistics*, *1*(1), 1-47.

Chaney, A., & Burk, T. L. (1998). Teaching Oral Communication in Grades K-8 Boston: Ellyn & Bacon. Chhabra, P. (2012). Use of E-Learning tools in teaching English. *International Journal of Computing & Business Research*, *3*, 2229-6166.

Chhabra, P. (2012). Use of E-Learning tools in teaching English. *International Journal of Computing & Business Research*, *3*, 2229-6166.

Chinnery, G. M. (2006). Going to the MALL: Mobile assisted language learning. *Language learning & technology*, *10*(1), 9-16.

Chitanana, L., & Museva, L. (2012). Adult education students' perceptions of e-learning: a case study of Midlands State University.

Corlett, D., Sharples, M., Bull, S., & Chan, T. (2005). Evaluation of a mobile learning organiser for university students. *Journal of computer assisted learning*, *21*(3), 162-170.

Coulthard, M., & Condlin, C. N. (2014). *An introduction to discourse analysis*. Routledge.

Dara, T., & Niloofar, G. (2014). Review of Computer-Assisted Language Learning'. *History, Merits & Barriers. International Journal of Language and Linguistics*, 32-38.

De Jong, N., & Perfetti, C. A. (2011). Fluency training in the ESL classroom: An experimental study of fluency development and proceduralization. *Language learning*, *61*(2), 533-568.

Derwing, T. M. (2017). L2 fluency development. In *The Routledge handbook of instructed second language acquisition* (pp. 246-259). Routledge.

Desjardins, F., & Peters, M. (2007). Single-course approach versus a program approach to develop technological competencies in preservice language teachers. *Preparing and developing technology-proficient L2 teachers*, 3-21.

Dickey, R. J. (2001). Make it a conference call: An English conversation course by telephone in South Korea. *Distance-learning programs*, 51-60.

Doolittle, P. E. (2011). IPods as mobile multimedia learning environments. In *Instructional Design: Concepts, Methodologies, Tools and Applications* (pp. 620-638). IGI Global. Du, X. (2009). The affective filter in second language teaching. *Asian Social Science*, *5*(8), 162-165.

Ducate, L., & Lomicka, L. (2009). Podcasting: An effective tool for honing language students' pronunciation? *Language Learning & Technology*, *13*(3), 66.

Dudeney, G., & Hockly, N. (2007). How to teach English with technology. *EA Journal*, *24*(1), 78.

DuVall, J. B., Powell, M. R., Hodge, E., & Ellis, M. (2007). Text messaging to improve social presence in online learning. *Educause Quarterly*, *30*(3), 24.

Egbert, J., Paulus, T. M., & Nakamichi, Y. (2002). The impact of CALL instruction on classroom computer use: A foundation for rethinking technology in teacher education. *Language Learning & Technology*, *6*(3), 108-126.

Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.

Essossomo, S. M. (2013). Implementing communicative language teaching (CLT) in Cameroon high schools: Analysis and perspectives. *Journal of Education and Practice*, *4*(17), 87-93.

Evans, S., & Morrison, B. (2011). The student experience of English-medium higher education in Hong Kong. *Language and Education*, *25*(2), 147-162.

Finney, D. (2002). The ELT curriculum: A flexible model for a changing world. *Methodology in language teaching: An anthology of current practice*, 69-79.

Florez, M. C. (1999). Improving adult English language learners' speaking skills. Retrieved from https://files.eric.ed.gov/fulltext/ED435204.pdf. Accessed on June21, 2021.

Fu, G. S. (1998). Teaching by principles: An Interactive approach to language pedagogy. *Asian Journal of English Language Teaching*, *8*, 117-123.

Garcia J.C. (2002). Tele-enREDando.com: A multimedia WEB-CALL software for mobile phones. International Journal of English Studies, 2(1), 167-178.

Garrett, N. (2009). Computer-Assisted Language Learning Trends and Issues Revisited: Integrating Innovation. Volume 93 issue S1.

Godwin-Jones, R. (2008). Web-writing 2.0: Enabling, documenting, and assessing writing online. *Language Learning & Technology*, *12*(2), 7-12.

Gove, A. and Cvelich, P. (2011). *Early Reading: Igniting Education for All. A report by the Early Grade Learning Community of Practice*. Revised Edition. Research Triangle Park, NC: Research Triangle Institute.

Grgurović, M., Chapelle, C. A., & Shelley, M. C. (2013). A meta-analysis of effectiveness studies on computer technology-supported language learning. *ReCALL*, *25*(2), 165-198.

Hargrave, C., & Hsu, Y. (2000). Survey of instructional technology courses for preservice teachers. Journal of Technology and Teacher Education, 8(4), 303-314.

Hart, R.S. (1981). Language study and the PLATO system. Studies in Language Learning, 3, 1-24. Hashim, H., Yunus M.M., Embi M.A., Mohamed N. A. (2017). Mobile-assisted Language Learning (MALL) for ESL Learners: A Review of Affordances and Constraints. 9: 1-5 (2017) 45–50 | www.sainshumanika.utm.my | e-ISSN ISSN: 2289-6996.

Hashim, H., Yunus, M. M., Embi, M. A., & Ozir, N. A. M. (2017). Mobile-assisted language learning (MALL) for ESL learners: A review of affordances and constraints. *Sains Humanika*, *9*(1-5).

Hazarika, Z. (2017). Exploring the impact of technology in teaching English*: TESOL in the context.* European Journal of English Language and Literature Studies. Vol.5, No.10, pp.19-28, December 2017.

Heugh, K. (2000). The Case against Bilingual and Multilingual Education in South Africa. PRAESA Occasional Paper No. 6. Cape Town: PRAES

Hoopingarner, D. (2009). Best Practices in Technology and Language Teaching. Language and Linguistics Compass 3/1 (2009): 222–235, 10.1111/j.1749-818x.2008.00123.x.

Howarth, P. (2001). Process Speaking. Preparing to Repeat Yourself. MET, 10(1), 39-44.

Huang, Y. M., Huang, Y. M., Huang, S. H., & Lin, Y. T. (2012). A ubiquitous English vocabulary learning system: Evidence of active/passive attitudes vs. usefulness/ease-of-use. *Computers & Education*, *58*(1), 273-282.

Hubbard, P. (2008). "Teacher Education in CALL: The Seven Central Questions" in W. Wang & X. D. Liu (Eds.). Digital and Networked Foreign Language Learning and Teaching. Beijing: Foreign Language Teaching and Research Press.

Hulstijn, J. H., & Laufer, B. (2001). Some empirical evidence for the involvement load hypothesis in vocabulary acquisition. *Language learning*, *51*(3), 539-558.

Isaacs, S. (2007). Survey of ICT and education in Africa: South Africa country report. Retrieved from https://openknowledge.worldbank.org/bitstream/handle/10986/10659/463640BRI0Box31ca01 0ICTed0Survey111.pdf?sequence=1. Accessed on May 13, 2021.

Ishihara, N. (2011). Co-Constructing Pragmatic Awareness: Instructional Pragmatics in EFL Teacher Development in Japan. *Tesl-Ej*, *15*(2), n2.

Jarvis, H., & Krashen, S. (2014). Is CALL obsolete? Language acquisition and language learning revisited in a digital age. *Tesl-Ej*, *17*(4), n4.

John, C. M. (2019). English Language Teaching Evolution from Traditional Classroom Teaching to Use of Technology in Classrooms International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-8S3, June 2019.

Kagwesage, A. M. (2013). Coping with English as Language of Instruction in Higher Education in Rwanda National University of Rwanda, Rwanda & Linköping University, Sweden International Journal of Higher Education Vol. 2, No. 2; 2013.

Karanezi, X., & Rapti, E. (2015). Teachers' Attitudes and Perceptions: Association of Teachers' Attitudes toward Traditional and Modern Teaching Methodology According to RWCT as Well as Teachers' Perceptions for Teaching as a Profession. *Creative Education*, *6*(06), 623.

Karthik, D. S. (2013). Pragmatics and language communication. *The Criterion*, *4*(3), 1-9.

Keirns, J. (1992). Does computer coursework transfer into teaching practice? A follow up study of teachers in a computer course. Journal of Computing in Teacher Education, 8(4), 29-34.

Kétyi, A. (2013). Using smart phones in language learning - A pilot study to turn CALL into MALL. In L Bradley & S Thouësny (eds). 20 Years of EUROCALL: Learning from the Past, Looking to the Future. Proceedings of the 2013 EUROCALL Conference, Évora, Portugal. Dublin/Voillans: Research-publishing.net.

Khaddage, F., Lanham, E., & Zhou, W. (2009). A Mobile learning model for universities: Re-blending the current learning environment. International Journal of Interactive Mobile Technologies, 3(1), 18–23.

Kiernan, P. J., & Aizawa, K. A. Z. U. M. I. (2004). Cell phones in task based learning-Are cell phones useful language learning tools? *ReCALL*, *16*(1), 71-84.

Kim, D. (2012). Effect of screen size on multimedia vocabulary learning. British Journal of Educational Technology, 43(1), 62–70. doi: 10.1111/j.1467-8535.2010.01145.x

Kim, L., & Albers, M. J. (2001, October). Web design issues when searching for information in a small screen display. In *Proceedings of the 19th annual international conference on Computer documentation* (pp. 193-200).

Kirkgoz, Y. (2011). Infusing Critical Thinking Skills into High School EFL Classroom. Emine Nabi Menemencioğlu High School.

Klopfer, E., Squire, K., & Jenkins, H. (2002). Environmental Detectives: PDAs as a Window into a Virtual Simulated World. Proceedings of the IEEE, 2-5.

Kozma, R. B., & Isaacs, S. (2011). *Transforming education: The power of ICT policies*. Unesco.Retrieved from http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Dakar/pdf/Transforming%20Education%20the%20Power%20of%20ICT%20Policies.pdf. Accessed on August 2, 2021

Krashen, S. (1983). Newmark's "Ignorance Hypothesis" and current second language acquisition theory. *Language transfer in language learning*, 135-153.

Kressler, G. (2007). Formal and informal CALL preparation and teacher attitude toward technology. Computer Assisted Language Learning, 20(2), 173-188.

Kukulska-Hulme, A. (2005). The mobile language learner—now and in the future. Fran Vision till Praktik. Language Learning Symposium conducted at Umea University in Sweden. Retrieved July 28, 2005, from http://www2.humlab.umu.se/symposium2005/program.htm.

Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. ReCALL, 20(03), 271-289. http://dx.doi.org/10.1017/S0958344008000335.

Kuning S. D. (2019). *Technology in teaching speaking skill.* Journal of English Education   E- ISSN, 2621-3680 Literature and Linguistics P- ISSN, 2621-3672.

Kwibuka, E. (.2013). Speaking English becomes cool. Global: the International Briefing. Retrieved from http://www.global-briefing.org/current-issue/, on 10 September 2014.

Kyeyune, R. (2010). Challenges of using English as a medium of instruction in multilingual contexts: A view from Ugandan classrooms. Language, Culture and Curriculum. 16 (2), 173-184. http://dx.doi.org/10.1080/07908310308666666.

Lambert, C., Kormos, J., & Minn, D. (2017). Task repetition and second language speech processing. *Studies in Second Language Acquisition*, *39*(1), 167-196.

Lambert, J. Gong, Y, & Cuper, P., (2008). Technology, transfer, and teaching: The impact of a single technology course on preservice teachers" computer attitudes and ability. Journal of Technology and Teacher Education, 16(4), 385-410.

Lantolf, J. P. (2000). Sociocultural theory and second language learning. Oxford: Oxford University Press.

Larsen-Freeman, D. (2000). *Techniques and principles in language teaching*. Oxford University.

Lawrence, E., Bachfischer, A., Dyson, L. E., & Litchfield, A. (2008, July). Mobile learning and student perspectives: An mReality check. In *2008 7th International Conference on Mobile Business* (pp. 287-295). IEEE.

LeClerc, J. (2008). Rwanda. L'ame´nagement linguistique dans le monde. Retrieved from http://www.tlfq.ulaval.ca/axl/afrique/rwanda.htm. Accessed on April 3, 2009

Leong, L. & Ahmadi, S., (2017). An Analysis of Factors Influencing Learners' English Speaking Skill. International Journal of Research in English Education, 2(1), 34-41. Https://Www.Sid.Ir/En/Journal/Viewpaper.Aspx?Id=520992.

Levy, M. (1997). Computer-assisted language learning: Context and conceptualization. Oxford University Press.

Lightbown, P. M. and Spada, N. (2001). Factors Affecting Second Language Learning. In Candlin, C. N., and Mercer, N. (Ed.), English Language Teaching in Its Social Context: a reader. London: Routledge.

Lin, L. (2010). A video-based CALL program for proficient and less-proficient L2 learners' comprehension ability, incidental vocabulary acquisition. Educational Media International, 47(3), 199-216. doi:10.1080/09523987.2010.518812.

Long, M. H., & Doughty, C .J. (2003). SLA and cognitive science. In C. Doughty & M. H. Long (Eds.), the handbook of second language acquisition (pp. 866²870). Malden, MA: Blackwell Publishing.

Longman Dictionary, (2002). Longman Dictionary of Language Teaching and Applied Linguistics

Lord, G. (2008). Podcasting communities and second language pronunciation. Foreign Language Annals, 41, 364-379.

Lu, M.M. (2008). Effectiveness of vocabulary learning via mobile phone. National Keelung Vocational High School.

MacDaily N., (2005, December 06). New Oxford American Dictionary announces word of the year: 'Podcast'. Retrieved October 12, 2006, from http://macdailynews.com/index.php/weblog/comments/new_oxford_american_dictionary_ann ounces_word_of_the_year_podcast/

Martins Kremer, M., & Valcke, M. (2014). Teaching and learning in English in higher education: a literature review. In *6th International Conference on Education and New Learning Technologies* (pp. 1430-1441). IATED.

Messinger, J. (2011). *M-learning: An exploration of the attitudes and perceptions of high school students versus teachers regarding the current and future use of mobile devices for learning* (Doctoral dissertation, Pepperdine University).

MINEDUC, (2008). Education sector strategic plan 2008–2012. Retrieved from https://www.mineduc.gov.rw/fileadmin/user_upload/Mineduc/Publications/ESSP/3_Education_Sector_Strategic_Plan_2008-2012.pdf. Accessed on September 19, 2021

Mohammed A. (2017). *The Role of Language Laboratory in English Language Learning*. English Language Teaching; Vol. 10, No. 2; 2017 ISSN 1916-4742   E-ISSN 1916-4750 Published by Canadian Center of Science and Education.

Motteram ed G. (2013). Innovations in learning technology for English language teaching British Council (London) Retrieved from https://www.research.manchester.ac.uk/portal/files/38535355/FULL_TEXT.pdf. Accessed on 16th July, 2021.

Motteram, G., Slaouti, D., & Onat-Stelma, Z. (2013). Second language teacher education for CALL: An alignment of theory and practice'. In Thomas, M, Reinders, H and Warschauer, M (2013) Contemporary Computer-Assisted Language Learning. UK: Bloomsbury Academia.

Muhammed, A. A. (2014). The impact of mobiles on language learning on the part of English Foreign Language (EFL) university students. Procedia - Social and Behavioral Sciences, 136:104-108. doi: 10.1016/j.sbspro.2014.05.297.

Munyankesha, P. (2004). Les défis du plurilinguisme officiel au Rwanda. Analyse sociolinguistique. Unpublished Ph.D., the University of Western Ontario (Canada), Canada.

Munzaki, D. F., Suadah, L., & Risdaneva, R. (2016). Teaching methods used by students of department of English language education of UIN Ar-Raniry in teaching English at English course. *Englisia: Journal of Language, Education, and Humanities*, *4*(1), 10-26.

Mwaura, P. (2008). Shift from French to English likely to affect region. *The Nation*, *17*, 3.

Mwinsheikhe, H. M. (2002). *Science and the language barrier: Using Kiswahili as a medium of instruction in Tanzania secondary schools as a strategy of improving student participation and performance in science* (Doctoral dissertation, Univ. i Oslo, Pedagogisk Forskningsinstitutt).

Myers, L. (Fall 2000). Task Interpretation and Task Effectiveness: A Vygotskian Analysis of a French L2 Classroom Task. Texas Papers in Foreign Language Education, V.5, n.1, Pp: 9-21.

Nation, P. (1989). Improving speaking fluency. *System*, *17*(3), 377-384.

Niyibizi E., Sibomana E., Parmal A. (2019), learning to teach writing through a distance education programme: Experiences of Rwandan secondary school English teachers. Reading & Writing - Journal of the Reading Association of South Africa ISSN: (Online) 2308-1422, (Print) 2079-8245.

Nkubito, J. de D., Uwababyeyi A. (2017*)*. Peacebuilding through Language Mentorship in Rwanda's Primary Education: Challenges facing key stakeholders. Rwanda Journal of Arts and Humanities, Volume 2 (2), 2017.

Nunan, D. (1989). Designing Tasks for the Communicative Classroom. New York: Cambridge University Press.

Nunan, D. (2003). Practical English Language Teaching Teacher's Text Book. McGraw-Hill.

Nzitabakuze, C. (2012). Implementation of the English medium policy in Rwandan primary schools: a case of Gasabo district, Rwanda. Unpublished Masters Dissertation, Kenyatta University, Nairobi, Kenya.

Orr, G. (2010). A Review of Literature in Mobile Learning: Affordances and Constraints. In Proceedings of 6th IEEE International Conference on Wireless, Mobile and Ubiquitous Technologies in Education, 107–111, Kaohsiung, Taiwan.

Pachler, N., Cook, J., & Bachmair, B. (2010). Appropriation of mobile cultural resources for learning. *International Journal of Mobile and Blended Learning (IJMBL)*, *2*(1), 1-21.

Pakula, H.M. (2019). Teaching Speaking. Apples-Journal of Applied Language Studies Vol. 13, 1, 2019, 95-111

Panday, P. P. (2009). Simplifying Podcasting. International Journal of Teaching and Learning in Higher Education 2009, Volume 20, Number 2, 251-261 http://www.isetl.org/ijtlhe/ ISSN 1812-9129.

Park, M. & Slate T. (2014). A Typology of Tasks for Mobile-Assisted Language Learning: Recommendations from a Small-Scale Needs Analysis. TESL Canada journal/revue TESL du Canada 93 Volume 31, special issue 8, 2014.

Pearson, P. (2014). Policy without a plan: English as a medium of instruction in Rwanda. Current Issues in Language Planning, 15:1, 39-56.

Peters, M. (2006). Developing computer competencies for pre-service language teachers: Is one course enough? In P. Hubbard & M. Levy, (Eds.), Teacher education in CALL, (pp. 153-165). Philadelphia: Johns Benjamins.

Praxton, I. J.M. (2009). "It is easy to learn when you using your home language but with English you need to start learning language before you get to the concept": Bilingual concept development in an English medium university in South Africa. Journal of Multilingual and Multicultural Development. 30 (4), 345-359. http://dx.doi.org/10.1080/01434630902780731.

Rahimi, M. &Miri, S. S. (2014). The impact of mobile dictionary use on language learning. Procedia - Social and Behavioral Sciences, 98:1469-1474. doi: 10.1016/j.sbspro.2014.03.567.

Ramsey, A., Raven, J., and Hall, M. (1999).Academic adjustment and learning processes: A comparison of international and local students in first-year University. Higher education research and development. 18 (1), 129-144. http://dx.doi.org/10.1080/0729436990180110

Richards J.C. (2006). Communicative Language Teaching Today. CAMBRIDGE UNIVERSITY PRESS Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo. Cambridge University Press 32 Avenue of the Americas, New York, NY 10013-2473, USA

Richards, J. C., & Rodgers, T. S. (2002). Approaches and methods in language teaching (2nd ed.). New York, NY: Cambridge University Press.

Richards, J., & Rogers T. (1986). Approaches and methods in language teaching. Cambridge: Cambridge University Press.

Richards, J. C., & Schmidt, R. W. (2013). *Longman dictionary of language teaching and applied linguistics*. Routledge.

Rodomanchenko, A. (2014). From speaking micro skills to general communicative skills development: A practical approach. *IATEFL Testing Evaluation and Assessment Special Interest Group*, *56*, 17-21.

Rosell-Aguliar, F. (2014). How smartphone apps are revolutionizing language learning. Available at http://theconversation.com/how-smartphone-appsare-revolutionisinglanguage-learning-25165. Accessed on June 1, 2016.

Rubagumya, C. (1997). Disconnecting Education: Language as a determinant of the quality of education in Tanzania. Journal of Linguistics and Language in Education. 3, 81-93.

Rugemalira, J. M. (2005). Theoretical and practical challenges in a Tanzanian English medium primary school. Africa & Asia. 5, 66-84.

Samuelson, B. L., & Freedman, S. W. (2010). Language policy, multilingual education, and power in Rwanda. *Language Policy*, *9*(3), 191-215.

Saran, M., & Seferoğlu, G. (2010). Supporting foreign language vocabulary learning through multimedia messages via mobile phones. *Hacettepe University Journal of Education*, *38*, 252-266.

Saran, M., Seferoglu, G., & Cagıltay, K. (2009). Mobile assisted language learning: English pronunciation at learners' fingertips. *Eurasian Journal of Educational Research (EJER)*, (34).

Savignon, S. J. (2002). Communicative Curriculum Design for the 21st Century. In *Forum* (Vol. 40, No. 1, pp. 2-7). Retrieved on http://exchanges. State. Gov/forum/. Accessed on 12 August

Savignon, S. J. (2007). Beyond communicative language teaching: What's ahead?. *Journal of pragmatics*, *39*(1), 207-220.

Savill-Smith, C., & Kent, P. (2003). *The Use of Palmtop Computers for Learning: A Review of the Literature*. Learning and Skills Development Agency, Regent Arcade House, 19-25 Argyll Street, London W1F 7LS, United Kingdom (Ref. No. 1477).

Scott, K. (2015). The pragmatics of hashtags: Inference and conversational style on Twitter. *Journal of Pragmatics*, *81*, 8-20.

Sfard, A. (1998). On two metaphors for learning and the dangers of choosing just one. *Educational researcher*, *27*(2), 4-13.

Sibomana, E. (2010). *Challenges faced by postgraduate French speaking students who are learning in English: a case study of Rwandan students in the School of Education at the University of the Witwatersrand* (Doctoral dissertation, University of the Witwatersrand).Retrieved from https://core.ac.uk/download/pdf/39667318.pdf. Accessed on September, 22, 2021.

Smith, K., & Craig, H. (2013). Enhancing the autonomous use of CALL: A new curriculum model in EFL. *CALICO Journal*, *30*(2), 252-278.

Solé, C. R., Calic, J., & Neijmann, D. (2010). A social and self-reflective approach to MALL. *ReCALL*, *22*(1), 39-52.

Tabaro, C. (2015). Rwandans' motivation to learn and use English as a medium of instruction. *International Journal of Humanities and Social Science*, *5*(2), 78-85.

Tafazoli, D., & Jam, Z. A. (2015). Text Me English Idioms: Mobile-Assisted Language Learning. *International Journal of Language and Applied Linguistics*, *1*, 38-44.

Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *How to Choose a Sampling Technique for Research (April 10, 2016)*.

Tam, A. C. F. (2011). Does the switch of medium of instruction facilitate the language learning of students? A case study of Hong Kong from teachers' perspective. *Language and Education*, *25*(5), 399-417.

Taylor, N., & Robinson, N. (2019). Secondary education in sub-Saharan Africa: Teacher preparation and support–Literature Review. *Johannesburg, South Africa: Jet Education Services*.

Termit, K., & Ganisha, V. (2014). Teachers' Uptake on ICT Integration in Teaching and Learning-A Case of Malaysian Teachers. *Pertanika Journal of Social Sciences & Humanities*, *22*(4).

Thieman, G. (2008). Using technology as a tool for learning and developing 21st century skills: An examination of technology use by pre-service teachers with their K-12 students. *Contemporary Issues in Technology and Teacher Education*, *8*(4), 342-366.

Thornbury, S. (1999). *How to teach grammar* (Vol. 3). Harlow: Longman.

Thornton, P., & Houser, C. (2003). Using mobile web and video phones in English language teaching: Projects with Japanese college students. *Directions in CALL: Experience, experiments & evaluation*, 207-224.

Torky, S. A. E. (2006). The Effectiveness of a Task-Based Instruction Program in Developing the English Language Speaking Skills of Secondary Stage Students. *Online Submission* .Strived from https://files.eric.ed.gov/fulltext/ED523922.pdf. Accessed on July 11, 2021

Trudell, B. (2010). When 'Prof'speaks, who listens? The African elite and the use of African languages for education and development in African communities. *Language and education*, *24*(4), 337-352.

Tyler, R. W. (1931). Nature of learning activities. *Review of Educational Research*, *1*(1), 22-29.

Uwizeyimana, V. (2018). *An investigation into the effect of mobile-assisted language learning on Rwandan university students' proficiency in English as a foreign language* (Doctoral dissertation, Stellenbosch: Stellenbosch University). Retrieved from https://www.researchgate.net/publication/322791354_An_investigation_into_the_contribution_of_ mobile- 6. Accessed on June 12, 2021.

Valarmathi, A., & Chandrasekaran, R. M. (2011). Multipath Routing Based Quality of Service Enhancement in Mobile Ad Hoc Networks. *Digital Signal Processing*, *3*(2), 77-80.

Van der Walt, C., & Dornbrack, J. (2011). Academic illiteracy in South African higher education: strategies and practices of successful students. *Language, Culture and Curriculum*, *24*(1), 89-104.

Vavrus, F. (2002). Postcoloniality and English: Exploring language policy and the politics of development in Tanzania. *Tesol Quarterly*, *36*(3), 373-397.

Vogel, B., Spikol, D., Kurti, A., & Milrad, M. (2010, April). Integrating mobile, web and sensory technologies to support inquiry-based science learning. In *2010 6th IEEE International Conference on Wireless, Mobile, and Ubiquitous Technologies in Education* (pp. 65-72). IEEE.

Volman, M. (2005). A variety of roles for a new type of teacher Educational technology and the teaching profession. *Teaching and Teacher education*, *21*(1), 15-31.

Wajnryb, R., & Maley, A. (1990). *Grammar dictation* (Vol. 3). Oxford University Press.

Walia, D. N. (2012). Traditional teaching methods vs. CLT: A study. *Frontiers of language and teaching*, *3*(1), 125-131.

Wallace, T., Stariha, W. E., & Walberg, H. J. (2004). *Teaching speaking, listening and writing*. International Academy of Education.

Wallet, P., Kimenyi, E., Miao, F., & Domiter, A. (2020). Improving quality and relevance of education through mobile learning in Rwanda: a promise to deliver: case study by the UNESCO-Fazheng project on best practices in mobile learning.

Wang, M., Shen, R., Novak, D., & Pan, X. (2009). The impact of mobile learning on students' learning behaviours and performance: Report from a large blended classroom. *British Journal of Educational Technology*, *40*(4), 673-695.

Wang, P., & Ryu, H. (2009). Not SMS, but mobile quizzes: Designing a mobile learning application for university students. *International Journal of Mobile Learning and Organisation*, *3*(4), 351-365.

Wang, P., & Ryu, H. (2009). Not SMS, but mobile quizzes: Designing a mobile learning application for university students. *International Journal of Mobile Learning and Organisation*, *3*(4), 351-365.

Warchauer, M. (2000). CALL for the 21st century. IATEFL and ESADE Conference. *Spain, Barcelona. Retrieved February*, *3*, 2014.

Warschauer, M. (1996). Computer-assisted language learning: An introduction. *Multimedia language teaching*, *320*. Retrieved from http://www.ict4lt.org/en/warschauer.htm. Accessed on September 14, 2021

Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language teaching*, *31*(2), 57-71.

Webb, V. (2002). English as a second language in South Africa's tertiary institutions: a case study at the University of Pretoria. *World Englishes*, *21*(1), 49-61.

Webb, V. (2003). The role of language in economic development. *Wolff, H, Ekkehard. (Ed.) Tied Tongues. The African Renaissance as a challenge for language planning. Münster: LIT Verlag*, 61-84.

Wentworth, N. M. (1996). Educational technology: From curriculum course to the classroom. In *Society for Information Technology & Teacher Education International Conference* (pp. 387-390). Association for the Advancement of Computing in Education (AACE).

Wentzel, P., Van Lammeren, R., Molendijk, M., de Bruin, S., & Wagtendonk, A. (2005). Using Mobile Technology to Enhance Students' Educational Experiences. Educause Quarterly, ECAR Case Study 2ECAR Case Study, (2), 1-18.

West, P. W. (2016). Simple random sampling of individual items in the absence of a sampling frame that lists the individuals. *New Zealand Journal of Forestry Science*, *46*(1), 1-7.

Wong, L., & Benson, P. (2006). What happens after the course is over? *Teacher Education in CALL*, *14*, 251.

Wu, Q. (2014). Learning ESL vocabulary with smartphones. *Procedia-Social and Behavioral Sciences*, *143*, 302-307.

Yaman, İ., & EKMEKÇİ, E. (2016). A shift from CALL to MALL? *Participatory Educational Research*, *4*(2), 25-32.

Yaman, İ., Şenel, M., & Yeşilel, D. B. A. (2015). Exploring the extent to which ELT students utilise smartphones for language learning purposes. *South African Journal of Education*, *35*(4).

Yedla, S. (2013). Classroom to smart room: Need of the hour for English for engineering, Contemporary Research in India. *An International Peer Reviewed Journal*, *3*(1), 115-117.

Yükselir, C., & Kömür, S. (2017). Using Online Videos to Improve Speaking Abilities of EFL Learners. *Online Submission*, *3*(5), 255-266.

Zyoud, M. (2016). Theoretical perspective on how to develop speaking skill among university students. *Pune Research Scholar an International Multidisciplinary Journal*, *2*(1), 1-10.

APPENDICES

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APPENDIX I: Subject information sheet (for students)

University of Rwanda

Faculty Education

Department of English with Education

Dear respondents,

I am Anastasie Uwababyeyi, a student from UR-CE who is conducting a research on 'The use of new technologies MALL (Mobile Assisted Language Learning) and CALL (Computer-Assisted Language Learning) in teaching English speaking skills in higher learning institutions of Rwanda", for the completion of my Master's studies. The tool of data collection is closed questionnaire. The objective of this questionnaire is purely for academic research and information from it will only be used for this purpose.

 I would be grateful if you could help me to write down the responses to the questions accompanying this letter.

Please be assured that your responses will be kept confidential and strictly used only for my research purpose. Hence, your anonymity is guaranteed.

 Yours faithfully,

Anastasie UWABABYEYI

A student in English with Education

APPENDIX II: Questionnaire for students

Part 1. Personal identification

Q 1 Please answer the following questions by placing a tick in the box you consider appropriate

Tick (√) your age range.

a) 18 – 22 years   ( )

b) 23 - 27 years   ( )

c) 28 - 32 years   ( )

d) Above 32 years   ( )

Q 2 Tick the right answer.

a)   Male   ( )

a)   Female   ( )

Q 3 Which year are you studying in?

a) Year 1   ( )

b) Year 2   ( )

Q 4 Indicate the higher learning institution you are currently studying in.

a)   UR Nyarugenge ( )

b)   AUCA   ( )

c)   UoK   ( )

d) UTAB   ( )

e) UNILAK   (   )

f) ULK   (   )

g) CUR (Catholique University of Rwanda)   (   )

Part 2: Questionnaire related to the research objectives

Answer the questions below relating to methodology used while you are studying English.

Q 5 Indicate how you study the English module. You can tick more than one option

    a. Following lecturers' explanations from the beginning to the end   ( )

    b. Following the lecturer and sometimes doing exercises relating to the lesson ( )

    c. Preparing and doing presentations   ( )

Q 6 Rank the following skills in order of importance: Listening, speaking, reading and writing

    a. ……………………………………..

    b. ……………………………………..

    c. ……………………………………..

    d. ………………………………….

Q 7 Are the components below emphasized and encouraged by English lecturers while teaching English speaking skill?

Skills	Yes	No
a. Vocabulary		
b. Phonology		
c. Stress		
d. Grammar		
e. Intonation		

Q 8 Are the following activities done during English lesson or outside the classroom? Use a tick to indicate your answer

Activities	Done during English lesson		Done Outside the class	
	Yes	No	Yes	No
Individual presentation				
Group presentation				
Drama				
Debate				
Group discussion				

Q 9 What are the challenges do you observe during teaching and learning of English speaking? Use a tick (√) to indicate your answer. (You can choose more than one)

a. A big number of students in class   (   )

b. Lack of opportunity to talk   (   )

c. Lack of native speaker's voice   (   )

d. Others   (   )

Q 10 Which possible strategy/ strategies would you propose to overcome those challenges? Use a tick (√) to indicate your answer. (You can choose more than one)

a. Little number of students in class   (   )

b. Listening to native speakers   (   )

c. Having more activities allowing us to speak   (   )

d. Speaking English even outside the   (   )

I wish I had looked at the questionnaire before it was administered. You should have asked a question about your objective no. 2.

Thank you for your cooperation!

APPENDIX III. Subject information sheet for lecturers of English

University of Rwanda

Faculty Education

Department of English with Education

Dear respondents,

I am Anastasie Uwababyeyi, conducting a research on 'The use of new technologies MALL (Mobile Assisted Language Learning) and CALL (Computer-Assisted Language Learning) in teaching English speaking skills in higher learning institutions of Rwanda", for the completion of my Masters studies.

The tool of data collection is the semi-structured interview for lecturers of English language.

The objective of this structured interview is purely for academic research and will only be used for that purpose.

I would be grateful if you could help me to interview you, and record the given information from the questions accompanying this letter using my telephone.

Please be assured that your responses will be kept confidential and strictly be used for my research. Hence, your anonymity is guaranteed.

Yours faithfully,

Anastasie Uwababyeyi

APPENDIX IV: Semi-structured interview with lecturers of English language.

Q 1   Tick (√) your corresponding age range.

a. 25– 32 years   ( )

   b.   33 - 40 years   ( )

   c.   41 - 48 years   ( )

   d.   49- 5 6   years   ( )

   e.   57 and more years   ( )

Q 2   Tick (√) the right answer.

   a. Male   ( )

   b. Female   ( )

Q 3 Tick (√) whether you are Rwandan or not

Rwanda   ( )

Another country   ( )

Q 4 Tick (√) your highest qualifications?

a) Bachelor's degree   ( )

b) Master's Degree   ( )

c) PHD   ( )

Q 5 Tick (√) your experience of teaching English in Higher learning Institutions

a)   Less than 1 year   ( )

b)   Between 1-5 years   ( )

c)   Between 6- 10 years   ( )

d. More than 10 years   ( )

Part 2: Questionnaire related to the research objectives

Q 6 Rank the four English skills (Listening, speaking, reading and writing) in order of importance and explain why.

Q 7 - What are the methods and approaches do you use while teaching English to encourage speaking skills in the higher learning institution where you are working ?

  - Do you facilitate students to continue studying English outside the classroom? If yes how?

Q 8 Which speaking skills components do you consider most important while teaching English speaking? Why?

Q 9 Do you think the use of the new technologies MALL and CALL can be helpful to increase vocabulary, pronunciation, fluency and accuracy of students? How?

Q10 What challenges do you think may occur while using MALL and CALL in teaching and learning English speaking in and outside the classroom, to students from higher learning institutions in Rwanda?

Q 11 What do you think may be the possible strategies to overcome the observed challenges?

Thank you for your cooperation!

Thesis_Anastasie