Constructing multilingual digital identities: An investigation into Grade 11 learners' digital practices in relation to English language learning in Rwanda

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by

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ABSTRACT

Rwanda has taken a strong move towards language-in-education policy shift whereby English became the sole medium of instruction in 2008, despite her rich linguistic diversity. The language shift occurred at the time when the country had resolutely embraced Information Communication Technologies (ICTs) as one of the country's key development plans for socio-economic development. In spite of these changes, research on multilingualism and digital identity in Rwanda is very limited. Given the pressing need for Rwanda to play an increasing role in the global economy, it is important to explore the ways in which the new generation negotiates multilingual digital identities in second language learning.

The aim of this study, therefore, was to investigate the ways in which secondary school learners used digital technologies to negotiate new identities in two or more languages in order to understand the implications for English second language learning in the multilingual context of postcolonial Rwanda. Specifically, my interest was to examine Grade 11 learners' current digital practices and the ways in which existing multilingual repertoires were drawn on as resources in navigating digital literacies. I also aimed at understanding how such practices could be harnessed as resources for English second language learning in the classroom. .

This study is informed by post-structural theories of identities as well as of Bourdieu's theory of habitus, field and capital. The post-structural frame of analysis underlying issues of Second Language Acquisition (SLA) has also been important to establish a bridge between the learners' digital practices and their English learning processes. It draws on debates around digital literacies, multilingualism, and identity, theories of access to ICTs and digital technologies and English as Additional Language Acquisition.

The research sites were two urban based high schools mainly selected for their proximity to digital technologies, namely cyber cafes and/or computer laboratories and by their representativity in terms of gender and subject choices. Drawing on the qualitative research tradition and informed by ethnographic methodology, the study investigated Grade 11 learners' insider views of the affordances of digital technologies for language learning. To reach this end, non-participant observations, focus group discussions and a questionnaire were used. Issues of research ethics namely, informed consent, anonymity and confidentiality were adhered to throughout the research process.

With regard to access to technologies, the research findings reflect Bourdieu' post-structural theory notion of 'habitus' as they show that the social dimensions the learners were involved in influenced their engagement with several digital technologies. In relation to Warschauer's model of access, this study was able to identify the following: (1) material access' linked to the learner's access to the internet connection; (2) skills access' concerning the learner's ability to interact with computers and communicate with peers or fellow friends by typewriting and (3) usage access' associated with the learner's opportunity to use ICT facilities.

The findings also generated insights into the learners' construction of multiple digital identities and the fluidity and hybridity of 'youth digital literacies'. The learners created a form of global digital identity by simply interacting or engaging with various multimodal literacies.

Findings also indicated that learners negotiated digital identities by immersing themselves in Social Networking Sites (SNS) that fall under 'Web 2.0', an online platform which online users make use of to interact, share and perform different activities, focusing chiefly on social media. It was observed further that learners constructed a national language identity in the digital world

by visiting mostly popular sites whose medium of communication was the national vernacular "Kinyarwanda", thus stimulating the sense of national language identity of ' Rwandaness'. Additionally, it was apparent that Grade 11 learners had a great sense of attachment to their language as a significant characteristic of their digital practices through 'translanguaging' which became one of the resources in the digital space.

The findings also indicate that technology served as a bridge between learners' digital practices and their learning of English as an additional language, although language power relations were apparent as English was conferred a status of symbolic capital.

The study concludes that various forms of access to ICTs do not only inform and strengthen Grade 11 learners' process of learning English as additional language, but also support the construction of their multiple identities. There is a need to capitalize on face-to-face interaction and integrate ICT in teaching and learning so that learners can create their own learning space whereby they construct their digital identities as adolescents in the different languages they get exposure to.

DECLARATION

I declare that **Constructing multilingual digital identities: an investigation into Grade 11 learners' digital practices in relation to English language learning in Rwanda** is my own work, that it has not been submitted for any degree or examination in any other university, and that all sources and quotes have been fully acknowledged.

PRAVDA MFURANKUNDA **December 2015**

Signed

DEDICATION

To the Almighty God

To my beloved wife, MARIE LOUISE KAYITESI, for your love and unfailing support

To my brothers and relatives for your encouragement

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LIST OF ABBREVIATIONS AND ACRONYMS

ESL	English as Second Language
EFL	English as a Foreign Language
ET	English Teacher
FAQ	Frequently Asked Questions
ICA	Internet Café Attendant
ICTs	Information Communication Technologies
IT	Information Technology
L2	Second Language
LoLT	Language of Learning and Teaching
MOI	Medium Of Instruction
NICI	National Information and Communications Infrastructure
OLPC	One Laptop Per Child
PCs	Personal Computers
RALC	Rwanda Academy of Language and Culture
SLA	Second Language Acquisition
SMS	short messages
SNS	Social Networking Sites
TOEFL	Teaching of English as a Foreign Language
TV	Television
UK	United Kingdom
US	United States
USA	United States of America

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Chapter One: General Introduction

1.1. Introduction

This chapter outlines the background to the study. It states the problem, announces the aim and research questions and describes the research methodology. It also describes the post-colonial language policies as well as the Information Communication Technology (ICT) policies in Rwanda. The chapter outline for the study concludes the chapter.

1.2. Background to the study

It is said that the world today has become a 'global village' (McLuhan, 1964, 1987) due to the emergence of highly complex communication networks to which large numbers of people have access. This perceived contraction of the world into a 'village' has occurred through 'the instantaneous movement of information from every quarter to every point at the same time' (McLuhan, 1987, p. 254). Although on the surface, technologies such as the internet appear to foster a more unified, responsive, global community, some countries and geopolitical areas are far less networked than others, due, among other things, to socio-economic factors such as poor infrastructure, high access costs, lack of technological content in local languages, and so on (Cheneau-Loquay, 2007).

Such disparities have led to the coining of the term 'the digital divide' [1] which refers to 'the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to their opportunities to access information and communication technologies (ICTs)' (Pascual 2003, p. 32). This digital divide includes the disparities both in physical access to technology and in the skills needed to participate as a digital citizen (Rice, 2002;

[1] Attributed to the administration of former US President Bill Clinton.

Mossberger,Tolbert, and McNeal, 2007). Such digital divides can reduce the ability of citizens to access political and socio-economic rights and can result in the marginalization of those individuals who do not have access to the skills to use available technologies, usually those that 'are already marginalized such as women, the poor, micro and small enterprises, and the physically challenged' (Pascual 2003, p. 32). The digital divide is thus 'a symptom of a larger and more complex problem; that of persistent poverty and inequality' (Servon, 2002, p. 2).

The global inequalities in access to technologies have enabled a problematisation of concepts such as the 'net generation' and the 'digital native' (Prensky, 2001). Prensky claimed that by the age of 21, the average person will have spent '15,000 hours in formal education, 20,000 hours in front of the TV, and 50,000 hours in front of a computer screen' (p.1). He coined the term 'digital natives' for such young people who were born during or after the introduction of digital technology and who have interacted with digital technology from an early age.

In the context of Africa, for example, for South African higher education students, Brown and Czerniewicz (2010) have shown that age is not a determining factor in students' digital lives; familiarity and experience in using ICTs is more relevant. Consequently for Brown and Czerniewicz, the deepening digital divide in South Africa is 'characterized not by age, but by access and opportunity' (p. 357). Those familiar with ICTs are a digital elite, rather than a generation of 'digital natives' (cf. Owen, 2004).

While Africa as a whole is still far behind the rest of the world in terms of its provision of broadband Internet and other new technologies such as smart phones, tablets and the like, access

is slowly improving and technological knowledge is increasing. In 2009, in Nigeria new subscribers were signing up for mobile phone services at a rate of almost one every second (Shiner, 2009). Rwanda as a case study of this research has also made significant progress in terms of the number of active mobile cellular phone subscribers. By December 2013, the subscribers increased to 63.5 % from 53.1 % by December 2012. This suggests that the total size of mobile subscribers had risen up to 2, 5 million (Ministry of Youth and ICT, 2014).

In many countries, adults, including those with little formal education, join youngsters in taking hold of the opportunities afforded by mobile technologies. For example, African farmers can check prices at local markets using their cell phones and doctors can help nurses in rural clinics to diagnose patients by 'telemedicine'. In 2013, Rwandan 13 hospitals used telemedicine, that is 27% of the total number of hospitals (i.e. 48) (Ministry of Youth and ICT, 2014).

From the above scenarios, a more complex understanding of people's experiences of technology that looks at the issue of access and engagement could be developed. In addition to broad-scale surveys on the latter, qualitative methods are critical to acquiring 'in-depth insights into the basis for differences in access and activity and what they mean in the lives of individuals' (Bennett, Maton and Kervin, 2008, p.329).

These insights are especially critical in education, where teachers, many of whom speak only the 'language' of the pre-digital age, are struggling to teach the younger generation that speaks an entirely new language (Prensky, 2001), that is the technological language or discourse associated

with digital technologies. The youth are more conversant with this discourse more than their teachers.

Several studies have shown that for many young people their digital learning spaces give them high levels of engagement and agency which are presently not acknowledged by their formal school experiences (Green et al., 2005). For Castells (1997), the internet provides material support for a 'new pattern of sociability based on individualism' (p. 130). This pattern, in the context of this study, can also be referred to instances such as young people's sense of engagement with social networks for socializing purposes or for one's individual self gratification. The internet connects people not only through traditional family and local community networks, but also through geographically dispersed social networks connected by computer communications.

Before I discuss my research aims in more depth, it is worth looking at postcolonial Rwanda which reflects the role of Western powers in shaping the current sociolinguistic status.

1.2.1 Postcolonial language policies in Rwanda

Rwanda became independent from Belgian rule in 1962. The country's vernacular language is Kinyarwanda and is spoken all over the country. Until 1994, this language was the medium of instruction in primary schools from Primary 1 (P1) to Primary 6 (P6), followed by French in secondary and tertiary education (Mukama, 2008). After the 1994 Genocide, Rwanda restructured its language policy. In a bid to promote unity and maintain political and economic relationships with its Anglophone and Francophone neighbours, the Rwandan government

instituted a tri-language policy in education where Kinyarwanda, English, and French had to be learnt at all schooling levels (Keleher - Walker, 2006, Samuelson& Freedman, 2010).

Rwanda then followed a trilingual policy until 2003 (Ministry of Education, 2002, Samuelson and Freedman, 2010). With regard to the Language of Learning and Teaching (LoLT), from 2003 to 2008 the language of instruction in primary education from P1 to P3 was Kinyarwanda, except for lessons in English or French, but the language of instruction from P4 to P6 was French or English (Rosendal, 2010).

As mentioned, the postgenocide language-in-education policies in Rwanda aimed, among other things, to promote both Rwandan and foreign cultures, and to build a knowledge-based and technologically-oriented society (Ministry of Education, 2007). Despite this provision for multilingual education, in 2008, under increasing global economic pressure, Rwanda decided that English should become the sole medium of instruction in all public and subsidized private schools and higher institutions of learning from Primary 1(P1) to Primary (P 6) (Ministry of Education, 2008). This meant that Kinyarwanda and French were to be taught as subjects only in all grades from P1 to P6 and in secondary education as well, from the beginning of the year 2009 (Ministry of Education, 2008).

It has to be noted that educational systems in Africa and developing worlds as a whole still face the influence of the former colonial languages that prevail as a dominating linguistic tool. This situation continues to have an impact on the choice of language for teaching. ‘One of the

arguments used in order to maintain English as the Language of Learning and Teaching (LoLT), is to prepare the students for entry into new technology'(Halvorsen, 2010, p.306-307).

Before looking at the implications of the 2008 language-in education policy shift, it is worth analysing the Rwandan linguistic configuration by considering statistics on language use provided by the last Population Census in 2003. The data from this census indicate that Kinyarwanda was spoken by 99.7 % of the population, French 3.9%, English 1.9% and Swahili approximately by 3% (Maniraho, 2013;Niyibizi, 2010; Rosendal, 2010). Later studies by LeClerc (2008) and Munyankesha (2008) estimate that by the year 2008, 2% of the population spoke English, 3 to 5% spoke French, and the remaining majority Kinyarwanda. Thus, for this study which took place in urban areas, all the research participants spoke Kinyarwanda, followed by those proficient in French, while a smaller number spoke English by the time the study was conducted. Therefore, most learners did not easily get exposed to English in their daily lives. Urban learners may, however, have significant exposure to English through radio, TV and Internet. Moreover, as the switch to English medium of instruction only took place in 2008, most learners had most of their schooling through the medium of French which is the case for my target research group. This means that for them English was formally taught rather than informally acquired.

The 2008 language policy shift in Rwanda has had a number of side effects in education. Learners have been required to learn content subjects such as Science and History through the medium of English: this means that they have been given a two-fold task, to learn both the course content and the language (Rollnick, 2000; Evans and Green, 2007). However, a

preliminary study conducted in 2010 assessing the 2008 language policy seems to indicate that few learners have yet mastered to a satisfactory level any language, besides Kinyarwanda (Niyibizi, 2010).

It may be argued that such a state of affairs could have a profound effect on learners' ability to construct academic identities for themselves. Wenger (1998) has argued that learning and identity are intertwined as learning does not only involve accumulating skills and knowledge, but also different kinds of personal transformation. In brief, learners in Rwanda are confronting unfamiliar spaces in the scholarly communities of practices they have to join while also attempting to enter these spaces without the necessary linguistic repertoires. Even learners who study through their home language may struggle with academic writing as a result of conflicts between their former selves and their 'becoming-selves' (Clark and Ivanic, 1997). The 'former selves' could be their language proficiency or competence before acquiring new knowledge and their 'becoming selves' their actual language abilities as result of what they have already acquired. The earlier said conflicts are even more acute for learners studying through a language in which they are not fully proficient.

It is from this perspective that Information and Communication Technologies (ICTs) may offer opportunities to construct new, affirming identities to such learners. It has been noticed that the learners in the framework of this research, negotiated several identities (see Chapter V & VI). It is worth examining questions such as how the technologically sophisticated language learners or users of today might 'engage in learning and using language in creative new ways via social networking, gaming, simulations…' (Duff, 2010, p.37). Exposure to digital spaces can also offer

the chance to try out or take on new kinds of identities, which may in turn encourage successful language learning.

The issue of language identity is further complicated by debates over the extent to which the growth of English (in addition to French and other western languages) in African countries whose colonial linguistic legacy is not English represents a challenge to symbolic language policies. In actual fact, some languages in some countries do not position themselves in terms of stability vis a vis their foreign language counterparts, which in the end prevail at the expense of the local vernaculars.

Rosendal (2010, p. 297) holds that 'the promotion and increasing consolidation of English to the detriment of African languages reinforces myths about African languages as being inferior. This causes a vital part of African identity to be neglected'. Kamwangamalu (2010) goes further and claims that the future for indigenous languages as a whole looks bleak under globalization. Thus, issues of language identity become increasingly complex. In the next section, I outline the Information Communication Technology (ICT) policy in Rwanda as this is likely to have a profound effect on linguistic and other forms of identity construction.

1.2.2. ICT policies in Rwanda

The Government of Rwanda initiated an ICT development programme in 1998. It promulgated its national ICT policy in 2000 and this was an "ICT-Led Integrated Socioeconomic Development Framework." This policy was being implemented in four 5-year rolling plans, which are referred to as the National Information and Communications Infrastructure (NICI) plans. The ICT in Education policy was defined in NICI for action by the Ministry of Education

in 2005. The educational policy associated with NICI includes among other things, using ICTs for formal and informal education and raising public awareness of ICTs (Harrison, 2005).

In a bid to provide Rwandans with basic literacy skills to cope with challenges on the global market, a mandatory ICT subject was introduced in the high school curriculum in 2007 and all learners have to spend two hours a week on learning ICT skills (Rubagiza, Were and Sutherland, 2011). Concerning the development, acquisition and access to ICTs and digital content in Rwanda, substantial progress has been made in terms of equipping schools with computers and laboratories. However, the ratio of computers to students is still low, especially in rural regions (Jenkins, 2009; Rubagiza et al., 2011). Moreover, the difficulties of access to computers and other ICT facilities in Rwandan schools negatively affect the way learners benefit from ICT, with students failing to exercise a 'degree of control over technology and content when they are given access to computers in schools' (Rubagiza et al., 2011, p.43).

A major ICT development in Rwanda has also been the introduction in 2009 of an OLPC (One Laptop Per Child) programme which has been initiated by Nicholas Negroponte in partnership with the Rwandan Presidency Office and the Ministry of Education (http://wiki.laptop.org/go/OLPC_Rwanda). According to Wadhams (2010), the OLPC programme plans to buy and distribute thousands of computers to school children. Despite the short supply of power especially in rural areas, OLPC proponents hope that these computers will teach the children the language of technology and provide them the skills to carry out the simple computing tasks they lack, which children in industrialised nations take for granted (Wadhams, 2010; Ministry of Youth and ICT, 2014).

In the Education Sector, the distribution of XO Laptops reached 203, 763 units covering 407 schools by December 2013. It should also be noted that digital contents were deployed in these schools, allowing primary school students to access courses in a digital format as a means of improving quality of education and their learning experience. In Africa, Rwanda ranks among countries that benefited most of the deployment of laptops under the One Laptop Per Child Initiative (OLPC) (Ministry of Youth and ICT, 2014). It is worth noting that the establishment of a new ministry of youth and ICT in the government of Rwanda has also been a major development in that this institution was given a primary mission to address national priorities having to do, among other things, with youth empowerment as well as ICT policies and programs (Ministry of Youth and ICT, 2014). Having examined the background to the study, it is worth looking at how this context leads to the statement of the problem.

1.3. Problem statement

The 21st century has turned out to be an era of the new and sophisticated technologies or ICTs. English is also emerging as the language of wider communication or a lingua franca and it is no longer studied as a content subject only for examination purposes and the spread of ICTs extends far beyond the classroom context and impacts every aspect of life. Likewise, access to knowledge and professional development necessitates the ability to handle ICT tools and have the requisite skills for navigating digital landscapes that are fundamental to cope with the demands of the global conversations of the current century.

In addition, given the multilingual nature of Rwandan society, it has been crucial to investigate the ways in which individuals 'mobilise multiple languages within digital networks to conduct

inter-personal relationships and seek out media information from various sources' (Lam and Rosario-Ramos, 2009, p. 172). New developments in the geopolitical and linguistic dynamics of networked information and communication patterns suggest that the command of several languages is becoming associated with increased participation in a global and networked society (Canagarajah, 2005). This study has, therefore, been able to suggest an understanding of multilingualism and an approach to language teaching that recognises and promotes young people's linguistic and digital repertoires.

It has to be noted, however, that there have been several studies on language policy and management in Rwanda (Ntakirutimana, 2005; Munyankesha 2008; Rosendal, 2010; Samuelson and Freedman, 2010) but almost no research on multilingualism and identity or on how young learners in Rwanda interact with digital technologies. Given the pressing need for Rwanda to play an increasing role in the global economy, it seemed important to explore the ways in which the new generation negotiates multilingual digital identities and the implications for their language learning processes. It is against this background that this study explored the nature of Grade 11 learners' language learning in multilingual digitally mediated contexts, and how their exposure to digital technologies in an additional language shapes processes of identity construction, and in the end indicate ways in which bridges may be built between learners' existing digital practices and language learning in schools.

1.4. Objectives of study and research questions

1.4.1. General Objective

In view of the earlier stated problem, this study, therefore, aims to investigate the ways in which Grade 11 learners use digital technologies to negotiate new identities in two or more languages.

It also aims to draw out the implications for English language learning in the multilingual context of postcolonial Rwanda.

1.4.2. Specific objectives

1) to investigate the ways in which Grade 11 learners negotiate new multilingual identities using digital technologies
2) To identify learners' current practices in relation to digital technologies
3) To identify which languages or mix of languages they access digital technologies
4) To examine how these multilingual practices shape processes of identity construction
5) To look at the learners' perceptions of the affordances of digital technologies for English language learning in Rwanda

1.4.3. Research questions

My main research question is thus 'How do Grade 11 learners negotiate new multilingual identities using digital technologies?'

Sub-questions are:

1) What are learners' current practices in relation to digital technologies?
2) In which languages or mix of languages do they access digital technologies?
3) How do these multilingual practices shape processes of identity construction?
4) What are learners' perceptions of the affordances of digital technologies for English language learning in Rwanda?

1.5. Research design and methodology

1.5.1. Design

This study attempted to examine research participants' practices and attitudes within their social and learning settings. Therefore, a qualitative research design was appropriate. This study was

also informed by ethnographic principles and the latter appeared to be appropriate for this study as 'the ethnographer is sensitive to the meanings that behaviour, actions, events and contexts have in the eyes of the people involved' (Punch, 2009, p. 127). In qualitative research, the researcher attempts to openly and actively be involved in their daily lives by watching what happens, listening to what they utter, posing questions and collecting any other pertinent information as objectively as possible (Hammersley and Atkinson, 1995).

To reach its desired end, this research used several data collection instruments: questionnaire, non-participant observation, focus group interviews with learners', individual interviews with English and ICT teachers as well as a cyber café attendant. The use of the questionnaire, though less associated with ethnography, served to provide me with baseline information on my participants' digital practices. These 'data sources' (Baxter and Jack 2008) were jointly part of the analysis process rather than considered individually, and the combination strengthened the findings as the data collected from different tools supported a better understanding of the phenomenon under study.

1.5.2. Research setting

The research sites were two urban high schools (whose names are kept anonymous for ethical reasons), located in the South Province of Rwanda in Huye, the second largest city of the country. These schools were selected among other criteria, on the basis of the following: their proximity to digital technologies such as internet cafes and/or facilities in the school social environment such as computer laboratories, being well represented from a gender perspective, and having both sciences and social sciences as major school subjects as students in different disciplines may engage in different digital practices. The choice of these school subjects has

been motivated by the fact that these are major school orientations most learners enroll to in Rwanda.

1.5.3. Research participants

My participants were forty Grade 11 multilingual learners (see details in Chapter III), speaking Kinyarwanda, French and/or English. I chose Grade 11 because they are advanced level students capable of critical discussion and reflection. In this case, the majority of Grade 11 learners completed a questionnaire. Then a certain number of these learners were selected for focus group discussions based on responses given in the questionnaire and on my non-participant observation.

1.5.4. Data collection Tools

This study made use of an open and closed *questionnaire* that was used in a time- and cost-effective way (Dornyei, 2002) of establishing an initial picture of participants' digital practices in different languages. Then, the non- participant observation method was used and field notes were compiled for that matter. In recording field notes, I constantly registered notes on the group under investigation and also kept records on my responses or feedback as well as perceptions about my field experiences. It is crucial that these notes regularly be analyzed in relationship to interpretations about the host community (Whitehead, 2005).

During my non-participant observation, I tried to observe behaviours and actions of the participants in the study but without forming part of the group being investigated (Foster, 1996). However, I used other sources of data to enrich my understandings of participants' practices and the meanings attached to them.

As an ethnographically informed research, this study had recourse to field notes based on the interviews and *non-participant observation* data (Fetterman, 1989). *Field notes* are an 'essential grounding and resource for writing broader, more coherent accounts of others' lives and concerns' (Emerson, Fretz, and Shaw, 1995, p. 11).

While observing digital practices and understanding the nature of their function and significance in learners' lives, I paid visits to cyber cafes and other sites where digital technologies were used in addition to school computer laboratories. However, this study had limitations. For the purposes of understanding the nature of multilingual interactions with technologies, I wish I had observed whether two or more people sit together and surf, in order to investigate what language/s they used when they talked to each other while doing this. The limitations are discussed at length in Chapter VI. This is subject to further studies (see Chapter VI).

Interviews were the major data collection tools for this study. The choice of participants for these interviews was based on the learners' responses to the questionnaire and on insights from the observation. Interviews were tape recorded, transcribed and translated where necessary. To begin with, *focus group interviews* provided the core data for this research. When conducting focus group interviews, as Babbie and Mouton (2001) suggest, the researcher selects between eight and twelve respondents or seven to ten (Krueger, 1994) seated in a circle. Focus group discussion aims to obtain insights on a specific area of interest in an accommodating, non-aggressive atmosphere (Krueger, 1994). On this note, Whitehead (2005, p.17) claims that the interviewer 'elicits answers fully from the perspective of the study participant, and attempts to gain a greater understanding of the context and meaning of those responses through various forms of probing'.

Finally, the researcher had also recourse to *individual interviews* that were conducted to follow up on issues raised by observations and focus group interviews. Here, one ICT teacher and manager of the school computers laboratory, an English teacher and an internet café attendant were interviewed. This was intended to get their personal opinions based on their daily observations and experience of young people's digital and multilingual practices. A detailed account of the research methodology is given in Chapter Three.

1.6. Thesis outline

The first chapter which is a general introduction provides a background to the study, the problem statement, aims of the study as well as the research questions. This background discusses the postcolonial language policies in Rwanda which have known a number of unstable policies culminating in the recent one, the 2008 language-in-education policy which provides for English as the sole medium of instruction. It also describes ICT policy in Rwanda which has resulted in the introduction of a mandatory ICT subject in the high school curriculum in a bid to cope with global market challenges.

The same chapter sets the scene for the problem statement which draws on the fact that there has been little research on multilingualism and identity in Rwanda and no research on ICTs and language learning. The study, therefore, sought to explore secondary school learners' current digital practices, the ways in which existing multilingual repertoires are drawn on as resources in navigating digital literacies, and how such practices can be harnessed as resources for the English language learning classroom.

The second chapter discusses key concepts and the theoretical framework for the study. Three bodies of theory and research will be highlighted in this chapter: digital literacies, poststructural theories of identity and second or additional language acquisition in multilingual contexts. The latter emphasizes recent social approaches to language learning in which languages are seen as social and economic capital, language learning as language socialization and language learners as social agents.

The third chapter presents the research design and the methodology for the study. It elaborates on the qualitative design and ethnographic underpinnings for the study and the choice of data collection tools. These tools include non-participant observation, focus group and individual interviews. This chapter also addresses data analysis, ethics, and reflexivity as well as the limitations of the research.

The fourth chapter presents the data on the participants' perceptions of their digital practices in multilingual context and how this shaped their identity construction. This chapter also highlights their views on the implications for English language learning. Besides, an overview of the individual interviews' responses is presented as well.

The fifth chapter analyses and discusses findings on digital practices out of school and draws out the implications for language learning. The analysis and discussion are carried out within the post-structural theoretical framework. The final chapter provides the conclusion and recommendations. The next chapter reviews the literature and presents the theoretical framework for this study.

Chapter Two: Literature review and theoretical framework

2.1. Introduction

This chapter presents literature view around key concepts of this study as well as theoretical framework relevant to the research under question. It seeks to provide a brief background around which respective bodies of knowledge evolve in this area of study. In this context, the most appropriate approach for this study is the poststructuralist paradigm through which the empirical data is explained and understood. The theoretical framework is also presented in the light of Post-structural theories of identity, as well as of Bourdieu's theory of habitus, field and capital. The post-structural frame of analysis underlying issues of Second Language Acquisition (SLA) is also of importance in this chapter as English is taught as a second language in many schools in Rwanda.

2.2. Digital literacies

This section paves the way to a number of concepts that relate to and/or give rise to digital literacies. In this regard, this section looks at some of the related concepts frequently used in parallel with 'digital literacies' and these are literacies, new literacies, multiliteracies, to name but a few. Below I give a description of each of these concepts to highlight how they are conceptualized in different contexts and their significance in this study.

2.2.1. Literacies

In the past, literacy has been described as something associated with being able to read and write or having to do with books and writing. It was also perceived as a set of skills which were taught in schools. However, some scholars would argue that 'literacy' is appropriated into English usage as an expression that signifies 'a set of abilities required to do something associated with a

particular sphere of activity' (Allan and Madigan, 2006, p.8). From a different perspective, current debates advocate for another view of literacy which has in turn been perceived as 'a social practice, something that people do in everyday life, in their homes, at work and at school' (Pahl and Rowsell, 2005,p.11). In a related development, it is believed that people's daily activities in the modern world are mediated by literacy and individuals 'act within a textually mediated social world' (Barton, 2001, p.100). Literacy is considered as a social product and the language through which literacy is understood is interactive and dynamic, and people' actions are comprehensible in terms of the contexts within which they occur (Street, 2002).

Regarding this debate on literacy as social practice, literacy is linked to individuals' daily occupations such us going to a bank and filling in a form, typing on any form of screen, be it on a laptop, tablet, on a phone, etc. Pahl and Rowsell (2005, p.10) claim that 'When we type on a screen we are situated within a specific time and place as we type (…) and 'the global practices from the World Wide Web infuse our local spaces.' In other words, when young people, for instance, are engaged with digital technologies there is a sense of proximity that is created between several sites they visit such as Social Networking Sites (SNS) and with their social spaces such as home setting where they browse, or their spare time when they are entertaining themselves. Being involved in a virtual world like chatting gives the actors a sense of presence in the other world of your friend or partner in the chatroom or any other global communication activity.

In the context of this study, as the world is facing digital knowledge revolution, literacy is regarded a social cultural practice. It is also perceived to be characterized by certain qualities

such as being literate is to think critically, to be a lifelong learner and to master interaction with technologically based information'(Martin and Madigan, 2006, p.54). In the next section, emphasis is put on the New Literacies which is a close related term to literacy and literacies.

2.2.2. New literacies

The term "new literacies" itself is rather new within the field of literacy studies and has in the first place been discussed in 1993 by David Buckingham. Other scholars have also conceptualized it from different paradigms. On one hand, new literacies were looked from the psycholinguistic angle. For instance, while analyzing online texts, psycholinguists could consider cognitive theories around processing the language. On the other hand, scholars advocate a more sociocultural direction that considers literacy as a social practice, which emphasizes the importance of literacy operating within social patterns and converging towards things being done in the real world (Lankshear & Knobel, 2011).

New literacies are currently characterised by peculiar writing style that portrays the essence of the new literacies. Thus, various hyphenated literacies are used to refer to new literacies: information-, media-, Internet-, visual-, computer-, consumer-, and scientific-, to name but a few. They all relate to new means for representing knowledge and communicating.' (Alvernmann, 2005, p. 15) In addition, new literacies usually imply access, as well as the acquisition of appropriate skills and knowledge (Nardi & O'Day, 1999).

Furthermore, the 'new literacies' also referred to as 'new literacy practices' are described as largely encompassing what is termed as 'post-typographic' forms of textual practice (Lankshear and Knobel, 2003). The post-typographic can thus be defined as several textual forms such as

online texts that are presented in a certain way to make or communicate meaning. These forms include, among other things, 'using and constructing hyperlinks between documents and/or images, sounds, movies, semiotic languages (such as emoticons used in email, online chat space or instant messaging), manipulating a mouse around within a text' (Lankshear and Knobel, 2003, p.16-17).

Overlap around 'new literacies' has been an upbeat topic to date. Martin & Madigan (2006) argue that divergence or convergence observed in the superfluous use of terms connected to new literacies are inherent to the lively interested academicians in this topic. In relation to the above, the next concept to be discussed is "Multiliteracies".

2.2.3. Multiliteracies

The concept of 'Multiliteracies' is known to have been introduced to researchers in education by the New London Group (1996). This group theorized changing the essence of literacy pedagogy (New London Group, 1996, p. 65) to include what they called six design elements in the meaning-making process: linguistic, visual, audio, gestural, spatial meaning and multimodal interplay (p.230). While explaining the relation between literacies and multiliteracies, Jewitt (2008) talks about a multiliteracies model and argues that the model highlights two intertwined changes that affect literacy today in the communication setting. The said changes are 'the increasing significance of cultural and linguistic diversity in a global economy and the complexity of texts with respect to nonlinguistic, multimodal forms of representation and communication' (Jewitt, 2008, p.245). As this study seeks to explore learners' digital practices, they are exposed to most of these cultural forms and several linguistic repertoires across various media of communication.

Falchi (2011) supports the view by the New London Group (1996) that the term *multiliteracies* embraces the ways that semiotic and cultural resources, including several modes, are utilised in various settings and social situations and for special purposes. For example, they are concerned with the use of academic discourses that are driven by social, political and economic factors. Consequently, multiliteracies emphasize the way verbal and written linguistic modes are always linked to other modes that are also visual, audio, spatial and gestural, channels of expression (Siegel, 2006).

Falchi (2011, p. 23) also alludes to the role of language and culture in multiliteracies. She states that 'by reimagining language and literacy practices to include children's cultural and linguistic backgrounds, a multiliteracies perspective expands the notion of literacies to acknowledge multimodality as always a part of participation in literate practices'. In this respect, learners who are the target research group of my study and speaking different languages are involved in a number of literacy activities such as writing emails, producing power point presentations, watching videos, visiting web sites and chat rooms and sending text messages with their cell phones in English as well as other languages on a daily basis (Nallaya, 2010, p.54).

As has been stated earlier, theorists have had an ongoing debate on the interrelated literacies as if the concepts under question do not have a common denominator. Some analysts use the plural terms 'literacies', others 'multiple literacies' or 'multiliteracies'. Kellner (2002,p.163) prefers the term 'multiple literacies' which takes into account several kinds of literacies required to access, interpret, criticize and contribute in the rising and new forms of culture and society. Synder

(2002) prefers 'literacy practices' rather than 'literacies' (Kress, 2003) while Tyner (1998, p. 63-8) recognizes the need to refer to multiliteracies, but opts for maintaining 'literacy' as an overarching concept. However, multiplicity of literacies has led to conceptual confusion and some writers suggest that it is crucial to develop a theoretical base that advocates a single designation for literacy that addresses its various angles. Therefore, there is need to conceptualise 'digital literacies'. This is the focal point of this study, and it has to be stressed that digital literacies have helped the world to move from a' paper-based society to a screen – based society' (Kist, 2010, p.2). Having had a background to literacies, it is now turn to look into the digital literacies that emanates from other related forms of literacies.

2.2.4. Digital literacies

To start with, the term 'digital literacies' was popularised by Paul Gilster, who defined it as 'the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers' (Gilster, 1997, p.1). Besides, the concept on its own has little historical baggage but has merit as 'as an integrating (but not overarching) concept that focuses upon the digital without limiting itself to computer skills, (…)' (Martin (2006, p.18). As a matter of fact, today a great deal of writing and reading is on a computer screen, and the texts we are accessing include not only print communication, but also elements of graphic design, video, sound and visual art (Kist 2010, p.2). It should be emphasized, however, that at the core of the digital literacies is the ability to deal with critical thinking rather than technical competence because what matters most here is to have a critical evaluation of what one finds on the web, rather than the technical skills he/she has recourse to in accessing the needed content (Gilster, 1997, p.18).

To be digitally literate, therefore, people need to know not only how to 'represent an idea by selecting modes and tools but also [...] how to spatially and temporally juxtapose multimodal texts to best represent ideas' (O'Brien and Scharber, 2008, p.67). This emphasis on 'design' is important as it has been argued that the definition of 'literacy' as the 'ability to read and write' is no longer satisfactory to encompass all its embedded meanings.

It would also be crucial to contextualize the concept of 'digital literacies' in relation to other terms such as literacy, new literacies, and multiliteracies (see the previous section). Lankshear and Knobel (2008) stress the plurality of this concept rather than the singular 'digital literacy'. A key influence is the New Literacy Studies (Street, 1984; Lankshear, 1987; Gee, 1996) in which literacy is seen as a social practice which changes according to context, participants, and embedded power relations. From such a sociocultural viewpoint, digital literacies can be defined as 'a set of social practices that are interwoven with contemporary "ways of being"' (Carrington and Robinson, 2009, p.83). These literacies are considered part of the so-called 'new literacies' that have accompanied the move from a 'page-based society to a screen-based society' (Kist, 2010, p.2). For Kist (2010), new literacies embody a two-fold meaning: they suggest both the multimodality of today's communication forms and the interactivity that is embedded in them.

Interactivity appears to be a key part of the appeal of digital literacies. According to Will (2010, p.131) young people interact in what is called 'friendship-based ways'. He further asserts that these interactions help them stay attached to the people they know in their physical spaces, that is, friends at school or team mates, but also in virtual friendship groups which may cross regional or national boundaries. In both cases, social networks allow youngsters to explore interests and

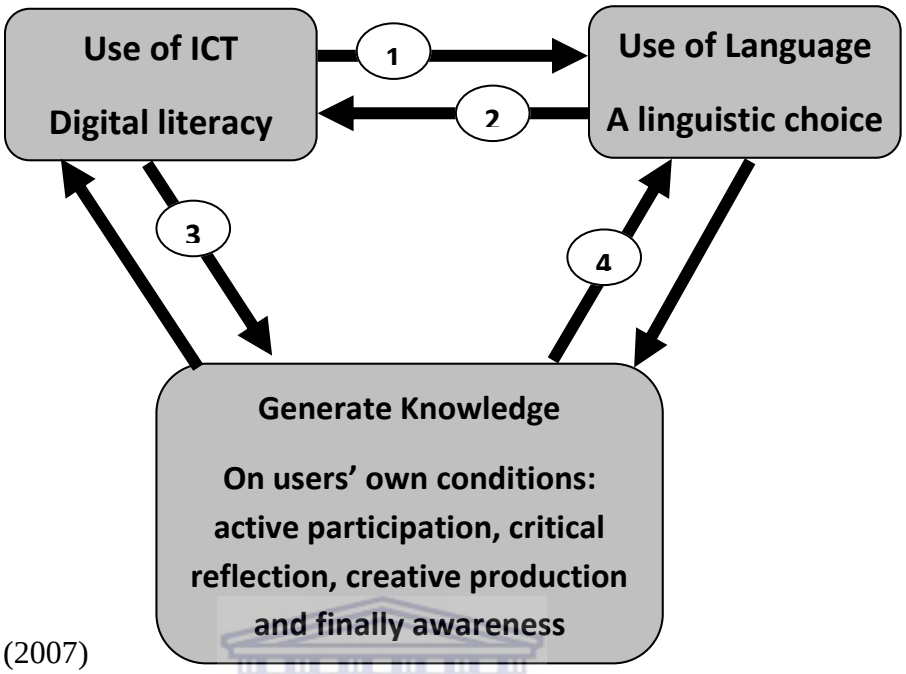
find information that goes beyond what they have access to at school or in their local community (Ito et al., 2008).

A further significant aspect of digital interactions is that there appears to be mutual reinforcement of social networks and language practices as learners' multilingual abilities are fostered by their access to information for personal benefit and pleasure, while using both their 'first' language as well as English (Wei, 2000; De Bot and Stoessel**,** 2002). It is, therefore, crucial to examine the interrelationships between digital literacy and ICT on the one hand, and language on the other, since the two concepts correlate in this study. This is necessitated by the fact that the target research group in this study had access to language and ICT in their schooling background.

2.2.4.1. Digital literacy and language

As a matter of fact, drawing on Frones (2002) theories of *User competence* and *Basic Competence* in ICT, Halvorsen (2008) argues that a better definition of digital literacy should encompass these two kinds of competence. It is assumed that Basic Competence and User Competence in combination generate students' digital proficiency and 'this ability includes being able to use new technology devices and media in a creative and critical way, managing to navigate the Internet distinguishing trash from quality' (Halvorsen, 2008, p.215). This scholar further stresses that digital proficiency presupposes basic competence and one can only achieve competence through a familiar language which gives the student the best capability to actively participate as a user in any digital activity.

Figure 1. Model of interaction



Source: Halvorsen (2007)

This figure illustrates how digital literacy and language mutually relate and influence knowledge acquisition. The model in Figure 1 depicts a triangular format with different arrows. The first arrow (1) moves horizontally from the box on 'Use of ICT' to the box on the right "Use of Language'. This arrow indicates how ICT influences and vitalizes the language. Then a second arrow (2) takes the opposing direction from 'the Use of Language' to the left side moving towards 'Use of ICT'. This arrow shows how a developed language generates digital literacy. This figure also describes the third arrow (3) that moves down to the box 'Generate Knowledge' and the fourth arrow moving down as well, but from the box 'Use of Language'. These arrows demonstrate how ICT and language mutually affect the learning process in generating knowledge which through linguistic consciousness and digital competence encourage and bring on active participation, critical reflection, creative production and awareness (Halvorsen, 2008).

2.2.4.2. Digital divide and digital revolution

The issue of access to Information Technologies (IT) facilities and its availability is important if a given society has to develop to meet regional and global challenges. Alvermann (2010) discusses the relationship between multiple literacies and the 'Digital Divide'. Although the term 'digital divide' typically refers to issues of technology access and availability, it is also an appropriate description for the recurrent inequality between home and school literacies. Thus, the need for authentic experiences in schools that offer students opportunities to immerse in real-world situations as much as possible is increasingly important in the face of a rapid changing global world in order to bridge 'the home-school literacies gap' (Alvermann, 2006, p.29).

In the framework of supporting and enabling digital literacy in a global environment, Martin & Madigan (2006, p. 136) also makes reference to Nicholas Negroponte with his initiative of enabling access to digital literacy among the world's populations (see section 1.2.2.). While addressing the World Economic Forum in Switzerland, Negroponte remarked that his team and himself envisioned a laptop that would allow children from even the poorest countries a 'window to the world', and 'a tool with which to think'(Martin and Madigan, 2006, p. 136). The statement below is consequently self–explanatory to highlight the significance of addressing the pressing issue of the digital divide in the world in relation to digital literacies:

> 'The world is becoming increasingly digital and this is profoundly affecting how we learn and live. Those who do not have access to this digital world, and those who cannot use digital tools to become independent learners and explorers of new ideas, will be at a distinct disadvantage as learners' (idem).

In the context of this study, it should be noted that there is a concern over the right importance attached to some less valued languages in the era of the digital revolution. On this note, the

expression ‘bridging the linguistic digital divide’ has been envisaged. Martin and Madigan (2006, p.147) raise a concern by stating that ‘a major contemporary anxiety for the guardians of minority languages has been the domination of cyberspace by the English language’. Although this has begun to decrease in recent years and that there is possibility to use the internet with its multilingual repertoire, it remains challenging to come up with computer applications (e.g. having bilingual softwares) that accommodate minority languages. In the next section, emphasis is put on examining the issue of access to ICT facilities and/or digital tools.

2.2.4.3. Theorizing the issue of access to ICT and/or digital facilities access

Several writers (GESCI, 2010; Gudmundsdottir, 2010; Keniston, 2004; Van Dijk and Hacker, 2003) have been attracted by the problematization of the digital divide worldwide. It has to be reiterated that the digital divide is understood as “the gap between those people with effective access to digital information and communication technology (ICT), and those without” (GESCI, 2010). Besides, whenever there is debate on digital divide, it is misunderstood that the latter only implies the gap between the wealthy and the poor or between the educated and uneducated in terms of access to digital opportunities. There is another angle that needs to be examined. Keniston (2004) on his part indicates that there is also the *linguistic* and *cultural* divide. This divide is linked to English use, its supremacy and the connection the language has with the Anglo-Saxon culture (Gudmundsdottir, 2010, p.148).

With regard to the theories of access to digital technologies and ICT related tools, it has to be stressed that access is conceptualized from different levels and from different research trends. Van Dijk and Hacker (2003) explain the digital divide and claim that access is based on four factors. These are *material access*, which refers to owning computers or having access to

network connections; *mental access*, which includes motivation, experience and computer anxiety; *skills access*, which refers to digital competence, support and user friendliness; and finally there is *usage access*, which identifies opportunities to use ICT.

The digital divide should be viewed as something more than just physical access and it should rather be determined or understood from a multi-faceted perspective (Drenoyianni, Stergioulas & Dagiene, 2008; Czerniewicz & Brown, 2005). Warschauer (2004) in Brock – Utne, Desai and Qorro (2005, p.149) on his side, suggests another model of access that is described below.

The four access components are: access to *physical resources*, access to *digital resources*, access to *human resources* and access to *social resources*. With this division, he takes into consideration the significance of not only having access to computers and Internet connection (*physical resources*), but also on related content in a familiar language (*digital resources*), and to be able of employing the resources by developing digital literacy and being well-trained (*human resources*). Finally, having social capital and satisfactory support from the community or the institution (*social resources*) is essential in order to be able to provide sustainable and relevant use of ICT (idem).

In the context of Rwanda which is the focal point for the study, the government has become conscious that simple access to ICT which is achieved in developing the necessary infrastructure does not mean that ICT usage is effective and productive (Chabbott, 2013). In view of the above, Mbatha and Manana (2012) raise the fact that even if some of the learners have relatively easy access to the technologies but the digital divide is of great concern. In fact, there

is still a gap between those 'who have readily available access to the internet and computers and the peripherals needed to navigate it efficiently, as well as to students who do not have these resources' (Galuszka 2007, p.21).

Access to technologies has also been contextualized in terms of getting in touch with social communication spaces and Facebook is the focal point here. In this instance, different kinds of access are identified, namely code access, technology access, participation access, among others (Harran &Olamijulo, 2014). As far as code access is concerned, the social media users put their postings on facebook. For instance, they are allowed to use their own codes and most use informal codes, including abbreviations. For the second kind of access which is technology access, they link this to the access that internet administrators allow users to access to (e.g. lack of access to Facebook during the day when students use the labs for their school work). The third kind has to do with participation access. This is, according to Harran & Olamijulo (2014), the fact that some of the social media give an opportunity to the users to actively participate in them. For example, Facebook pages provide access for active participation as participants who normally do not say anything, for example, in class or who are shy, often comment online and share experiences they would usually not 'express face-to-face'. In the following section, attention is directed to the internet and digital generation.

2.2.4.4. Internet and digital generation

The rapid growth of technology into the world of young people has resulted in the development of a new generation different from previous generations. Different names have been attributed to this generation including Millennials, Nexters, Generation Y and Generation Why (Horovitz, 2012; Prensky, 2005). Regardless of the variety of names the generation has acquired, the

identification of this group of people as being different from other generations stems from their unique exposure to digital technologies (Zevenbergen, 2007, p.20).

The internet generation, as a concept, has considerably been popular in the 1980s with the sensitization of the Personal Computer or PC (Harwood & Asal, 2007). It is known from a given trend to refer to a group of people who have a peculiar way of interacting with digital media and are categorised within the age range of 13 to 14 years old (Nyirubugara, 2012). This generation is also known to belong to what is termed as 'digital generation or digital natives'.

Prensky (2005) coined the term 'digital natives' to refer to the generation who has grown up with digital technologies so that they are a part of their world view. That is why the digital natives enjoy a plethora of digital media such as mobile phones, computer games, the Internet, instant messaging and chatlines, i.e. the media available to this generation and that was not accessible to other generations, both in form and quantity. On the contrary, the generations that have not grown up within technology-rich environment are 'digital immigrants': they are bound to learn the new technologies but a great deal more effort is required than for the digital natives (idem).

'Internet Generation' and 'Digital Generation' are sometimes alternatively being referred to. 'Digital Generation' is understood as relying on the hardware or devices that allow certain digital activities to take place such as gaming, computing, playing music, etc. (Palfrey & Gasser, 2008). The 'Internet Generation' emerged to emphasise one kind of activity, i.e. networking or connecting to the Internet or the Web, which is facilitated by digital devices. Most of these devices today connect to the web, therefore, the concepts of digital generation and Internet

Generation end up serving purposes for both young and old generations (Nyarubugara, 2012). It is against this background that education should benefit more from the digital world to improve the way the youth acquire knowledge and hands on skills, thus developing the culture of knowledge.

2.2. 5. Digital literacies and education

Martin and Madigan (2006, p.62) talk about the 'internet culture' and elaborate on how the rapid increase in digital technology access (see section 2.2.4.3) has somehow changed the nature of the school and college experience. In some classroom contexts, several teachers still have recourse to dictations as a teaching method to classes of youngsters. They actually propose their 'personal' version of some course subjects such as geography, history, biology or literature contents and so on. In contrast, it has now been possible to imagine that such texts or data could be made available online, and that the teachers can devote their educational time teaching students how to think about these contents from a geographical, historical, biological or literary point of view (idem).

As one of the major issues confronting education stakeholders has been 'how to reconcile the old literacies with the emerging literacies (Harushimana, 2008, p.38), it is crucial that digital technologies be seen as playing a role in the service of education and training (Inglis, Ling & Joosten, 1999). Education training in this context should not be seen as providing a stage on which the capabilities of digital technologies can be displayed. But the impressive changes in the ways education and training are delivered 'can be best explained by the new possibilities that recent developments in digital technologies have brought' (Inglis, Ling & Joosten, 1999, p.239).

Although, the world has had profit from the emerging digital literacies, it is necessary to look into the use of these technologies that sometimes seems irrational. There is a risk that in rushing to the benefits offered by digital technologies and advocates of the new learning technologies may overlook what is important: improving students' learning (Inglis, Ling & Joosten, 1999). In other words, these technologies should be more of a support to learning than being a distractive tool that prevents learners from succeeding in their school subjects. One of the disadvantages of the growing technologies for the youth today is the distraction resulting out of 'blind" use of these tools. Here a pressing issue is that of the learners impinging school discipline and regulations. This is due to the fact that students often divert their attention instead of focusing on school work. The normal rule for the use of the computer laboratory, for instance, is that **learners** are supposed to do only school-related tasks (Poynton, 2005). These activities are word processing, reading emails, searching for information on the website and those that are prohibited during school hours include using chat rooms or playing games.

Nowadays changing technologies allow new modes of literacy in shifting circumstances in the context of learners' diversity and critical social engagement. For instance, sometimes school management or teachers should monitor how the youth conduct their school work when they use the computer laboratory. Bruce (1997) gives a scenario that is self-explanatory. In actual fact, the writer talks about learners' digital practices at school and the circumstances in which they are busy with such activities. Some of these learners can be found alone, or in pairs or others talking or sleeping, or listening to music they had purchased or copied from their friends' CDs, or in some cases, downloaded from the internet (Poynton, 2005; Martin and Madigan, 2006, p. 63). In brief, the youth are increasingly distracted and disinterested in school and they are gradually

developing a non-official, digitally literate competence that schools do not accommodate or recognize (Bulfin, 2008). Such practices that the youth is exposed to (such as watching pornography) are influenced by their teenager's age and other factors as it was noticed in the findings of this study (see Chapter IV, section 4.4.2).

It is persuasive to believe that today's society is being governed by digital technologies, and the assumption is backed up by the several technologically inspired names given, over the last 40 years, to the age in which we live (Martin & Madigan, 2006, p.4). But how should learners optimally utilize these technologies for their benefit? In view of the earlier stated youth digital practices and associated behaviours, it is crucial to examine in the next section the issue of identity construction that addresses ways in which learners' engagement and exposure are manifested as they deal with digital tools and other social spaces they interact with such as the school and language to name but a few.

2.3. Conceptualization of identity

Identity in the study framework plays a crucial role in an attempt to understand the ways in which learners actively invest in multiple sources of knowledge and seeking their 'selves' within the digital world with which they interact. Identity has 'commonly been understood in the past to be a sense of one's alignment or affiliation with, or membership in, a particular social group and the emotional ties one has with that group, and the meanings that connection has for an individual' (Duff, 2010, p.6). Furthermore, Block (2003, p.79) characterises such views of identity as 'unified, internally completely coherent and uncontested, and stable over both time (past, present and future) and space (in varying contexts)'. In contrast, in recent post-structural approaches, identities become more complex. Weedon (1997), for example, describes individuals

as representing several subjectivities which are in a state of continuing change and which can be managed through reflection, speech and other media of communication such as print, visuals, and body language.

Such fluid and multisemiotically managed subjectivities are viewed as 'social, discursive and narrative options offered by a particular society in a specific time and place to which individuals and groups appeal in an attempt to self-name, to self-characterise, and to claim social spaces and social prerogatives' (Pavlenko & Blackledge, 2004, p.19). Clark **(**2009) understands the concept of identity as fluid, not fixed or static in a moment or specific context. Identity can also be understood as, 'how a person understands his or her relationship to the world, how that relationship is constructed across time and space, and how the person understands possibilities for the future'(Norton, 2000, p.5).

Wenger (2000, p.239) states that identity is not an abstract idea or a label, such as a title, an ethnic category, or a personality trait. It is a lived experience of belonging (or not belonging). In addition, identity is also described as strong because it involves deep connections with others through shared histories and experiences, reciprocity, affection, and mutual commitments (idem). Besides, identity is understood in terms of one's connection or identification with a specific social group, the emotional bond that one has with the group, and the meanings that connection has for an individual (Duff, 2010, p.12).

Richards (2006) distinguishes three aspects of identity. Firstly, there are *situated* identities, which are explicitly conferred by the particular context of communication, such as doctor-patient

identities in the context of a health clinic, or teacher-student identities in the context of a classroom. Secondly, there are *associated* identities, as participants orient themselves to particular discourse roles in the moment-by-moment organization of the interaction (e.g. initiator, listener, challenger). Thirdly, and most importantly, there are *transportable* identities, which are latent or implicit but can be invoked during the interaction for particular reasons **(**Zimmerman**,** 1998**)**. For example, during an English lesson, a teacher might allude to the fact that he/ she is a keen tennis player or a devoted science fiction fun. On this note, Murray, Gao and Lamb (2011, p. 16-17) argue that engaging students' own transportable identities (e.g. football fan, amateur photographer) can stimulate a much higher level of personal involvement, effort and investment from them than traditional teacher- student talk. Transportable identities by definition extend beyond the physical boundaries of the classroom and beyond teacher- student roles and relationships (idem).

While trying to grasp the phenomenon of negotiation of identities, it is worth looking from a post-structural angle different types of identities namely *imposed identities* (which are not negotiable in a particular time and place), *assumed* identities (which are accepted and not negotiated), and *negotiable* identities (which are contested by groups and individuals) (Bock & Mheta, 2013; Pavlenko and Blackledge, 2004, p.20). As for the first kind of identities (imposed), these are the ones that individuals cannot resist or contest at a particular point in time. Pavlenko and Blackledge (2004, p.21) give an example of immigrants in the United States who when they arrived there, had resented obligatory name they were given but they were powerlessly unable to refuse the imposed label.

The second type of identities (assumed) are the ones that most individuals are comfortable with and not interested in contesting. They are in principle identities that are valued and legitimized by the dominant discourses of identity. These identities include, for instance, monolingual speakers of the majority languages (Pavlenko and Blackledge, 2004, p.21). The third and last, negotiable identities refer to all other identity options which can be or are contested and resisted by particular individuals and groups (idem). These identities are manifested across different areas such as ethnicity, nationality, class and social status, religion affiliation, linguistic competence and so on (Pavlenko and Blackledge, 2004, p.21-22).

On the whole, it should be noted that identity options vary according to the context involved and a number of factors such as increased urbanization, mobility, new technologies, and globalization play a big role in the changing forms of identity (Clark, 2009, p.7). Thus, studies have been arguing that the world is undergoing a kind of 'crisis of identity' (Mercer, 1990) overtime where the imagined complete, unified, passive, stable, and coherent conception of identity is in fact believed to be more of a dream or ideal vision as we face a multiplicity of possible identities (Block, 2006).

It is of significance for this study to understand how learners negotiate digital identities. In the next section, focus is put on the significance of multilingual repertoires and how these give authority to constructing or shaping learners' several and changing identities.

2.4. Identity and Multilingualism

Research within a post-structuralist framework has suggested that multilingual citizens tend to construct linguistic identities according to the processes and alliances that they establish with

different societies or communities of practice (Pavlenko and Blackledge, 2004). Here concepts such as language expertise, language inheritance and language affiliation (Rampton, 1990) are worth considering. Language expertise refers to the speakers' competence in the language/s, whereas language affiliation refers to their affective relationship with the languages spoken. Language inheritance refers to the relationship between the speaker and the ethnic group into which he/she was born (Rampton, Harris and Leung, 1997). In the context of this study, it is assumed that language learners have 'complex histories and multiple desires and that such ventures in the target language can be an investment in the learner's social identity which changes across time and space' (Beavis, 2006, p.411).

Debates on multilingualism and discourses around it have not yet been exhausted. These debates have been highlighting the shifts in the value of languages in the global era, with the rise of the global communication and information technologies. The value attributed to certain kinds of multilingualism is having a profound impact on people's lives and identities and it also presents constraints and opportunities, 'while at the same time creating spaces for voices to be heard and listened to, which are observable in everyday social interactions'(Clark, 2009,p.19- 20). Language is a loaded resource that is inextricably bound within the construction and negotiation of identities within the development of multilingual repertoires (Lamarre & Dagenais, 2004).

As this study aims at examining the implications for the learners' use of digital technologies as part of their school language curriculum, it is worth looking at the discourses around identity and language learning. There has been a shift in SLA from seeing learners as individual language producers to members of social and historical collectivities, placing further emphasis on

conditions for learning (Lamarre & Dagenais, 2004, p.35). In the context of this study, despite the learners' little exposure to the native like environment of their additional language in multilingual setting they are immersed in, learners are committed to speak out their language learning needs as they are aware of the pressing global trend to join the English linguistic community which is their target.

Regarding the relationship between multilingual issues and SLA underlying this study, De Angelis (2007, p. 12) lists a number of points that should be taken into account such as the age of acquisition of a non-native language, exposure to non-native language environments, classroom language instruction for the non-native language, years and hours per week for the formal instruction, number of languages known to the speaker, to name but a few. Thus, in the context of this study whereby the target research group is made of learners who speak more than one language, the above mentioned points could serve a role in illuminating their concerns as they negotiate their digital identities.

2.4.1. Identity and digital literacies

This section briefly discusses different scholars' depiction of the identity phenomenon that is observed among the youth when they interact with several digital technologies, mainly social media. In this context, reference is made to Hobbs' (2006, p. 103) paper where he highlights some of the emerging literature on adolescents' use of instant messaging (IM), blogs and chat rooms. He talks about how identity development can be realized for teens as they carry on several interpersonal conversations simultaneously online. In addition, it has been noticed that these forms of interactions are not profound and they rather create 'a comfortable, low-pressure social experience'(Stern, 2007). The youth are more relaxed as they deal with social media

spaces. The scholar concludes that the interactive online communication caters for two major needs for adolescents: maintaining friendships and belonging to peer groups.

In the social world of adolescence where one must look, adolescents dress and act in a certain way to be accepted by peers. Many teens appreciate the chance to communicate their identity only through words. For some teens, online mediated communication is a primary way to satisfy their need to belong to a social group (Stern, 2005, p.103). In the busy lives of adolescents who are trying to manage academics, sports, social activities and family life, it seems that teens are simply taking advantage of internet technologies to meet their essential developmental needs to communicate with others in order to learn about themselves (Stern, 2005, p.103).

Another illustration of identity construction can be obtained through Merchant analysis of social networking trend in relation to those who are keen on experiencing social network sites. Alvermann (2010, p.53) defines 'social networking' as reference that 'could be regarded as a way of describing the patterning of everyday practices of social interaction – particularly those that take place outside of the normally intimate relationship structures of family life.' He associates his explanation to what he terms as View My Profile (s) (p.51). He maintains that the term 'online social networking' is probably best used as a way of capturing, in a rather general way, the use of web-based communication to build and maintain such things as friendship or interest groups, extended family ties, and professional, political or religious affiliations (p. 54). Alvermann (2010) also uses the term 'social networking sites (SNSs for short) to describe these environments – Bebo, MySpace, Facebook and Twitter being the most popular examples at the moment (p. 55). This researcher conducted interviews with teenagers and the findings indicate

that whilst young people might not consider themselves as experts, they freely refer to new practices such as 'changing skins', 'writing on walls', 'messaging', 'apps' and 'tagging photographs', in describing their everyday literacy activity (p.56). This is the essence of the role of social networking sites as a space for developing or highlighting new literacies.

While attempting to scrutinize young people's commitment or engagement with digital technologies, one realizes that the youth's presence or membership to SNS is increasingly becoming like a 'must' as these SNSs change their format or appearance online overtime, and the youth keeps on subscribing to these as time goes on. Thus, on a daily basis, young people in their social network create and maintain an online presence which can be seen as important identity work (Merchant in Alvermann, 2010, p.59). In short, online social networking has rapidly become a mainstream youth activity. It is in this perspective that exploring learners' identities creates a space for them to engage with learning opportunities.

2.4.2. Identity and literacy as a learning practice

It is assumed that identity is one of the most important components that characterize or guide the teaching and learning process. The way we express our identity is partly through language. People's identity may be conveyed, expressed or created through individuals' social practices (Pahl and Rowsell, 2005, p.98). In other words, the individuals express their identity in the way they dress, in the way their accent is perceived and how they talk, gesture, and the way they conduct themselves at homes, communities and families.

Identity has been leveled on equal footing with literacy and literacy practices as they all have at their centre the learner and his/her literacy practices in a particular discourse community. In

other words, 'literacy is a culturally mediated and practice-infused activity that constantly pulls on the personality of the speaker, the writer or the reader' (Pahl and Rowsell, 2005, p.98). Pahl and Rowsell (2005) elaborate on what a discourse community is. In the context of this study, the latter can be a group of teenagers engaging in a chatroom, or a whole community sharing a common space, or language and its related terminology, and a common understanding of a set of practices (for example, working in a group as an adolescent learner in the classroom) (Pahl and Rowsell, p.98).

The debate on identity further argues that all learning and literacy learning, in particular, can be conceived as moments in identity construction and representation. Teaching literacy, then, could be considered as acts of supporting and challenging learners' identities and providing spaces for learners to explore how their identities are hybrid (McCarthey and Moje, 2002, p. 233). On this note, identities shape people's literacy that teachers take up and consider in the school environment. Pahl and Rowsell, (2005, p.10) question how to ensure that students' literacy practices in classrooms account for their identities out of school. Coming up next is the notion of multimodality in identity construction.

2.5. Multimodality

Learners today are facing a great deal of multifaceted technologies which distribute and make meaning. As a range of studies discuss technology, they do not solely focus on basic computing skills like clicking, cutting and pasting, but rather on the cultural and critical implications of technology (Pahl and Rowsell, 2005, p.4) whose modes vary from one text to another. These modes are either in written, visual or audio form. (p.4). Thus, we have the rise of the word

multimodal which is used to describe the way we communicate, using a number of different modes to make meaning. A mode could be visual, linguistic, aural or tactile (p.27).

The youth today engage with different cultural forms of new changing global forms of communication like the internet and email across different spaces or spheres, be it at school or home. In so doing, they negotiate with a number of communication and meaning making practices at the same time: listening to a DVD while doing their homework, or instant messaging with friends on chat line. In short, they are dealing with multimodal literacies that are regarded as 'new ways of reading and writing' or at another level they are referred to as "children *out-of*-school *literacies*" (Pahl and Rowsell, 2005, p.25) which explain what learners deal with (i.e. engagement with digital technologies) out of the classroom.

Lotherington and Jenson (2011) claim that multimodal literacies go beyond the alphabetic world that is the focus of classroom literacy instruction. They argue that a long time ago, the world of literacy was paper based and today literacy engages people in texts and discourses that navigate space and time on screens. In this way, we can access and mix semiotic resources that include a diversity of languages. This is materialised by the instant use of new media which in turn, is in constant development (Lotherington and Jenson, 2011, p.226).

Though multimodality does not necessarily utilize digital technologies, it enables modes to be configured, be circulated, and get recycled in different ways (Jewitt, 2009), thus intensifying multimodal possibilities. Digital media have been designed to accommodate a set of sophisticated and popular features such as 'devices of ever-decreasing size at a dizzying rate over the past two decades, dramatically changing the media of communication, scope and speed of

interactions, nature of discourse, and materiality of texts' (Lotherington and Jenson, 2011, p.227).

Multimodal texts are becoming more apparent in the students' lives and Nallaya (2010) stresses that these texts play a significant role in communicating information, knowledge as well as virtues and values (p.54). Nallaya states that communication now encompasses icons, graphics, audio as well as screen, thus requiring multimodal literacy. The educational implication of this is that schools need to provide learners with the skills, knowledge and understanding of how to use these new communicational technologies effectively and efficiently (p.57). While conducting his study in Malaysia, Nallaya (2010) found that the most popular multimodal technologies among youth in this country were computers, laptops, internet, cell phones, television and DVD players (p.58). He holds the same view with Jewitt and Kress (2003) and the New London Group (1996) that with the existence of various types of multimodal texts in today's global communicational technology, formal language is not the only means for making meaning.

It is becoming more obvious that the 'screen' will govern people's primary channel of communication and more significantly, language use (Kress, 2003). It is implicitly foreseen that learners today will understand language use within an electronic medium. This shift in the language will be represented in the form of printed texts with images and texts of all kinds with colour, different fonts, on monitors or mobile phones with sound, gesture and movement (Pahl and Rowsell, 2005, p.4).

As multimodal approach to literacy focuses on the representations of students across different sites of learning, then the unresolved question of how curriculum knowledge is organized, classified, represented, and communicated (Jewitt, 2008, p.255) should be taken into account. In the context of this study, the aim is to understand how pedagogy and curriculum accommodate different representations and modes of communication, as well as how the latter shapes learners' knowledge, locate and connect knowledge to the world (idem). In the ensuing section, emphasis is put on the theoretical framework for this study, namely, the Poststructural theories of identity.

2.6. Theoretical framework

26.1. Poststructural theories of Identity

This section explores the poststructural theories of identity and approaches to the study of social factors in second language learning which builds mainly on Pavlenko's and Blackledge's (2004) frame of analysis. In addition, Bourdieu' (1993) theories of habitus, field and capital which allow deeper argumentation around learners' digital practices and how they shape the various forms of identity have also been helpful in the analysis and discussion of findings of this study (see Chapter V).

It is when poststructuralist views of identity became apparent in the 1990s that notions of future identities to the field of L2 motivation were introduced, for example, in the work of Norton (2000). Block, (2007) claims that identities are about negotiating new subject positions at the intersections of the past, present and future. In this context, individuals are perceived to be agents in the construction of their own several, dynamic identities, and the futures they imagine themselves are perceived to impact or shape their behaviuor.

To begin with, the learning of L2 or additional language is currently informed by the poststructuralist approaches to the study of social factors in Second Language Learning (Cook, 2002). Under this approach, Pavelenko in Cook (2002, p.282) presents poststructuralist attempts to theorise social aspects of L2 learning and use. The call to this approach dates back in the 1990s with Pennycook who advocated for a need to rethink language acquisition in its social, cultural, and political contexts, taking into account gender, race, and other relations of power (Pennycook, 1990). In this regard, the proposed framework of understanding the language learning process (i.e. poststructuralism) is understood broadly as an attempt to investigate and to theorise the role of language in the construction and reproduction of social relations, and the significance of social dynamics in the processes of additional language learning and use.

2.6.2. Post-structural theories in relation to L2 learning and use

Poststructural thinking has been at the forefront of analyzing aspects of Second Language Acquisition (SLA) or additional or third language learning process. It is in this perspective that the current study is informed by three different aspects of poststructuralist approaches that are understood through the view of language, the view of learning and the view of L2 learners (Pavlenko, 2002, p.283).

To begin with, theorizing SLA from the poststructuralist framework and specifically the view of learning entails looking at language as a symbolic capital and a site of identity construction. Secondly, the view of L2 learning is understood as language socialization and thirdly, the view of L2 learners signifies L2 users as agents, not merely knwoledge consumers but producers of

the input (Pavlenko in Cook, 2002). These views are discussed at length in the following sections.

2.6.2.1. Language as symbolic capital and a site of identity construction

From a poststructuralist perspective, language is not viewed as a set of grammar, vocabulary and pronunciation but as symbolic capital and site of identity construction (Norton Peirce, 1995; Norton, 2000). Informed by Bourdieu's view of linguistic practices, language theorists explain language as symbolic capital which can be convertible into economic and social capital (Pavlenko in Cook, 2002, p.283). In related development, Probyn, Murray, Botha, Botya, Brooks, & Westphal (2002, p. 41) provide an analogy labeled as 'English puts bread on the table' to illustrate the extent to which English as a language caters for the beneficiaries' needs. English which is also the focus in this research serves as a tool which opens room for several opportunities; be it social or economic benefits like having access to education, employment and so on. In the context of this study, Grade 11 learners in Rwanda striving to acquire non-African languages (e.g. English, French) perceive these languages as a linguistic capital that allows them to join the community of practice.

Language is also considered as a site of identity construction. Identities are constructed and incarnated in the discourses reflected in the language. Theorists view all instances of language use or linguistic practices in multilingual contexts as forms or acts of identity (Le Page & Tabouret- Keller, 1985; Tabouret–Keller (1997) in Pavlenko, 2002, p.284). According to Pavlenko (2002, p. 285), language as a site of identity construction has important implications for theorizing learning outcomes. The first one is the fact that ethnicity, class and gender mediate access to linguistic resources available to L2 learners. Secondly, the agencies and investments in

language learning and use are shaped by the range of identities available to them in the L2 (Pavlenko, 2002, p.285). In this regard, L2 learners afford different multiple and dynamic identity options influenced by their learning trajectories such aspiring to be language competent or to have the right to speak.

2.6.2.2 Second Language (L2) Learning as language socialization

It is believed that L2 users are socially constituted beings and that the language learning process is intrinsically social, rather than simply cognitive (Wenger, 1998). Researchers have claimed that language as socialization is a more accurate description of the process for which individuals not only internalize a particular body of knowledge, but become culturally competent members of a particular community (Bremer et al., 1996). At the centre of L2 learning as socialization, there are interactional opportunities that learners explore with motivation, despite the fact these opportunities are not easily obtained since access to linguistic resources and interactional inputs are mediated by other factors such as gender, race, social status, class, etc. (Pavlenko in Cook, 2002, p. 287). In addition to the three language conceptions (as symbolic capital, a site of identity construction and as socialization), the poststructuralist inquiry also examines the role of second language learners.

2.6.2.3. Second Language users as agents

In the context of poststructural theories to SLA, learners are viewed not as merely recipients of the knowledge (or input receivers), but rather producers of the output and whose 'multiple identities are subject to change overtime' (Pavlenko, 2002, p. 292). On this note, Pierce (1995, p.15) emphasizes that the learners are depicted as diverse, contradictory and dynamic. It has been, therefore, observed that learners' identities become more complex as they shift from their mother tongue to acquire the L2 (target language). Learners tend to loose realities of L1 and

embrace quickly L2 traditions. Therefore, the poststructural thinking views the learners as being agents of change in their own learning, as opposed to the socio-psychological theorists that used to consider them as passive recipients of knowledge. In short, the poststructuralist understanding of L2 favours the notion of agency, investment and identity. Norton (2000) argues that learners' investment in the language gives them access to material resources as well as to symbolic resources such as education, media and more importantly, their engagement with the language and its speakers. Having looked at the theories that inform SLA in the framework of this study, the next section elaborates on another poststructuralist approach which builds on Bourdieu's theoretical premises.

2.6.3. Bourdieu's theory of Habitus, Field and Capital

To begin with, it has to be stressed that three main tenets at the core of Bourdieu's poststructuralist theory need to be foregrounded. These are habitus, field and capital. Wacquant and Deyanov (2002, p.182) provide a basic premise on how Bourdieu's theory should be understood, especially concerning its three elements underlying his poststructural theory. These elements are habitus, field and capital and they are not mutually exclusive, but rather intertwined in relationship. Below is a description that indicates how the relationship between these elements is understood:

> "If Bourdieu's mode of argumentation is weblike and ramifying, if his key concepts are relational, (habitus, field, and capital are all constituted of 'bundles' of social ties in different states, embodied, objectified, institutionalized, and they all work most powerfully in relation to each other), it is because the social universe is made that way, according to him" (Wacquant and Deyanov, 2002, p. 182).

2.6.3.1. Habitus

McLeod (2002, p. 28), drawing on Bourdieu's theory, defines *habitus* as 'a set of bodily dispositions acquired through extended engagement in individuals' everyday activities that dispose them to act in certain ways. Habitus can simply be defined as a system of dispositions that shape or drive individuals in becoming who they are. Habitus also takes into account the conditions of existence which are apparent in people's daily relations to society, in and through, their different individual activities (Bourdieu, 1990). Bourdieu is understood as situating habitus within social class values, beliefs and practices. He further claims that habitus arranges the way members of different social groups (or classes) interrelate within different fields of relations (McCarthey and Moje, 2002, p.233). Johnson, (2009) on the other hand, argues that habitus includes how people take steps in a way that reflects social structures and their process of socialisation, which is, in turn, represented in their actions.

Having an overview of other different pieces of research conducted on digital literacies in several contexts helps to examine similarities between these studies and the study at hand. In the framework of research on digital literacies (North, Snyder and Bulfin, 2008; Bulfin and North , 2007; Zevenbergen, 2007) the concept of habitus, however complex it has been to grasp, has been applied to demonstrate people's actions in society, how they deal with them and the way these actions are understood.

For instance, North, Ilana **and** Bulfin (2008), in their study on young people's use of ICT and their rising digital tastes, explain how Bourdieu's notion of habitus powerfully informs the dimensions of their study. In other words, they found that young people's habitus was formed

from their personal histories linked to the social and cultural structures they are caught up in (p.898). It has to be stressed, however, that habitus could be in more realistic terms compared to 'ways of looking at the world and of operating in it' (Bennett et al**.,** 1999, p. 11). Besides, as **North et al.** (2008) put it, individuals of comparable social backgrounds have similar ways of looking and interpreting things or have the same preferences. In the context of this study, when considering young learners' engagement with digital technologies it should be noted that 'preferences for technology use, or 'digital tastes', is affected by habitus and young people make technologies their own – they use them according to what has a 'sense of place' (North et al., 2008, p. 898)

In a 2007 study, Bulfin and North investigated Australian youth digital practices across home and school and came to the conclusion that the 'notion of habitus suggests that while the activities of home and school are commonly separated physically and often oriented towards radically different functions, the influence of each place travels much further than the school gate or the home door' (Bulfin and North, 2007, p.249). For example, this study portrays a young school girl who shared her experience on how she coped with technologies in her daily life. In fact, she and her peers would listen to music using her Ipod while at school. Bulfin and North (2007, p.256) recount the specific situation that prevailed in the classroom while this young girl and peers were busy interacting with their digital tools. In a sense, these learners were simultaneously getting involved in two activities (i.e. studying passively while preoccupied with digital practices). Below is a description of the girl's experience by Bulfin and North:

> "Listening to music fits with her habitus whereas listening to the teacher in the classroom is not her top priority. In fact, she creatively mediates between the two, exercising her agency while simultaneously accepting the importance of, or at least

> the presence and authority of, school structures and practices' (Bulfin and North, 2007, p.256).

In this regard, drawing on Bulfin's and North's exposure to Bourdieu's theory of habitus which encompasses dispositions, attitudes and behaviours, it is worth noting that these notions develop from, and adapt to social structures and situations encountered in everyday life. Having had the background to the learners' digital practices, tied to their social setting, it should be ascertained that socially oriented digital media create a *habitus* within digital environment and this explains that youths' engagement with technological culture shapes the ways in which they network with technology (Freishtat and Sandlin, 2010, p.505). It should also be observed that the youth who have grown up in a digital-well-off world provides a more different perspective for constructing a technological habitus than for those who have not immersed in technologies (Zevenbergen, 2007, p.20).

Since this study has a component of language as it examines the role of multilingual repertoires learners have access to in their digital spaces, it is crucial to look at how Bourdieu's theories address the language issue. In fact, language is a loaded resource that is inextricably bound within the construction and negotiation of identities within the development of multilingual repertoires. Bourdieu's constructs of habitus, field, linguistic markets, and cultural capital allows us to interpret how individuals interact within intersecting social spaces and provide conceptual tools for analyzing the role of language within these interactions (Lamarre and Dagenais in Clark, 2009). The next section elaborates on the notion of field which is closely attached to 'habitus'.

2.6.3.2. Field

Field which originated from the French word, '*champ*",is one of the core concepts used by the French social scientist Pierre Bourdieu. A field is a setting in which agents and their social positions are located. In addition, the position of each particular agent in the field is a result of interaction between the specific rules of the field (Bourdieu, 1993).

The 'field' in Bourdieu's theory metaphorically symbolizes sites of cultural practice (Johnson, 2009). In his study, Johnson depicts a situation whereby computers located at a given home constitutes a field. Then he talks of a field of home computer use for leisure for the benefit of teenagers who are knowledgeable about and/or who are exposed to technology. This includes cultural practices found around the expert use of technology in non-school settings. In his study, Johnson (2007) conceptualises field in relation to the home computer use where activities are carried out as a particular group of teenagers are observed positioned in that field.

A field is also considered as a certain object or space. This is a space where agents struggle for power and where agents meet each other. It can be defined as a structured system of social positions occupied by agents and the nature of their social positions determines the situation for them. In other words, fields are social spaces in which agents move around (Bourdieu**,** 1993). In short, Bourdieu uses the concept of 'field' as a social arena in which people maneuver and struggle in pursuit of desirable resources. In the context of this study, field can be associated with spaces learners are exposed to such as school settings, home areas or wherever they interact with digital technologies or online spaces. Below a special attention is put on the third core concept propounded by Bourdieu.

2.6.3.3. Capital

Johnson (2009) reports on Bourdieu's work, theorizing the term 'Capital' which is one of the three elements constituting his theory. The term "capital" has several meanings within Bourdieu's framework. Bourdieu uses economic capital as the foundation for writing about and developing forms of other capitals, that is, cultural, social and symbolic. Bourdieu (2011) describes economic capital as immediately and directly convertible into money and may be institutionalised in the form of property rights, whereas cultural capital is convertible, on certain conditions, into economic capital and may be institutionalised in the form of educational qualifications. Social capital is made up of social obligations (connections), which are convertible, in certain conditions, into economic capital and may be institutionalised in the form of a title of nobility.

According to Pishghadam, Noghani and Zabihi (2011, p.151), Bourdieu's capital as a notion or concept, is not only economic, but is also social and cultural. That is to say, society can also be structured by the differential distribution of cultural and social capital. These two types of capital can be powers that define the chances of profit in a given field. The more one possesses cultural and social capital, the more successful one may be in a specific area. Thus, these types of capital can be considered as guarantees of success.

2.7. Conclusion

This study seeks to investigate the ways in which Grade 11 learners construct new identities in one or more languages and to draw out implications for language learning. In order to reach this objective, it has been crucial to explore the conceptual connection between different areas of study and to foreground the theoretical base for illuminating empirical issues emerging from the

reviewed studies. This has been the main rationale for this chapter. In fact, this chapter has mainly focused on reviewing literature and studies conducted and debated on the key concepts underlying this study. These are digital literacies and related notions such as new literacies and multiliteracies; identity construction; multilingualism and identity; multimodality and Second Language Acquisition (SLA). SLA is an umbrella for other related concepts that were used in this study mainly for additional or third language acquisition.

This chapter has also tackled the theoretical framework that informs data analysis of the research underway. The proposed theoretical base is the poststructuralist approach. In the context of this study, an interdisciplinary approach was deemed necessary to address different angles having to do with learners' engagement with digital technologies and their implication for language learning in a multilingual setting.

This study draws out implications from learners' digital experience and this is informed on one hand, by the poststructuralist approaches to the study of social factors in second or additional language learning. In this regard, a look at second or additional language learning implies considering three key aspects: language as symbolic capital and site of identity construction; second language (L2) learning as language socialization and L2 users as agents.

On the other hand, this research suggests a poststructuralist approach that draws on Bourdieu's theory of Habitus, Field and Capital to suit for the elucidation of issues related to Grade 11 leaners' experience with digital literacies. Bourdieu's theoretical elements of habitus, field and capital are relevant to this study as they facilitate the understanding of the phenomenon of the

trajectories learners make when interacting with digital literacies. Their habitus (subjective expectations and predispositions they have) influences their field (the space, the social world in which agents move around to get resources) and the capital (whatever is taken as significant for social agents, for example, the capital would be resources, money and so on). The next chapter elaborates on the research methodology that paved the way to data collection, its presentation, analysis and discussion of findings (see Chapters IV, V & VI).

Chapter Three: Research Methodology

3.1. Introduction

This chapter highlights the researcher's journey in data collection in terms of the procedures that informed the field work, presentation of data and their analysis. In other words, this research methodology chapter focuses on the following major points: research design, research setting, population and sampling, data collection instruments, data analysis procedures, ethics, reflexivity and study limitations. It has to be noted that all these aspects of data collection mentioned above seek to address the objectives of the study. As mentioned in previous chapters, this research study aimed at investigating the ways in which Grade 11 learners use digital technologies to negotiate new identities in two or more languages and then to draw out the implications for English language learning in the multilingual context of postcolonial Rwanda.

3.2. Research Design

The term 'research design' refers to the conceptual structure within which research would be conducted (Lodico, Spaulding and Voegtle, 2010; Babbie and Mouton, 2001). The researcher creates the research design, gives it a shape or molds it in relation to the context and the participants of the study (Richards, 2014). A research design is defined as "a plan of how a researcher intends conducting the research" (Babbie and Mouton, 2001, p.74). In the same vein, the researcher by means of the research design, determines which appropriate approach suits his/her study and he/she is guided by the objectives of the study. This implies that the research issue determines which type of research design to be employed (Bryman, 2012; Silverman, 2007).

In light of the above, this study has made an attempt to examine in-depth research participants' practices and attitudes evolving around the study's objective within their social and learning settings. Thus, a qualitative research design has been deemed appropriate. A qualitative researcher focuses on studying human action in its usual or ordinary settings or environments and through the eyes of the actors themselves (Babbie and Mouton, 2001; Dowling and Brown, 2010). In addition, it has to be stressed that qualitative research puts "emphasis on processes and meanings rather than measurement" (Quinn, 1999), and takes into account "things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (Denzin and Lincoln 1998, p. 3). Qualitative research is also understood as an inquiry in which researchers collect data through face-to-face interaction, by engaging with selected persons in their settings (McMillan and Schumacher, 2006, p.315).

In the context of this study, ethnography seemed to be the most appropriate form of qualitative research as 'the ethnographer is sensitive to the meanings that behaviour, actions, events and contexts have in the eyes of the people involved' (Punch, 2009, p. 127). It is in this respect that the researcher also openly and actively gets involved in their daily lives by watching what happens, listening to what they utter, posing questions and collecting any other pertinent information as objectively as possible (Hammersley and Atkinson, 1995). The aim is an in-depth data-rich understanding of people's practices and of the broader context in which they work and live (Atkinson, et al., 2001; Myers, 1999). It is also to understand the issue under investigation from the perspective of those being studied (Nurani**,** 2008; LeCompte and Preissle, 2003).

It has to be noted that early ethnographers, such as Malinowski, tended to live in the research community for years, but Green and Bloome (1997, p. 183–184) propose that such immersion in the field is one of three possible approaches to ethnography. The first one refers to 'doing ethnography' which is a broad, in-depth, long-term study of a social/cultural group. The second one has to do with adopting an 'ethnographic approach'. In this regard, this is a more focused study of particular aspects of the everyday life and practices of a community whereas the third one takes into account 'ethnographic tools'. These tools are considered as ethnographic methods and techniques used during fieldwork.

This study was rather an ethnographically informed research which was only inspired and guided by ethnographic tools, mainly fields' notes based on the interviews and non-participant observation data (Feterman, 1989). In the following section, attention is drawn on the description of the research site where the study was conducted.

3.3. Research setting

Two urban high schools located in the South Province of Rwanda in Huye District, served as research sites for this study. The names of the schools were kept anonymous for ethical reasons. These schools were selected on the basis of their proximity to digital technologies such as internet cafes and/or facilities in the school social environment such as computer laboratories, being well represented from a gender perspective, and having both sciences and social sciences as major school subjects as students in various disciplines may engage in different digital practices.

It has to be mentioned, however, that the choice of this setting has also been motivated by other factors. The main one was my own judgment of the feasibility of the study with regard to the logistic and financial support allocated to this research. The chosen sites were accessible because of their proximity to the researcher's residence and work, and reduced the constraints associated with means of transport and accommodation. Thus, I had to establish the boundaries of the study while considering constraints in terms of logistics and 'geographical proximity, availability at a certain time, or easy accessibility' (Dornyei, 2002, p.61). In the next section, the focus is on describing the study population and the techniques that informed the sampling procedure of this research.

3.4. Population and Sampling

Population in research is defined as a "sum total of all the elements or cases that meet the definition of the unit of analysis" (Babbie and Mouton, 2002 p. 138), whereas the sample can be explained as a group of participants or things that can help make inferences about the entire population from which it is drawn (Graziano and Raulin, 2009). As far as the sampling in this study is concerned, I opted for the purposive sampling. On this note, Cohen, Manion and Morrison (2007, p. 103) maintain that the research handpicks the cases to be included in their sample on the basis of their judgment of cases of typicality. The aim of purposeful sampling is not to get a big and representative sample but to select persons, places, or things that can lead the researcher to obtaining the richest and most detailed information to help him/her answer the study's research questions (Bryman, 2012; Lodico, Spaulding and Voegtle, 2010). To complement this assumption, Silverman (2013, p.127) asserts that purposive sampling makes the selection of the case easy in that it depicts features of the researcher's interest. The technique

requires a process in which the researcher purposely selects subjects who are considered to be relevant for the study (Patton, 2002).

Therefore, the study participants were Grade 11 multilingual learners, speaking Kinyarwanda as home language, French and/or English (L2) as an additional language respectively. These participants were chosen because they were advanced level learners capable of critical discussion and reflection. In this case, all Grade11 learners had first of all to complete a questionnaire (see Section 3.5.1). Then a certain number of these learners were selected for focus group interviews (see Section 3.5.3) based on responses given in the questionnaire and on the researcher's (non-participant) observation (see Section 3.5.2.1).

The population for this study was composed of seventy (70) male and female Grade11 learners from sciences and humanities disciplines in the selected urban schools of the South Province of Rwanda. In other words, a total number of 35 participants from each school were selected to constitute the population.

These participants were of French speaking background who were affected by the 2008 language policy shift in education as mentioned in Chapter 1. In fact, French was their medium of instruction from P4 to P6, till they completed their Grade 9. Then the new language policy in place in Rwanda was implemented just as the concerned learners had started their Grade 10. Thus, they were following English as the Language of Learning and Teaching by the time they participated in this study. It is worth noting that they also spoke Kinyarwanda as L1 and English as an additional or third language.

In the next section, I focus on the methods that I employed to collect the data. It has to be stressed that I followed a certain ethical procedure to reach the data collection stage. After having obtained permission from the Senate High Degrees Committee from my university, I proceeded with data collection.

3.5. Data collection methods

A number of data collection tools were used to give credit to the research aims and questions. Use of multiple sources of data in the context of this study also increased the reliability of the research findings. Thus, the following instruments were of paramount importance to obtain the intended data: questionnaire, observation and field notes, individual interviews and focus group interviews.

3.5.1. Questionnaires

A questionnaire designed for learners was used as a time- and cost-effective way (Dornyei, 2002) of establishing an initial picture of participants' digital practices in different languages. The researcher employed questions with both open and closed items. Closed items established basic demographics and some quantifiable information. In the context of this study, examples included such questions as 'Do you ever use any other kinds of technologies other than cell phones? When talking on your phone, do you ever use any other language/s other than English?' (see the questionnaire in Appendix D).

Open-ended questions have the merit of providing in-depth qualitative data on practices as they offer opportunity for clarification and give rise to more views and ideas (Best and Kahn, 1998; Dornyei, 2002). Nevertheless, such kind of questions may yield extensive data that frequently

requires substantial time and energy to organise and analyse. In the same perspective, Fontana and Frey (2000) note that there are more chances that open-ended questions provide, i.e. lengthy, detailed answers which may be difficult to code.

I anticipated that there could be some limitations to the use of the questionnaire. One was the linguistic problem faced by the participants for whom English was their third or fourth language. Accordingly, the researcher translated the questionnaire into the language with which the participants were more conversant in written form that is French, the medium of instruction of their schooling before the 2008 language policy. It has to be stressed that while administering the questionnaire, I gave room to the participants to use any other language (mainly Kinyarwanda or English), provided that they felt comfortable while completing the questionnaire.

In addition to the general introduction and the personal and demographic details of the informant, the format of the questionnaire comprised six main sections representing the major themes emerging from the study research questions. These sections are presented below:

1. Learners' digital and linguistic practices
2. Language use while talking on cell phones
3. Computer use
4. Learners' perceptions of the affordances of digital technologies for English learning in Rwanda
5. Attitudes towards the importance of digital technologies in English language learning
6. Access to digital technologies

In the final analysis, the participants responded to the questions related to the indicated themes and provided their views and perceptions on their exposure to, and experiences with digital practices and on their implications for the English language learning. Then in turn, this information complemented my field work whereby I conducted some observations of issues related to learners' actual digital and multilingual practices.

3.5.2. Observation and field notes

3.5.2.1. Observations

There are two general forms of observation in ethnographic studies (Babbie and Mouton, 2001). One is participant observation where the researcher simultaneously becomes a member of the group he/she is studying and a researcher conducting the study. Atkinson et al. (2001, p.32) argue that in such a case 'a duality approach leads to a duality of role'. Duality refers to the *participant* and *observer*. Firstly, the term '*participant'* refers to the fact that it is only by trying to grasp the people's symbolic life world that the researcher can establish the subjectivity of the judgment upon which it is based. Secondly, as an *observer*, 'one tries to keep a certain distance and analyses in a way, that is, as much as possible unknown to the subject' (Atkinson et al., 2001).

I chose to avoid the dilemmas posed by duality and engaged in non- participant observation. This made more sense in this particular study since I would find it difficult to actively participate alongside the youth. I did not share the same social and demographic characteristics such as age, professional status, expectations, familiarity with digital technologies, or friendship group. As a result, when I reached the research setting some of my concerns were reduced to the minimum

and I had a more friendly kind of interactions with the participants, without necessarily going beyond the boundaries indicated above.

3.5.2.2. Field notes

In examining the ways in which Grade 11 learners negotiated digital practices, I took field notes as part of the ethnographic data collection strategy (i.e. researcher's non-participant observations). I compiled the field notes in my diary.

The observations were conducted in two different spaces (i.e. school and cyber cafés). Three different spaces are identified in the framework of ethnographically oriented similar studies: school, home and community spaces (Snyder and Prinsloo, 2007). As a matter of fact, young people's practices around digital technologies generally flow across the earlier mentioned spaces (idem). The data collected as part of the non- participant observation were obtained from field notes the researcher compiled in different places and phases in the natural settings. These data were obtained in two different phases:

1) Field notes from the research sites (i.e. notes taken while students completed their questionnaires and during their focus group, as well as notes from the visit to the school computer laboratories).
2) Field notes from cyber cafes or internet cafes and its surrounding sites (i.e. youth digital practices, i.e. outside classroom and internet café context – street wise walk with handsets, headphones, etc.).

During non-participant observation I observed behaviours and actions of the participants in the study, but I did not form part of the group that was investigated (Foster, 1996).

The non-participant observer's task was not easy because the process of collecting data came across some challenges. As indicated above, I did not fully contribute to the functioning of the group under study and so I could not grasp its inner realities (Woods, 1986). However, I used other sources of data (i.e. questionnaire, interviews) to enrich my understandings of participants' practices and the meanings attached to them. In the end, observations provided me with first-hand data (Dowling and Brown, 2010), and it should be noted that in non-participant observation, the researcher 'follows the flow of events' (Flick, 2009, p.223), without being involved in the situation under study (Petty, Thomson and Stew, 2012, p. 380).

It should be stressed that field notes were an 'essential grounding and resource for writing broader, more coherent accounts of others' lives and concerns' (Emerson, Fretz, and Shaw, 1995, p. 11). In recording field notes, ethnographers not only constantly register their notes on the community under investigation, but they also need to keep records on their responses or feedback, as well as their perceptions about their field experiences. These personal notes should regularly be analyzed in relation to interpretations about the host community (Whitehead, 2005).

In order to observe digital practices and understand the nature of their function and significance in learners' lives, I visited the premises hosting the computer laboratories for the schools under investigation, as well as some cyber cafes neighbouring the city of Butare where the two high schools are located. I also visited internet café in the capital city of Rwanda (i.e. Kigali) where

some of the learners resided when they were on vacation. These were sites where digital technologies were used, in addition to school computer laboratories.

The next data collection tool (i.e. focus group discussion) has been the major research instrument for this study. With this data collection tool, I was able to highlight circumstances under which the target research group provided their opinions and views on their affordances of digital technologies. The focus group discussions aimed at addressing this research question as indicated in Chapter 1: 'What are learners' perceptions of the affordances of digital technologies for English language learning in Rwanda?'

3.5.3. Focus group discussions

The focus group presents benefits as well as limitations. Regarding its advantages, using focus groups saves time and money and researchers have the opportunity to observe a large amount of data on a given subject in a limited period of time, based on the their ability to bring together and lead the focus group (Morgan, 1997). However, the level of self-disclosure that occurs may be difficult or uncomfortable for participants, and in some circumstances, requires much effort, trust and courage (Krueger, 1994). Here, ethical considerations are paramount and these are discussed further in Section 3.6. Other factors that play a role in the validity of group interviews are the level of control that the researcher has and the difficulties of analysing data where findings might have been influenced by the social setting of the group interaction.

When conducting focus group discussions, as Babbie and Mouton (2001) suggest, the researcher selects between eight and twelve respondents, or seven to ten (Krueger, 1994) seated in a circle. Depending on the nature of the study, the researcher might decide to have focus groups that

consist of six to ten interviewees each (Earthy and Cronin, 2008, p. 226). Then, he/she organises the focus group interview by going around the circle, ensuring that everyone has a turn and provides 'individual' responses. In brief, a focus group is a discussion which is, to some extent, planned and aims to obtain insights on a specific area of interest in an accommodating, non-aggressive atmosphere (Krueger, 1994). While the interviewer may have a set of questions in mind, s/he does not have predetermined answers and allows participant responses to determine the direction of the interview. On this note, Whitehead (2005, p.17) claims that the interviewer 'elicits answers fully from the perspective of the study participant, and attempts to gain a greater understanding of the context and meaning of those responses through various forms of probing'. It is in this context that questions for the focus group speak to the study research questions which are generally open-ended, allowing for a range of findings to emerge (see Appendix F**)** for the focus group guide).

In this study, the focus group discussions were held in an environment that was suitable for generating atmosphere of trust with Grade 11 learners in the two schools under investigation. Research has proved that participants on the whole feel more comfortable and speak more openly when the interview is conducted on familiar grounds (Taylor and Bogdan, 1998). In related context, the management body of these schools provided me with a classroom where the concerned learners were used to, and the focus group interviews took place in a conducive way.

In the course of my field work, though, I was not able to assemble the focus group participants together for one single interview. This means that it was not possible to have male and female learners convened in the same room. I had to meet the learners in their schools at different times,

and had the interviews separately. I interviewed the boys' group in the first place, and proceeded with their counterparts' focus group afterwards at a different time. For each group, I invited 10 learners who participated in the focus group discussion. It means that I had two focus groups: one with male learners and the second with female learners.

The focus group interview was suitable for this research because the dynamic nature of the group interaction encouraged deeper and more extensive responses to questions. It is by means of a tape recorder, one of the ethnographic equipments (Fetterman, 1989, p.81) that I was able to capture long verbatim language that was essential to this study. I was informed by ethnographic principles to maintain the natural conversational flow within the focus group interviews.

After tape recording the focus group discussion, I transcribed the data and translated them from Kinyarwanda into English. Since "there is no standard way to transcribe oral narratives", (Pavlenko, 2007, p. 173), I conducted verbatim transcription of the collected data in order to avoid losing the rich and insightful moments of the interviews. It has to be noted that Kinyarwanda was the medium by which the focus group interview was conducted, and at the same time, it was the local language of the interviewees. This was due to the fact that I responded to the informants' request since they were more conversant with and comfortable in this language than in the other languages (i.e. French or English).

It is worth mentioning that the choice of participants for these interviews was mainly based on the learners' responses to the questionnaire. In fact, I examined the clarity and brightness of some of the learners' views and decided to select those that responded to overall satisfaction of

my expectations. In actual fact, I spent some time in the respective schools and I had recourse to the purposive sampling to identify groups of learners to participate in the focus group.

As mentioned above, twenty participants for the focus groups were selected on the basis of the following criteria: although studying at urban schools, Grade 11 learners from both urban and rural areas studying in the respective schools under investigation had to be equally represented. They were part of the group that was affected by the 2008 shift in the language policy. I considered equal gender representation and a mix of those who were studying Sciences and Social Sciences. Demographic data as well as the learners' linguistic backgrounds for this purpose were obtained from the management of the schools which were involved in the study. In the following section, emphasis is on the individual interviews that I conducted with English and Computer Class teachers, as well as one Internet café manager.

3. 5.4. Individual interviews

Individual interviews with Computer class teacher, English teacher and Cyber Café attendant were conducted to follow up on interesting issues raised by observations and focus group discussion. The questions emerged from these interviews (see in Appendix G) for the interview guides). These interviews intended to get their personal opinions based on their daily observations and experience of young people's digital and multilingual practices. I conducted these interviews in three different phases that are elaborated below.

It has to be stressed that initially, I intended to interview two English teachers from both schools that were part of my research but one withdrew from the research due to personal commitments that blocked her availability. In the end, I could only interact with the English teacher from the

boys' school. In the next phase, I interviewed a Computer class teacher from the girls' school. While talking about the latter, I also had planned to talk to his counterpart from the boys' school but he could not make it as he had personal commitments too. Lastly, I was able to interview the Cyber Café Attendant working from the capital city of Rwanda. The latter provided me with views that could be taken as reference to other attendants as his internet café was one of the most popular and frequented in the city.

The next section looks at reflexivity whereby the researcher makes an introspection towards his/her study. It also discusses ethical considerations that ascertain the voluntary participation and anonymity of research participants, and/or confidentiality of the informants' data.

3.6. Ethics and reflexivity

Confidentiality in the data collection process is also an important aspect of the research ethics. Bryman (2008) stresses the importance of confidentiality, respect for privacy and informed consent. He emphasizes that care needs to be taken when findings are being published to ensure that individuals are not identified or identifiable. One of the suggestions to adhere to this end is

> '… storing the list of participants and their identifier codes separately in a locked cabinet' and '… ensuring transcripts do not include participants' names' (Bryman, 2008, p. 120).

Another important aspect of ethical considerations is informed consent. During the data collection process, the researcher should give prospective research participants sufficient and needed information to make an informed decision about whether or not they wish to participate in a study (Bryman, 2008). Furthermore, the research participants should obtain the required and detailed information about the study and the researcher should render this information in a comprehensible manner, using plain language that is intelligible to them (Wolf, 2009)

As Davies (2008) argues, it is always recommended at the beginning of one's research to be familiar with the ethical code, and to explain to the participants in plain language the nature of the study and the specialised areas that need to be elucidated. In this case, before administering the questionnaire, I gave learners, in simple language, explanations on the background to the study and the content of the tools. This was similarly done when I had focus group discussions with the selected learners as well as the interviews with different teachers and the internet café manager.

In this study, participants were informed that the concept of 'identity' should not be taken for 'ethnic group' belonging or the like, because it is a concept that still raises controversy and misunderstanding in post genocide Rwanda. For instance, some scholars hold the view that speaking of the Rwandan genocide is considered as only an ethnic conflict and talking of the new language policies (see Chapter I, Section 1.2.1) as not linked to those conflicts is to 'obscure the close relationships between language and identity and between language and ongoing political, societal, and economic conflicts' (Samuelson and Freedman, 2010, p.196).

In this case, I consistently strived to do no harm. Learners had beforehand to sign the consent forms that bound them to the research ethics to minimise the danger of breach of confidentiality, I gave them full information on the project and they provided me permission to use the findings of my research.

Reflexivity within social research is thus, generally speaking, "the ways in which the products of research are affected by the personnel and process of doing research" (Davies, 2008, p. 4). It is 'a turning back on oneself, a process of self-reference' (idem).

The next section elaborates on the data analysis procedures which constituted a significant step towards the completion of this study. This is a crucial stage as results of the study are tested with previous knowledge as well as other pieces of research and theories (Babbie and Mouton, 2001).

3.7. Data analysis procedures

I analysed my data through the lens of the thematic framework of analysis, as well as through a poststructuralist perspective as discussed in the previous chapter. The thematic analysis, as defined by Braun and Clarke (2006, p.79) is "a method used to identify, analyse and report themes and concepts within data". The themes represent some level of meaning within participants' responses in relation to the research question (Braun and Clarke, 2006).

To begin with, the data were coded and generative themes drawn out. The issue of validity in a qualitative study is of a concern. I also made use of triangulation by systematically looking across multiple data sources (i.e. interviews, questionnaires) to conform or disconfirm findings and to cross check evidence from the data. This was intended to increase the level of the research trustworthiness.

As far as trustworthiness is concerned, Babbie and Mouton (2001, p.276) argue that the concept can be put simply as 'how can an inquirer persuade his or her audience (including him or herself) that the findings of an inquiry are worth paying attention or worth taking account of'. It also

refers to how the results of a study are valid, credible and believable or convincing, and this depends on the quality of the study results (Creswell et al. (2007).

While analyzing qualitative data, in particular, a given researcher has recourse to the thematic analysis processes to simplify the understanding of the data. In this sense, one of the strategies that facilitate this understanding is the 'coding' of the data. This should help the researcher to understand the general categories 'surfacing' from his/her data and these should show what type of event is going on, the participants' narrated stories on their actions and the researcher's observations of the participants' actions. Henning et al. (2004, p.104) state that the data are coded after which categories or 'units of meaning' are developed from the data. Concepts differ from one writer to another, but they basically refer to the same thing. For instance, Henning's (2004) 'unit of meaning' will be understood in Trochim's (2007) terms as 'unit of analysis' which is "the major entity that you are analyzing in your study".

Further, Bryman's (2012) and Lichtman's (2012) also present their attempts at understanding methods of analyzing qualitative data. Both authors view qualitative data analysis as an interactive process where the researcher moves from data coding to data reduction (i.e. organizing the generated codes into hierarchical categories and getting a sense of interrelatedness between them). In the end, the whole process provides a number of meaningful themes and sub-themes that speak to the research topic.

In short, coding the data has been at the centre of the thematic analysis and the first stage in the analyzing process. It is "a systematic way in which to condense extensive data sets into smaller

analyzable units through the creation of categories and concepts derived from the data" (Caudle, 2004, p. 420).

3.8. Conclusion

In a bid to scrutinize a certain matter, one has to conduct research whose phenomenon is understood by the process of collecting data, analyzing and interpreting them (Williams, 2007). It is in this context that the current study has opted for the qualitative research design which was ideally recommended in a study of this nature that was informed by ethnographic principles. This chapter has described the methodology used in this study to collect and analyse the data. In addition, this chapter has discussed the data collection and analysis procedures. These have been the learners' questionnaire and focus group discussions, individual interviews with English and IT teachers and a cyber café attendant. In this chapter, it has also been a question of use of the non-participant observation the researcher had recourse to. This chapter has also pinpointed the data analysis procedures, namely the thematic analysis approach. The next chapter focuses on presenting the collected data for this study.

Chapter Four: Data Presentation

4.1. Introduction

This chapter presents the data collected by means of a questionnaire, focus group discussions, individual interviews, as well as by field notes from non-participant observations. Grade 11 learners, the target research group, completed the questionnaire and a selected sample of them participated in the focus group discussions. This chapter also presents data from follow–up interviews with an IT or computer class teacher, one cyber café attendant and one English teacher. It has to be noted that this chapter only presents the data in their raw form, but data are categorized under different themes emerging from the informants' responses.

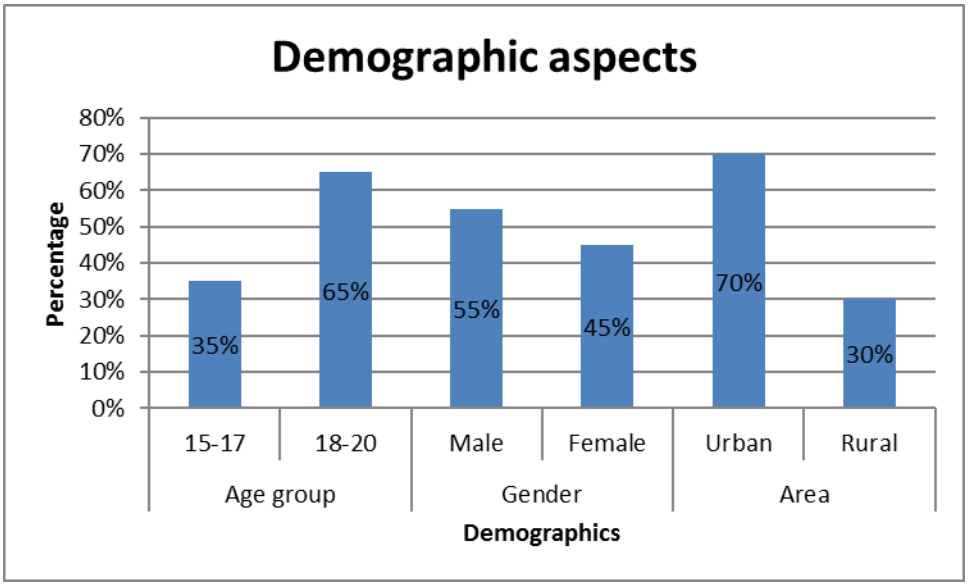
4.2. Data from the questionnaire

4.2.1. Learners' Personal and demographic data

This section provides learners' identification details in relation to their age, gender and home location.

Out of 40 Grade 11 learners, 28 responded that they lived in urban areas while 12 stated that they lived in rural region.

Figure 2: Demographic aspects



4.2.2. Learners' digital and linguistic practices

Data provided in this section are categorized into two different parts: the first one deals with data associated with learners' digital practices, and the second one highlights data on the learners' linguistic practices.

4.2.2.1 Learners' digital practices

On the question regarding their use of digital technologies, 38 learners affirmed that they used cellphones while two (2) said that they did not use them. Concerning the use of computers, only five (5) learners out of 40 claimed that they did not use computers. But on this note, all participants asserted that they had a computer skills class.

With regard to the use of computers, the respondents highlighted their views on their computer skills by the time they completed the researcher's questionnaire. Almost all the participants (38), except two learners, agreed that they had basic computer skills.

In response to where they had learned or acquired the computer basic skills, 29 learners mentioned 'school' and 11 talked about their home environment. In addition, the participants specified the category of people who taught them how to use computers. In this case, the participants identified five different categories, namely teachers, parents, siblings, friends and relatives. In addition, they listed them in order of importance and teachers came in the first place. In fact, 25 participants stated that they learned the computer from the teachers while six (6) informants acknowledged that their friends were the ones who taught them. In the third place, four (4) respondents talked about siblings while three (3) specifically referred to relatives and in the last place, two (2) learners indicated that they learned the basic computer skills from parents.

The participants also elaborated on why they used computers. They mentioned the following main reasons. Firstly, they stated that they used computers for entertainment purposes (i.e. 17/40) such as watching movies and listening to songs. Secondly, 11 participants mentioned 'research, studies and documentation' as another digital activity. In other words, they meant that computers helped them to conduct some research and find some documentation for their studies. Thirdly, 10 informants talked about using computers to send emails and browse the internet and two (2) learners claimed that they used computers to develop their writing skills and for news update.

Another question asked about other technologies they used in addition to the computers. In related development, 28 **learners** reported that they used other technologies while 11 stated that they did not use them and one abstained. As far as these technologies are concerned, the

participants listed five main technologies, and by order of importance they were the Television (TV), MP3, IPod, CD player and USB (flash drive).

The learners also provided some information about where and when they used the above mentioned technologies. Of the 40 participants, 23 talked about 'home' while 12 of them did not reply to the question. Four out of 40 learners said that they used technologies at school and one mentioned 'cyber cafes'.

Regarding circumstances under which they used the technologies mentioned above, the informants classified their answers in this way. Twenty three of them (23/40) mentioned that they used the technologies when they were on holidays, whereas ten of them (10/40) claimed that they used them while relaxing or during their leisure time. Only two of the learners (2/40) stated that they mainly used them when travelling and one stated that she used them when she was lonely. Four (4) participants affirmed that they usually made use of the technologies on weekends. Asked whether they had a computer laboratory, all learners affirmatively answered the question. The next section provides learners' views on their linguistic practices.

4.2.2.2. Learners' linguistic practices

This part provides learners' views concerning their language use on cell phones. All informants, but one responded to this question. They categorized their language use on cellphones in the following order: Kinyarwanda came in the first position (14/39) and both French and English were ranked second with a score of 11, respectively (11/39). Swahili (2/39) came in the fourth place. One male learner placed Latin and Luganda (1/39) in the last position.

Asked when they used a specific language and why they used their cell phones, the learners gave several answers. The main responses on the language use are provided in the table below**.**

Table 1: Learners' use of language and cell phones

Activity	**When they used a specific language**	**Why they used them**
Calling	When they were at home, they used French, e.g. to communicate with classmates.	In order to improve their speaking skills
Writing (**SMS** or chat)	When they had chat (using Kinyarwanda) with friends, relatives and parents.	To communicate in the medium their interlocutor/partner was more comfortable or conversant with.
Calling	When they were talking to other fellows at home, using Kinyarwanda	To facilitate communication with them because they were not conversant with English or French except Kinyarwanda as their mother tongue.
Calling	When talking with foreign people, using English	To facilitate communication because they did not speak their language (i.e. Kinyarwanda) and to improve on the English language skills

Other reasons the participants provided, but which were secondary to the ones in the table, include the use of a particular language, depending on the language used by the interlocutors.

They could also shift languages, when responding to the language their fellows used. One male learner claimed that he used a particular language to make friends with girls or for dating purposes. In the following section, attention is directed to the learners' use of languages while using short messages (SMS).

4.2.2.3. Language use in text messages

The use of languages in short messages (SMS) seemed to be more common among the learners. Out of the 40 respondents, 39 of them acknowledged having recourse to SMS while communicating on phones. Learners also indicated that they mixed languages (i.e. Kinyarwanda, French and English) while text messaging. In this case, they specified the categories of people with whom they mixed languages. In order of importance, the learners listed them in this way: Twelve of the learners (12/40) talked about their friends. In the second place, they mentioned classmates (8/40) and in the third position they mentioned family members (5/40) and siblings (5/40). In the fourth place, four (4/40) learners mentioned their fellows of the same age range. One informant talked about "acquaintances', another one indicated that neighbours were his preferred audience while two learners pointed out 'girl friends' as their preferred target audience. Only one **participant** did not reply to this question.

4.2.2.4. Reasons for language mix

The informants elaborated on the reasons for mixing languages. The main reasons that were mentioned included communicating with girlfriends by male learners, chatting with friends, checking on or catching up with classmates' news when they were on holidays, telling stories with close friends, lacking knowledge of a word or equivalent word in the target language. As an alternative solution, they had recourse to the foreign language. Having fun with friends was also a reason. Furthermore, they stressed that while mixing languages, shortening words was recurrent in their text messaging practices. The next section discusses learners' views on their computer use.

4.2.3. Learners' views on computer use

In this respect, the informants indicated the extent to which they visited different websites (the ones they liked most) and the language they used on specific websites. It has to be noted that these are the learners' narratives of their experiences when they had an opportunity to visit internet café, especially when they were on holidays.

4.2.3.1. Learners' access to websites

To begin with, the learners gave their answers regarding the websites they visited as their first choice or in the first place. Their responses showed that the facebook website (www.facebook.com) was the most popular site, i.e. it came in the first position (16 /40), while www.google.com was put in the second position (7/40). The third place was allocated to www.yahoo.fr (6 /40) while www.gmail.com and www.inyarwanda.com came in the fourth place (2/40 each). In the last position, they ranked www.youtube.com and www.wikipedia.com (i.e. 4/40). There were, however, three abstentions to the question.

Under the same question, the participant listed in their second choice the following websites by order of preference: www.igihe.com occupied the first position (12/40) and www.waptrick.com came second (5/40). The www.twitter.com ranked third (4/40) while www.skype.com was the fourth (2/40). The learners identified other websites they liked to visit and these were: www.zahabu.com; www.hotmail.com; www.wapdam.com; www.netlog.com; www.theparkschool.com; www.buzzteens.com; www.badoo.com; www.igitondo.com; www.miniclip.com; www.worldsex.com; www.xxx.com; www.tubidy.com; www.freesheetmusic-link.com and www.locketmaniac.com. It has to be noted that the latter were ranked in the last position with 14 **learners** mentioning one each a particular website of his/her preference. Three **learners** did not respond to this question.

As far as the language use on the website was concerned, the learners gave their preferred choice of the languages used on specific websites. The participants' rate of the languages in order of importance was as follows: English was ranked first (21/40), and French came second (11/40) and Kinyarwanda was in the third position (5/40).

4.2.3.2. Understanding websites' content

This section highlights ideas concerning the learners' attempt at understanding the website content. The learners had to tell whether they encountered difficulties or not in comprehending the message or content of the website. Out of the forty learners, 35 of them (35/40) acknowledged to have difficulties but did not specify in which areas or aspects, and two of them (2/40) affirmed that they did not face any challenges, while three learners did not respond to the question. The learners narrated their experiences considering the affordability or the complexity of the message a particular website conveyed.

4.2.3.3. Strategies to overcome difficulties in understanding websites content

The learners provided strategies they employed when they faced difficulties in understanding the content on a site they usually visited. The learners indicated that they sought assistance from their friends (10/40). They also obtained assistance from colleagues or classmates, relatives and/or parents (7/40). It is worth noting that few respondents (5/40) mentioned their teachers. In addition, they emphasized that they would from time to time request help from someone who was more knowledgeable or who was better than them (6/40).

Other strategies the learners had recourse to were making use of the dictionary (4/40), trying to understand the content by considering the context of the message conveyed on the site (3/40), going to the help desk on the website or to FAQ 'frequently asked questions'. Other learners

talked about visiting other websites if they faced difficulties in one or simply gave up, or changed the language if the website medium of communication was more than one. In the next section, the informants provide an idea of what they were able to do over the internet.

4.2.3.4. Other activities learners do on internet

Learners answered the question on other potential activities they would be able to do on the internet. They had to choose from the proposed activities, namely, reading and writing emails, visiting chat rooms and visiting social networking sites. The respondents' responses in figures were the following: Thirty learners (30/40) asserted that when browsing the internet they would be busy reading and writing emails and twenty six (26/40) preferred to be in the chat rooms. The same number of learners (26/40) visited social networking sites as well. Three learners (3/40) did not respond to this question.

Additionally, the informants also listed other activities they did while surfing the internet. The most common responses were mainly listening to music and watching movies (5/40), followed by doing research related to their school subjects (4/40). In the third position, visiting websites attracted the learners' attention and they mentioned the following as the main target sites: www.igihe,com,

www.inyarwanda.com,

www.kigalipaparazi.com,

www.yahoo.fr,

www.google.com,

www.wikipedia.com and www.igitondo.com.

Two learners mentioned getting interest in e-learning. Other two students referred two sites which provided news and pictures respectively. One more learner mentioned downloading music and movies.

4.2.4. Other activities learners can do with computers

The learners elaborated on what they used computers for. Most of the informants affirmed that they liked watching movies on computers (7/40), while in the second place they were busy listening to the music (6/40). In the third place, they talked about playing games (6/40). Writing, studying and doing research were ranked next (5/40). The same position was also allocated to improving on their computer skills (5/40). Two learners also attributed importance to saving documents on the computer. The following activities got the favour of one learner each: learning programming, PowerPoint presentation, using LCD projector, doing some mathematical calculations, MsWord, Ms Excel and Adobe Photoshop and storing movies. This question did not receive answers from nine learners.

In the following section, the focus is on the informants' perceptions of how digital technologies can serve as bridges to learn English better as an additional language.

4.2.5. Learners' perceptions of the affordances of digital technologies for English learning

This section provides learners' views on two main aspects of the affordance of digital technologies. The first one is the Language of Learning and Teaching and the teachers' use of digital technologies at school and the second one deals with the possibility of online use for English learning.

4.2.5.1. Learners' medium of instruction and teachers' use of digital technologies

Under this theme, almost all the learners (38/40) responded positively by mentioning that English was the Language of Teaching and Learning. Two learners only stated that Kinyarwanda was their LoLT.

The second question wanted to know whether the teacher used digital technologies. A total of 37 learners out of 40 affirmatively said that their teachers used these technologies, while three (3) negated. Then the ensuing step was to provide examples only if the answer was 'yes'. On this note, learners enumerated a number of digital technologies the teachers made use of in classrooms: computers (13/40), laptops (7/40), cell phones (5/40), TV set (4/40); projectors (6/40); CD players; MP3; digital camera; audio recorder and radio (2/40).

It has to be noted that some learners stressed the fact that their teachers could use computers to teach several science subjects such as biology, chemistry and computer science. As far as language learning is concerned, 'the French teacher used to show us movies using a computer', one student reported. Other informants indicated that their English teacher, using a radio, gave them listening exercises, based on a conversation. Three learners talked about listening to Obama speech in the related context.

One informant (a male) reported that their mathematics teachers used computers to teach them graphs; what he called 'graphing". His counterpart said that his teacher sometimes brought a laptop in class and showed them documentaries in English to develop their listening skills. According to one of the respondents, their biology teacher once used a laptop to teach the

subject. The history teacher was also mentioned by six learners. In the interviews, the English teacher, himself, narrated that he used data projectors to teach them the history of Roman Empire and historical events.

One of the female learners in this study indicated that her biology teacher used a laptop and a projector while teaching this subject. Her counterpart talked about watching a movie using a laptop on the African resistance against colonialism. The learners did not, however, mention the frequency of the teacher's use of these technologies. The next section focuses on the use of online resources to improve the learners' English learning process.

4.2.5.2. Online services to improve English language learning

The focus here was to inquire whether the teacher encouraged learners to use online services to enhance their English language skills. It was a "yes" or "no" question, but learners had to provide reasons if only they had affirmatively answered the first part. The majority of the learners (27/40) affirmed that their teacher advised them to go online, while 10/40 provided negative responses. There were three learners who did not respond to this question.

Those who positively answered the question elaborated on what their teachers did in the classroom. The following is a summary of their answers. Of the 40 learners, one learner narrated that his teacher proposed www.toefl.com to improve their English language skills. Another learner affirmed that their teacher asked them to listen to various English speakers. Three learners indicated that they would go online to develop their listening, reading and writing skills.

Two of the target focus group stated that they had been watching English movies for listening purposes, while other three **learners** had been using different websites to acquire new vocabulary. An activity which attracted a big number of participants dealt with reading the

content of different sites for research purposes. One learner indicated that they did translation practices from one language into another. Using online dictionaries was a concern for two learners. The same number of learners indicated that their teacher encouraged them to imitate the language online to do their sketches, debates and exposes. The same learners asserted that they had to read some texts and answer comprehension exercises the teacher had set for them. In the next section, the focus is on the extent to which learners dealt with digital practices.

4.2.5.3. Learners' digital practices

The researcher asked the learners how often they did each of the following activities as presented in the table below.

Table 2: The extent to which learners dealt with digital practices

Activities	**Daily**	**Weekly**	**Monthly**	**Several times a year**	**Never**	**Don't know**
1. Listen to radio via your cell phone	19 learners	3 learners	4	12	1	0 = 1 did not answer the whole question
2. Write emails	6	9	8	13	3	0= 1 did not answer
3. Write **SMS** on a cell phone (Note: 3 learners did not answer this question)	22	5	1	7	2	0
4. Use a personal computer (Note: one learner did not answer this question)	7	8	1	8	13	2
5.Watch educational programmes on internet (Note: One learner did not answer this question)	1	5	3	12	11	7
6.Watch recreational programmes on internet (Note: 1 **learner** did not answer this question)	3	8	12	11	4	1
7. Watch news in English on internet (Note: 2 learners did not answer this question)	1	3	6	9	18	1
8. Visit chat rooms (Note: idem)	7	12	7	6	7	0
9. Play games (Note: idem)	3	9	8	5	8	6
10. Read information from computers) Note: 3 learners did not answer the question.	4	10	6	11	3	3

4.2.5.4. Learners' digital practices at home

This section sought to know what the learners did when they were at home during school vacation, especially how much time they usually spent each day using their computers or laptop. The learners' responses are provided in the table below.

Table 3: The time the learners spent using computers or laptops

Not on a daily basis	14
1 hour or less per day	2
More than 1 hour, but less than 2 hours	3
More than 2 hours, but less than 5 hours	4
5 or more hours per day	7
Don't have a computer or laptop	7
Note: 3 learners did not answer the question	

4.2.5.5. Learners' ownership of digital technologies

The respondents provided answers concerning digital technologies they possessed at their homes from the choices listed in the table below.

Table 4: Learners' possession of digital devices

Digital devices	Yes	No	Don't know
Cell phones	37		
Laptop	22		
Desktop	7		

4.2.5.6 Learners' use of digital technologies while watching TV programmes.

The informants provided answers to this question: Which of the following kinds of programmes do you watch the most on internet using cell phones, laptop, desktop or any other digital technology? The responses in figures are presented in the table below:

Table 5: Learner's frequency in watching different programmes using the internet

Programme	Most of the time	Sometimes	Only now and then	Hardly at all	Don't know
Movies	28	7	1	3	1
Educational programmes	2	13	2	14	1
News	10	19	5	5	1
Sports	9	14	4	12	2

In the table, these figures represent the frequency a given learner allocated to a certain item. In this context, for example, most learners (28/40) watched movies most of their time, while 3/40 hardly watched movies.

4.2.5.7 Engagement and interest in digital technologies for English language learning

In the table below informants' response rates depicted the extent of their engagement and interest in digital technologies for English language learning.

Table 6: Learners' engagement with digital technologies for English language learning

Greatly	9
Somewhat	19
Not at all	11
Don't know	0
Note: for this question, only one informant did not answer the question.	

4.2.5.8 Assistance on the use of ICTs or computer related activities

In this regard, the respondents described how much they sought help from several people to do or handle some ICT, digital or computer related activities.

Table 7: Assistance the learners got in using ICTs or computers

Assistant/s	**Most of the time**	**Some of the time**	**Only now and then**	**Hardly at all**
Teachers	24	13	0	2
Fellow **classmates**	12	15	9	1
Family members	15	17	3	3
Others	6	2	4	4
Note: only one **learner** did not answer this question.				

In this question,

learners were asked to name other people from whom they received assistance. The following were listed by some learners:

Friends (7)

Neighbours (2)

Girlfriend (1)

Cyber cafe attendants (1)

Brother (1)

4.2.5.9 ICT and the development of English language skills

The number of responses provided in the table below shows how likely or unlikely learners were to improve their English language skills through ICT or digital technologies.

Table 8: The learners' likelihood in improving their language skills using ICTs or digital technologies

Very likely	**25**
Fairly likely	3
Not very likely	8
Not likely	1
Don't know	0
Didn't answer the question	3

In the ensuing section, the learners highlighted their perceptions regarding the importance of digital technologies in English language learning. Their views are categorized under two main aspects, namely the role of digital technologies in the developing learners' language skills and language areas, and the major strengths and weaknesses of digital technologies in these areas.

4.2.5.10 Role of digital technologies in developing language skills and other language structures

Regarding the role or importance of digital technologies in developing language skills and other language areas, the learners believed that digital technologies helped them to have access to online books related to their courses and enhanced their reading skills. They were of the view that by using computers they could learn how to read well by following some pronunciation features provided online. Others (3/40) said that by looking at the dictionaries in the computers, they could learn more on the spelling of some English words. Other learners emphasized the fact that they learned new vocabulary by exploring materials they found on the internet.

Concerning the role of these technologies in developing the learners' writing skills, two informants stated that technologies enhanced their typing skills, by making use of the chat room and typing written texts. There was also a learner who stated that he acquired to write some words correctly through the use of the computer.

Thirdly, some informants believed that listening to some audio English materials online helped them to improve their speaking skills by imitating the language structures of the speakers. Others indicated that by doing so, they acquired new vocabulary and expressions which enhanced their speech expression.

Fourthly, the informants were of the opinion that listening to speeches or talks from native speakers of English from audio or video materials could help improve their listening skills. In this case, they did not specify which technology was associated with this idea. They also added that these technologies helped them to be aware of the different English accents from speakers of different language backgrounds and countries. One learner mentioned that he learned from people who spoke fast and this sharpened his listening skills. Another learner stated that the use of some Teaching of English as a Foreign Language (TOEFL) audio materials sharpened his listening skills.

(1) Role of digital technologies in developing language structures

Learners also commented on the role of digital technologies in the structure of language such as grammar, vocabulary and pronunciation learning. One participant stated that the laptop helped him to correct some of his grammar mistakes when he was writing his English composition. His counterpart said that by listening to some talks from foreign English speakers, he could learn

language structures which could enhance his grammar competence. With regard to vocabulary as one of the key aspects of language learning, the respondents insisted on the fact that by accessing digital technologies in English, one can acquire more words in the foreign language. Finally, getting exposure to several English accents and varieties enabled some learners to recognize different accents. For example, one learner reported that he learnt to distinguish American accent of English from the British one. It has to be stressed, however, that 15 learners out of 40 did not respond to the whole question of the questionnaire and others did not actually provide relevant answers. My assumption is that they did not understand the question.

(2) Strengths and weaknesses of digital technologies in addressing language skills and language areas

Learners elaborated on strengths and weaknesses of digital technologies in addressing the above mentioned language skills and language areas. As far as strengths are concerned, Grade 11 learners indicated that these digital technologies provided easy and quick access to communication and information they were looking for. They also added that they could get much more updated information than any other channel of communication. One female learner, for example, specified that computers helped her to study well, especially through access to online materials related to her subject referred to as 'General Paper'. This is a compulsory examinable subject that Advanced level high learners have by the end of their studies in Rwanda. It is described as follows:

> a multi- disciplinary subject aiming to enhance the student's ability to make cross-curricula links, develop a maturity of thoughts appropriate to students at advanced level, and achieve an understanding and usage of English which enables them to express arguments, ideas and opinions in a reflective and academic manner
> **(**General Paper Curriculum for Secondary Schools- Advanced Level: Kigali, January 2011).

Another learner said that digital technologies were very useful supporting learning materials because of their sophisticated options. They provided opportunities to learn things better, such as being able to store the information you have acquired online, e.g. audio materials, and so on. In a similar way, her counterpart believed that digital technologies assisted in the pronunciation and listening ability since they provided quality sound needed to reach this goal.

Regarding weaknesses of digital technologies, several participants expressed the high cost and difficult accessibility of these technologies in rural areas. Some of them stressed that internet access was a challenge and expensive. One learner mentioned the fact that people get addicted to them and that these technologies end up being harmful rather than beneficial.

There were also ten (10/40) participants who did not provide any answer to this specific question on strengths and weaknesses of digital technologies. Others simply did not give the expected or relevant responses to the questions. The last section of the learners' questionnaire addressed the issue of access to digital technologies and how learners viewed it.

4.3. Data from Focus Group Discussions

Regarding the data collected from the focus group discussions, the respondents' views revolved around the main research question for this study which sought to investigate how Grade 11 learners negotiated new multilingual identities using digital technologies. In relation to this question, other questions broadly covered learners' current practices in relation to digital technologies, and the languages in which they mixed. They also aimed at understanding learners' perceptions of the affordances of digital technologies for English language learning in the

Rwandan context. These questions aligned with the main and sub-questions presented in Chapter 1 of this thesis.

4.3.1. Learners' digital and linguistic practices

Both male and female learners reported on the nature of their technology use. In this regard, they indicated different digital practices which are discussed below.

4.3.1.1. Access to and Ownership of digital technologies or devices

Learners mentioned the kinds of digital technologies they used and both males and females claimed ownership and use of cell phones, computers and MP3. But in the course of the interaction, they also mentioned other devices, namely radio, TV, Ipod and Ipad. It is worth noting that both male and female respondents stressed that they were not allowed to use cell phones at school, except when they were on holidays. Below is what some of them had to say about the digital technologies they used:

S[2]1 (boy): In my daily life, personally, I use a telephone, a computer,….;
S1 (idem): I sometimes use MP3.
S2 (boy): What S1 didn't mention while we all use it's a radio.
S1 (girl): Telephones, laptop.
S2 (girl) : Television, telephones…
S3 (girl) : Computer, telephones, TV, iPod and iPad.

In response to the ownership of these devices, the learners stated that they got personal computers from their parents, and others could access them while they were in cyber cafés. This is apparent in the following responses:

S4 (boy): I got it from my father.

[2] S stands for "student " to represent leaners who participated in the focus group discussions. Numbers e.g. S1, S2 were used to identify different learners who responded to given questions.

S 3(boy): The one we use at home is a communal one. We share it with my brothers and sisters but since I am the eldest I am responsible for it.

S4(girl): I have got one but I only use it at home.

S5(girl): I sometimes go to the internet café and get access to computers.

4.3.1.2. Use of computer and Internet facilities

In relation to the above, the learners elaborated on the circumstances under which they used them. Some of them used them when they were at home during holidays and others used them at school in their IT class, or in the cyber café when browsing the internet. In the two cases, they said they were busy with several activities. Three of the respondents, two boys (S7 & S10) and a girl (S9) reported on their computer use when they were at home:

S7 (boy): ….but when we're at home with a computer, we do things which we judge are interesting for us.

S10 (boy): For instance, me, if I get a computer, I use those social networks.

S9 (girl): Playing games such as snowball, solitary, solitary spider …

When they were in the cyber café, the informants indicated that they were busy with several activities such as surfing the internet. When browsing the internet, they also focused primarily on sending and receiving e-mails and exploring website contents for various purposes as reflected in the following excerpts:

S7 (boy) : When we go to a cyber, we often want to send e-mails, or e-mail back those who wrote to us on Yahoo or Facebook, things like that, or we can read breaking news at www.inyarwanda.com

S8 (boy) :We can visit websites containing the best musics such as thewebtrick.com; watch on-fashion lyrics, and sometimes YouTube to download the songs we like … www.inyarwanda.com …

The girls shared common views regarding their interest in using computers, especially the use of internet. **They** accessed the same websites such as www.yahoo.fr; www.facebook.com; www.youtube.com, to name but a few. The girls shared their experiences thus:

> S2 (girl): Much has been said. Once you're on a computer you need to write, and on the internet you want to communicate with friends.
> S4 (girl): The main reason is that I've many friends there and we chat more easily than at Yahoo. I also get information from this website. I sometimes use Google when looking for news about artists, and Youtube when looking for songs and films, and Igihe.com when I want to know news about my country.
> S5 (girl) : I very often use in the first instance, Gmail.com, because many of my family members communicate through it; then Facebook because I've got many friends there and chatting there is easier than at Gmail, and when I'm doing research or looking for stars' pictures. I also visit Netlog, though not so often, but I've friends there; and I sometimes visit Twitter.

4.3.1.3. Computer skills and Literacy

Learners indicated that they were taught how to handle computers and related knowledge in the classroom context or in informal settings by parents and relatives. But the internet was self-taught as some of the informants pointed this out:

> S7 (Boy): We learn Microsoft Office, Microsoft Word and Microsoft Excel and Powerpoint, we generally learn these only….. Here at school, because we learn being aware that we'll sit for an examination on a specific point, if it's a Microsoft Word programme, we learn a related function.….
> S4 (Girl): As for other skills such as the PowerPoint, Microsoft office and Excel, I learnt these from my teacher. And my friends taught me other things especially when we could go to the internet.
> S3 (Girl): We learn some computer skills here at school, and we learn others at home but I learnt how to browse on my own.

4.3.1.4. Learners' access to engagement with websites

The following are the websites the male participants listed in their focus group: www.yahoo.com,www.facebook.com,www.inyarwanda.com,www.thewebtrick.com,www.youtube.com,www.google.com, www.tubidy.com and www.igihe.com,while their female counterparts mentioned new websites, namely www.gmail.com, www.twitter.com , www.mtv.com, www.wapdam.com, www.skype.com, and www.penpals.com. The websites they had in common (boys and girls) were the Facebook, Yahoo, YouTube and Google. Others were unique to each of the gender represented in the focus group.

The learners said that they used several websites for different purposes. They indicated that they engaged with various sites to listen to the news and music/songs, watch and download movies, make friends, chat with them, do research and look up for celebrities or stars' pictures. These were the girls' views, but their fellow boys pointed out more specifically that they listened to the songs' lyrics and they watched for football player stars, as shown in the utterances below:

> S4 (girl): The main reason is that I've many friends there and we chat more easily than at Yahoo. I also get information from this website. I sometimes use Google when looking for news about artists, and Youtube when looking for songs and films, and Igihe.com when I want to know news about my country.
> S9 (boy): I get academic lessons at Google, especially Physics.
> S10 (boy): In holidays I often visit one (hundred) or thousand films website where I find films and download them. When I'm here at school, I like visiting Yahoo to check e-mails sent to me.

In short, the learners' experience with their website visit was chiefly meant for socializing and recreational purposes.

4.3.1.5. Digital spaces and Learners' Aspirations

In response to the question regarding what websites they liked visiting most, the learners reported that facebook was among the top websites they liked the most. This website was used for various purposes such as making friends and chatting.

> S1 (boy): Me, the website I visit more often than others is Facebook. When I log in, I get to know new friends and get more news about so many people and my old friends, my acquaintances living abroad; and sometimes when we meet there we chat.
> S6 (Girl): The one I use more than others is Facebook because there're many people with whom we can communicate; at the Facebook, even those who live away from us or those with whom we can't communicate with a telephone or in our daily life, various friends, and it's easy to interact with them there.
> S2 (boy): I also very much visit Facebook because I can meet many friends of mine, my former classmates at primary school. Another thing I can come across a friend and I don't have his phone number. In this case, I can't call him or SMS him, but we can meet on the Facebook.

Another website that attracted informants' interest was 'skype' because of its benefits which facilitate viewing and listening and face-to-face communication.

> S1 (girl): I like using Skype. I like Skype because when I've got a webcam I can see my interlocutor as I talk with a friend or acquaintances, and if the latter have something to show me, I also do the same. It's like being on a telephone close to the person you're calling. Even the person who's far, wherever, let's say a person I haven't seen for a long time who had gone, for example, to America or elsewhere, we talk and I can see how he has changed and he or she also can see me. These are the reasons why I visit it more frequently than other websites.

The learners expressed their additional opinions on what they would like to do with the internet and technologies, if they had opportunity to do so. The following responses were expressed by both boys and girls:

S5 (boy): Personally, when I get to the internet and look at the websites' contents, I first of all appreciate what has been achieved by the webmaster. So, I'm pushed to wonder about the requirements to create one's own website. Another benefit would be turning this website into an income generating activity, and in turn, with such an investment I may become popular.

S7 (boy): Me, I feel that if I can get required means, I can learn about developing videos or video clips. In addition, if I happen to acquire more knowledge about this, I would get involved or develop the music industry …and in this context, this would make sense and it would help me in my life by earning some money.

S10 (boy): I wish I could follow a distance learning programme. Another thing beside the computer that has so far attracted our attention is these kinds of sophisticated telephones such as those we see these days on TVs or iPads; the telephone that is big and you can do everything with it: using it for calls, having some computer functions, and so on. I feel that this is really my dreams.

S5 (girl): For me, when I visit those popular websites, I understand that it's business. I think that if I can get means to study this area thoroughly and get enough knowledge, I could invent or produce my own softwares or programme and benefit from them. But it's just a dream.

S7 (girl): My dream is to know how to burn pictures and produce a movie because many people do it. People just copy your pictures there and make clips.

In brief, looking at the above learners' utterances, it is apparent that the learners were eager to develop their own space, construct their own identity as video or movie producers, software developers, webmasters and so on.

4.3.1.6. Global status of English as a language of technology

From the informants' responses, it is apparent that English was regarded as the most dominant language of technology. For example, when they engaged with digital technologies, they used cell phones for SMS or text messaging and English seemed to be used more frequently for communication than other languages:

S1 (boy): There's another reason why we prefer English than French: when we write among ourselves we very much abbreviate. In English there're several abbreviations and things get shorter. To write a message, especially, quickly at the chat option so the receiver can reply, you need to abbreviate and in terms of abbreviating English is easier than French.

Besides, the informants provided their reasons of why they believed English was the predominant code on the websites they visited. In other words, English was the de facto language and rules over others.

S5 (boy): Because English prevails over the linguistic ground throughout the world today, because countries using English namely the Great Britain and USA are dominating the world, I think this is the reason…

S6 (boy): For instance with Facebook, you can go to Settings and you can personally choose the language you'll be using, and very often we choose English because it's a prominent language in meetings, even if you don't know it, you select it so you can get some knowledge in the language progressively.

English as language of global communication also attracted the respondents' attention. They held this view because when they visited different websites English was the medium of communication. The hegemonic status of English was perpetuated by its association with the global and developed world as indicated below:

S5 (boy): Because English prevails over the linguistic ground throughout the world today, because countries using English namely the USA and Great Britain are dominating the world, I think this is the reason…

S4 (girl): Because it's the Americans' language.

Later in a different interaction on the role of IT and digital technologies in English learning, the learners mentioned the current US president in their responses which links to the predisposition they had about the American dominant status in the world.

> S4: Sometimes, when the English teacher wants to teach us 'listening', he (or she) may give us a president's speech like Obama's or some past events: we listen to these materials and tell the content from that message.

On the whole, the informants believed that English was the internet lingua franca as different internet users speaking different mother tongues could interact through it. In this instance, Grade 11 learners who were of Kinyarwanda and French speaking background used English as an official language and medium of instruction. Despite the fact that English was the prevailing language on the websites for the respondents, but some websites had, in the learners' opinions, their particular language of use.

4.3.1.7. The status and role of Kinyarwanda in the world of technology

According to the informants, Kinyarwanda was not practical in terms of its usage in informal communication such as chatting or text messaging using digital or IT technologies. They reported on their experience when they used their cell phones while busy text messaging their friends.

> S3 (girl): If you consider what many of us have said, you understand that when they write text messages, they use other languages than Kinyarwanda. This is what's very frequently done and it doesn't mean that the other person doesn't know Kinyarwanda, but we've observed that writing a message in Kinyarwanda takes more space than writing in another language. For example, with other languages such as English, the youth have their own way of abbreviating or shortening words known to all people but in Kinyarwanda it's not the case.

While learners were chatting with their friends on cell phones by means of SMS, they had recourse to shortening their messages for various purposes such as insufficient space on the phone screen for text messages or having to write faster to save time. In this study, informants argued that Kinyarwanda was poor in abbreviations to represent the intended message they wanted to convey.

> S4 (girl): In Kinyarwanda you can tell someone 'mwaramutse' (good morning), it takes you six words (letters) but in English you can simply say 'HI', only two words (letters). That's why there're few abbreviations in Kinyarwanda used to shorten words.

The participants also stressed that Kinyarwanda would be more appropriate or good for conversation, but not for SMS.

> S3 **(girl):** This is the reason we prefer writing in other languages more than in Kinyarwanda. But when speaking, you will hear several people using Kinyarwanda and then when you need to write to them, you use English or French. This is done to shorten words in order to be more practical.

In addition, from the participants' views, it seemed that Kinyarwanda was invisible in the global or technological era. This was noticed in mobile communications, especially in SMS interactions.

> S7 (girl): On the telephone when calling, you may speak in Kinyarwanda, but there're some people who often disturb me speaking to me in other languages and I feel obliged not to speak in Kinyarwanda and I shift to French or English. Some of my friends send messages in French and others in English; those who like French write to me in French and those who like English write in English. I rarely write messages in Kinyarwanda
> S8 (girl): I like using English but not as much as French.

4.3.1.8 Languages used on different websites

The focus group participants also reported on the languages used on the different sites they visited. In this case, they indicated the language they found on a given website and the one they preferred to use when they were given a choice. Some learners had this to say:

> S7 (girl): It's Kinyarwanda, especially at the Rwandan websites such as www.inyarwanda.com , www.igihe.com.
> S8 (boy): It's English and Kinyarwanda, and sometimes French at Google.
> S9 (boy): And French at Yahoo.
> S10 (boy): I don't use much Yahoo but when I use it, I'd frequently prefer French.
> S3 (girl): French and English.
> P: Between the two, which one is more used?
> SS (Most of them): English.

4.3.1.9 Language/s for writing messages (SMS)

When learners communicated on their phones, especially using text messages, they made use of particular languages due to several reasons. Considering the learners' responses, French and English were more preferred than Kinyarwanda, but in some cases this phenomenon varied from one individual to another:

> S1 (girl): French comes faster than English...
> S3 (girl): ….when speaking, you will hear several people using Kinyarwanda and then when you need to write to them, you use English or French.
> S5 (girl): When talking to others in terms of communication, I often use Kinyarwanda because it's the common language for most of us; but as regards sending messages, I often use English .
> S9 (boy): It's because we learn more lessons in English and we progressively forget some realities in French, because we no longer use it very much and naturally English comes fast.

Language mix or code switching is becoming a popular linguistic practice and this has also been identified in the learners' responses. They reported that while text messaging to their friends, they frequently had recourse to language mixing. It is worth stressing that mixing languages was between English and Kinyarwanda as can be noticed in S2's observation and/or comments below.

> S3 (boy): When we write among ourselves, we often mix languages … Kinyarwanda, English ...
> P: When you mix, personally, what're the languages that come easily when writing SMSs?
> S4 (boy): Kinyarwanda and English.
> S 6 (boy): I like mixing French and English...
> S2 (girl): I also often use Kinyarwanda when talking, but when sending messages I mix languages because there*'re words which are difficult to know and I mix languages.*

4.3.1.10 French status in education

In spite of the language policy shift in education which gave English a dominant position, French is still visible with regard to power and status. The informants stated that they had two hours of French a week, alongside two hours of English as a subject. It is worth noting that they studied through the English medium. But for some students French was still their language of affiliation.

> S3 (girl): As for me, I grew up in a family using French, thus Anglophones are very few, and you could only find me speaking in French at school, and when I got to the 4th Form, my relatives obliged me to study in English …
> S4 (girl): It's been very difficult for me to switch from the 'Francophone' system because I could defend myself easily in French. For example, in exams, I need to know many English words, and in fact, I haven't acquired so many. So I've to think in French and when writing I translate this into English, and this troubles me because my reasoning is still in French.

On the contrary, their male counterparts seemed to hold a different opinion. Since English was introduced as a medium of instruction, the same learners found it more accessible and were happy with the new educational system:

> S2 (boy): When we consider the progress we made in our learning in general, we find out that if we had started in English we would have gone far better than what we would get with French.
> S3(boy): Another thing is that after being aware of the teaching policy change, I thought that it couldn't be possible or easy for us to accommodate the new policy, but when we were introduced to it we got accustomed to it without much difficulty. Despite some difficulties of adaptation, we got accustomed to it. Anyway, in my opinion English is easier than French.

4.3.1.11. Accessing online information

Learners indicated that they visited websites to look for information on current affairs, especially news on several artists. It is worth noting that considering the learners' views, the website visit targeted more music as preference.

> S7 (boy): When we go to a cyber,….. or we can read breaking news at www.inyarwanda.com …
> S7 (boy): There're news (www.inyarwanda.com) and the today's artistic situation in Rwanda and their latest development.
> S7 (girl): Here, we don't have access to these TV programs and when we go home I have my time to watch my favourites. Other websites have been mentioned.

The focus group participants also elaborated on strategies they adopted when facing difficulties to assimilate the contents of certain websites they visited. Some said that they guessed the meaning from the context; others looked up difficult words in the dictionary and had recourse from the website help desk:

S1(boy) : I try to guess the meaning from websites other than those including Facebook. These seem to be complex in the language they use. You may read some parts and not understand them; so you try to imagine the meaning based on what you've understood …

S3 (boy): There're websites with the options of HELP and you check there depending on the problem you have.

S3 (girl): I look for a dictionary and use it but sometimes I may not find the meaning or entries I'm looking for, but I can also find some which can help me understand.

4.3.2. Learners' Views on Digital technologies for language teaching and learning

This section focuses on interactive language teaching strategies. To the question related to the role of digital technologies in formal English teaching and learning, the learners indicated that their teachers made use of different technologies in their English class. The following are some of the learners' responses:

S6 (boy): He'd bring TEOFL CDs. You see, we listen…. A person speaks and then the teacher asks questions, and we answer them and then hand in the papers, and the teacher evaluates them….

S7(girl): In the ordinary level, the teacher would switch on a radio and let us listen to Westlife songs, and then we'd memorise them and he'd explain us and ask some comprehension questions.

S4 (girl): For example, he sometimes brings a radio set and plays it. When we were in the ordinary level while learning English, he'd use the laptop and play a CD to check if we're getting something from what they're saying. For example, someone would read a newspaper using American or British English, so that we had to get the difference between the two accents.

Similarly, the French teacher from the girls' school sometimes used technologies to teach this language:

S3(girl) : For example in French, the teacher regularly uses a projector and shows us films and we understand them well, and when he notices that we didn't understand, he gives us more clarification.

With regard to the informal way of learning languages using the internet or digital technologies, learners had their expectations on this matter:

> S6 (girl) : Because of interacting much with friends at the Facebook, I feel that I can use only the simple words they use everyday, and end up becoming fluent in English. I wish I could speak and write English as they do.

In summary, from the learners' responses one can notice that they had a perceived educational value of the technologies their teacher made use of while teaching them.

While discussing the idea of learning languages or other subjects using technologies, the informants raised innovative ways of learning that were encouraged by their teachers.

> S8 (boy): He doesn't tell us to go and visit such websites and report back to him; rather, we learn a text and he tells us that if we're interested by the writer, we can find his details on the internet.
>
> S6 (girl): When there's internet here at school, we get data from different websites. When the internet is down we ask for permission to go to the internet cafes in town or do such activities when we are on holidays. In this case, the teacher involved gives us an authorization to do this without his guidance and by doing this we have more time to practice our English because we read much on the internet, we try to get the meaning and eventually we summarise the information and this helps us in our different specialised subjects.

The learners' views depicted the learning experience that was influenced by the teacher's approaches to teaching and learning.

> S5 (girl): In general, we're required to know several things happening in the world, in our country or abroad. As we study in English today, we're asked to communicate much and conduct our research in English. Then we are also compelled to search this on our own and then report our findings through exposés in front of our classmates.

> S1(girl): What I can say about English, there are concepts that we find difficult to understand and then the teacher would use his telephone and search their meaning on the internet. In the next step we get the explanations easily.

From the learners' views it seemed that they were exposed to a new way of learning that induced them to some kind of independent learning. It is worth noting that the teacher sometimes benefited from the technology input (i.e. cell phone use) to support his teaching process as S1 put it. In the next section, the main focus is on data presentation from individual interviews.

4.4. Data from individual interviews

This section elaborates on data collected from informants other than the target research group, i.e. Grade 11 learners. I conducted some follow up interviews with the IT specialist teacher, the Internet Café Attendant (ICA) and the English teacher. Their responses are presented below.

4.4.1 Enhancing Learners' Computer Literacy Skills

The first question was related to what computer basic skills teachers covered in their IT lessons. First of all, the IT teacher indicated that the computer class was compulsory at all levels in high schools, as prescribed by the Rwandan Government policy in education. He stated that learners did this subject from Senior 1 up to Senior 6, with two hours on the school timetable. He also talked about the main content and focus of his computer class:

> ….they must have some introduction to computer science; they must know what a computer is: the hardware, what is a software in general, how the computer works…after this we try to introduce the Microsoft office ….It means from Senior 1 after knowing in general what is a computer, then we introduce slowly the text editors Microsoft word then they must know to type texts, edit texts, insert images, something like these.

Internet is one of the topics the teacher talked about as part of the computer lessons. The internet has been their most part of interest in their ICT lessons, the IT teacher reported. In this case, the

internet is normally part of the IT class contents. In addition, the teacher narrated his views of his learners' interests in the computer lessons:

> …. as we know that this is the new science in the world. It means all students, not only students, all people are interested to know this tool operates…..If you tell them that today we are going to browse ….Ah we have internet… they are very, very interested.

According to the teacher, learners also used online resources in their computer class but the internet connection had been a concern which did not give them enough time to benefit from this tool. Despite this constraint, they had recourse to internet for the learners' benefit.

> When we have an opportunity they browse the internet and do some research, then I guide them because internet as part of what we teach them, as well as the advantages and disadvantages of using internet, how to send emails with the attachment files, etc.

In the teacher's opinion, computers can raise awareness of the learners in using this tool to their benefit because the medium of communication in the computer's programs is English. For instance, he talked about the fact that when learners were in their practical activities they learnt new vocabulary, thus:

> 'they come across different terms such as 'file', 'tool', 'insert', and other related terms in English, and these can help them to know more vocabulary in English.'

When I asked the teacher's opinion about the learners' interest in the digital technologies nowadays, the IT teacher noted that the youth were somehow obliged to be part of the digital environment because this is what the world currently offers them:

> I think they are obliged to use it because now as we know in the world we are migrating from the analog to the digital system. They don't have another choice now. It means most of tools and machines are digital related technologies. Another thing is that some of these technologies help them for entertainment and for other purposes.

The interviewee also indicated what he perceived as his learners' basic performance in Computer classes. He stressed that his learners performed well and this was proved by the results they obtained, compared to their counterparts from some other schools. He said that when some of the learners were transferred to his school, they found themselves with low performance compared to their classmates who had been studying computer class from Senior 1.

4.4.2 Learners' Access to the Internet

The Internet Café Attendant (ICA) shared his views from his daily observations concerning the category of youth that regularly visited the internet café he was working for at the time of the interview. He stated that many of users among the young people were between 18 and 25 years of age. They were students at university and others at high school level.

According to the attendant, the latter category (i.e. secondary school learners) constituted the big part of internet café users because:

> 'during school time they don't have easy access to use the internet compared to their counterpart from the university who have sufficient IT and lab facilities to get connected'

The ICA elaborated on young people' use of internet café in terms of the most preferred activities. He indicated that the internet café received several customers who came for different activities and different purposes. Some came to type texts and print them; others browsed the internet. According to his observation, most young learners on holidays were busy with miscellaneous activities, but surfing the internet had attracted his attention:

> As you know, Internet is broad; you might find just chatting with their friends and others let me say from higher education, they used to deal with research. And others, mainly from secondary schools look out for games, playing them from the desktop or from the internet. Something else you see… learners from secondary schools are mainly teenagers; they like pornography just to entertain themselves.

In connection with what websites the users liked most, the ICA reported that on the whole 'www.google.com' was the target website for the youth but he could not tell the content the users used to look for.

The ICA also responded to the question about what language the users made use of while surfing the internet. He stated that the internet languages prevailing in the menu showing the 'most visited' website was English and French. In this regard, websites such as www.yahoo.fr and its related sitewww.yahoo.com were among other sites reflecting the use of French and English languages respectively. In addition, ICA stated that:

> The language they used on a particular site depends on a user's linguistic background. Don't forget that our country has recently adopted a new linguistic system which gave more importance to English. I believe that they were eager to use it because they want to perform well when they return to their school after holidays.

The ICA identified two different forms of benefits that the youth get from using social networks. He pointed out firstly, the fact that communication had become easier among social media users or consumers since they interact and send messages in a two-way communication. Secondly, he emphasized the nature of entertainment that the social media provided the users with, that kept the beneficiaries alert and absorbed in using them.

However, the ICA also mentioned some disadvantages of open access to social media, including the internet. One of the challenges was watching pornographic materials. He stressed that it was not beneficial for young learners as future intellectuals. He also mentioned some other negative effects of online materials:

> Another thing is that watching some of the movies online from their stars, they tend to lose focus or try to imitate their behavior which I find harmful especially when they are still at school. For instance, when they use phones, especially smart phones, (that have

> some audio or video features) at school, they can't follow lessons because you will find them busy on these phones instead of focusing on what the teacher is saying.

4.4.3 Using IT for Language Teaching and Learning

Given that the main medium of instruction in schools was English, interviews were conducted with the English teacher. The English teacher provided ideas and views with regard to the use of digital technologies or IT facilities in English language teaching and learning and other related issues. Regarding the use of IT in English lessons, the teacher, referred to as ET in this study, specified that English was the medium of instruction in his classes as per the language-in education policy. In his responses, it became apparent that he sometimes used other languages when learners faced difficulties in understanding some concepts.

> Sometimes if you produce word which they cannot understand you use Kinyarwanda or French; the language which can help them to understand better what you teach. We mix languages but not frequently.

The English teacher ET reported on his experience of using digital or IT technologies in his class. He acknowledged that he had been having recourse to these tools. He had actually been using a laptop and radio recorders to enhance his learners' listening skills.

> In this context, I believe that these technologies help more with listening activities that involve listening to native speakers of English and speakers, other than the teacher. The learners get the opportunity to listen to other English accents: the American accent, Nigerian accent, British accent and we know these accents are different from the Rwandan accent of English.

ET also elaborated on the benefits of using technologies. He made a distinction between using a laptop and a radio recorder in English learning and its specific benefits for learners.

Talking about the recorder, actually the one I use is only meant for audio materials. With the computer, they can listen to a video material while listening and watching. In fact, in English when you are watching it may be better for students to listen well because they are reading the lips of the speaker when especially they fail to get the speaker's intended message.ET gave a description of what he normally did to help his learners to use online resources. In the first place, he stated that most of the times he assigned his learners work to visit different websites and he mentioned three of them thus: 'Google, Wikipedia and YouTube from which they could download movies to watch. ET also elaborated on the perceived importance of the English as a medium of communication for most online resources and the input this language could have for language learners:

> Most of the websites we use have English as the medium of communication. If it is English and the students are browsing the internet in that medium, it means they are in interaction with the language. Actually, they are learning it unconsciously and not even the vocabulary of the language, but also the sentence structures.

In response to the question whether visiting online chat room or social media could be powerful motivation for language learning, ET had this to say:

> For me, I think they are motivating tools because the youth are the ones who like visiting Facebook, for instance, and nowadays WhatsApp is their preferred social media. I might also say even I don't have enough data but few of my students we chat on the facebook, most of them, when they are interacting with me use English. I find that they are interested and motivated. If we could get an opportunity to teach them using these technologies they would really get more motivation.

Furthermore, ET gave an idea on specific language areas ICTs or digital technologies that could assist learners to enhance their English competence, e.g. pronunciation, grammar, etc. He highlighted that, on the one hand, several softwares installed on the computer could help in

language learning, and on the other, audio or video materials were useful English teaching and/or learning aids.

> I remember using my computer; you know there are what we call set ups like dictionary set ups. If there is a dictionary set up, when students come across pronunciation problems most of cases we use that one. Coming back to the same question like phonology or pronunciation can be taught using technologies and grammar can be one of those areas because we know that students learn better when they view or watch a movie or documentary in English. So, these technologies can help in different language areas.

The Internet Café Attendant (ICA) also made remarks with regard to the role of IT in language learning. ICA was certain that computers could help one to develop his/her language competence. He stated that he made research using computers. He had this to say:

> I have tried to browse the internet and gain several things'. … through the computer and internet you can learn English grammar, read texts in English, learn vocabulary and you can do listening exercises'.

ICA further made an important observation on the use of digital technologies for French language learning. He stressed that the mentioned technologies were supporting tools for learning a language better, but they could not replace the teacher and the classroom learning context.

> Cela n'empeche que le professeur en personne ne soit devant les etudiants. Sa presence est tres pertinente [This does not prevent the teacher from being in front of his students. His presence is very relevant].

4.4.4 IT and Learners' Identity Construction

As one of the research questions for the study sought to know what types of identities learners constructed when they interacted with multilingual digital repertoires, ET gave his views on the matter. In fact, he firstly pinpointed his learners' motivating factors in learning English:

> First of all in my case as an English teacher, here I noticed that our learners study English as a tool to get a job because they know that wherever they will go they will sit for an interview in English. That is one. Number two, with the integration to the Eastern African Community, and when we speak of this community, the students always understand English. With these two reasons I see that the learners construct the two related identities while learning English.

Secondly, ET talked a little bit on the learners' identity regarding their exposure to IT facilities in their language learning process. He stressed learners' commitment to learn, but backed up by existing language background from their formal English classes:

> I might also affirm that for the case of English, this assumption might be valid if the learners commit themselves to acquire something new from digital resources but supported by their class lessons because many websites use English and for a hardworking person using technologies can help him to sharpen his English competence.

The ICA also gave his own understanding of the learners' identity construction in relation to their engagement with digital technologies. ICA assumed that when they used internet or computers as a tool for several purposes, they changed their behaviour or attitude towards the way they viewed things.

> This is to mean that you will find that some young learners are shy, and then by using these tools they become cheerful because of the excitement they have from these technologies. Another instance is that I do remember in my native place, there were opportunities of movie shows, the category of young people who used to watch these movies had a different mindset compared to those who didn't have access to these shows.

ICA observed that those who had access to technologies were open-minded and critical towards issues they had seen on movies which were different from those who did not have exposure to the technologies.

4.4.5 Constraints to IT integration in teaching and learning

The interview data showed that there were constraints with regard to IT integration in schools. For example, the IT specialist teacher acknowledged that their learners 'access to computer facilities was satisfactory. However, he also mentioned some constraints. To start with, he asserted that the student –computer ratio: *'at least we have one computer that can be used by two students'*. In spite of this, the learning conditions, he noted, were not optimal beneficial to the learners because of the physical setting of the school and its classroom arrangement:

> …. they only have two hours per week for each class, then they come here in the lab from their classes and as they move from their previous classes to join my lesson they waste some time; some minutes are lost on their way. If we could have three hours they could do better than what they are doing now.

He also raised learners' home backgrounds which tended to impact on their access to computer or IT facilities. He claimed that:

> some of the learners come from villages, the rural parts of the country. And there they can't see computers….. I don't think they can have opportunities other than what they have here'.

But he believed learners from urban areas did not have difficulties regarding access to computers. He said *'at home sometimes, parents use computers and they also pay money for their children when they are in the holidays to go to cyber cafes.'*

The English teacher also expressed constraints with regard to IT in English teaching and learning. He voiced his views on the need for an IT course for language teachers. On this note, ET indicated that teachers needed training since the learners whom they taught were very eager to use several technologies and they should have some basic knowledge about using them. He added that this would enable them to feel comfortable in using them rather than lagging behind in handling them.

The next section elaborates on data from the non-participant observations.

4.5. Data from non-participant observations

As mentioned earlier, observations were conducted in three different spaces (i.e. school, cyber cafés and a non-specific space labeled as outside world). Three different spaces are identified in the framework of ethnographically oriented similar studies: school, home and community spaces (Snyder and Prinsloo, 2007). As a matter of fact, young people's practices around digital technologies generally flow across the earlier mentioned spaces (idem).

The data collected during the non-participant observations were compiled in a diary. This section only presents my reflection, as a researcher, on my field work that was conducted in different places and phases. These data were obtained in two different phases that were accounted for in Section 3.5.2.2 (cf. Chapter III). In the next section, the emphasis is on highlighting major developments that emerged from field work on the research sites and internet café.

4.5.1. Field notes from the research sites

It has to be noted that the purpose of recording field notes in this study was to observe the actual digital and multilingual practices of Grade 11 learners. This study, although having not followed a traditional ethnography, might be qualified as 'limited' (LeCompte and Schensul, 1999)

because it focused on informed ethnographic tools to construct a framework of understanding that would generate data about young people's experiences with digital technologies and multilingual practices in their everyday lives. During the process of data collection, I had a number of opportunities to observe the site's environment and jotted down notes that mainly converged around two main aspects: informal chat with learners and visit to the school computer laboratories.

To begin with, I noticed the learners' excitement over topics of their interest (i.e. talking about popular cultural forms, i.e. digital technologies and related tools). From their faces, some of the students smiled and showed a great sense of enthusiasm to participate in this research. When I had a chat with one or two learners on their digital practices, they affirmed that they had much interest in using several digital instruments, mainly the cell phone, in spite of the restrictions to use them at school which was common to most of the boarding schools (i.e. the case for the school under investigation). This corroborates with studies in related field (Vasudevan, 2010).

In the second place, a special visit was paid to the schools' computer laboratories and I found that they contained a number of Personal Computers (PCs), but in a relatively smaller number compared to the size of the class which constituted the sample of the study. One laboratory from the boys' school (i.e. identified in this study as X) contained PCs without internet connection as it had been down for a couple of weeks during the period of my data collection. I obtained information from informal interaction with learners during the focus group discussion. In fact, internet access in school continues to be a challenge in most schools in developing countries (Gudmundsdottir, 2010).

Regarding the learners' multilingual practices, I observed a number of aspects related to the use of languages at the respective schools under study. For both of the visited schools, school regulation stipulated that the use of Kinyarwanda was only allowed in extra curricula activities and entertainment activities such as sports and dance. However, foreign languages, mainly French and English which were additional languages of the learners were compulsory at school, especially when learners addressed their superiors, including the schools' authorities and their teachers.

As the English saying that when the cats are away, the mice play; the learners shifted to the home language, Kinyarwanda, when they were not to be noticed by their superiors. Since this study looked at how learners shaped their multilingual identities in the context of learning English as an additional language, this might have had a negative impact on their additional language learning process as the acquisition of second language is facilitated by adequate exposure to the target language in settings that are not necessarily formal (Mbori, 1994).

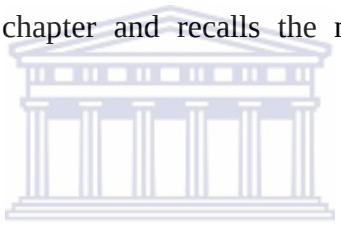
4.5.2. Field notes from Internet Cafés

During my several visits to the cyber cafés, I had time to observe what was going on, with a special focus on identifying some striking attitudes or behaviour patterns related to youth digital practices.

The observation I carried out in the two urban based internet cafés led me to identify two striking issues related to the youth digital practices. Some customers in the cyber cafes seated in front of a PC with headsets on their ears; others waiting for their turn to get their time slots to benefit

from cyber cafes services. The last category that attracted my attention was mainly the youth (of approximately 19 to 21 years old age range) who were busy with their cell phones, text messaging or their hands on the phone screen and most of them wearing their phone headsets. Some of them were noticed moving as if they were enjoying some good music from their handsets and others stood still, thoughtful as if their minds were taken away by what they read or watched on their respective cell phones. It is in the context that Horst and Miller (2006), in their study on cell phone use argue that there is "no fixed thing called a cell phone", but rather a process by which technologies and communities influence one another.

The next section concludes this chapter and recalls the major developments of the data presentation.



4.6. Conclusion

This chapter presented data based on Grade 11 learners' responses to the questionnaire, focus group discussions as well as individual interviews with an IT or computer course teacher, an English teacher and a cyber café attendant. The chapter also elaborated on the data from the non-participant observations.

The questionnaire' responses provided some baseline information of which basic quantitative data were presented in this chapter. It has to be stressed that while my methodology followed a qualitative approach, I also had to quantify certain sections of my data to highlight certain issues that could not have been clearly and explicitly described if I were to use qualitative measures only. Apart from the preliminary data on the respondents' demographic data (i.e. age, gender,

home and school physical backgrounds), this chapter also highlighted the informants' ideas reflected in figures presented in different tables.

Emerging themes from the focus group discussions have mainly been the learners' digital and linguistic practices and their views on digital technologies for language teaching and learning. With regard to the data from follow-up interviews, the interviewees' views enfolded the following main themes: enhancing learners' computer literacy skills, learners' access to the Internet, using IT for language teaching and learning, IT and learners' identity construction and constraints to IT integration in teaching and learning.

As far as data from the field notes are concerned, the latter provided insights on what happened in the natural settings of the youth' digital and multilingual practices that were observed in two main sites namely the research site (i.e. schools under investigation) and one internet café. The next chapter analyses the data and discusses findings.

Chapter Five: Data Analysis and Findings

5.1. Introduction

The previous chapter presented the raw data of this research. The current chapter analyses data in the light of the thematic approach suggested by Braun and Clarke (2006). Thematic analysis is "a method used to identify, analyse and report themes and concepts within data". The themes represent some level of meaning within participants' responses in relation to research questions (Braun and Clarke, 2006). It has to be stressed that the data analysis is mainly informed by the research qualitative design. It is for that reason that this research attempted to examine the study's participants within their usual or ordinary social and learning environments in order to understand the ways in which they used digital technologies to negotiate new identities in two or more languages.

In the context of this study, inspired by the thematic analytic approach, the responses from the research informants were organized in categorical themes and subthemes with examples extracted from the participants' responses. In this respect, the triangulated data obtained from the various sources were analyzed, guided by the study research questions stated in Chapter 1 of this thesis.

Finally, this chapter also discusses the findings through the lenses of theories of access to digital technologies and ICT facilities. The analysis and discussion of research findings draw on the post-structural theories of identity, and on Pierre Bourdieu' theory of habitus, field and capital which are discussed in detail in Chapter two. Finally, this chapter discusses the implications of the findings for the teaching and learning of English Second or Additional language.

5.2. Exploiting contemporary digital environment and infrastructure

This section focuses mainly on analyzing and discussing insights on the following sub- research question: What are learners' current practices in relation to digital technologies? In other words, it attempts to highlight issues and factors that influenced to learners' current practices, as well as their access to digital technologies.

5.2.1 Learners' access to digital technology

Prior to getting responses to this question, it should be noted that digital practices emanate from the idea that 'digital literacies' are simply a set of technology skills that are operational (Durrant and Green, 2000; Lankshear and Snyder, 2000). Besides, basic computing skills are important to perform a function or task. Thus, Grade 11 learners' views (i.e. the main target group in this study) on how they negotiated or engaged with their digital literacies could be defined as 'a set of social practices that are interwoven with contemporary "ways of being" (Carrington and Robinson, 2009, p.83). In the context of this study, the learners had exposure to different digital technologies they used to socialize with their peers (i.e. classmates, friends when they are on holidays, relatives) either by exchanging news or entertaining themselves via social networks using cellphones or computers.

In a related development, the IT teacher (Chapter IV, section X) who participated in this study stressed that the youth today are immersed in the contemporary digital environment as the world has migrated from the analogue system to the digital one (Okon, 2014) which offers the youth, Grade 11 learners included, room for entertaining themselves using digital technologies or by fulfilling other purposes.

Before delving deeper into the issue of learners' digital practices, it is also of paramount importance to examine the extent to which the learners had access to digital technologies and the ability to access the required skills to be able to use available technologies. Regarding the issue of accessibility to digital technologies, Grade 11 learners' responses to their questionnaire indicated that they used or benefited from these technologies under certain circumstances: (1) during their computer class or ICT course, as some of them called it; (2) the school vacation or holidays; (3) borrowing phones from friends at home, using their brothers and parents' phones or computers and watching TV when they were on holidays; (4) learners also made reference to the use of cyber cafés where they went to send emails to their friends or did some research.

In the context of Rwanda which is the focal point for the study, the government has become conscious that simple access to ICT which is achieved by developing the necessary infrastructure does not mean that ICT usage is effective and productive (Chabbott**,** 2013). In view of the above, Mbatha and Manana (2012) raise the fact that even if some of the learners have relatively easy access to the technologies but the digital divide is of great concern. In fact, there is still a gap between those 'who have readily available access to the internet and computers and the peripherals needed to navigate it efficiently, as well as to students who do not have these resources' (Galuszka, 2007, p.21).

In the same perspective, the IT teacher who participated in this study was happy with their learners' access to computer facilities. However, he acknowledged that there were some constraints such as the low student –computer ratio and insufficient time for computer classes. In this respect, as he observed, at least they had one computer that can be used by two students'.

He suggested that if his learners could have three hours they could do better than what they had been doing. He also raised an important aspect of accessibility in terms of computer or IT facilities. He indicated that some of the learners came from villages, the rural parts of the country where there were no computer. Additionally, he thought that they could have opportunities other than what they had in their respective home places. On this note, some of the learners affirmed that they 'sometimes go to the internet café and get access to computers' (S5/ girl).

In this regard, it should be understood that learners negotiated their 'digital literacy' by virtue of their 'ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers." (Gilster, 1997, p. 1). To complement the latter, Ba et al., (2002, p.6) add that there are several dimensions underlying the youth's interaction or negotiation with information technologies (i.e. for learning, work, and fun) and among others, they mention a range of *purposes* connected to their computing; their skills in *using common tools* such as word processing, email; web searching; and their *communication literacy*—how they use email, Instant Messaging, audio tools. In the context of this study, the participants mentioned the kinds of digital technologies they used namely cell phones, computers, MP3, TV, Ipod, Ipad. This fact corroborates what other researchers found out.

> 'most young people in many societies around the world carry mobile devices – cell phones, sidekicks, iphones – at all times' and use their mobiles for computer as well as Internet access' (Palfrey and Gasser, 2008, p. 3).

So, in view of the above assertion, I argue that use of digital technologies is not only the particular activity of the Rwandan youth or Grade 11 learners but it is a universal phenomenon as well. To use Bourdieu's metaphor of 'habitus', the use of several digital technologies has become 'the unconscious framework that individuals draw on; a 'way of being', a 'habitual

state'; and also tendency, inclination or propensity – expressed as 'taste' or 'lifestyle' (Jenkins, 1992, p.76).

Besides, informed by the study conducted by North et al**.** (2008) on the youth's use of ICT and their digital taste, it is worth indicating that Grade 11 learners have shown similar tastes and Bourdieu's theory of Habitus applies to the Rwandan born learners as well. The learners indicated that when they used the cell phone, they often talked with people with whom they shared common interests, people with the same hobbies and most of the time people with whom we share favourite stars. In this context, habitus seems to influence or inform the social dimensions the learners are involved in. To be more specific, from the post- structural viewpoint of Bourdieu's habitus, these learners actually had some dispositions or preferences that drove them to chat with people with whom they shared common interest (e.g. parents, friends). These dispositions are referred to their social background as urban learners seemed to be digital natives who had grown in a society where they appreciated music stars.

It is worth noting that the respondents stressed that they were not allowed to use cell phones at school except when they were on holidays. However, the research indicates that unlawful use of cell phones and other related technologies referred to as 'unsanctioned or unofficial' technologies or "literacies", brings about non-acceptable practices pertaining to immorality. This practice also leads to what is named 'unofficial or unsanctioned' practices considered as 'underlife digital literacy' (Bulfin, 2008). This form of practice has also been raised in the interview with the Internet café attendant who also took part in this study. He mentioned the fact that some of the young learners during their vacation like watching on the computers some obscene materials*: 'learners from secondary schools are mainly teenagers; they like*

pornography just to entertain themselves'. This practice calls for questioning the learners' morality and discipline which could affect their schooling when they are not focused on their classes and their practice also impacts on their life style as they form a new form of identity, that of a victim of online sexual solicitation, for instance, as depicted in the research by Jones et al. (2012) who caution people on the dangers digital technologies can cause to the beneficiaries, especially the youth. They argue that due to the dynamic nature of digital media and new technology today, there is risk of online safety. Their findings suggest that the popularity of social networking sites may have influenced the rate and nature of online risks for the youth in such a way that the latter experienced online sexual solicitation (requests for sexual activity, discussion, or pictures) from anonymous "chat rooms" or from their peers on social networking sites.

In a related research, Margaryan et al., (2010, p.438) concluded that their target study participants (i.e. university students) used largely established technologies, in particular mobile phones, media player, Google, Wikipedia. Additionally, this study indicated that the use of handheld computers as well as gaming, social networking sites, blogs and other emergent social technologies was very low. Looking at the current study from the Rwandan context and this study conducted in UK universities, there are commonalities considering the nature of technology in the two studies. In fact, with regard to Grade 11 learners' access to digital technologies, the learners used essentially recognized technologies such as cell phones. They also visited popular sites such as Google.

Learners' access to technologies, their ownership and circumstances under which they learned to handle computers and who they benefited this from has been previously discussed. In a sense,

Grade 11 learners exploited all the digital resources and spaces they had access to. They made use of a number of physical resources such as cell phones, computers, websites, etc. as well as human resources (parents, teachers, siblings, etc.) to make use of technology for various purposes such as communication and entertainment. In the following section, I examine the informants' digital technology and socio-cultural practices.

5.2.2 Digital Technology and Socio-cultural Practices

It is worth noting the importance of computers in digital literacies. Since computers in the classroom include any digital technology used to enhance, complement, or serve as replacement of old curriculum in use at school (Larry, 2001), they constitute the basis for any knowledge and skills to handle any digital technologies. It is important to understand learners' views on where and from whom they learned or acquired the computer basic skills. The majority of learners (i.e. 29/40) both from the urban and rural regions mentioned 'school' and the remaining talked about their home environment. In fact, most of the respondents (i.e. 25) stated that they learned the computer from the teachers while others acquired computing skills from their friends, siblings, parents and relatives.

It has to be stressed that from Bourdieu's post-structural social theory, his notion or concept 'capital' can be associated with the context of this study regarding the reported learners' computer skills they acquired either at school or in the family setting. In fact, the knowledge in terms of handling computers is not only economic but is also social and cultural to use Bourdieu's terms (Pishghadam, 2011). These two types of capital can be powers that define the chances of profit these learners can get in their field of study. The more they possess cultural (i.e. the acquired knowledge at school) and social capital (i.e. family support they had while learning

computer skills), the more successful they might be in their school subjects or any other related endeavour. Thus, these types of capital can be considered as factors that influence learner success.

In relation to the learners' access to ICT facilities mainly the 'computer' which is the focal point in this section, Grade 11 learners' access to computers from their relatives or siblings can be understood as increase of their social capital to use Bourdieu's terms (2003). These learners did not only benefit from the social resources, i.e. the community support and in this instance, relatives or siblings (Warschauer , 2003) but also from other several resources as it is elaborated in detail in Section 5.2.3 below.

With regard to their computer use, the learners elaborated on the circumstances under which they used them: when they were at home during holidays and when they were at school in their IT class or in the cyber café browsing the internet. In the context of this study, while learners are exposed to different digital technologies, it is vital to assess their role in their learning process as a whole (Margaryan et al., 2011) because "it is not technologies, but educational purposes and pedagogy that must provide the lead, with students understanding not only how to work with ICTs, but why it is of benefit for them to do so" (Kirkwood and Price**,** 2005**,** p**.** 257**).**

While talking about what learners did with computers, Bulfin (2008, p.15) argues that basic computing skills are important when conceptualising digital literacies but currently students' practices are not simply employing skills to perform a function or task, they are engaged in fascinating social and cultural work. It is in this regard that examining learners' main computing

tasks or activities, the presented data from the questionnaire mainly indicated that learners liked watching movies, listening to the music and playing games. The young people who spend most of their time on computers are referred to as 'gamers' (Thrupp**,** 2008).In the context of this study, learners reported that they played games such as snowball, solitary, solitary spider, etc. Thus, these learners acquired a particular identity as 'gamers'. They actually spent their spare time engaging with different games.

In a related development, such instances of learners' social environment or spaces where they play and perform different activities have been referred to as 'affinity spaces' (Gee, 2004) where people of the same interests and goals meet and share knowledge. In this case, the participants in this research used for instance computers to access social networks, a platform that allowed them to exchange views. This is also the view from the Computer class teacher who participated in this study (see Chapter V). In short, several and up-to-date technologies are open to playful activities. They support people's recreational, experimental and informal pursuits (Davis, 2010). Therefore, technology can be regarded as one of the socio-cultural tools which enhance people's access to different forms of knowledge.

5.2.3 Exploring multimodal digital texts

The use of the computer or the internet has changed all over the time with the emergence of new technologies and users are caught up between the old literacy (being able to write and read) and new literacies i.e. being able to handle technological tools for one's benefit and other purposes). When they were in the cyber café, Grade 11 learners indicated that they were busy with several occupations; one of them was mainly surfing the internet. In this context, data from the focus

group discussions showed that when browsing the internet, informants focused primarily on two tasks: sending and receiving e-mails and exploring websites contents for various purposes.

Coming back to reasons that motivated the learners to use several websites, it is worth noting that they engaged with various sites (see Chapter IV) for the following main reasons: looking for news, listening to music/songs, watching and downloading movies, making friends, chatting with them, doing research, looking for a star's pictures, looking for songs' lyrics and looking for football player stars. In other words, the learners had access to physical resources (Warschauer, 2003) including the internet. They benefited from digital resources (idem) such as music, movies and so on.

In this regard, "It is not the computer or the Internet itself that is central to literacy but the way that these tools of technology shape social relations and practices" (Lewis and Fabos, 2005, p.475). Besides, it should be noted that skills and attitudes are crucial to make successful use of internet and other computer resources are also crucial (Wilson and Peterson**,** 2002; Villa, 2002). These observations concur with the study conducted by Liebeskind (1996) who established that online Social Network Sites (SNSs) offer exciting new opportunities for interaction and communication.

Data from the current study showed that the participants needed to write, and once they were connected to the internet they wanted to communicate with friends. Therefore, SNSs have even been found to increase self-esteem among younger people (Kim and Yun, 2007). In this regard, SNSs such as those mentioned by the informants in this study such as the Facebook, twitter and

others, allow infinite number of internet users to create and maintain profiles of personal information and interact with each other in a variety of ways (Aleman and Wartman, 2009).

In the context of this study, Grade 11 learners indicated that they engaged with a number of digital resources or technologies with several applications considered as multimodal texts which are 'technologies for making and distributing meanings as messages' (Jewitt and Kress, 2003, p.4). These digital practices constitute the learners' literacies which are forms of multimodal practices as they use 'new changing global forms of communication like the internet and email' (Kress, 2003. p.41). Besides, they interact with 'the local and the global in their use of the internet, videogames, texting, emailing, and so on' (idem). In addition, the target group for this study reported that they sometimes looked for news about artists at the local level via the Google search engine or www.igihe.com to inquire about their country's news or at the global level using Youtube to look for films. The different digital practices that are part of these learners focal interests are characterized by various multimodal texts such as news search; films watching to name but a few.

When exploring how the above multimodal texts shape the learners' identity or how they negotiate their identities using those different texts, it has to be noted that the learners' practices are linked with identity by negotiating meaning through multimodal literacies (i.e. a range of modes such as visual texts (photographs, videos, animations) and audio texts (music, audio narration, sound effects) (Jewitt **and** Kress, 2003). It should also be noted that technology has introduced new types of text produced in a multimodal format. These multimodal texts include websites and social networking sites being taken up by thousands of users on a daily basis. Most

of teenagers, including the participants in this study, used these online spaces to instant message, upload photographs, exchange music files and much more (Cashmore, 2006).

5.3 Unequal access to digital technologies

From the data collected by means of questionnaire, focus group discussions and individual interviews, one of the themes emerging from the research participants' responses is associated with a number of kinds of access to technologies as depicted by several authors (van Dijk and Hacker, 2003; Warschauer, 2004; Czerniewicz and Brown, 2005). These are 'material access' which is associated with the learner's access to the internet connection. The other form of access is the 'skills access' which has to do with the informant's ability to handle easily the computer and communicate with friends by typewriting and the 'usage access' that is also linked to the learner's opportunity to use ICT facilities. 'Mental access' refers to the learners' motivation to use the computer and social networks. Once the learner is on a computer he/she needs to write, and on the internet he/she wants to communicate with friends.

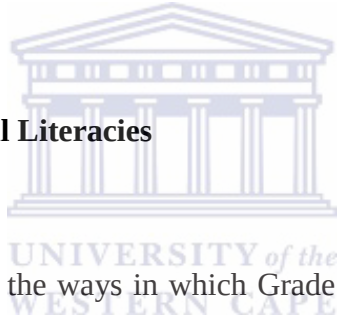
In the context of this study, Grade 11 learners expressed their views that are related to different kinds of access to digital and information technologies. In relation to Warschauer's model of access to social resources, the data indicated that when the learners were at school they did not have access to some TV programmes, and when they went home they had their own time to watch their favourites. In other words, this describes the situation whereby there was lack of sufficient and adequate support for the learners to have access to some ICT facilities at school e.g. to watch TV programs they preferred. This seemed to be a barrier to the 'usage access' which in principle has to do with embracing or identifying opportunities to effectively use or

access the technology (van Dijk, 2005). It can also be a barrier to material access, including the lack of access to computers and Internet Connection (idem).

This could also explain the digital divide that some of the learners, especially, those coming from the rural regions faced (i.e. not having easy access to computers when they are at home) as reflected in the interview with the IT/ICT teacher. The difference in access and use through the rural/urban divide is still a concern both in the industrialized and developing world (Anderson et al., 2009). It has to be noted, however, that access to human resources was regarded by the research target group as satisfactory since they benefited from trained teachers of ICT in their learning process.

Learners' mental access to digital or ICT facilities can be understood from Bourdieu's concepts of habitus and field. The target research group indicated that when they visited several websites such as 'penpulse.com' (cf. Chapter IV) and met people from different corners of the world, they could ask them for membership to this social network as part of the acquaintances they were making with their new encounters. In this respect, these learners were informed by their habitus, that is, their expectations and predispositions they had while visiting the website; the way they approached the people they met on penpulse.com. They wanted to benefit from acquiring friends from this space (i.e. a place Bourdieu's theory calls 'field'). The 'field' is considered as a social arena where social agents meet, interact in pursuit of desirable resources (e.g. knowledge), power and so on.

In this study, Bourdieu's notion of 'field' is incarnated in the data from the interview I had with the learners. To be more specific, the social agent here is compared to the learner who liked using Skype because with this facility they could see their interlocutors. In related terms, the leaners had been in interaction with 'cultural practices' (see section 5.2.2) that were offered in the social networks as facilities of communication with friends. Besides, the social agents in the 'field' observe the rules of the place which could be equated with the way one handles the tool or manipulates it to meet your desired benefits. Apart from the above mentioned activities the learners did with computers, the questionnaire and interview data indicated that their overall digital practice or activity was the 'internet".



5.4 Multiple Identities and Digital Literacies

This study also sought to examine the ways in which Grade 11 learners negotiated their digital identities. It is in this context that when the young people engage with literacies in range of modes for different purposes, they use a wide range of digital, multimodal media to bond with people and issues across the world. They, therefore, created a global network identity as they became closer to each other. Thanks to the multimodal nature of the digital tools they made use of such as skype which seemed to be one of the popular modes of communication by Grade 11 learners. Considering the interest the research participants demonstrated while surfing the internet and browsing different websites, Grade 11 learners displayed multiple identities that were multi-layered (Coupland **and** Brown, 2012). In addition to their own identities as Rwandans who were females and males from urban and rural home settings, there were

dimensions of shared "feelings, knowledge or activities" across distance (Coupland and Brown, 2012).

It has to be stressed that 'youth literacies' are commonly defined as fluid, hybrid (i.e. combining two elements like the audio and video) and diverse (i.e. variety of kinds). From this study perspective, Grade 11 learners reported to use hybrid, diverse literacies namely cell phones, computers, etc., all of which portrayed multimodal features or had a multi-functionality nature such as audio, video platform for entertainment, information or instructional purposes. In other words, these literacies involved the ability to interpret and produce a wide range of texts that bear a communicative message in their nature by identifying themselves among other things through music, movement, gesture, film, etc. (Sanford et al., 2014).

Data showed that some leaners' identity was dynamic. For example, learners negotiated different identities by being assertive and evoking their self-desired goals (i.e. to be a webmaster; to create one's website). In addition, others constructed new identities by aspiring for higher positions in life, thus building a high self- esteem identity (i.e. becoming popular). Within the post-structural frame of analysis informed by Bourdieu's field, such aspirations seem to illustrate the kind of 'field' the learners identified with and a sense of belonging to a social arena in which people maneuver and struggle in pursuit of desirable resources. The "field" is also referred as a result of interaction between the specific rules of the same field e.g. being able to be a webmaster, having the required skills and competences of developing a website and eventually benefit from resources gained out of it. As for Emirbayer and Johnson (2008) , the field will be a setting of cultural practices found there and carried out by people (mainly teenagers) to meet

their expectations. In this case, some learners would like to gain popularity by developing websites for martial arts for income generation.

In the same context of negotiating the digital identities, Thomas (2007, p. 3) in her study of digital online practices of young adults, argues that for the youth 'there is no such dichotomy of online and offline, or virtual and real - the digital is so much intertwined into their lives and psyche that the one is entirely enmeshed with the other".

In the next section, emphasis is on describing Web 2.0, an online platform which people use to interact, share and perform different activities using mainly social media. It has to be noted that in the framework of this research, data obtained from different data collection tools used in this study indicated that Web 2.0 attracted most of the Grade 11 learners' attention. Examples of Web 2.0 include, among other elements, social networking sites, blogs, wikis, hosted services, Web applications and post casts (Anderson, 2007). This study describes the extent to which Grade 11 learners made use of this platform in terms of their digital practices and how their multilingual repertoires shaped their identity construction (see research questions, Chapter I).

5.5 The role of Language in Digital Identity Construction

With the advent of Web 2.0, a site which allowed easy access to a platform of interaction among online users, it became easy to encourage participation and sharing between users who simultaneously consume and produce content. This forum has also allowed various communication modes to co-exist in a single platform: personal messages, instant messaging or chat, public posts, etc. (Anderson, 2007; Eleta, 2014).

In an interview with the Internet Café Attendant (ICA), he stressed that the youth benefits from using social networks in several ways and among other things, communication has become easier among social media users or consumers since they interact and send messages in a two-way communication. The nature of entertainment, the social media provide the users with that keeps the beneficiaries alert and absorbed in using them (see Chapter IV). In addition, the other interviewee (i.e. English teacher) held a similar view that *the social media were motivating tools because the youth used the Facebook and WhatsApp as a means of communiction* (see Chapter IV).

Young people construct identities in different ways. It is worth considering, for instance, a profile page, where photographs, music and 'about me' statements converge as digital texts. These make a dynamic screen – based text and can reflect the profile's owner' attitudes, experiences that are in turn inscribed into his/her text as he/she uses it to position herself among her audience (Dowdall, 2009). In brief, this text can be seen as a vehicle for negotiating his/her 'desired social identities' (Gee, 1996, p.91).

Learners' expose or engage or negotiate their identities by visiting several websites. It is worth looking at the learners' views regarding ranking of websites according to their preferences, compared to the data on world ranking in 2014 as provided in http://afrodigit.com/visited-websites-world/ . This source highlights data on the most visited websites as well as the most popular websites.

To begin with, data from the respondents' questionnaires indicated that the learners preferred to visit several websites and the following emerged on top of the list in the informants' first choice (see Chapter IV): www.facebook.com ; www.google.com ; www.yahoo.fr; www.gmail.com and www.inyarwanda.com on equal footing and last www.youtube.com and www.wikipedia.com as well were ranked on the same level.

The latest information of 2014 provided corroborates with findings from this study in a sense that www.facebook.com tops the list in the learners' ranking and the source of the world ranking websites based on Linkscape Web Index has similar results. The next website that attracted more viewers according to 2014 afrodigit.com was www.google.com which was also ranked second by Grade 11 learners. However, Grade 11 learners ranked www.yahoo.com third and the same website got a good position (i.e. 11th) among 100 websites that were the target for http://afrodigit.com survey.

Taking into account websites that attract more of the local consumers and that are hosted in the Rwandan world-wide-web directory, the findings from the questionnaire highlight www.igihe.com as the most popular website and this occupied the first position. In the second place, the respondents mentioned www.waptrick.com and www.twitter.com ranked third while www.skype.com was the fourth. According to the Rwanda Website Directory 'http://rw.abcmundi.com/' , www.igihe.com a news portal and website development tops the list of websites that receive a high turn up of online visitors.

The popularity of this website stems from the fact the informants identify themselves with their language identity implied via the use of Kinyarwanda, official and national vernacular; 'my national language, my identity' (Prosper, 2012; p.113) and as one of the media of communication hosted on www.igihe.com. Taking into account the linguistic configuration of the Rwandan population, approximately 99% of the population can speak Kinyarwanda (Rosendal, 2009), and roughly 90% of Rwandans speak only Kinyarwanda (LeClerc, 2008; Munyankesha, 2004). Therefore, the website is mostly likely to attract more of the Kinyarwanda speaking community. Besides, the learners who happened to be online visitors of the websites were most likely influenced by the digital resources which constituted the context of this study; access to the familiar language (or home language) (Gudmundsdottir, 2003) used or hosted on www.igihe.com.

The following section elaborates more on Facebook as a website that has attracted most the informants for this study. The learners reported that Facebook was among the top websites they liked the most (see Chapter IV). On this website, the users were busy doing several things, among others, making friends and chatting. Facebook friends can remain connected by posting status updates, commonly known as news feeds and having the latter made public to users' online friends. The status updates can help users stay connected by informing friends about the user's thoughts or feelings or other issues they might need to know (Abram and Pearlman, 2008; Kraynak and Belicove, 2010).

The main participants in this study (i.e. Grade 11 learners) indicated that they visited Facebook more often to get news about their old friends. This is why Facebook has been considered as a

representative of affinity spaces (Gee, 2004; Gee and Hayes, 2012) where people acquire social and communicative skills, and at the same time become engaged in the participatory culture of Web 2.0 (Ivala and Gachago, 2012, p.154). In an interview with an English teacher, he mentioned that his learners invited him over in this social network for a chat, especially for the purposes of developing their communicative skills in English and also noted that the youth liked visiting Facebook (see Chapter IV). Another piece of research conducted on university students had similar findings on the popularity of the Facebook and the participants in the study named it as one that is frequently mentioned in social media (Morgan and Peter, 2014).

5.6 Multilingual Practices and Digital Identity Construction

The section seeks to respond to the following sub- research question: How do multilingual practices shape processes of identity construction? From the learners' responses to the questionnaire and the focus group discussion, it is noticeable that they reflected a number of identities described under several factors. Before highlighting some of the learners' identities from their narratives, it is worth having a glance at some of the identities as depicted by scholarly works.

To begin with Zimmerman (1998) identifies three types of identity, namely discursive identities, situated identities and transportable identities. Firstly, discursive identities are the kind of identities a person has in a given speech situation as the conversation unfolds. In this context, the individual engages in different discursive practices such as interaction with friends. In the framework of this study, social networking sites also provide 'discursive' (Jacobs, 2007) spaces and interaction between people in chat rooms on social media and text messaging on phones can

be form of constructing discursive identities. In this case, learners in this study often talked to their interlocutors especially those with whom they shared common interests. Other forms of discursive identities that individuals create or construct are reflected through their posts/postings on SNS and these are channeled through the 'discursive choices and selective appropriation of symbolic resources in words, photos, videos…' (Chen, 2013, p.145).

Secondly, 'situated' identities are those that a subject adopts when engaged or involved in a particular social activity or identities which are explicitly conferred by the particular context of communication (Richards, 2006). In this instance, individuals enact some specific social roles, thus negotiating their situated identities (Lam, 2000). For instance, when two facebook users interact and share their life experiences as part of their lives, they thus reflect their situated identities. In the context of this study, the learners depicted the nature of their situated identities that is characterized by their involvement in chatting on Facebook with their friends with whom they socialized by exchanging news from both sides and by acquiring new friends.

The third kind of identities, as depicted by Zimmerman (1998) and Richards (2006) refer to 'transportable identities'. These are identities that one travels with across a variety of interactions. These identities extend beyond the physical boundaries of the classroom and beyond teacher-student roles and relationships (Murray et al., 2011). Besides, things such as social media, digital technologies (e.g. smart phones) can stimulate in the individual involved, his/her high level of commitment to these tools driving the participants from their 'selves' to a sense of belonging to a new space (e.g. social networking sites /SNS), thus constructing their transportable identities.

On this note, thanks to the data obtained from the focus group discussion which indicated that learners constructed 'transportable identities' when they aspired becoming software makers, movie makers or webmasters by simply visiting websites and appreciated what others did. They, therefore, moved from their 'selves' as learners to inhabit another sphere of creators of desired products. The same identities were negotiated when the research participants talked about the moves they did when using cell phones. They reported that they preferred writing in foreign languages, namely French and English when text messaging while they used Kinyarwanda in their talk. This is explained by moving from their initial identities as speakers of their national language to acquire a new identity as they wrote SMS in foreign languages which could be associated with an act of constructing 'transportable identities'.

As mentioned in the previous sections, the sample population of this research constituted Grade 11 learners who spoke Kinyarwanda as their mother tongue and French was the medium of instruction by the time this study was conducted (see Chapter III, Section 3.4).

From a sociolinguistics point of view, the learners' identities are historically constructed based on their language in education policies and linguistic background. The majority of Rwandans might speak 'native-like' code and this is associated with the 'Rwandaness' (Gafaranga et al., 2013) as well as the marker of 'national identity' (idem), as Kinyarwanda is the country's national language. In other words, the language is not only a sum of semiotic signs but also an expression of identity and links people with their life histories, and it is highly embodied in their native speakers (Janks**,** 2014).

Following the Government of Rwanda's decision to declare English as the Medium Of Instruction (MOI) in 2008, the concerned learners acquired a new identity which is rather imposed (Pavlenko and Blackledge, 2004) and not negotiable in a particular time and place. In the context of this study, the learners could not resist or contest this new linguistic development and they were not given room to suggest otherwise. In a focus group discussion with these learners, they noted that they had more classes in English and, as a matter of fact, they progressively lost touch with French because of less exposure to the language which was not used very much in their environment. As a result, English took over.

These learners have therefore acquired alongside their fellow countrymen additional identities from the three main foreign languages spoken in Rwanda: "Anglophones", "Francophones", "Kinyarwandophones", "Kinyarwanda-Anglophones", "Kinyarwanda-Francophones", etc. (Mbori, 2008). These are other forms of 'imposed identities' since the earlier mentioned labels were imposed or ascribed on them or considering their former countries of exile in part and for others (i.e. Kinyarwanda – Francophones), because they were born and stayed in Rwanda before the 1994 Genocide.

In view of this complex linguistic status, given that foreign languages are mainly learnt at school, they seem to be considered by the less-educated general public as "belonging to the educated others" (Maniraho, 2013). In spite of this, Grade 11 learners were beneficiaries of the exposure they had to the English language in several ways, be it at school, on social media or networks. Samuelson and Freedman (2010, p.203), for example, in their study on language policy in Rwanda report that among their interviewees, learners at secondary schools saw English as 'as

an important step towards greater opportunities for educational advancement and economic development'. Similarly, in the context of this study, there are commonalities in terms of looking at the learners' aspirations and/or beliefs towards English as MOI or medium of communication (see Chapter IV).

The next type of identity to be discussed here is the *assumed* identity. It is an accepted identity and the individual involved feels comfortable with and not interested in contesting (Pavlenko **and** Blackledge, 2004). In other words, you accept who you are and not how you see yourself (Bock and Mheta, 2014, p. 411). In this study, Grade 11 learners assumed that the hegemonic status of English as a dominating channel of communication worldwide was due to its association with the global and developed world. They believed that the fact that English prevails all over the world today or the fact that countries using English namely the Great Britain and USA are dominating the world, automatically the websites have to be dominated by the English language. Therefore, they constructed 'assumed identities' by accepting this fact and not having any ambition to contest it. The dominant status of English was apparent in their narratives in which they stated that English was the language of the internet '*Because it's the Americans' language'.*

Another multilingual practice that is worth mentioning in this study is what has been referred to as 'translanguaging'. Translanguaging is regarded to be similar to code-mixing in that it refers to 'multilingual speakers' shuttling between languages in a natural manner. It can also refer to processes that involve multiple discursive practices which can be transferred into one's own linguistic repertoire, freely and flexibly' **(**Park**,** 2013, pp. 50-51).

Learners, in this context, found an alternative way of meaning making whereby they engaged in 'languaging' activities, viewing language as action and a dynamic activity" (Bock and Mheta, 2014, p.371). Such instances of languaging involved 'code-mixing' or 'code- switching'. In the framework of this study, the learners reported that they used a 'mixed code' or mixed language especially while calling or sending SMS while communicating with friends or peers. The reported mixed languages were in Kinyarwanda and English. Besides, they stated that they had recourse to this languaging practice mainly to cope with difficult words. In short, this phenomenon can be referred to as 'translanguaging' (Bock and Mheta, 2014; Creese and Blackledge, 2010), and it is not simply the mixing of linguistic forms from diverse language sources. It involves a variety of identity articulations and negotiations within newly created social spaces. In a related context, such are social spaces like social networking sites where learners inhabit and construct diverse identities.

Alongside looking at Grade 11 learners' perceptions on how they engaged with the use of languages across online sources, it has to be noted that they had to do with negotiation of language use in the global online discourse context. Therefore, language is 'a loaded resource that is inextricably bound within the construction and negotiation of identities within the development of multilingual repertoires' (Clark, 2009, p.22).

In the ensuing section, attention is directed to several multilingual dimensions and practices that emerged from the learners' views who participated in this study. These are mainly related to the language use on cell phones, as well as on websites, and the status of the languages in Rwanda.

They reflect the role of the mother tongue and the potential or likelihood of a language loss in the era of new technologies.

5.6.1 Digital technologies and language configuration

This part of the study deals with discussion of data related to the following sub – research question 'In which languages or mix of languages do learners access digital technologies?' This section discusses data from learners' perceptions on their language use when they employed cell phones as digital technologies as well as their views on the language use on several websites they had opportunity to visit. It also discusses data related to the status or configuration of languages in the framework of this study.

Firstly, regarding the learners' language use on cell phones, data from the questionnaire gave the learners' perception on their linguistic practices while using their cell phones. The informants indicated that they used most the following languages in the order of preference: Kinyarwanda, French, English and Swahili (see Chapter IV).

This order makes some sense as it comes from the influence of the learners' linguistic background which is dominated by the mother tongue (i.e. Kinyarwanda); followed by French which is their L2 they have learned over years as both a subject and language of learning and teaching before the language policy shift which gave English a new status of MOI. The ranking of English in the third place demonstrates the learners' choice and how they felt about it. This phenomenon also relates to the learners' identity construction in several ways. One way can be

an instance when the learners used Kinyarwanda when talking one the phone, the medium was more appropriate with conversation or orality as a speech style and also associated with shared or national language identity of Kinyarwanda, which was common to the learners' interlocutors. (see Chapter IV).

Another way linked to the fact the learners employed a particular language, was the medium of communication, and a digital practice that predominantly attracted the informants' attention during their focus group discussion: text messaging. On this note, learners reported that while using SMS, they mixed languages namely Kinyarwanda, French and English as an alternative way for easy conveying a given message to friends or relatives. Thus, languages are not only used as medium of communication 'but also as an integral part of every human being's most intimate moments' (Bock and Mheta, 2014, p. 414).

Secondly, the data from the focus group discussion reported on the views of the informants on the language use on different sites they visited. In this case, they specified the language they found on a given website and the one they preferred to use when they were given a choice among several languages. This seemed to influence their identity in the choice of language online. Identity, as a marker of social and cultural differences, plays an important role in language choice (Warschauer, 2007; Eleta, 2014).

It has to be stressed, however, that despite the use of Kinyarwanda as a mother tongue on local websites for communication purposes, website visitors who are mostly non-English speaking users perceive the scarcity of online resources in their first language. They are also generally

appreciative when they can find information in their language (Eleta**,** 2014, p.30). If users have sufficient knowledge of English as a second language, they might search for information in English because they perceive English as a language with more content and of better quality.

With regard to the language choice online, there are a number of factors that influence learners' choice. Firstly, Kelly-Holmes (2004) maintains that the status of a language and its associated importance worldwide encourages its use online. This is observed by the responses obtained in the data from the focus group discussion where learners affirmed that they noticed the supremacy of English which gave them no other choice than staying on the web for a particular purpose. It has to be recalled that in view of what the leaners experienced with English hegemony online, they found themselves negotiating imposed identities.

Secondly, language choice could relate to the availability or lack of online resources in a language. Thirdly, the social context of interaction is another factor. English can be used for emails in the professional context, and as a vernacular language for personal communications (Warschauer, 2007). In the following section, the issue of the linguistic configuration and/or status of languages is discussed, that is, the status of the mother tongue as affected by the dominance of foreign languages and the apparent language loss following the power of technologies.

5.6.2. Power of technologies and Language Loss

To begin with, data from the focus group revealed that Kinyarwanda, the national and only vernacular language of the informants is believed not to be practical in chatting or text

messaging using smart phones. On this note, the informants reported on chatting using cell phones by means of SMS. They affirmed that they had recourse to shortening their messages for a number of reasons such as lacking enough space on their handset screen for text message or writing faster to save time. The same views are corroborated by a similar study by Mose (2013) on 'SMS Linguistic Creativity in Small Screen Technology'.

> Messages are compacted to save effort on the cumbersome keys. This makes texters to think clearly how they will phrase the words in order to put the point across with the least words possible with the character limit allowed, forcing creativity in the forms of abbreviation, rebuses, multilingualism and graphone among others (Mose, 2013, p.116)

The learners preferred foreign languages instead of Kinyarwanda, especially when they communicated using the SMS mode. This is likely to lead to language loss, particularly the local language or mother tongue. To counteract this, the Government of Rwanda instituted in 2012 a state based institution named Rwanda Academy of Language and Culture (RALC) (www.ralc.gov.rw) whose mission focuses, among other things, on language maintenance (in this context, Kinyarwanda). This is a process by which the concerned put an effort on keeping a given language in use by a particular speech community (Bock and Mheta, 2014).

Concerning the threat of language loss in the era of current technologies, the data from the focus group led to the assumption that Kinyarwanda is poor in shortened words, on the one hand, especially while texting messages to convey a certain message, and on the other hand that Kinyarwanda is a language with a culture of orality (i.e. Kinyarwanda would be fit for conversation, but not for SMS), which is allegedly doomed to die or be labeled as a dying mother tongue in this digital era (see Chapter IV). For example, the main participants in this research, the Grade 11 learners, argued that while greeting someone in Kinyarwanda you

would say ‘mwaramutse’, but in English ‘Hi’ would be sufficient. As a matter of practicality when text messaging, they would prefer the code that makes the communication easier, that is English. Therefore, shortening in SMS promotes brevity in text messaging (Döring, 2002).

In the context of language loss, it has been noticed that electronic media with dominant languages as medium of communication contribute more to language shift from minority languages, and this ‘occurs when the speakers of a language decide to make more use of another language – that is, they shift across to another language.’ (Bock and Mheta, 2014, p. 381). In the context of this study, Kinyarwanda was assigned the role as a medium of everyday interaction (Grenoble and Whaley, 1998). This explains the culture of orality that is characteristic of most of Rwandan speakers or users of the national language, including the main participants in this study (see Chapter IV). Researchers, on the other hand, are worried about the standard language use and linguistic issues that are at stake with the emergence of new technologies (Crystal, 2004). Today’s youth is exposed to the language of the technologies and is more influenced by the language from the ‘screen’ which direct people’s daily communication and more importantly, their language use (Kress, 2003).

Having explored and discussed some issues of multilingualism that emerged from the data presented in Chapter IV, it should be understood that being literate involves much more than simply knowing or having a command of the language. Learners also need to develop critical skills in the cultural dimensions of literacy, especially when mediated by the use of new technologies (**Lankshear et al.**, 2000). Thus, in view of the above assumptions, the next section

discusses the learners' views on the ways in which digital technologies can serve as a bridge to learn English as an additional language.

5.7 Digital technologies and ESL/EF language teaching and learning

The current study also aimed at understanding learners' perceptions of the affordances of digital technologies for English language learning in Rwanda. This objective is conveyed in a related research question: What are learners' perceptions of the affordances of digital technologies for English language learning in Rwanda?

This section discusses the data concerning ways to build bridges between learners' existing interests and/or engagement with digital literacies and the current school curriculum (Lankshear and Knobel, 2008). The analysis and the discussion in this section are carried out within the relationship between theories of SLA and post-structuralism. SLA and additional language learning in the context of this study are seen as informed by recent post-structural social theory and 'represents a shift from seeing outcomes of encounters with languages only in linguistic or meta-cognitive terms…'(Block, 2003, p.131). In the following discussion, attention is directed towards post-structuralist approaches to the study of social factors in second or additional language learning which constitute the theoretical framework of this study.

The analysis of the informants' views on bridges between their digital practices and English language learning process is done following the social lens on language learning that encompasses three key aspects: (1) language as symbolic capital and site of identity construction, (2) second language (L2) learning as language socialisation and (3) L2 users as agents (Cook,

2002). In the second place, the analysis and discussion take into consideration scholarly contributions to the possibility of integrating digital technologies or media in ESL/EFL context.

5.7.1 Language as symbolic capital and site of identity construction

Linguistic practices are regarded as a form of symbolic capital, which can be converted into economic and social capital (Bourdieu 1991, 2000). Samuelson and Freedman (2010, p.203), for example, in their study on language policy in Rwanda report that among their interviewees, students at secondary schools saw English as 'as an important step towards greater opportunities for educational advancement and economic development'. The informants, the learners in this study, argued that English was the dominating discourse on websites and that it prevails over the linguistic ground throughout the world today. They thought that this was due to the assumption of the supremacy of countries using English, namely the **USA** and Great Britain.

This explains that in many cases, speakers of non- African languages including Rwandans, aim to acquire 'linguistic capital' by learning those languages which they perceive to be 'conferred with certain legitimacy, credibility and authority, in addition to their potential to grant their speakers access to top-level employment and economic opportunities' (Rosendal, 2010, p.316). In spite of the ongoing dominance of former colonial languages over the Internet, other languages should play a part in developing ICT by having local languages online which implies that 'there is no monopoly on the world wide web and each and everyone, if competent, can take part in the expansion in whichever language they prefer' (Halvorsen in Desai, Qorro and Brock-Utne, 2010, p.330).

Language as an element of identity construction has also been conveyed in the learners' perceptions on the English language and its use on social media. There is peculiarity to this matter, that is, the interactional nature the language learners benefit from. Learners indicated that considering the way they interacted with friends on the Facebook, they ended up acquiring the basic everyday communication language, and eventually became more conversant with English (see Chapter IV). In other words, language is a site where learners on an individual, social, or institutional level, are constantly building and negotiating identities throughout their lives, through interaction with others (Jones and Thornborrow, 2004).

5.7.2 Second language (L2) learning as language socialization

Poststructuralist approaches reconceptualise L2 learning as 'an intrinsically social, rather than simply cognitive - process of socialization into specific communities of practice' (Pavlenko, 2002, p. 286). These approaches also refer to L2 learning as 'situated learning' (Lave **and** Wenger, 1991; Ochs, 1993; Wenger, 1998) which emphasizes the critical importance of context in language learning.

Some of the participants in this study implicitly referred to interactional occasions they had with their peers as a source of uplifting their English proficiency by speaking and writing in English (see Chapter IV). Considering the learners' perceptions, one would notice that beyond the entertainment nature of the chat room where they met friends, they were also exposed to English as an additional language in a 'situated' learning space which is rather social with interactional opportunities that learners explore with motivation (Pavelenko, 2002).

While examining the context in which learners used the different digital technologies, the social context has been found to be a primary factor as it shapes the use of new technologies. Therefore the social context in which digital technologies are used are important (Snyder and Prinsloo, 2007, p. 175).

5.7.3 Second Language users as agents

The notion of 'L2 users as agents', implies that learners are no longer seen as producing 'output' or just mere recipients of 'input' but rather as 'individual agents whose multiple identities are subject to change over time' (Pavlenko**,** 2002, p.292). In the context of this study, English Second Language learners in Rwanda were seen as actively investing in multiple sources of knowledge and identity construction within the digital spaces in which they interacted.

Grade 11 learners reported that their teacher would give them work to do independently and by doing so, they had more time to practice their English. In this respect, they could read much on the internet and tried to get the meaning of the texts. Sometimes they had to summarise the information and this helped them in other subjects across the curriculum. In this case, the learners are considered as not as breastfeeding beneficiaries but rather agents in their own learning process. In related development, there is need for a 'third' as well as 'textual space' (Canagarajah**,** 2007) where students can interact in an informal setting and in a digital space while accessing different and varied textual forms with 'divergent varieties of English' (Canagarajah**,** 2006) to develop their language proficiency.

In an interview with one of the English teachers to determine whether visiting online chat room or social media could be a powerful motivation for language learning, ET acknowledged the motivational effect of social media such as the facebook and WhatsApp. He added that while chatting on Facebook some of his learners and friends on this platform interacted with him in English. This in the end, according to the same teacher, served as a good opportunity to teach his learners how to use these technologies. Thus, teacher self-disclosure via social networking 'can increase motivation and improve classroom climate' (Mazer, Murphy and Simonds, 2007, p.11). Language teachers can also benefit from the fact that there is an increase of a wide range of text forms associated with information and multimedia technologies to facilitate teaching and stimulate learning (Harran and Olamijulo, 2014).

In view of the above, the potential of technology to radically change the experience of learning languages has to be noted. New cultural forms and leisure activities such as visiting on-line chat rooms can be powerful motivations for the development of new language learning identities (Block and Cameron, 2002).

5.8 Conclusion

In this chapter, attention has been directed to data analysis and discussion of findings derived from Grade 11 learners' responses to their questionnaires, focus group discussions, as well as from individual interviews with English and Computer Class teachers and the ICA. This study brought about additional data that were also subject to analysis and discussion; these were obtained from field notes in light of the ethnographically informed principles through the non-participant observation method. In addition, this chapter analysed and discussed results and/or

findings through the lenses of post-structural social theories of identity as well as from Bourdieu's notion of habitus, field and capital.

It has to be noted that the process to the data analysis and discussion has been conducted with an attempt to reach the research objective that was to investigate the ways in which Grade 11 learners used digital technologies to negotiate new identities in two or more languages and then to draw out the implications for English language learning in the multilingual context of Rwanda. As it is the case all over the world, Rwandan youth are not spared; the youth especially of the developing world are to a great extent influenced or shaped by technology and dependent on it.

Therefore, there is a need for Rwanda and other developing countries, to provide education with opportunities for technology to change the experience of learning languages and form new language learning identities, i.e. visiting on-line chat rooms as powerful sites of motivation (Block and Cameron, 2002).

Chapter Six: Summary of Findings, Conclusions and Recommendations

6.1. Introduction

This study explored the ways in which Grade 11 learners used digital technologies to negotiate new identities in two or more languages and then to draw out the implications for English language learning in the multilingual context of Rwanda. In this chapter, I summarize the key findings around three key aspects of the scope of this study, namely, access to digital technologies and/or ICT related tools; negotiation of identities across multilingual digital technologies and educational implications for using digital technologies in SL teaching and learning.

In brief, the first part of data analysis of this study attempted to answer questions on learners' digital practices, as well as how they mixed languages to access digital technologies and to communicate meaning in different modes.

The second part responded to the question of language mix the learners used when accessing the different digital technologies. In addition, this research came up with findings related to how learners' multilingual practices shaped their identity construction. The third aspect of data analysis examined learners' perceptions of the affordances of digital technologies for English language learning in Rwanda.

This chapter summarizes the major findings and their implications for utilizing digital tools to enhance English language learning. In other words, the chapter recaps the major findings and

secondly, it draws conclusions, thirdly provides some recommendations and areas for further investigations It also outlines the limitations of the study.

6.2 Summary of Findings

6.2.1. Access to digital technologies

The issue of access has been conceptualized and debated through the lenses of Bourdieu's post-structural social theories as well as Warschauer's model of access that helped me to elucidate the nature of the learner's commitment and engagement with several digital tools.

To begin with, from Bourdieu' post-structural theory, this research indicated that the 'habitus' or the social dimensions the learners were involved in influenced their engagement with several digital technologies. To be more specific, findings demonstrated that learners had some dispositions or preferences that motivated them to interact with friends (using different social media they accessed online or via different websites), or relatives with whom they shared common interest. These dispositions are referred to as their social background or social dimensions as urban learners or digital natives who grew in a society where they appreciated several people like music stars as they indicated in the data (see Chapter IV).

In the same context, Bourdieu's concept of 'capital' has also been reflected in learners' view of their access to computer skills and/or knowledge. In fact, the computing knowledge is not only economic but also social and cultural (Pishghadam, 2011). These two angles of 'capital' were, in the context of this study, understood as powers that determined the learners' chances they would get while learning to handle computers. Findings also led to the assumption that the easier or

closer access they had with cultural (i.e. the acquired knowledge at school) and social capital (i.e. family support while learning computer skills), the more successful they might be in their school subjects, which at the end is likely to guarantee success.

In relation to Warschauer's model of access, this study was able to identify the following:

(1) material access' linked to the learner's access to the internet connection

(2) skills access' concerning the learner's ability to interact with computers and communicate with peers or fellow friends by typewriting

(3) usage access' associated with the learner's opportunity to use ICT facilities

(4) mental access that is involved in the person's motivation to use the computer and when he/she is connected to the internet to use social networks

(5) access to human resources

The findings indicate that learners interacted with another form of access closely related to material access (cf. earlier discussion) i.e. 'physical resources' (Warschauer, 2003) which are a means of access to internet connectivity and digital resources. Digital resources include the digital content which the learners liked to listen to or watch, depending on the availability of certain resources (e.g. music, movies, etc.). All the above categories of access were applicable to the research participants in a way or another with digital technologies or related tools.

However, it should be stressed that the digital divide has also been noticed among the informants' perceptions around this matter. In this instance, some of the learners, mainly coming from the rural region expressed their concern over lack of easy access to digital or computer

facilities (Galuszka, 2007) in their home region, a view they shared with their Computer class teacher (see Chapter IV). This state of affairs is of concern in a relatively way despite the commitment of the Rwandan government to invest more in the ICT sector (Ministry of Youth and ICT, 2014). The next section addresses more specifically the issue of Construction of Multiple digital identities.

6.2.2. Construction of Multiple digital identities

This study also came up with findings that showed that Grade 11 learners engaged with a number of multimodal digital technologies (some of which were audio and video), comprising a variety of applications of meaning making and distributing messages (Jewitt and Kress, 2003). Another important finding is that learners' digital practices converged around local and global forms of communication via internet use, texting, emailing, etc. i.e. digital literacies they shared with other people of the same generation worldwide. Examples of local content they had access to were www.igihe.com whose main focus was news contents and www.facebook.com, a global social network. It has to be noted that the participants to this research got involved in 'youth literacies' that are said to be fluid and hybrid. That is, they utilized a variety (i.e. fluid) of technologies such as computers, cell phones and the latter combined, in most of cases, elements of audio and video content (i.e. hybrid). Grade 11 learners reported their ability to negotiate a range of identities and these findings verified the research objective that was meant to investigate the ways in which Grade 11 negotiated new multilingual identities using digital technologies. A special emphasis was to look at how their multilingual practices shaped their identity construction (see Chapters I, VI & V).

Learners created a form of global digital identity by simply interacting or engaging with various multimodal literacies with a range of digital media in a bid to construct ties with different people and address issues of their interest around the world. Thus, they negotiated a global network identity as they became closer with online peers or fellows they met. For instance, on skype or Facebook they were so much immersed into a digital network that seemed to take their psyche and lives (Thomas**,** 2007).

The findings also showed that the learners seemed to construct multi-layered or non-static or fluid identities such as assertiveness, self-esteem, social identities (Gee, 1996), the national identity versus national language, 'Rwandaness' (Gafaranga, Niyomugabo and Uwizeyimana, 2013), to name but a few.

Learners appeared to be open to new horizons by aspiring to create their own websites, thus constructing a kind of assertive identity which manifests itself in a form of achieving self-desired goals. In the same vein, they negotiated their self-esteem and they indicated that by owning their new product (i.e. websites). In other words, they aspired to become popular digital natives (see chapters IV& V).

Another set of identities Grade 11 learners constructed and whose pertinent findings are presented here are the situated and transportable identities. Firstly, the learners reflected on their experiences when they visited social media sites such as the Facebook. Their engagement while chatting with its users such as friends, school fellows, etc. or interacting and sharing their lives

with new encounters constituted social activities that are part of negotiating their situated identities.

Secondly, the Grade 11 learners constructed 'transportable identities' by letting themselves to be driven from their 'selves' to acquiring new identities. For instance, when they dreamt of becoming software makers, movie makers or webmasters by visiting websites and appreciated what others did, they dwelled on another space inhabited by their desired products. These identities were also negotiated when the learners narrated about the moves they did when using cell phones by moving between languages i.e. from the use of their mother tongue to the utilization of a foreign code (e.g. English or French) whereby they text-messaged in foreign languages or talked in the same languages. They then acquired new identities, the 'transportable' ones.

In addition, it is worth noting the 'imposed' identities the learners constructed when the 2008/ 2009 language policy shift provided English the status of being the sole MOI in Rwanda. In the framework of this study, the learners could not negotiate to revisit the already decided policy or resist or contest it; they could not suggest otherwise. It has to be recalled that they used and learned French as medium of communication and LoLT. Assumed identity is another form of acquired status the learners negotiated by associating English with Americans or United States of America. Therefore, they assumed that English was perceived as the language of the powerful countries which gave orientation towards its current hegemonic status. In the following section I report on the findings related to how the learners perceived their use and engagement with

different languages while they were exposed to different media such as cell phones or Social Networking Sites (SNS).

6.2.3 Negotiating digital identity through Social Network Sites

Findings proved that learners were so much immersed in visiting or engaging with SNS that fall under what has recently been referred to as 'Web 2.0'. The latter is an online platform which online users make use of to interact, share and perform different activities, focusing chiefly on social media. Thus in this research, findings indicated that Web 2.0 attracted most of the Grade 11 learners' attention. It has to be recalled that one of the learners in this study mentioned aspiring to be a webmaster and another one preferring to be software specialist and others dreaming of using web applications to post casts, make videos or movies (Anderson, 2007).

Worth of mentioning here is also the popularity of Facebook. The main participants in this study (Grade 11 learners) as well as their teachers who were part of the research acknowledged that this SNS was far away popular compared to their social networking sites counterparts (see Chapters IV & V). Its reputation draws from the fact it gives room to countless online or internet users to construct and keep profiles of information for private use and interact with each other in a variety of ways (Aleman and Wartman, 2009). While talking about the fame of Facebook, data from ranking websites are revelatory: the 2014 data provided by http://afrodigit.com validates findings from the participants' views that www.facebook.com comes on top of their favourite sites and the world ranking websites based on Linkscape Web Index has similar results.

6.2.4 National Language Identity and the digital world

The study also noted that the learners' engagement with online media pushed them to be plunged into associating themselves with sites of miscellaneous functions and purposes namely, www.igihe.com , a popular site with a variety of menus and whose medium of communication is mainly Kinyarwanda, among other languages used on the platform. The other site, www.igihe.com drew its popularity from the fact that its majority users spoke Kinyarwanda (Rosendal, 2010), and this seemed to stimulate their sense of language identity reflected in the official and national vernacular; 'my national language, my identity' (see Chapter V). In the same perspective, they consequently constructed the 'Rwandaness' as a marker of national identity linked to their national language.

The other multilingual issue worth mentioning here is the 'orality' of the Kinyarwanda language, a specificity that emerged as a characteristic of the national vernacular. This linguistic phenomenon is part of the common or shared identity for most Rwandans which is recurrent in their everyday communication, especially when they want to convey more of the intimate message to their interlocutors.

Despite the culture of orality associated with Kinyarwanda, it has also to be noted that learners who participated in this study observed that the language attracted the learners' attention when they visited several websites and the main one being www. igihe.com which according to the Rwanda Website Directory 'http://rw.abcmundi.com/' , www.igihe.com (i.e. news portal and website development) was ranked the first among websites that receive a high turn up of online visitors (see Chapters IV & V).

6.2.5 Translanguaging as a resource in a digital space

The use of the national vernacular Kinyarwanda emerged as the most significant characteristic of Grade 11 learners' linguistic status in their digital practices. In actual fact, the learners' sense of belonging and attachment to the language was apparent.

However, it should also be stressed that in the era of technologies, some languages are doomed towards a progressive loss (Crystal, 2004). Regarding the threat the Kinyarwanda language could face in this era of current technologies, the findings indicated that Kinyarwanda was poor in terms of expressions, especially when learners were texting messaging to convey a certain message. Therefore, this led to the assumption that most users would prefer the foreign language such as English in replacement of their mother tongue as an alternative, while communicating and shortening words through text messaging which promotes brevity (Deumert and Masinyana, 2008; Döring, 2002).

It has to be mentioned that bilinguals employing the electronic medium like SMS writing as mentioned earlier, make use of a variety of global non-standard features which permit them to achieve brevity of expression and to adjust speed while communicating (Deumert and Masinyana, 2008**).**

The findings of this study demonstrated that 'translanguaging' is of significance for learners while engaging with digital technologies. This is explained by having a close analysis of the learners' narratives on the way they perceived their linguistic practices while using different digital technologies, mainly the cell phone.

6.2. 6 Digital technologies in Second language teaching and learning

Through the lens of post-structural theories to the study of social factors in second or additional language learning, the study findings show that technology served as a bridge between learners' digital practices and their learning of English as an additional language, as discussed in the previous chapter. This could be understood under these three dimensions:

(1) language as symbolic capital and site of identity construction,

(2) second language (L2) learning as language socialisation and

(3) L2 users as agents (Cook, 2002).

Firstly, language is seen as symbolic capital and site of identity construction. In the framework of this research, findings showed that learners' perceptions of English, reflect power relations, i.e. English is conferred a status of symbolic capital. This is explained by the fact learning English is referred to as a significant phase towards greater opportunities for educational and economic development (Rosendal, 2010; Samuelson and Freedman, 2010).

In the same vein, the language is also considered as a site of identity construction. Learners in this study interacted with a number of digital technologies users; be it on different websites or cell phones and whereby the language (i.e. English) served as a medium of communication and they ended up being conversant with it. Thus, they acquired a certain identity as language learners or interactional actors seen in any situation at individual, social or institutional levels (Jones and Thornborrow, 2004).

Secondly, second language learning is viewed as language socialization. In this context, in addition to the social and cyber space such as the chat room, learners met their fellow classmates or friends, who also had exposure to English as L2 or an additional language. This was in a 'situated' learning channel which is rather a social and interactional setting that learners explored with motivation (Pavelenko, 2002).

Thirdly, L2 users are considered as agents. More specifically, L2 learners were seen as knowledge producers than consumers of the classroom materials. Besides, they were actively committed to draw knowledge from multiple sources such as several digital spaces with which they interacted. For example, the participants of this study acknowledged having assignments from their teachers whereby they were required to visit online sites to enhance their communication skills in English by summarizing texts and acquiring new vocabulary. Having summarized the major findings for this study, the next step is to make conclusions.

6.3 Conclusions

In view of the discussions of the previous chapters and the findings of this research, I can draw the following conclusions:

Firstly, it has to be stressed that the findings of this study support to a greater extent the initial premises expressed in the research objectives and questions, and nullify some of them to a lesser extent. In this respect, looking at the main objective of this research, the findings have highlighted how Grade 11 learners used several digital technologies to construct new identities in two or more languages. The findings also outlined, from the post- structural perspective, the

main aspects under which bridges can be built between language use and the learners' different forms of opportunities that support their English or additional language learning such as digital technologies, Web 2.0 and so forth.

This suggests that the main objective of this study has been addressed. Data obtained from my field work, mainly associated with visits to cyber café and non- participant observations, as well as recent literature, indicated that some youth of the same generation as the target research participants of my study, showed similar practices and behaviours in terms of engagement and commitment they had towards digital tools as reflected by the study findings. So it can be concluded that youth, globally, tend to engage in similar digital practices as they navigate their digital identities.

With regard to the learners' use of their different linguistic repertoires, either in using cell phones or accessing several websites, it has to be noted that the findings supported the rationale behind the set objectives that were: to identify which languages or mix of languages learners access digital technologies and to examine how these multilingual practices shaped processes of identity construction. To be more specific, starting from the identification of languages or mix of them, Kinyarwanda, French and English were the main languages as per the learners' choices and preferences while chatting with peers, fellow friends or relatives (see Chapters IV & V). Concerning the language mix, the findings indicated that translanguaging is a linguistic and/or multilingual resource. Regarding how the learners' multilingual practices shaped processes of their identity construction, it has to be noted that the sense of belonging to the national language, i.e. Kinyarwanda, the national vernacular and/or lingua franca for most Rwandans has led to the

identity of ‘ Rwandaness (Gafaranga, Niyomugabo **and** Uwizeyimana, 2013), the language identity as well. Therefore, learners’ sense of belonging and identity surfaced, despite their exposure to other languages in the digital space.

Secondly, it has been observed that in the context of digital literacy, learners experienced different forms of access to digital technologies namely skills, mental or physical. Therefore, it is imperative that in the framework of establishing the relationship between language and digital literacy, their various forms of access inform or strengthen their process of learning English as additional language. It has to be stressed that one of the research questions of this study was ‘What are learners’ perceptions of the affordances of digital technologies for English language learning in Rwanda?’ On this note, it is worth noting that basic competence in ICTs or digital tools vitalizes the language and influences the language learning (Halvorsen, 2008). This suggests that there is a positive relationship between the different forms of digital access and language learning, especially if there are sufficient and adequate resources.

In view of the theories that regard access as a multi-faceted phenomenon, there is room for questioning the need for ICT or digital tools to be involved in teaching and learning using the local languages in a bid to construct meaningful knowledge (Gudmundsdottir**,** 2010). Thus, adopting ICTs and digital tools to the local context of Rwanda could be viewed as an alternative solution to the threat of the loss or death of national languages in the 21st century of emerging technologies.

Thirdly, the findings of this research indicated that learners constructed a number of identities such as assumed, imposed, transportable identities. This implies that learners experienced some fluidity of identity negotiation as a whole. In view of the post-structural theories to identity propounded in this study, what contribution did the learners' negotiation of the earlier identities have to their sense of belonging to the global digital identity? Was there any sense of collective, shared or individual identity apparent in the way they engaged with different digital technologies?

This research looked at issues of multilingualism that were mainly observed through learners' perceptions on their linguistic practices while engaging with digital tools when using phones in calling and text messaging, as well as visiting social networking sites, interacting with friends via chat rooms. What impact or difference has the learners' linguistic background as French speakers had on the way they perceived their identity as learners of English as additional language? It could also be a question of looking at the learners' language proficiency in either French or English if we have to examine their investment in any of the languages they learn at school, versus the language- policy shift that Rwanda experienced in 2008 whose implementation had impact on the target research group. The coming section addresses a number of recommendations that are geared towards attracting attention of stakeholders as well as suggesting areas for further investigation.

6.4. Recommendations

This research proposed to answer a number of questions but due to its limited scope, some issues remain unresolved. This calls for further research. It is against this background that I recommend the following to be given more priority in future research:

Through the lenses of post-structural theories to SLA and/or additional language learning, learners can have access to knowledge beyond the classroom context by socializing with peers of English speaking background online or by acting as agents of change. In other words, there needs to be a shift from treating learners as consumers of knowledge only, to producers of input. It is of paramount importance that future research should focus on teachers who should also capitalize on face-to-face interaction and integrate the virtual or online channel in order to allow their students to create their own learning space whereby they construct their identity as adolescents (Eamer, Hughes and Morrison, 2014).

However, it should be stressed that 'within every productive network there is always the possibility for resistance' (Foucault, 1980, p.191**).** The main stakeholders in education i.e. instructors who spend most of their time with learners, employing supporting tools such digital or ICTs tools should positively engage with their students are at the risk of utilizing irrelevant materials they obtain from the global media or alien cultures such as pornographic materials (cf. Chapter IV).

Given the language policy shift that Rwanda initiated and implemented in 2008, it appears that learners felt its impact on their learning. Regarding the findings of this research, the learners had to negotiate an imposed identity due to the fact that they had to accept the language policy in

education whereby they study in English as the sole medium of instruction. Therefore, it would be advisable that stakeholders in English teaching and learning understand 'the direct and powerful impact of social, political, and economic forces upon their classrooms and how these forces affect students' lives" (Tollefson, 2000, p.19). Therefore, further research should focus on the impact of these factors in relation to emerging technology in education.

This study does not pretend to be exhaustive and perfect. The next section presents some limitations of the study that need to be alluded.

6.5. Limitations of the study

It should be noted that research is a human construction; it might have some flaws. The current research came across several limitations that are worth mentioning here.

To begin with, having conducted an interdisciplinary kind of research (i.e. moving across key areas of research in digital literacy, multilingualism and identity and Second or Additional Language Acquisition, it has not been easy to explore in depth all issues falling under its scope from the onset of this research journey. Therefore, some areas that need more attention in future are addressed in Section 6.6.

In view of the 2008 language policy shift in education (see Chapters I, VI & V) and the current dominance of English in Rwanda which has limited learners' school language choices (Mbori, 2008; Samuelson and Freedman, 2010), to some extent it constrained my informants to express their opinions and attitudes openly; especially the focus group discussions. In this case, language issues complicated the smooth running of the research which was contextualised in a multilingual setting. In this case, I had anticipated that informants would come across language

barriers associated mainly with English as additional language while responding to focus group interview questions. Accordingly, the focus group interviews were held in Kinyarwanda, the first language or language of inheritance of the research participants (i.e. Grade 11 learners).

A further limitation is that conducting research in one or two urban schools did not give an idea of how learners in rural schools perceived or experienced the phenomenon under investigation. That is why further research is recommended (see section 6.6). Also, the Grade 11 learners in this study did not represent views or realities from other learners of the same age or specialising in the same subjects from other schools of the country. Their views did not reflect those of Grade 12 who at the time of the data collection were about to complete their high school studies and who were likely to construct new identities in studying or working environments. It is worth noting that the findings of this research would also not be generalisable to learners from other schools performing less well in the same region.

Another limitation of this study is that I could not observe in depth the learners' digital and multilingual practices in and outside classroom contexts. For instance, to observe whether two or more learners sit together and surf, and the language/s they talked to each other while doing this was one of the challenges. Besides, this study could not collect online data by means of tracking website use and the content of different websites visited by the learners. This was initially meant to identify the research participants' language use online and the reasons for their choices of specific languages and to respond in a more consistent way to the objective related to identifying which languages or mix of languages they used when accessing digital technologies.

On this matter, a major constraint has been ethical considerations as the internet café management (where the exercise had to take place) was reluctant to allow me to proceed with this task. This is due partly to the unfamiliarity with internet online research in Rwanda and the issue of the online privacy, though the informants' confidentiality was guaranteed (cf. Chapter III, section X).This could be established in further research (see section 6.6).

6.6. Suggestions for further investigations

This study was conducted with the main objective to investigate the ways in which Grade 11 learners used digital technologies to negotiate new identities in two or more languages and then to draw out the implications for English language learning in the multilingual context of Rwanda. The scope of this study only took into account the urban setting. It is recommended that a large scale study be undertaken and cover the rural schools as well.

In addition, in view of the earlier mentioned limitations of this study, further research could be established in the area of investigating learners' surfing internet and identifying their language use online and the reasons for their language choices. Adopting an 'ethnographic approach' in for a similar study would be advisable as this form of methodology would allow the researcher to focus more on studying particular aspects of the learners' everyday life and practices.

Further inquiry could be carried out in examining gender disparities and similarities on the subjects' commitment or engagement to use digital technologies. This type of research would inform more the body of knowledge in the area of digital literacy. This is necessary because this study was only limited to looking at learners' perceptions on their digital practices, without

taking into consideration gender differences or similarities and findings do not reflect the gender aspects.

Another research could be done in examining learners' perceptions on their digital practices by employing a quantitative research approach. This study could consider variables such as age, gender, place of residence and in the end to determine the relationship between them. It should be remembered that this study employed, among other data collection tools, a questionnaire which provided baseline information on the informants' digital practices. Had this research had recourse to a mixed method approach, the research outcomes could have reduced to the minimum subjectivities associated with informants' views that were not quantifiable. Fortunately, findings are significant and satisfactory in light of the methodology and theoretical approach that informed this research.

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APPENDICES

Appendix A: Information sheet for research participants

Title of the research project:

Constructing multilingual digital identities: an investigation into Grade 11 learners' digital practices in relation to English language learning in Rwanda

Researcher: Mfurankunda Pravda

Contact details: 0731970854 or 2366819@uwc.ac.za

Department: Language Education

Institution: University of the Western Cape, Cape Town.

Research aim

The aim of this study is to investigate the ways in which Grade 11 learners use digital technologies to negotiate new identities in two or more languages and then to draw out the implications for English learning in the multilingual context of postcolonial Rwanda.

Ethics

Permission has been obtained from the Schools Governing Bodies of Karubanda Junior Seminary and Notre Dame de la Providence to have access to these two institutions. In the same vein, informed consent shall be obtained from the research participants seeking their cooperation and request to engage the learners as participants for the research. The attached letter clearly states the aims of the study. Only learners with positive, signed consent from their parents will be consulted for voluntary participation and briefed on what the research entails. The participating

learners however will continuously be reminded of the right to decline to be interviewed or to carry the audio recorder and to withdraw without any consequence and at any stage of the study. The study will adhere to the school code of conduct and treat all questionnaire and interview questions with the optimum sensitivity they deserve. Learning will not be disrupted in any way. All consultations with learners shall be done during their spare time. Confidentiality of identity and information given will be ensured. Similarly, all participant details, including the site, will be given fictitious names and the original transcripts accessible only by the researcher and supervisor. Transcripts of audio recordings will be taken back to participants for retrospective commentary and permission requested again to use them.

How the findings will be used

All findings will be confidentially handled by my supervisor and me. This study will generate insights on urban learners' digital practices in and out of school and the way they negotiate new digital identities using their multilingual repertoires. This study will also draw implications for language teaching policy and practice and use of digital technologies in language learning practices in Rwanda. Finally, this research will indicate the learner's views as to how their exposure and/or access to digital and linguistic resources shapes their ability to construct new, desired identities within local, national or global communities.

Appendix B: Consent Form

Title of the research project:

Constructing multilingual digital identities: an investigation into Grade 11 learners' digital practices in relation to English language learning in Rwanda

Researcher: **MFURANKUNDA Pravda**

Contact details: Tel **0731970854 & email: pmfurankunda@gmail.com**

Dear Parent /child guardian

I have been granted permission to investigate into Grade 11 learners' digital practices in relation to their English language learning at Karubanda Junior Seminary and Karubanda Notre Dame de la Providence as part of my research on multilingualism and identities at the University of the Western Cape in South Africa. I would like to request your written permission on this form is required for me to do this research.

Goal of the study

My study aims to investigate the ways in which G11 learners use digital technologies to negotiate new identities in two or more languages and then to draw out the implications for English learning in the multilingual context of postcolonial Rwanda.

Research methods

I will administer the questionnaire to the students during their spare time. A few learners will also be asked for interviews to find out their views on the topic under discussion. I will also be observing learners in class and in computer labs on or off school premises.

It is voluntary and anonymous

Your child does not have to participate. There will be no penalties against your child for not participating. Learners only have to answer the questions they want to answer and they may stop at any time. The purpose of the research will be explained to learners and they will be able to ask questions. Your child's privacy will be protected. No names will be recorded or attached to the research report. Each participant will be allocated a number (e.g. M 1 or F2). A copy of the final research report will be given to the schoo1.

Thank you,

MFURANKUNDA Pravda

Please sign and give this form to your child to bring back to the school. Thank you for your help.

I, (name) ……. do / do not (please circle one) give permission for my child to participate in the research.

Parent's signature: …….

Child's name: ……

Date:

Appendix C: Translated version of the consent form in French

Titre du projet de recherche:

La construction des identités digitales multilingues: une étude sur les pratiques digitales des éleves des cinquieme années apprenants l'anglais comme langue étrangere au Rwanda.

Etudiant – Chercheur: MFURANKUNDA Pravda

Adresses: Tel 0731970854 & email: pmfurankunda@gmail.com

Cher Parent,

J'ai fait une requête auprès des autorités des écoles secondaires précisément du Petit Séminaire de Karubanda et celle de Notre de Dame de la Providence pour pouvoir mener une enquête auprès des élèves des 5ème années dans le cadre de ma formation doctorale à l'Université de Western Cape en Afrique du Sud. C'est dans ce contexte que j'ai besoin de votre consentement écrit pour pouvoir faire cette recherche.

Objectif principal

L'objectif principal de ma recherche est de s'enquérir sur la pratique des moyens digitaux des élèves en relation avec leur apprentissage de l'anglais dans un contexte multilingue du Rwanda. J'observerai également les apprenants en classe et dans les laboratoires d'informatique sur ou hors des locaux de l'école.

Méthodologie de recherche

Les élèves procéderont à remplir le questionnaire qui leur sera réservé et puis un certain nombre d'élèves seront soumis à une interview pour donner leur avis, opinions à propos du sujet de la recherche en question.

La participation à la recherche est volontaire et confidentielle/anonyme

Votre enfant n'est pas sensé de participer à cette recherche. Il n'y aura pas aussi des sanctions pour ceux qui n'auront pas pris part à cette étude. Les apprenants n'ont qu'à répondre aux questions de leur choix et ils ont le droit de se désister n'importe quel moment. L'objectif de la recherche sera expliqué aux élèves et ils auront l'occasion de poser des questions et/ou de demander des éclaircissements.

L'identification de votre enfant est strictement confidentielle. Aucun nom ne sera enregistré ou publié en annexe de la copie de la thèse de doctorat. Au terme de mes études, une copie de la thèse sera réservée pour le compte de la bibliothèque de l'école.

Je vous remercie de votre franche collaboration.

MFURANKUNDA Pravda

Veuillez apposer votre signature sur ce document et donnez-le à votre enfant pour qu'il puisse l'amener à l'école. Je vous remercie de votre assistance.

Moi, (nom) ……accepte/ n'accepte pas (encercler la réponse correcte) de donner mon enfant la permission de participer à cette recherche.

La signature des parents ……

Le nom de l'enfant ……

Date :…….

Appendix D: Questionnaire for learners

Research Topic:

Constructing multilingual digital identities: an investigation into Grade 11 learners' digital practices in relation to English language learning in Rwanda

I. General introduction.

We would like to ask you to help us by answering the following questions concerning the area described in the research topic. This study is conducted by MFURANKUNDA Pravda as part of his PhD studies in the Faculty of Education at the University of the Western Cape, South Africa.

Please note that this is NOT a test. So, there are no 'right' or 'wrong' answers. We are interested in your personal opinion. Please give your answers sincerely, as only this will guarantee the success of this research. The information obtained will remain confidential. In most cases just tick (✔) or cross (✕) applicable response. For open-ended questions, write your answers in the space provided. Thank you very much for your help.

II. Personal and Demographic Data

Surname: …….. …….....

First name(s): ……..…….....

School name: …….....

Age: …….....

Gender:

Male	
Female	

Would you describe the area of your secondary education as rural or urban?

Rural	
Urban	

Would you describe your home area as rural or urban?

Rural	
Urban	

III. Questionnaire items

1. Learners' digital and linguistic practices

1.1 Which technologies do you use?

Cell phones ☐

Computers ☐

1.2 Do you have computer skills? Yes ☐ No ☐

1.3 Where did you learn them.....?

1.4 From whom? ……..

1.5 What do you use computers for? ……

1.6 Do you use any other kinds of technologies? Yes ☐ No ☐

1.7 If yes, which ones? …….....

1.8 Where? ....

1.9 When? …….....

1.10 For what purposes? …….....

1.11 Does your school have a computer laboratory? Yes ☐ No ☐

2. If you think about talking on your phones, which language do you use?

.....

2.1.Do you ever use any other language/s other than English? Yes ☐ No ☐

If yes, which ones?

…….....

.....

2.2 When do you use them and why?

…….....

.....……

……

2.3 Which language/s do you use while writing text messages or SMS?

……

2.4 Do you ever mix languages? Yes ☐ No ☐

If yes, When?

.....

With whom?

…….....

3. What about your computer use?

3.1 If you are browsing/surfing the internet, what kinds of sites do you like to go to? List them in order of importance.

Your website in order of importance	Main language used on this site by you	Other language/s used by you on this site

3.2 Do you ever have difficulties understanding content on the site?

Yes ☐ No ☐

3.3 What do you do if so?

……

……

…….....

3.4 What else would you like to be able to do on the Internet?

Reading and writing emails ☐

Chat rooms ☐

Social networking sites (e.g. Facebook, Twitter) ☐

Others:

…….....

.....

3.5 What else do you use computers for? ……..

3.6 What would you like to be able to do with other forms of technologies if you could?

……

……

Why? …….

In what language/s? …… …

4. Learners' perceptions of the affordances of digital technologies for English learning in Rwanda

4.1 How would you describe the medium of instruction at your secondary/high school?

Mainly Kinyarwanda	
Mainly English	
Mainly French	
Mainly Swahili	
Other languages	

4.2 Does your current language teacher ever use digital technologies or tools? Yes ☐ No ☐

4.3 If yes, can you give me some examples?

……

……

4.4 Does s/he suggest you go online to help improve your English? Yes ☐ No ☐

4.5 If yes, what does s/he suggest?

……

……

4.6 Has he/she made use of audio-visual materials or any other teaching aids or ICT or digital technologies or tools? Yes ☐ No ☐

If yes give details:

……

……

4.7 How often, if at all, do you do each of the following ?

	Daily	Weekly	Monthly	Several times a year	Never	Don't know
Listen to radio via your cell phone						
Write emails						
Write SMS messages on a cell phone						
Use a personal computer						
Watch educational programmes on internet						
Watch recreational programmes on internet						
Watch news in English on internet						
Visit chat rooms						
Play games						
Read information from computers						

4.8 When you are at home during school vacation, how much time do you usually spend each day using your computer or laptop?

Not on a daily basis	
1 hour or less per day	
More 1 hour less than 2 hours	
More than 2 hours, less than 5	
5 or more hours per day	
Don't have a computer or laptop	

4.9 Which of the following do you have in your home?

	Yes	No	Don't know
Cell phones			
Laptop			
Desktop			

4.10 Which of the following kinds of programmes do you watch the most on internet using cell phones, laptop, desktop or any other digital technology?

	Most of the time	Some of the time	Only now and then	Hardly at all	Don't know
Movies					
Educational programmes					
News					
Sports					

4.11 To what extent is your engagement and interest in digital technologies useful for your English language learning?

Greatly	
Somewhat	
Not at all	
Don't know	

4.12 Sometimes high school students need help from several people to do or handle some ICT, digital or computer related activities. How often, if ever, do you make use of help from the following?

	Most of the time	Some of the time	Only now and then	Hardly at all
Teachers				
Fellow students				
Family members				
Others (name them)				

4.13 How likely or unlikely are you to improve your English language skills through ICT or digital technologies?

Very likely	
Fairly likely	
Not very likely	
Not at all likely	
Don't know	

5. Attitudes towards the importance of digital technologies in English language learning

5.1 What role do you believe digital technologies can play in the following language skills and language areas?

- Reading …….
- Writing ……..
- Speaking …….

- Listening …….
- Grammar……..
- Vocabulary……..
- Pronunciation……

5.2 Where do you see the major strengths and weaknesses of digital technologies in the above areas?

Strengths:

……

……

……

…….

Weaknesses:

…….

…….

……..

.....

6. Access to digital technologies

Do you have access to up-to-date equipment such as networked computers, Internet and other digital technologies? Yes ☐ No ☐

- If yes, under what circumstances do you have access to digital equipment at present?

……

…….....

- For how long each week?

……

…….....

Thank you.

Appendix E : Translated version of the questionnaire in French

I. Introduction générale.

Je voudrais vous demander de m'aider à mener bien ma recherche en répondant aux questions en relation avec mon domaine d'étude. Cette étude dont l'enquêteur principal est MFURANKUNDA Pravda s'inscrit dans l'optique de l'obtention du grade de Docteur en Education de l'Université de Western Cape, Afrique du Sud.

Notez que questionnaire n'est pas un test ou examen. Il n'y a pas de réponses correctes ou fausses. Ce qui importe ici est votre opinion sur le sujet en question. Vos réponses honnêtes et sincères contribueront à la réussite de cette recherche. Je vous garantie que les informations que vous allez donner resteront confidentielles. En répondant à certaines questions, il faut juste utiliser le symbole (✔) ou (✘). Pour des questions ouvertes, répondez dans l'espace qui vous est réservée. Merci beaucoup.

III. Identification du répondant

Nom : …….. …….....

Prénom : ……..…….....

Nom de l'Ecole: …….....

Age: …….....

Genre :

Masculin	
Feminin	

Comment décrivez / qualifiez-vous votre école secondaire?

Rural	
Urbain	

Comment décrivez/ qualifiez-vous votre région natale ?

Rural	
Urbain	

III. Le questionnaire proprement dit.

1. Les pratiques relatives à l'utilisation des langues et les moyens digitaux

1.1 Quelles sont les technologies que vous utilisez?

Cellulaires /Telephones mobiles ☐

Ordinateurs ☐

1.2 Avez –vous des compétences ou connaissances en informatique? Oui ☐ Non ☐

1.3 Ou est-ce que vous avez appris ceux-la…….?

1.4 De la part de qui? ……..

1.5 Pour quelles fins utilisez-vous l'ordinateur ?……

1.6 Est-ce que vous utilisez d'autres sortes de technologies ? Oui ☐ Non ☐

1.7 Si oui, lesquelles? …….....

1.8 Ou précisement ? **..... .....**

1.9 Quand? …….**.....**

1.10 Pour quelles raisons ? …….....

1.11 Est-ce que votre école dispose d'un laboratoire informatique ? Oui ☐ Non ☐

2 Quand vous parlez au téléphone ou quand vous communiquez au moyen du cellulaire, quelle langues utilisez-vous? .....

2.1 Est-ce vous utilisez une certaine langue autre que l'anglais? Oui ☐ Non ☐

Si oui, lesquelles ?

…….....

.....

1.7 Quand est-ce que vous les utilisez? Et pourquoi?

…….....

.....……

……

1.8 Quelles langues utilisez-vous en écrivant des messages courts/ SMS?

…….

1.9 Est-ce que vous mélangez des langues à la fois ? Oui ☐ Non ☐

Si oui, quand est-ce que vous faites cela?

.....

Avec qui?

……..**.....**

2 Les pratiques informatiques /utilisation de l'ordinateur

3.1 Si jamais vous utilisez l'Internet, quels sont les sites que vous préfèrez visiter ?. Enumerez-les par ordre d'importance.

Votre site Internet par ordre d'importance.	La langue principale que tu utilises a ce site.	Autres langues utilisées au site visite.

2.7 Est-ce vous éprouvez des difficultés à assimiler ou comprendre le contenu sur certains sites de l'Internet? Oui ☐ Non ☐

2.8 Si oui, qu'est ce que vous faites?

……..……

……

…….**.....**

2.9 Qu'est ce vous préférerez pouvoir faire d'autre à l'Internet?

Lire et écrire/ rédiger des emails ☐

Les lieux de conversation sur Internet ☐

Les sites sociaux (e.g. Facebook, Twitter) ☐

Others:

…….....

.....

3.5 De quoi d'autre vous vous occupez sur l'ordinateur ?

……..

3.6 Si vous en avez la possibilité, qu'est-ce vous préférerez faire avec d'autres formes de technologie?

……

……..

Pourquoi? ……

En quelles langues?…… …

3 Opinions des élèves à propos de la relation entre l'utilisation des moyens digitaux et l'apprentissage de l'anglais comme langue étrangère au Rwanda.

4.1 Quelle est la langue d'instruction de votre école secondaire?

Le Kinyarwanda	
L'anglais	
Le francais	
Le Swahili	
Autres langues	

4.2 Est-ce que votre professeur utilise- il les moyens digitaux en classe?

Oui ☐ Non ☐

4.3 Si oui, donnez-nous quelques exemples

……

…….

4.4 Est-ce qu'il/elle vous demande de visiter des sites sur l'Internet pour améliorer vos compétences linguistiques en anglais? Oui ☐ Non ☐

4.5 Si oui, qu'il/elle fait/ suggère ?

……

…….

4.6 Est-ce qu'il/elle aurait eu recours aux moyens audio-visuels ou autres matériels didactiques ou TIC ou moyens digitaux? Oui ☐ Non ☐

Si, oui, donnez des details a ce sujet.

……

……

4.7 Combien de fois, si jamais vous le faites, vous vous occupez des activités suivantes.

	Par jour	Par semaine	Par mois	Beaucoup de fois par an	Jamais	Je ne sais pas
Ecouter la radio a partir de mon portable						
Ecrire des emails						
Rediger des SMS sur mon portable						
Utiliser un ordinateur privé						
Suivre des programmes TV à caractère éducationnel sur l'Internet.						
Suivre des programmes de loisir sur Internet						
Suivre des nouvelles TV en anglais sur internet.						
Visiter des lieux de rencontre et de conversation sur internet.						
Jouer à partir de l'internet						
Lire des informations sur votre ordinateur.						

4.8 Quand vous êtes en vacances, combien de fois par jour vous passez votre temps **à utiliser** votre ordinateur ou **portable** ?

Pas par jour	
1 heure ou moins par jour	
Plus d'une heure et moins de deux heures par jour	
Plus de deux heures, moins de 5 heures par jour	
5 ou plus de temps par jour	
Je ne dispose pas d'ordinateur de laptop	

4.9 Qu'est ce que vous possédez à la maison parmi les moyens suivants:

	Oui	Non	Je ne sais pas
Téléphones portables			
Laptop			
Ordinateur de bureau			

4.10 Quels sont les programmes que vous aimez suivre le plus sur TV à partir téléphones portables, laptop, ordinateur de bureau et autres moyens digitaux?

	La plupart du temps	Quelques temps	parfois	Pas du temps	Je ne sais pas
Films					
Programmes à caractère educationnel					
Programmes à caractère educationnel					
Nouvelles à la Téle					
Le Sport					

4.11 Dans quelle mesure votre engagement et votre intérêt pour les technologies numériques ou digitales sont utile pour vous faciliter l'apprentissage de la langue anglaise?

Considérablement	
Peu	
Pas du tout	
Je ne sais pas	

4.12 Parfois, les élèves ont besoin d'aide de plusieurs personnes pour manier ou utiliser certaines TIC, numériques/digitales ou relatives a l'informatique. Combien de fois, si jamais, vous avez recours à l'aide des suivant moyens suivants?

	La plupart du temps	Certaines fois	Parfois	Presque pas
Professeurs				
Mes collegues de classe.				
Membres de famille				
Autres (mentionnez-les)				

4.13 Comment est-ce que vous estimez vos chances d'améliorer vos compétences en anglais a travers l'utilisation des TIC ou des moyens digitaux ou numériques ?

Très probablement	
Assez probablement	
Pas assez probablement	
Pas du tout	
Je ne sais pas	

4 Attitudes des élèves sur l'importance des moyens digitaux ou numériques dans l'apprentissage de l'anglais

5.1 Quel rôle pensez-vous que les technologies numériques peuvent jouer dans les compétences linguistiques suivantes ?

- Lecture…….
- Ecriture ……..
- Parler …….
- Ecouter ……
- Grammaire……..
- Vocabulaire……..
- Prononciation……

5.2 Où remarquez- vous /voyez-vous les principales forces et faiblesses des technologies numériques dans les domaines ci-dessus?

Forces:

……

……

……

…….

Faiblesses:

…….

…….

……..

.....

5 Accès aux technologies numériques ou digitales

Avez-vous accès aux équipements à jour /modernes tels que les ordinateurs en réseau Internet et autres technologies numériques? Oui ☐ Non ☐

Si oui, dans quelles circonstances avez-vous accès aux équipements digitaux ou numériques modernes/ à jour?

……

…….....

Pour combien de temps par semaine?

……

…….**.....**

Merci beaucoup!!

Appendix F: Focus group interview questions

1. Tell me about the technologies you use. Do you have cell phones? All of you? What about computers? Do you have computer skills? Where did you learn them? From who? What do you use computers for? Do you use any other kinds of technologies? Which/ Where? When? For what?
2. If you think about talking on your phones, what language do you use? Do you ever use any other language/s? When? Why? What about text messages/ Do you ever mix languages? When? With whom?
3. Now can I ask about your computer use? If you are browsing/surfing the intent, what kinds of sites do you like to go to? Which language/s is/ are used on those sites? Do you ever have difficulties understanding content on the site? What do you do if so?
4. What else would you like **to** be able to do on the Internet?
5. What else do you use computers for?
6. What would you like to be able to do with technologies if you could? Why?
7. Tell me about your English lessons in school. Does the teacher ever use digital technologies or tools? Can you give me some examples? Does s/he suggest you go online to help improve your English? What does s/he suggest?
8. Has he/she made use of audio-visual materials or any other teaching aids or ICT or digital technologies or tools? If yes give details.

Appendix G: Individual Interviews

I. Internet Café Attendant (ICA)

1. According to your observation, which age range of the youth/ young people who mostly visit your cyber café?
2. What category of youth do you mostly receive according to their current daily occupation?
3. What type of activities most of your customers do or are busy with as they visit your cyber café or when they are using the computer?
4. In your own observation, what could be the websites they regularly visit or they like the most?
5. If you had chance to observe high school learners, what do you think has been their main interest visiting the different websites?
6. What do you think is the language they like to use most while visiting or browsing different websites?
7. What do you think could be the role of the digital technologies in teaching and learning languages?
8. What do you think could be the identity the youth as cyber café users construct when they browse the internet?
9. What do you think the youth benefits from the social media and other websites they visit and use?

II. Information Technology / Computer Teacher (IT)

1. What basic computer basic skills do you teach your students?
2. At which level, ordinary level or advanced level do your learners start their ICT or computer classes?
3. What do you think is your learners' interest or focus while attending your ICT class?
4. From your experience what do you think they like most in their computer lesson?
5. How would or could you rate or assess your students computer skills?
6. How do you assess your learners' access to computer facilities?
7. Do they have easy access to computer facilities outside classroom context?
8. How many computers do you have in your lab?
9. Do you think that ICT facilities or computers can help learners improve their language skills? If yes, elaborate.
10. Do your students have an opportunity to browse or use the internet when they are at school?

III. English teacher (ET)

1. Do you ever use ICTs or digital technologies while teaching English?
2. If yes, which ones do you use while teaching English or developing your learners' language skills?
3. What do you think are advantages of using these tools?

4. Have you ever suggested your students to go online to help them improve their English?

5. According to your experience, can the social media or visiting online sites be a powerful motivation for language learning?

6. Do you think that language teachers or English teachers in particular need a specific course on ICT?

7. In what specific language areas do you think ICTs or digital technologies can help more?

8. What could be a particular identity a learner of English as additional language constructs while using ICTs or digital technologies?