FOUNDATION PHASE TEACHERS' EXPERIENCES IN INTEGRATING INFORMATION COMMUNICATION TECHNOLOGY (ICT) INTO LANGUAGE LEARNING AND TEACHING AT UTHUNGULU DISTRICT SCHOOLS.

by

Durodolu Mercy

BA, PGD

(Student number: 201551044)

Dissertation submitted in fulfilment of the requirements for the award of the Degree of Master of Education (Early Childhood Education) at the University of Zululand, KwaDlangezwa, South Africa

Supervisor: Dr. J. N. Mashiya

Co-Supervisor: Dr S.C.B. Xulu

November, 2016

ETHICAL STATEMENT BY THE RESEARCHER

I affirm that this study entitled ***Foundation Phase Teachers' Experiences in Integrating Information Communication Technology (ICT) into Language Learning and Teaching at UThungulu District Schools*****,** which was submitted to University of Zululand in fulfilment of the academic requirements for the award of Master of Education in Early Childhood Education is my original work. I also declare that the work has neither been submitted nor copied elsewhere and that the various materials used in the study have been duly acknowledged. Finally, no part of this thesis may be reproduced by any means without the prior permission of the author or the University of Zululand.

Durodolu Mercy

Signature..... Date...17/03/2017.....

Supervisor: Dr. J. N. Mashiya

Supervisor: ..... Date: ...17/03/2017.....

Co-Supervisor: Dr. S.C.B. Xulu

Supervisor: ..... Date: ....17/03/2017.....

DEDICATION

This dissertation is dedicated to the glory of the Almighty God and to the memory of my late father, Pa Sylvester T. Utere for his love for education.

ACKNOWLEDGEMENTS

I would like to acknowledge the Almighty God, my help in ages past and my hope for years to come. I return all glory to His name for seeing me through this dissertation.

I also want to say a very big “thank you” to my amiable supervisor, Dr. Nontokozo Mashiya for her professional guidance, consistent encouragement and patience throughout this study.

My gratitude goes to my kind co-supervisor, Dr. Xulu for her valuable advice and support for the past two years. I am grateful to the following lecturers in the Department of Early Childhood Education: Mrs Mtshali, Dr. Kanyile, Mrs Kok, Mrs Mvuyani and Ms Luthuli. May God bless you all.

I also want to express my deepest gratitude to my sweet mother Mrs Esther S. Utere, my siblings Mr and Mrs Imoh Utere, Mr and Mrs Macauley, Aunty Grace, Mrs Ubom, Mr and Mrs. Daniel Utere, Item, Mr and Mrs Fashina, Mr and Mrs Emmanuel Utere, Mr and Mrs Uzoma, Emmanuel, Blessing and Richard. My in-laws, Mr and Mrs Durodolu, Mr and Mrs Jerry, Mr. and Mrs Olujobi, and Mr and Mrs Kunle Durodolu for their understanding, love and prayers from a distance.

And my priceless friends, Mr and Mrs Adedara, Glory, Kofo, Nkhensani, Mercy, Pricilla, Nora, Josephine, Kate, Bibi, Mary, Elsie, Mfon, Mrs and Mrs Isibor, Nompilo, I value you all. My gratitude also goes to Dr. Smith who edited the document.

I sincerely appreciate my Christian family and friends: Pastors Foli, Dr and Mrs Osunsanmi, Dr and Dr Mrs Ogunyinka, Pastor and Dr Mrs Oyinloye, Mrs Gabashe, Mrs Ikabi, Prof and Mrs Zahare, Pastor Khumalo, Mrs Mutasa, Dr and Mrs Rexwhite, the Adetibas, Dr and Mrs Olowe, for their spiritual support and for making my stay in South Africa a pleasant one.

I am infinitely grateful to my wonderful and adorable husband, Oluwole Durodolu for his undying love, understanding, encouragement, guidance, prayers and financial support throughout: ngiyabonga kakhulu.

ABSTRACT

The increase in the use of Information Communication Technology (ICT) has caused a remarkable transformation in the field of education in the 21st century. This transformation has led to the restructuring of school curricula to incorporate ICT in order to equip teachers with the necessary tools to enhance achievement. The ability to read and write at the foundation level of education embraces the most fundamental skills learners obtain. To develop these skills, new methods and forms of teaching should always be considered. This is why the introduction of ICT innovation makes major demands on teachers' professional skills. ICT plays a very crucial role in the expansion of language skills as it has become an indispensible way of learning and a valuable area of research for both teachers and learners. This paper explores the experiences of foundation phase teachers in integrating ICT into language learning and teaching focusing on Grade 3 teachers in six primary schools in UThungulu Education District. The following research questions were answered: What are teachers' experiences in incorporating ICT into language learning? What are teachers' attitudes towards the use of ICT? What is the level of teachers' resistance to the use of ICT? What is the level of appropriate use of ICT for curriculum delivery in language learning and teaching? The study adopted a purposive sampling technique and a qualitative research method in which the researcher conducted focus group interviews and class lessons were also observed. The target population was primary school teachers from government and privately owned schools in the UThungulu district. Data were analysed using the descriptive analysis technique. The study revealed that only 1.2% of the schools investigated were well resourced in the field of ICT facilities. It was also observed that teachers who claimed to have ICT skills only have basic computer skills. The study also discovered that teachers in the UThungulu Education District are not familiar with any English language online learning resources and software. Schools lack proper funding to integrate ICT and teachers are rarely trained on proper integration skills. The study suggests ways that will lead to effective integration of ICT into language learning and teaching in UThungulu District schools: Policy makers should partner with teachers in drafting the English language curriculum so as to incorporate ICT; stakeholders in the education sector should provide and monitor funds allocated to schools in order to see to the successful integration of ICT in education; frequent ICT integration accredited trainings should be organised for teachers and ICT integration should be incorporated into the teacher education curriculum from the very first year.

KEYWORDS: Language, learning, teaching, integration, Foundation Phase, school, ICT.

TABLE OF CONTENTS

CHAPTER 2

LITERATURE REVIEW

CHAPTER 3

RESEARCH METHODOLOGY

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

CHAPTER 5

DISCUSSION OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

LIST OF APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

CALL	Computer Assisted Language Learning
DOE	Department of Education
DVD	Digital Video Disk
ICT	Information Communication Technology
IICBA	The International Institute for Capacity Building in Africa.
ISAD	Information Society and Development
MP3	Municipal Planning Provincial Portal
PANAF	Pan African
PDF	Adobe Portable Document
PNC	Presidential National Commission

T.V	Television
TELL	Technology Enhanced Language Learning
THRASS	Teaching Handwriting, Reading and Spelling Skills
UNESCO	United Nations Education and Scientific Cultural Organisation

CHAPTER 1

MOTIVATION FOR THE STUDY

1.1 Introduction

The modern education environment has been remarkably influenced by the use of technology and many professionals around the world have come to recognise its positive effects especially in the teaching and learning of language. In view of this, the emphasis has shifted from traditional to technology-integrated curricula that have been designed to aid learning and teaching experiences (Ching-Ting, Ming-Chaun & Chin-Chung, 2014:85).

The teaching of language skills is very important in primary education environments and Information and Communication Technology (ICT) is perceived as an appropriate instrument for teachers and learners to tap into, in order to enhance learning in such a way that it complements the old traditional method of teaching in practice (Dighe, 2006:190). ICT plays a very crucial role in the expansion of language skills as it has become an indispensible way of learning and a valuable area of research for both teachers and learners (Chauhan, 2013:407). Zevenbergen (2007:22) notes that today's younger generation is so technology conscious to the extent that even their toys are very 'hi-tech' and they embrace e-chatting, computer games, high tech phones, DVDs, pay television, Mp3 and many more. Their constant exposure to these devices undeniably shapes their perception. The new developments of modern toys prompt early childhood teachers to focus on the diverse ways, in which information and knowledge are communicated.

Restructuring the curriculum and academic practices in schools to deal with the challenges of today's modern developments and integrating ICT into education at the primary school level have become the priority of most ministries and departments of education worldwide (Tay & Lim, 2013: 15). This is as a result of the government's increasing awareness of the advantages of globalisation and also the shift in focus towards knowledge-based societies. The Department of Education's (DoE's) White Paper on e-Education states that 6.4% of South Africans had access to and made use of the internet in 2002, compared with developed countries, which points out that South Africa is still lagging behind in the use of ICT in education and development (DoE, 2003:1). The government, in its effort to bridge the digital divide, came up with a number of measures, which included The Presidential National Commission on Information Society and Development (PNC on ISAD), in 2001, The

Electronic Communications and Communications Transaction Act, No. 25 in 2002, established by the Department of Communications and a number of policies to support the integration of ICT in schools (Mdlongwa, 2012:2).

Primary education is the major sub-division of any schooling system and it affords one an opportunity to be a part of the process of transformation through education. With the new advances in this field, the role of ICT is now very vital in the redrafting of curricula, a better focus on the acquisition of skills and the empowering of teachers in order to face the challenges of modern times (UNESCO, 2012:2).

The introduction of ICT in education is a part of the government plan to increase the quality of education nationwide. In 2001, the Department of Education and the Department of Communication in South Africa jointly came up with a strategy for the integration of ICT in Education; it is believed that this strategy formed the basis for the e-Education White Paper that was adopted in 2004. The policy also advocates the integration of ICTs into teaching methods in order to promote and enhance the development of cognitive skills (DoE, 2004) The primary objective of the policy is to develop ICT skills of both primary and secondary school teachers and learners. Teacher competence in ICT use in the classroom is what drives its integration into subject content beyond basic usage like typing of lesson plans and tests for learners, Ndlovu and Lawrence (2012:5), found out through a research carried out by PanAf (2008-2011) that the majority of teachers in South Africa are rarely familiar with proper ICT usage. They fail to maximise the full potential and benefits which ICT offers. In view of this, the DoE aims to review programmes and in-service policies to develop a national framework for competencies for educators. The aim is also to incorporate the use of ICT into pre-service and in-service training as a strategy to introduce incentives at both the national and provincial levels to encourage teachers to use ICT. The DoE's idea is to review the current teachers' awards and make provisions for possible subsidies and special loans for teachers to own personal computers (DoE, 2003:30).

This study looked at an approach to technology enhanced language learning and teaching for teachers who find themselves involved in a new process, whose role and the role of their learners differs from traditional teaching and learning. Therefore, the focuswere on the learning and teaching of language using ICT. It also overview the existing forms of technologically enhanced language learning and teaching and summarises the opportunities and benefit of using various electronic tools.

1.2 Literature review

The increase in the use of Information Communication Technology (ICT) remains a leading transformation in the twenty-first century, this development and change has a significant impact on education. This demands that education institutions adopt the use thereof in order to promote learning (Buabeng-Andoh, 2012:1). Therefore, education organisations should be restructured to accommodate the use of this new technology in the classroom, as this will go a long way in bridging the technology gap in teaching and learning. Incorporating technology in education is a way of ensuring that people develop a more inclusive society as it affords both teachers and learners immense opportunities that were impossible in the past when it is used as a tool to support teaching and learning (Moeller & Reitzes, 2011:14).

It is common knowledge that technology has changed the face of education and has impacted the teaching profession positively in three major ways: the role of the teacher in terms of classroom management, the method of teaching and instruction delivery and the way teachers assess learners' performances (Yunus, Nordin, Salehi, Embi, Salehi, 2013:765). Yet, incorporating it into classroom practices has been a complex process at an unexpected slow pace; it takes a number of years from the period that ICTs are first introduced in a school to the point when visible change can be noticed in learners (Moeller & Reitzes, 2011:14). Prevalent obstacles to the successful incorporation of ICTs in education today include but are not limited to organisational support and lack of interest on the part of the teacher.

The revolutionised notions of learning and quick advances especially with the use of Computer Assisted Language Learning (CALL) or Technology Enhanced Language Learning (TELL) have been accompanied by visible changes in the teaching and learning of language. As language classrooms are gradually becoming a blended learning environment that centres on active learning (Kumar & Tammelin, 2008:5). It is commonly known that active learning advances the learning process and thus raises the quality of the language learning and teaching experience. Tay and Lim (2013:1) also observe that of the different subjects offered in primary schools, language is one of the major ones that occupies students' time during school hours; nearly half of the entire curriculum time is dedicated to teaching language and learners offer language lessons almost on a daily basis. The nature of language is different, because it focuses on the representation of ideas, feelings, thoughts and opinions through the application of ICT to expand not only communicative competence but also literacy skills (Tay, Lim, Lim & Koh, 2012:1221).

The successful use of ICT in language learning and teaching has brought about innovations and this will continue to improve with the advancement in technology (Kumar & Tammelin 2008:5). ICT and the internet, in particular, provide teachers with first-hand information regarding their profession, access to subject content as well as innovations in teaching pedagogy. ICT is loaded with the potential to play a vital role in making English language learning and teaching more applicable, interesting and fascinating (Yunus, et al 2013:764). Therefore, the development of ICT based English language activities in classrooms must be a priority for quality content delivery. Mdlongwa (2012:4) points out that apart from the fact that ICT has enhanced subject content delivery, it is also of immense benefit to teachers' classroom administration and management in terms of efficiency and productivity. This innovation has no doubt, fostered collaboration among teachers and their counterparts in other parts of the world.

The advent of democracy in South Africa in 1994 signalled the beginning of reforms in the education sector. The most notable was the incorporation of the formally separated schooling systems at all levels (Bharuthram, 2012:1). Subsequently, the government has made several efforts in creating awareness through a variety of campaigns to improve the literacy levels by equipping schools and organising training programmes to empower teachers. Despite these efforts, reports have it that the literacy rates among school-goers in South Africa is still very low, a problem which Modisaotsile (2012:5) says has to do with the lackadaisical attitude of teachers. DoE, in 2004, identified reading literacy as an essential priority in education, and so reading became the central focus in the Revised National Curriculum Statement (RNCS) (Bharuthram, 2012:1).

The ability to read and write embraces the essential skills learners acquire in the Foundation Phase which is a determinant factor for success in every aspect of education. In order to develop competent communicative skills at this level, new methods and forms of teaching should always be under consideration, that is why the introduction of ICT innovation makes major demands upon teachers' professional skills as Moeller and Reitzes (2011:14) reiterate that teachers constantly need to keep up with current professional development in order to hone their skills both in subject area and in the usage of relevant technological tools. Educational technology is not, and never will be transformative on its own (Moeller and Reitzes 2011:5), as it requires teachers who can integrate technology into the curriculum skilfully and objectively. In other words, teachers are the driving force to whether technology

is used properly and effectively (Carlson & Gadio, 2002:119). Educators in the Foundation Phase should make the most of ICT resources and technology for language learning and teaching such as the interactive smart boards, THRASS (teaching handwriting, reading and spelling skills), Fovio, Anvil, T.V, DVD, computer, Lingt, radio and many others. They should not see them as a threat to their profession but rather as a useful tool to improve teaching efficiency and productivity and to improve learning outcomes (ICT Rev, 2015:20, Mdlongwa 2012:6). The role of the teacher has obviously shifted from active to passive. The advent of ICT integration in education has inevitably changed the role of the teachers, as they are no longer the centre of attention as the dispenser of information, but facilitators who set goals and provide resources for learners. Moeller and Reitzes (2011:7), also agree that with technology playing an important role in the classroom, teachers have to understand the value of incorporating it into classroom activities, because it occupies a major position in the world today and its integration into education is essential for learning to be effective. Mdlongwa (2012:4) observes that a major challenge of ICT implementation in education in South Africa is language, since English is the language of technology. 80% of the sources online are in English and so this tends to create problems for teachers and learners whose mother tongue is not English.

ICT no doubt serves as a valuable tool in a blended language learning environment as teachers now introduce different ICT-enhanced language learning plans and effective, individual and personalised tutoring or guidance (Isisag, 2012:2; Kumar & Tammelin, 2008:5). Isisag (2012:2) points out that the positive impact of ICT is highly reliant on teacher's competent usage. The South African White Paper on e-Education further reiterates the importance of ICT in Education and holds that “e-Education will connect learners and teachers to better information, ideas and one another via effective combinations of pedagogy and technology” (DoE, 2003:15).

1.3 The underpinning of the study

This study used two frameworks as its underpinnings, that is: the conceptual framework and the theoretical framework.

1.4 Conceptual framework

This research was anchored in the concept of literacy. Defining literacy in today's world has become a Herculean task as definitions keep evolving. The term ‘literacy’, according to Inglis

and Aers (2008:32), refers not only to the acquisition of reading skills, but also to speaking, listening and writing skills. The quality of literacy is commonly known as one of the major learning objectives of compulsory education. It refers to the ability to read and write to an appropriate level of fluency (Blake & Hanley, 1995:89). Literacy is important, because it is fundamental to all aspects of learning as it paves the way for a broader curriculum. English language has a historic and special role with respect to literacy, because it has a central notion in the teaching of reading, writing and visual and oral communication. The skills which the English language teachers are trying to develop are essentially 'literacy' skills. The literacy experience and outcomes promote the development of skills in using language (Research Report, 2013:19).

This is because technology is now part of our daily lives and serves as a tool used to enhance achievement and literacy on the other hand has to do with learning that will enable individuals to develop knowledge and achieve goals. It is, therefore, not out of place to say that ICT can be used to supplement and complement language learning and teaching in so many ways. For instance, it can broaden access to and improve the quality of education, enhance skill acquisition and improve teaching and learning practices amongst others. Incorporating ICT in education enhances the lesson, reduces the workload of teachers and also improve learners' self-concept and motivate and make them active participants (Dighe, 2006:30).

1.5 Theoretical framework

The framework that was used to help make meaning or sense of issues raised in this study is the Constructivist and the Cognitive theories of learning. Cognitive theory is an aspect of psychology that focuses on how information is being process by the human mind (Sternberg & Zhang, 2011:1). It looks at how we process the information we receive and how the treatment of this information leads to our responses. In other words, cognitive psychology is interested in what is happening within our minds that links stimulus and response. Cognitive learning theory, according to Neisser (1967:70), is a theory that has to do with the relationship between mental constituents and the information that is processed through this intricate network. McEntire, (1992) believes that people create cognitive structures as they learn and these in turn shape how they perceive themselves and their environment. It is important, because this study has to do with how learning can foster critical thinking that can be applied in real life situations.

Piaget's constructivist theory provides a structure for understanding children's ways of learning and thinking at various stages of their development. It asserts that learners construct new knowledge from existing ones and describe the change in supremacy from the all-knowing teacher to the learner, motivated by a need for a transformation in the traditional education environment where learners are passive, uninterested and bored. In the education system, the idea of child-centred learning has been derived mostly from the effort of Froebel and the idea that the teacher should not 'interfere" with this process of maturation, but act as a guide, facilitator or a coach (O'Neil, & McMahon, 2005:2).

1.6 Statement of the problem

In South Africa, some teachers still perceive ICT as a medium through which the subject content is delivered rather than integrate it into the pedagogy. The education policy, with regards to ICT (DOE, 2004) calls for the integration of ICT into teaching methods so as to promote and encourage the development of critical thinking skills. Teachers need to be innovative and skilful in order to make optimal use of these digital devices so as to improve learners' thinking skills which is a major component in enhancing learners' achievement. Apart from basic computer skills, teachers are not properly trained on how to incorporate ICT into pedagogical practice in such a way that it will bring out the best in learners and will also equip and stimulate their cognitive skills to independently access, synthesise, analyse and use information for the benefit of the society as a whole (PanAf 2008-2011). This is also echoed by Cox et al. cited in Bingimlas (2009:240) and Selwyn (2003:13) who also identify technophobia, (the fear of technology) and the wrong perception people have towards ICT.

Another problem is the natural resistance to change and new technology; some teachers are not receptive to the adaptation of new ICT trend. They still prefer the traditional approach which no longer poses a challenge to them (Mdlongwa, 2012:6). They are reluctant to face the challenges of learning new skills and keeping up with emerging techniques. The introduction of ICT in education has indicated a dramatic change in classroom organisation and management. The role of the teacher has naturally come with new challenges and responsibilities, and so as a result of this, teachers have to understand this new role and familiarise themselves with the changing work environment as they are no longer seen as the centre of learning, but only act as facilitators or motivators as a driving force to learners. All of these put together call for teachers to be proactive in updating their knowledge in developing educational processes in the classroom.

Many researchers have investigated the importance of ICT in education at the tertiary level. Several of them have come up with useful insight with regards to the role of ICT and its positive impact on learners (García-Valcarcel, 2010:5). There are considerably fewer researchers that examine the integration of ICT into subject content delivery in the Foundation Phase. This area of research is very important as it will assist in facilitating not only language and cognitive skills from a tender age, but also equip learners to independently apply this acquired knowledge in various areas that necessitate intellectual analysis and critical thinking later on in life. Since ICT integration into teaching and learning is still at the developmental stage, it is of paramount importance that teachers' experiences be investigated for the following reasons: finding out if the technology they have adopted is suitable for their curriculum delivery, understanding the kind of user-friendly software that is applicable, determining their area of need in terms of training and technical support.

1.7 Aim of the study

The purpose of this study was to investigate the experiences of foundation phase teachers in integrating ICT into the teaching and learning of language to grade three learners.

1.8 Objectives of the study

- To explore the experiences of teachers in incorporating ICT into language pedagogy at the foundation phase;
- To investigate teachers' attitudes and responses towards the use of ICT in language learning and teaching;
- To investigate the level of teachers' resistance on the use of ICT; and
- To investigate the appropriate use of ICT for curriculum delivery in language learning and teaching

1.9 Research questions

- What are teachers' experiences in incorporating ICT into language pedagogy at the Foundation Phase?
- What are the attitudes and responses of teachers towards the use of ICT in language learning and teaching?
- What is the level of teachers' resistance to the use of ICT?

- What is the level of appropriate use of ICT for curriculum delivery in language learning and teaching?

1.10 Significance of the study

This study is significant to the field of education in many important ways: it has suggested policy interventions where they are needed, which will extend, compel and lead to better understanding of the process of integrating ICT techniques to language learning and teaching in the Foundation Phase in the UThungulu district schools. One of the reasons behind the high failure rate in South African schools is the lack of language skills amongst learners (Modisaotsile, 2012:2). Reading and writing skills are the foundation principles in understanding the content of different subjects as the language of instruction in most schools is English (ENCA 2014), it has made recommendations for increased use of ICT tools in English language learning and teaching in order to improve English language learning outcomes. ICT integration in South African schools is relatively new (Shandu, 2011:3). This study has revealed the extent of availability and use of ICT and how the peripheral hardware has enabled educators to integrate video, sound, and animation into instruction in schools. The study is also important, because it has helped in choosing the proper methods of managing changes associated with the introduction of new technology to teaching and learning. And finally, it has expanded the frontiers of knowledge by adding more to the existing body of knowledge.

1.11 Scope and limitation of the study

The study was limited to Foundation Phase teachers' experiences in Integrating ICT into language learning and teaching at schools in UThungulu District. This means that the research examined how well teachers are able to incorporate ICT into curriculum delivery, teachers' attitude and responses, the level of teachers' resistance to ICT and the challenges they are faced with. The research was limited to a sample of teachers in primary schools in the UThungulu district in the Kwa-Zulu-Natal Province, South Africa. The research was limited to a manageable proportion, because of inadequate time, financial constraints, and proximity to the wider population.

1.12. Research methodology

The research design for the study was a descriptive survey anchored in the qualitative research method which was used as a tool to obtain information from primary school teachers

on the extent of the Integration of Information Communication Technology into Language learning and teaching in the Foundation phase in UThungulu district schools. A qualitative method was used to obtain more details and to also understand the experiences, attitude and perspectives of the respondents. Qualitative research methods focus on how individuals or the society can have various ways of looking at reality. Qualitative research methods have the capacity to accommodate different views on board; the focus is on behaviour in natural and cultural settings or individuals' accounts as data and variables are hardly manipulated, because they are actually a report of experience (Hancock, Ockleford & Windridge, 2009:6).

1.13 Research design

Data collection involved interview, observation, and/or archival content. Interviews were semi-structured focus group interviews designed to generate participants' perspectives about ideas, opinions, and experiences. The researcher used a variety of methods for observation, including general note-taking. Data interpretation was based on a combination of researcher's perspective and data collected (Creswell, 2008:4).

1.14 Target population

This study selected samples from three public schools and three privately own schools in the UThungulu Educational District, KwaZulu-Natal.

1.15. Sampling procedures for the study

The sampling technique was purposive also known as judgment sampling. As the name implies, it is a sampling technique, that is, a deliberate selection of an informer due to the qualities the informer possesses. In other words the researcher decides the kind of information that is needed and sets out to find those who are knowledgeable, experienced, able, and willing to provide such information (Neuman, 2011:222). Six primary schools in the UThungulu district were purposively selected for the survey due to the following reasons: on the basis of accessibility, the researcher is based in Empangeni for the purpose of communication, because of the researcher's origin, English medium schools were selected, because they are better equipped compared to rural schools where Isizulu is the medium of communication.

1.16. Selection of participants

The study investigated teachers in the Foundation Phase at schools in the UThungulu district under the control of the Department of Education. The teachers were chosen, because of the

important role they play in educational development and the use of ICT as a means of curriculum delivery. Grade 3 teachers from each school and also principals or HODs of Foundation Phase were interviewed. Principals or HODs in Foundation Phase in each school were interviewed, because of the leadership position they occupy in the affairs of the school, but the focus was on Grade 3 teachers, because that is the most mature grade in the Foundation Phase.

1.17 Research instrument

The main instrument for data collection for the study was a face-to-face interview and observations; the interview was semi-structured so that the researcher can use cues and prompts (Hancock, et al., 2009:16). This has addressed all the variables in the study i.e. the integration of ICT in the Foundation Phase.

1.18 Data presentation and analysis

A high proportion of the data was text based, containing precise transcriptions of interviews and dialogues, field notes and other written documents. For this reason, the analysis focused on the exploration of content. Content analysis refers to a technique employed by researchers to count the occurrences of phrases, words or themes. It is suitable when analysing responses to open-ended questions and written documents, because it devises its own unique system for coding (Hancock et al., 2009:14).

1.19 Research findings /Trustworthiness

To enhance confidence in the findings and to ensure the use of a rich and comprehensive instrument, the researcher employed a research assistant, and used interviews, observations and content analysis in order to facilitate a deeper understanding and to obtain more insight into the research work.

1.20 Ethical considerations

The researcher observes all research ethical rules recommended by the University of Zululand, which include anonymity of the respondents' and the schools used for the study and followed the process in what is involved in undertaking research. The researcher ensured accurate acknowledgement of work cited for the study and also ensured that the study contributes to relevant decision making in the integration of ICT into language learning and teaching. The researcher obtained an ethical clearance certificate from the Ethics committee of the University of Zululand before the research work commenced.

1.21 Definition of terms

The following key terms will be defined as used in this study:

Information Communication Technology (ICT), blended learning, literacy, cognitive theory, constructivist theory and Foundation Phase.

Blended learning refers to a combination of online instruction with the traditional face-to-face instruction.

Cognitive theory is a theory of learning that attempts to explain how humans develop their thought processes.

Constructivist theory is a theory that states that learners construct their own knowledge based on their interactions with their environment.

Foundation Phase is the very first stage of general education (Grades R-3).

Information communication technology (ICT) refers to the multimedia used in teaching and learning.

Literacy is the ability of a person to understand how to read and write.

1.22 Organisation of the study

An outline follows next.

Outline:

Chapter 1: Introduction and background to the study.

It contains a general overview of what the research title entails.

Chapter 2: Literature review

This chapter will air the views of various scholars and researchers, their opinions and findings as related to the field of study.

Chapter 3: Methodology

This chapter covers a detailed discussion of how the research will be carried out, methods of data collection and presentation.

Chapter 4: Presentation and analysis of data

This chapter presents the data collected in the course of the research and an analysis will be done accordingly.

Chapter 5: Conclusion

A critical discussion of the research findings in the context of the research questions and objectives is given. Recommendations and a final conclusion follow.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter addresses the views of scholars and researchers from various backgrounds, their perspectives and opinions as related to this study. It presents an overview of literacy and language concepts, theoretical framework and factors that impede ICT integration. It is very pertinent to attempt a brief explanation of what literature review means.

According to Bolderston (2008:51), literature review is an informative, fundamental, and contextual synthesis of a particular subject. It helps to identify areas of controversy or debate and formulate questions that need further investigation in a particular field. In the opinion of Hofstee (2006:91) literature review provides the reader with a premise, because it is an assessment of works that are relevant to a particular field of enquiry.

For this study the literature will be reviewed based on the following objectives:

- To explore the experiences of teachers in incorporating ICT into language pedagogy in the Foundation Phase;
- To investigate teachers' attitudes and responses towards the use of ICT in language learning and teaching;
- To investigate the level of teachers' resistance on the use of ICT; and
- To investigate the appropriate use of ICT for curriculum delivery in language learning and teaching.

2.2 Language and literacy

Historically, literacy has had a great effect on the advancement of people and the expansion of societies. It is perceived as an essential part of being competent and capable of making meaningful contributions to the progress and well-being of society (Neaum, 2012:45). Since literacy is a global issue, it is imperative to consider the meanings and definitions offered by the United Nations and other organisations that advocate the right of literacy for everyone. The United Nations Education and Scientific Cultural Organisation (UNESCO), states clearly that its objective is to eradicate illiteracy and to make sure that everyone can read and write. It defines literacy as the ability of a person to understand how to read and write a simple

statement that has to do with their everyday life (UNESCO, 2008:18). The establishment of the Experimental World Literacy Programme in 1996 brought about a definition of literacy. It sees literacy as a practical skill that is necessary for a person to function effectively for the development of their community (UNESCO 2008:18). This definition is a modified version of the 1957 definition, because it states expressly that literacy is situated in individual community.

Language and literacy skills begin in the early age and at the same time, because they are closely related. Research points to the importance of both oral vocabulary and high level language skills in building reading comprehension. It follows logically, when all of these language capacities are considered, that effective reading accuracy, speed, and comprehension at any age require a solid oral language foundation (Halvorsen, 2009:214).

2.3 ICT integration in teaching and learning

Education serves as an engine for the growth, development and advancement of humanity, and Information Communication Technology (ICT) are tools that can be used to accomplish the aims or goals in education (Mbodila, Jones & Muhandji, 2013:156). The introduction of ICT in education especially in primary schools is a relatively new concept that has gained the attention of practitioners in the field of education for some time now. This innovation has no doubt changed the way teachers teach, the way learners learn and even the learning environment has had its own fair share of this trending phenomenon. Mikre (2011:7) maintains that ICT has brought about fundamental changes in teaching practices, schools and communities. It is important to point out that this ongoing transformation has changed people's perception about education, because technology is now involved. UNESCO (2002) further reiterates the importance of ICT in promoting the Millennium Development Goal No 2 which is to make sure that by 2015 children everywhere in the world would be able to complete primary school. Dzidonu (2010:5) points out that the emergence of ICT has made quality education accessible to a wider population at an affordable cost. These educational technologies, researchers confirmed, have been very useful in promoting literacy, enhancing the design, development, delivery and access to high quality educational programmes and resources irrespective of location (Chapman & Mahlck, 2004:63, Dzidonu, 2010:4).

Information Communication Technology (ICT) is an umbrella term that represents all sorts of communicative devices ranging from the more conventional ones such as radio, telephones, television, to the contemporary computers, satellite systems, and other information

transmitting devices (Hennessy, Ruthven & Brindley, 2005:6). Asabere and Enguah (2012:62) refer to it as tools or equipment and methods, that provide the needed environment with the substantial infrastructure and services for creating, processing, disseminating or transmitting information in every form which includes raw data, SMSes, video, text and voice. Celebic and Rendulic (2011:2) say ICT is a concept that has to do with the transfer and utilisation of all manners of information. UNESCO (2002:13) defines ICT as a "combination of informatics technology with other related technologies, specifically communication technology." The broad definition of ICT includes radio, television, video, DVD, telephone, satellite systems, computers hardware and software, as well as the equipment and services associated with these technologies such as video conferencing, E-mail and blogs (Hennessy, Ruthven & Brindley, 2005:5). From the definitions above it is clear that ICT is a very broad term and is still evolving.

Contrary to belief, ICT integration does not mean the presence of computers in a school laboratory, nor does it refer to using computers to support the old traditional method of subject content delivery. According to Nkula and Krauss (2014:243), integration involves the use of technology creatively and skilfully to promote teaching and learning in such a way that learners can develop cognitive skills. That is, a situation where learners are taught with or through ICTs. ICT is increasingly becoming a part of our social, political, economic and educational system; it has a huge impact on people and situations that surround learning, and it offers new prospects that support aspects of teaching and learning at the foundation level. Its integration into teaching pedagogy, curriculum and policy is generally accepted by stakeholders in the education sector, because it is a tool for development (Bolstad, 2004:2). There is no doubt that ICT is important in the Foundation Phase, because it is crucial to children's development and learning experiences as they are surrounded daily with 'hi-tech' devices ranging from computers, smart phones, kindles, tablets or iPads, and can very well operate these devices even better than some adults.

Wellington (2004:2-3) provides three reasons why ICT really matters at this stage of a child's life: first, because ICT is now a part of most people's lives including those who support young children's education either as teachers, parents or family members. Secondly, it presents new opportunities that will promote children's learning and lastly, it enhances the development of teachers' skills and sustains the relationship between teachers and parents.

In order for teachers and learners to maximise the full potential of ICT, UNESCO (2004) proposes the following three main approaches to ICT in education; these approaches, it is believed, can help to enhance learning outcomes. The approaches are:

- **The integrated approach:** lessons must be planned along the curriculum area by making use of appropriate or relevant resources that will help to promote teaching objectives, improve and enhance learners' understanding of concepts, skills and educational attainment. ICTs must be used within the subject in meaningful contexts and for genuine purposes;

- **The enhancement approach:** planning the use of ICT resources that will dwell more on the topic in question and the graphic presentation of concepts, ideas and theories in electronic format in order to promote classroom discussion and enhance visualisation; and

- **The complementary approach:** empowering learners with the use of ICT resources by encouraging learners to take class note using word processing and to submit take home assignment via e-mail.

These approaches call for teachers' and learners' development of ICT skills and techniques, competence and confidence, and a change of attitudes and beliefs in order to function effectively in the twenty first century.

In its effort to promote ICT integration in education, the South African government came up with a number of measures to see to its proper implementation. One of which is the e-Education policy goal which states that by 2013, learners should be able to use and apply ICT independently and confidently in order to develop skills and participate fully in today's global community (DOE 2004:17). This initiative is pioneered by the Department of Communication through the establishment of an Education Network known as schoolNet to help promote, support and train teachers on how to access and use ICTs in educational institutions (Issacs, 2007:7, Mdlongwa, 2012:2). Computers were first introduced in the education sector during the 80's, but were visible more in privately owned schools and some well-funded public schools. The purpose was to enhance school administration and management in terms of record keeping for both staff and students, creating timetables and other vital documents (Mdlongwa, 2012:2).

Thereafter, with the advancement of technologies, ICT plays a very prominent role not only in education but in every aspect of life. With this new development, the government has become aware of the important role ICT plays and the transformation that comes with proper application. Despite this awareness, proper implementation still poses a serious challenge on the part of the government and other stakeholders even with the introduction of The Electronic and Communications Transaction Act, No. 25 in 2002, The Presidential National Commission on Information Society and Development (PNC on ISAD), INTEL and all others. (Mdlongwa, 2012:2-3). Mbodila, Jones and Muhandji (2013:515) and Ndlovu and Lawrence (2012:2) noted that in as much as ICT integration in education is important for maximum educational outcomes, its implementation comes with its challenges such as poor and uneven distribution of ICT resources and infrastructure. ICT offers new opportunities for teaching and learning and has lead to real changes in teaching pedagogy. Educators prefer it because it encourages collaborative learning and offers both teachers and learners more prospects in adapting teaching and learning to suit personal needs (IIomaki, 2008:16; Mikre, 2011:1).

In terms of learning outcomes, ICT has a positive and significant impact in subject-related performance and also in the learning of fundamental skills like reading and writing. Teachers perceive ICT as a very valuable tool with beneficial result (Punie, Zinnbauer, & Cabrera 2006:12). ICT also provides a platform through which learners can become active participants as it affords learners an opportunity to contribute to their own learning assessment (Wilson 2011:24). The author also points out that it allows for easy reference and reflection. By being a part of their own assessment, learners develop and build knowledge, confidence and a high self-esteem.

ICT has indeed had more impact on administrative services such as admissions, registration, fee payment and purchasing than on the fundamentals of classroom teaching and learning (Punie, Zinnbauer, & Cabrera, 2006:10). It also has the potential to enhance the management and administrative capacity of schools (DOE, 2004). Khalid (2007:10) observes that ICT has supported school administration and education management and accountability. However, in spite of the numerous opportunities ICT in education offers, so many schools in South Africa are yet to embrace this innovation. These schools that lack ICT infrastructure, tend to use it in a restricted form and only concentrate on acquiring computer skills (Nkula & Krauss 2014:242). ICTs do not in themselves improve learning opportunities; but educators who use

ICTs skilfully do, because it depends richly on how well teachers can understand, select and use tools that will enhance development, play and learning experiences (Mbodila, Jones & Muhandji, 2013:156, Wilson, 2011:25). To make these choices, practitioners need to be familiar with various tools and what they can do, they also need to be familiar with contemporary theories about learning and development, and recognise how these can be linked to the use of ICT. New kinds of practices may be needed to support learners' language and literacy skills necessary for learning, because teachers are key figures for the successful integration of ICT in teaching and learning and are also agents of change that is why the use of ICT to a large extent is dependent on them (Mathipa & Mukhari, 2014:1216).

However, it is of utmost importance to make ICT infrastructure available for educational use in schools, but it becomes imperative to train teachers in the usage and application of these new technologies for improved learning outcomes. Ndlovu and Lawrence (2012:3) assert that access devoid of any plan to develop the status or skills of the user in this case the teacher, makes the instrument redundant. Even though it is generally assumed that ICTs play a central role in revolutionalising the approach to teaching and learning, Kaffash, Kargiban, Kargiban, Ramezani (2010:65), Akker (2010:126) and Punie, Zinnbaur and Cabrera (2006:12) argue that there is little or no convincing evidence or significant contribution or impact of ICT in the education system. Kaffash, et al. (2010:65), state that the reason why it is difficult to provide evidence on the impact of ICT in education is because ICT use contributes mainly to the comprehensive development of cognitive skills which cannot be proven by standard tests.

ICT is very vital to the future of education, in the sense that it provides access to multiple information resources from various perspectives, simplifies complex processes and promotes critical and high level thinking skills (Smeets, 2005:344). This explains why countries all over the world have adopted the integration of ICT into education in order to have a competitive edge.

2.4 Language learning and ICT

The use of technology in every aspect of life especially in education has helped language teachers to realize its invaluable potentials and the significant advancement it will bring if incorporated into language learning. ICT certainly supports learners in acquiring language competence as well as improve the quality of their learning experiences and outcomes. ICT tools as observed by Prinzessinnadia (2013:34) and Davood, Azizola and Hossain (2014:56) are prospective powerful tools that will bring about change and reform in the education

sector, because they play an important role especially in the learning of language. In this 21st century, the range of ICT tools that can enhance language learning is used in a variety of ways all over the world and has become a major aspect that requires an extensive investigation in the field of education (Shandu, 2011:73). ICTs can be useful in so many ways in the learning of language to enhance speaking reading, listening and writing skills and vocabulary, word pronunciation, meaning and origin. These skills the author noted can be developed through the use of multimedia activities. With ICT, learners also have an opportunity to rub shoulders directly with native speakers via chat rooms, and blogs having access to online academic contents like, story books, journals, video broadcast, graphics, exercises and even knowledge of the dos and don'ts of the target language (Ambu-Saidi 2010:64). As worldwide communication increases in the development towards globalisation, the demand for communicative proficiency especially in English language also increases and language institutes are unable to meet this demand (Davood, Azizola & Hossain, 2014:56). In an effort to deal with this problem and to make learning and teaching more satisfying and meaningful, the authors continued, a lot of theoretical approaches like the constructivist approach, computer mediated approach and others have been applied.

The use of Computer Assisted Language Learning (CALL) is one of the first learning approaches that has been used to promote enhanced language competency. Its use dates back to the 1960's. It refers to the use of technology in the field of language learning (Shandu 2011). In as much as using, CALL has brought with it innovations in so many ways, since its introduction into language learning, questions have been asked if the huge investment in technology is really worth it. In view of this, Kilickaya (2007:17) points out that just as with other learning assistance tools, CALL has the tendency to slow down learners' progress. This means that while CALL may be used to improve one or more language skills, it may fail in the achievement of overall success. The introduction of voice recording technology has helped improve listening, speaking and pronunciation skills in learners and has also encouraged teachers to re-think new ways and methods to apply in their teaching (Motteram, 2013:34).

Apart from enhancing language skill acquisition, Tai (2015:75) notes that studies have reported a major improvement in learners' achievement, performance and motivation with the use of ICTs in language learning.

2.5 E-learning/Blended learning

Also known as online learning or web-based learning, E-Learning has to do with formal and non-formal learning at all levels of education, even though it is most commonly linked with higher education and corporate organisation training. It is fast becoming a popular form of learning, because it employs an information network viz.: the Intranet and the internet in order to facilitate collaboration and effective course delivery (Tinio, 2010:4). Abbad, David and Nahlik (2009:2) define E-Learning as any learning that is electronically enabled. In other words, it is a kind of learning that is enabled by the application of digital technologies. E-learning refers to the use of information and communication technologies to enable the access to online learning or teaching resources (Arkorful & Abaidoo, 2014:398). Yusuf and Al-Banawi (2013:175) define E-Learning as the use of information and communication technologies to aid the development of learning in academic environment and professional institutions.

Not until recently, education has only taken place in a classroom of learners with a teacher who drives the entire process, and learners are to be physically present in class. The idea of E-Learning came with the advent of computers and the internet; its purpose is to make education accessible for those, who for one reason or another are unable to attend classes. A major significant advantage of E-Learning is that it offers flexibility in terms of distance, and it functions only with the internet and various ICTs (Asabere & Enguah, 2012:63, Epignosis LLC, 2014:5). One interesting fact about ICT in education is that it can be approached through different methods, for example computer-assisted learning, blended learning, virtual learning, web-learning, distance learning, computer-classes, online training, digital training and E-Learning (Punie, Zinnbauer & Cabrera, 2006:5).

With the advancement in technology, E-Learning is continually becoming easily visible, accessible and implemented by all. Just like any other form of learning, E-Learning also focuses on learners' needs and interest with the use of a variety of technology resources to acquire information and critical skills through discussion boards, online lectures, chats, testing and assessment, audio and video conferencing, blogs and wikis for effortless delivery, interaction and observation in courses (Dargham, Saeed & Mcheik, 2012:340). With E-Learning, material of all kinds can be shared in various formats such as slideshows, videos, PDFs and word documents. Conducting webinars and communicating with facilitators through SMSes and chat forums are options made available to E-Learners.

In E-Learning curriculum, the facilitator, the technology expertise and the learners have to be carefully and objectively considered to be balanced in order to maximise the full potential of the programme while guiding against drawbacks that may result from its limitations (Dargham Saeed, & Mcheik, 2012:342). The author also notes that the school has the responsibility to determine the suitability and the validity of the subject content and the technique or method by which such content is delivered. The curriculum of an online course is designed especially for a short-term, in order to keep students interested and motivated. One of the major reasons E-Learning is preferred is because it is flexible, cost effective and learning is personalised. This means that it is tailored to suit learners' needs and responsibilities at a reduced rate and learning materials can be accessed anywhere provided there is a computer or a mobile phone with an internet connection (Yusuf & Al-Banawi 2013:175, Arkorful & Abaidoo 2014:401). With this, learners are able to construct their own meaning, interpret and apply teachings to real-life situations.

Another reason for E-Learning is that it has a positive effect on the increase of human capital; it also makes it possible for learners to get together and share ideas or brainstorm in a virtual environment when it becomes impossible to meet physically. E-Learning increases the value of knowledge, understanding and qualification through easy access to a vast amount of information, it allows for a variety of learning approaches or techniques that support learning using a range of media (Arkorful & Abaidoo, 2014:401). In as much as E-Learning is well accepted and embraced, it also comes with a lot of disadvantages. This is because E-Learning is highly dependent on technology, which may pose a lot of challenges in terms of learning such as: poor internet facilities which can easily discourage learners.

Asabere and Enguah (2012:67), Epignosis (2014:14) and Arkorful and Abadio (2014:402) identify the following challenges: Self-regulating, computer or web-based learning can make learners feel isolated from the instructor or classmates. Learners with limited computer skills, bad or slow study habits, or low self-motivation may lag behind and become discouraged or frustrated. Some learners who may require more learning support may find it difficult and confusing to cope with self-directed learning. It reduces social and cultural interaction among learners and eliminates the use of body language which is a useful communication mechanism. Since E-Learning requires the use of a computer and other related technological devices, it may contribute to eye-strain, and other physical problems related to sitting posture. E-learning may not be effective if the content is not designed to make the most of the

medium. It is therefore imperative that coursework begins with an understanding of how the mind functions during learning, and then this understanding can be incorporated into the course content.

With the speed of change and innovation and the urgent need for improvement, E-Learning now becomes a viable option for learners who can combine education with work and family, because it is highly flexible, self-directed and also eliminates the boundaries of place and time. This change from instructor centred teaching approach to a blend of other approaches from which learners can conveniently explore as pointed out by Yusuf and Al Banawi (2013:176) is what makes E-Learning landscape a multi-channel learning environment.

Blended learning can be defined as a planned implementation of a particular form of learning that integrates learners-centred, traditional classroom methods with other flexible methods of learning with the use of online and mobile approaches so as to realise the strategic benefits of the education system. Such benefits may include access to educational prospect, flexibility of workforce operation, cost effectiveness and so on (Department of Education and Early Childhood Development, 2012:6). It is a term that has gained currency in recent times with regards to education. Tinio (2010:4) defines it as a learning model that combines traditional classroom methodologies with E-Learning solutions. This means that learners in a traditional classroom setting can also have online mentoring sessions through e-mails, chat, and blogs and can also be assigned online materials. The author further reiterates that the idea of blended learning was prompted by the recognition of the fact that not all learning can be accomplished through online instruction, that in order to enhance learning outcomes, the learning objectives, characteristics of the learners, subject matter, and the learning context must be adequately considered for maximum instructional and delivery methods.

2.6 A discussion on theory

This study focused on the integration of ICT into language learning and teaching, it is prompted by two theories namely the cognitive theory and the constructive theory of learning. The cognitive theory helps us understand information processes and interpretation while the constructivist theory will help us understand how learners construct new meaning with the use of ICT. Both theories can be applied to support and improve higher order thinking skills.

2.6.1. The Cognitive theory of learning

The cognitive theory of learning states that:

"Learning is the transformation of information in the environment into knowledge that is stored in the mind. Learning occurs when new knowledge is acquired or existing knowledge is modified by experience" (Keesee & Brandi, 2011:7).

Cognitive theory can be described as the teaching and learning process that involves intellectual activity where new information is linked to existing ones (Bowden, 2008:70). Cognitive revolution is a view that stems from three disciplines, namely psychology, anthropology and linguistics (Atherton, 2013:14). The basic idea of cognitive theory is that it has to do with how people think and expand knowledge. According to Mcleod (2009:6) Jean Piaget was the first to carry out a logical and comprehensive study of cognitive development. His contributions include: cognitive development theory, detailed study of cognition in children, and a series of tests to reveal various cognitive skills. The purpose of the theory the author continued, is basically to explain the processes and methods by which a child, grows into a personality that can reason and think.

Cognitive development involves changes in a child's cognitive progression and abilities (Cherry 2016:5); it also involves investigating learning, ability to recall, problem solving skills, and intellect (Keesee & Brandi, 2011:9). Piaget's cognitive development theory concentrates on understanding how knowledge is gained and the nature of intelligence. He believed that children play an active role in the learning process, construct an understanding of the world around them, and then experience differences between residual knowledge and new information (Mcleod, 2009:6). Some of the major concerns raised by cognitive psychologists include the following: That cognitive theory emphasises conscious critical thinking and presents an optimistic view of development. Piaget and Vygotsky emphasised that individual's understanding is actively constructed. Both theorists downplayed the importance of investigating developmental changes in a child's thinking. Cognitive Psychology deals with the study of how individuals think, comprehend, and know. It focuses on learning how people understand and represent the world around them (Mcleod 2009:7).

Piaget's analysis has helped educators to know how best to understand, communicate and be in touch with children. He suggested that for learners to be encouraged teachers should be concerned about the learning process, employ active teaching methods, encourage

collaboration and the learning task must be appropriate to learners' developmental level (Mcleod 2009:7). Although Piaget's theory is highly valued among psychologists, because it inspired new areas of research in psychology and education, it has been criticised for so many reasons: it underestimated the ability of children. It ignored societal and cultural influences on cognitive development. It predicts similar thinking for all children's patterns within a particular stage of development.

Cognitive learning theory concentrates on how learners acquire the knowledge of how to execute a particular task. Learning can be acquired through various means such as listening, reading, watching, touching, and then processing and remembering the information. There are various software that can be used for the cognitive learning theory Pitler, Hubbell & Malenoski (2007). In the teaching and learning of English language, learners can be asked to identify words, read out a sentence or listen to a story. By participating in classroom activities, learners can touch, listen to the teacher and at the same time experience the learning by themselves and then the learning may proceed to the level at which learners will process and remember the information.

According to Orey (2008), Cognitive learning theory also encourages the use of ICT tools for maximum learning outcome. The effective use of cognitive tools according to should enable learners to undertake this process and assist learners in experiencing cognitive processes that would be impossible without such tools. Pitler, Hubbell & Malenoski (2007) present an illustration of how language learners can better understand classroom instructions by incorporating technology into their note-taking processes. For instance, learners can make use of word-processing tool to track and edit changes made on a particular written passage. Cognitive tools allow teachers to effectively present information by selecting the relevant content, selecting information that enhances decisions and interpretations, and by representing content and relationships in their different forms (Iiyoshi, Hannifin & Wang2005).

Orey, (2008) presented an illustration of how cognitive tools can be of benefit to language learners. According to the author, if schools cannot afford to take learners on field trips to explore countries whose first language is English in order for learners to have a firsthand experience or contact with native English speakers, such schools can make use of technology. This can be done in the form of virtual field trips. It affords learners an opportunity to gain a better understanding about a place that the class is unable to visit while giving learners the

opportunity to practice with technological innovations that promote dynamic intellectual growth. This type of instructional strategy can positively affect learner's memory which is very powerful and found to help learners greatly in retaining the knowledge discovered throughout the entire learning process.

The generation of knowledge applies learners' abilities to represent knowledge from the virtual field trip in a meaningful format that reflects cognitive skills and strategies employed through the interaction with the information. Significant effort is required for both teachers and learners to design and construct their knowledge (Iiyoshi, Hannifin & Wang 2005:290) in o achieve maximum result in the use of these tools.

2.6.2. The Constructivist theory of learning

Constructivism is a theory that has recently surfaced as a valuable reference in education; it is a very broad concept that has been explained in various disciplines, for example, in education, psychology and sociology (Tabor, 2011:40). Prominent constructivists include Lev Vygostsky, and John Dewey who investigated the significance of human activity as a crucial part of knowledge acquisition (Bowden, 2008:71). This view of learning is based on the principle that knowledge cannot be handed out to learners by the teacher but is constructed by learners who are actively involved in the learning process. It also perceives learners as builders and creators of knowledge and meaning as pointed out by Nkula and Krauss (2014:244), who assert that Constructivism encourages learners to learn on their own, and deal with complex and authentic problems. Constructivism stems from the developmental work of Piaget (1977) who affirms that learning takes place when learners actively participate in the construction of meaning (Gray, 2007:67).

It is an approach that emphasises the importance of residual knowledge in the process of learning. According to Rhalmi (2011:4) people construct meaning based on their present or past knowledge. This view is premised on observation and systematic study, about the learning process. It states that people construct their own knowledge and understanding of concepts through their experiences and a reflection on such experiences (WNET, 2004). In other words when people encounter new experiences or ideas, they merge it with previous ones and this will help create their own meaning or perception. Constructivists' view of learning generally refers to different teaching and learning practices, one of which is to encourage learners to use active procedures. For example, learners experiment with real-life situations to create new knowledge merging it and engaging in discussions with their peers.

They then observe the changes that follow (WNET 2004). In this process, the teacher directs learning activities to help learners build on their prior knowledge.

Instead of recommending methods, constructivists concentrate on tools and learning environments that will help learners interpret the different perspectives of the world while making sense of the new information acquired (Pagan, 2006:98, Gray, 2007:67). Constructivism is a teaching method that encourages learners to access educational resources and contents that will aid or support learning (Nkula & Krauss, 2014:244). Constructivist theory of learning does not disregard the teacher's position as a knowledge expert who transfers knowledge directly to learners, but rather, it modifies it to that of a facilitator/coach who assists learners in the construction of their own knowledge (Pagan, 2006:98, WNET 2004). Teachers' role of transmitting knowledge is also shifted to that of a mentor who encourages learners to construct their own knowledge, manage problem solving activities, develop critical thinking skills, using the internet to search and select the required information, fostering collaborative work for peer teaching, knowledge sharing and social interaction (Mathipa & Mukhauri, 2014:1216).

Constructivism therefore fosters learners' critical thinking skills that will make them relevant in today's working environment. The constructivist theory of learning encourages problem based learning with the use of pictures symbols and content base activities, collaboration, ownership of learning, and the use of multiple perspectives or methods (Rhalmi, 2011:4). Despite its benefits, the constructivist learning approach has been criticised for the following reasons: the theory eliminates standard testing and grading for personal study which makes it difficult for learners to be properly assessed by their teachers because there is no traditional assessment. They may end up not learning at all. It requires an expensive long term teachers' professional development. That success is largely achieved with learners from privileged backgrounds only (WNET, 2004).

In relation to the study, using the constructivist learning approach to support the process of language learning and teaching in the 21st century, the classroom becomes relevant. Salazar (2007:169) asserts that the use of constructivism to support language teaching and learning may serve as the best tool for teachers because ICT is flexible, easily adaptable, provides opportunity for versatility, creativity and also motivates both teachers and learners. It is perceived as a tool that is of immense value to constructivism. Adapting the constructivist learning approach and integrating ICT into language pedagogy will benefit both teachers and

learners in the following ways: Unlike the traditional teaching practices where teachers adopt authoritative figures, learning is lesson centred and rote learning is discouraged. The constructivist approach and ICT integration perceive the teacher as a learning guide who encourages learners to actively participate in the learning processes thereby becoming creators of their own knowledge (Pagan, 2006:98, Mohanty, 2011, Wilson, 2011:24). ICT and constructivism encourage group work and collaboration among counterparts, peers and even native speakers of the language (IIomaki, 2008:19, Salazar, 2007:169, Mikre, 2011:1, Abbad, David & Nahlik, 2009; WNET 2004). Both help improve learners' writing, speaking, listening and reading and even social skills, and give a sense of value for each person's opinion. They both foster learners' critical thinking skills that are relevant in today's world. ICTs are of immense value for constructivism in education, because these technologies offer flexibility, motivation, adaptation, creativity, and versatility for teachers and learners. Salazar (2007:169) reiterates that the use of constructivism to support the learning and teaching of language in a virtual environment may become the best educational tool for teachers.

Constructivist theory is a theory that promotes social and communication skills by creating a classroom environment that emphasizes collaboration and exchange of ideas among teachers and learners. It encourages learners to be active participants by building a connection between what is being learned and reflecting it through experience. In an inclusive environment for instance, learners are provided the opportunity to collaborate with other learners of different English language proficiency levels, in this way learners will develop more complex vocabulary and concepts of the English language (Mvududu & Thiel-Burgess 2012:112). Collaboration is an important notion in constructivist learning environments because it represents the social aspect of learning. Vygotsky (1978) in Can (2009) posit that through joint effort learners have the opportunity to develop their understanding through the give-and-take of interaction, argument and discussion. Simich-Dudgeon (1998) in Mvududu & Thiel-Burgess (2012) also agree that classroom interaction can go a long way in developing learners' language acquisition, comprehension, and reflection especially with learners from culturally and linguistically different backgrounds.

2.7 Factors influencing ICT integration

Studies have shown that in spite of the awareness on the importance of ICT in education, there has been a slow uptake of this new process by many teachers. Tedla (2012:203) and Mathipa and Mukhari (2014:121) both agree that there are several factors that influence the

application of ICT in classroom instruction; some of these factors are internal (school-based), some are external (community-based) and others have to do with teacher's individual issues. Buabeng-Andoh (2012:137) points out that the integration of ICT into education is also affected by teachers' attitudes towards technology, organisational factors among others. These factors however, influence ICT integration immensely. Some reasons for these are discussed below.

2.7.1. Teachers' attitudes and beliefs

It should be noted that teachers' attitudes are an important determinant to the successful implementation of ICT in teaching and learning (Mikre 2011:12). Every teacher views and perceives a teaching situation differently, and so based on their pedagogical (learner-centred) or traditional (teacher-centred) beliefs draw conclusions and decide on the teaching materials to use and how to achieve teaching objectives (Nkula & Krauss, 2014:243). The authors also indicate that teachers with constructivist views or beliefs tend to use technology in a generative manner, as opposed to those with traditional beliefs who use them in a representational manner. Mathipa and Mukhari (2014:1217) note that teachers, especially the experienced ones, feel more comfortable with the traditional teaching methods and so find it difficult to adapt to modern teaching pedagogies. This category of teachers believe that ICT has no significant benefit to them and their learners; that is why they vehemently resist its use for teaching purposes. Liu (2011:1013) also agrees that teachers' use of ICT in the classroom relies heavily on their pedagogical beliefs.

Hence, Fu (2013:11) suggests that teachers keep an open mind about ICT integration in classrooms. It is imperative that teachers learn new teaching strategies to adapt to the new instruments when teaching with technology. According to Liu (2011:1019) studies have suggested that teachers who uphold constructivist (learner-centred) view of learning are more likely to integrate ICT into classroom activities than those with traditional views (teacher-centred). In his study of teachers' pedagogical belief and their practices, the author discovered the inconsistencies between the teachers' belief and their classroom practices. Even though teachers realise that constructivist based practices tend to help students more, they do not make it a priority to use them in the classroom. Teachers' attitudes towards the use of ICT are the strongest determinant of ICT integration, and the impact of teachers' pedagogical beliefs and their confidence in the use of ICT must not be ignored (Fu, 2013:119). Inan and Lowther (2010:942) also found that teachers' beliefs and readiness are

the factors that impact directly on ICT use in the classroom and they suggest the following: reviewing learners' performance as evidence of ICT integration can increase teachers' belief in technology. Professional development has to emphasise pedagogical aspects of ICT integration.

In his findings, Ang'ondi (2013:25) observes that even though some teachers have an interest in acquiring ICT skills, others see it as an unnecessary huge burden and so will either go late for training sessions or may not even show up at all. It is almost impossible to convince this set of teachers to believe that acquiring ICT skills is essential to their job. On the other hand, teachers who are willing or interested in integrating ICTs are not encouraged because neither government nor the school administration is committed to the course. The findings also revealed that teachers' response as to why they fail to integrate ICT in their teaching was that the school administrations denied them access to ICT rooms for fear of causing damage to the equipment. The author summarises this by saying that teachers are resistant to change and also he also recommends school administration support as a way of adopting this innovation.

Buabeng-Andoh (2012:148) in his study, concludes that teachers can effortlessly provide useful suggestions on the implementation and integration of technology into educational processes, if they embrace a positive attitude towards the use of ICT. He further stresses that for negative attitudes towards ICT to change, teachers need to understand the difference ICT can make in their content delivery, and how it can make teaching and learning more motivating, interesting, more enjoyable and fun.

2.7.2. Teachers' ICT literacy skill

Computers and other infrastructures and resources such as the interactive whiteboard and the internet are very vital tools in the hands of teachers if proper ICT integration is to be embraced (Oyeronke & Fagbohun, 2013:32). Teachers are the central part of the education process and ICT has more than ever before become a very handy tool that can transform teaching and learning today. Teachers' ICT literacy skills are very important to integration, because they cannot give what they do not have. It is therefore, imperative for them to acquaint themselves with the necessary skills in order to be relevant in the 21st century teaching profession. Trucano (2012:50) notes that there is a need to properly deal with the issue of ICT use by teachers, because teacher education and expansion programmes will be incomplete if this is ignored. According to the DOE (2007), "ICT development is a process

that takes teachers and learners through learning **about** ICT, learning **with** ICT and learning **through the use** of ICT."

Learning **about** ICT entails a look at how to use ICTs and its benefits. Learning **with** ICT has to do with effectively using ICT for teaching and learning purposes for improved learning outcomes. Learning **through** ICT also refers to using ICT as a tool to support new methods of teaching and learning for the purposes of research, critical dialogue and analysis among teachers in order to expand knowledge and perception about ICTs.

The Via Africa report, according to Phakathi (2014:98), states that most schools in South Africa are not ready to integrate ICTs, because out of 413, 067 teachers, only about 132, 884 had acquired basic computer and ICT skills by 2011. Sang et al. (2009:4) revealed in their study a positive development in terms of teachers' computer literacy skills capacity. That is, the percentage of teachers who are trained in the use of computers is higher than those who are not even trained, although most trained ones still find it difficult to access educational content. The authors also note that teachers indicated a willingness to improve their skills in the use of technology if given the needed support. The reason for this he concluded, may be because their working environment does not support the use of ICT. Mathipa and Makhuri (2014:1217) also cite teachers' lack of technology skills as a factor that impedes ICT integration in the classroom and mentioned that deficiency in this skill instils fear in ICT usage as participants in his study who are vast in computer and ICT skills expressed so much confidence in engaging learners in the same and confessed that the use of ICT proves to be positive in terms of learners' motivation, access to educational content, and improved learning outcomes.

Samuel and Barker (2006:9) in their findings reported poor teachers' ICT skills. More than half of the respondents acknowledged the fact that they generally lack ICT skills and that they usually consult their friends whenever they want to use ICTs. PanAf (2008-2011) reports that even though effort is being made to train public school teachers in South Africa, such training sessions only constitute basic computer literacy skills which do not equip teachers enough to integrate ICT into subject content. Ndlovu and Lawrence (2012:66) note that the fact that teachers still struggle to make meaningful use of their computer and ICT skills is an indication that the trainings they have acquired failed to address their classroom needs. The authors then suggest that beyond supporting teachers with material resources, the capacity to deal with constraints when using ICTs really needs to be improved.

The South African government in partnership with Schoolnet, through its Educator Development Network (EDN), has trained thousands of teachers since its inception in 1997. It has established an online learning model that includes teacher training, virtual communities, web portal of resources and recognition of teachers' progress by awarding a certificate to teachers who have completed six introductory modules and credit facilities towards an advanced certificate of education offered by the University of KwaZuluNatal. As regards teachers' ICT skills, the UNESCO IICBA (2012) states that:

"For quality teaching to materialize in the 21st century, we in UNESCO-IICBA believe that there is a need for teacher education programmes to work towards high standards in terms of the pedagogical integration of ICTs."

2.7.3. Teachers' development of competence and confidence level

ICT proficiency is just one aspect of teachers' competence (Lawrence & Veena, 2013:77). "Competence is the quality or state of being functionally adequate or having sufficient knowledge, strength and skill" (Vincent, 2008:58). The former author defined ICT competence as one's ability to use tools and computer technology to distribute and transfer knowledge. These tools according to the author, may include communication, storage and information management tools. Competent computer skills are grouped as follows: Basic computer operation, Professional application of ICT tools, ethical and social considerations, and integration of ICT into classroom instruction. Ang'ondi, (2013:22) observes that various studies have proven that the successful integration of ICT relies heavily on teachers' competence. Plumm (2008) as cited by Efe (2011:232), identifies uneasiness and a feeling of not being competent enough for some particular kinds of educational technologies as the major reason why teachers fail to integrate ICT into their teaching. Due to the fact that teachers lack the knowledge and skills of ICT they cannot integrate it into classroom activities (Mathipa & Mukhari, 2016:1217). Oldfield (2010:64) reports that teachers usually develop cold feet on how to use ICT in the classroom and suggests that frequent use can help them appreciate the usefulness of ICT and also build their self-confidence. For one to develop competence in technology, basic computer skills like managing files, using computer programmes and sending and receiving messages are not enough skills that will aid ICT integration as UNESCO (2008) and Lawrence and Veena (2013:77) state that teachers ought to be familiar with basic computer hardware and software programming, presentation software, productivity applications software and so on. Tasir et al. (2012:143) in their study,

reveal that a positive relationship exists between teachers' competence and confidence level in using ICT for teaching purposes. That is, the more competent teachers are in the use of ICT, the more confident they become while using it in the classroom. The higher the confidence level, the more inspired teachers become to improve their ICT skills. Molotsi (2014:11) observes in her study that one reason for teachers' incompetence is that even though teachers do undergo pre-service computer training; they are only trained on basic computer skills and not ICT incorporation and information skills. Another reason she stated for teacher's ICT incompetence is that some schools are under-resourced in terms of ICT facilities and so teachers rarely have the opportunity of using ICT. Lawrence and Veena (2013:78) affirm that all teachers, irrespective of their subject speciality or the grades they teach need these skills for improved learning outcome.

In its ICT competency framework for teachers, UNESCO (2008:10) advocates that teachers should develop modern ways of teaching and also stated that for effective management of classroom data and for support and development of professional learning, teachers need to be competent in the use of ICT.

2.7.4. Availability and access to ICT infrastructure

The availability and access to ICT infrastructure in schools are one of the major steps to its successful implementation into subject curriculum even though this requires a huge capital. This will no doubt enhance schools' administration capacity, increase the quality of learning outcomes and create new ways for teachers and learners to access, retrieve, use, store and analyse information effectively (DOE 2003:ii). Availability and access are simply established on the fact that there are computers, internet, electricity, and all other equipment and wireless tools that will allow digitised and comprehensive knowledge (Molawa, 2009:5), where teachers and even learners have the right to use them at will. When compared with developed countries in the SITES 2006 study, South Africa was poorly rated in terms of access to ICT infrastructure in schools. Blignaut Els and Howie (2010:74) then conclude that quality content delivery can be enhanced when there is adequate access to ICT equipment. Apart from equipping schools with ICT facilities, another initiative by the South African government in 2009 was the Teacher Laptop Initiative (TLI) which aims at providing laptops for 350 000 teachers to have access to ICT infrastructure through a monthly payment for the purchase of a laptop and ICT facilities (ELRC Annual Report, 2010/11), although this initiative has experienced a slow down due to funding.

Mlitwa and Koranteng (2013:217) investigated schools in Western Cape and found that the provision of ICT facilities is given low priority as evident in the budget of schools despite the ICT policy pronouncements by the Department of Education. They attributed this to financial mismanagement, a lack of political will, and ineffective coordination of human resources. The authors also condemn the current methods of ICT infrastructure distribution to schools and recommend a proper way of distribution, funding and account audit of schools. Thus the motivation and confidence to integrate ICT in teaching and learning may only come from having access to ICT equipment and possessing the required ICT skills (Mikre, 2011:12). Khan (2014:22) and Eze and Olushola (2013:40) identify electricity as a major problem in terms of access to ICT especially in rural schools in South Africa as a major setback to ICT integration.

Bialobrzeska and Cohen (2005:23) agree that teachers in South Africa do not have sufficient access to ICT facilities to effectively play their roles and add value to their work, they however pointed out that access to ICT infrastructures and other related resources can only support teachers' roles as mediators, interpreters, researchers, assessors, and specialists, but cannot compensate for poor teaching. The authors in their study of how ICT is managed in four schools in KwazuluNatal went further to state that the idea of how to employ computers to improve learning outcomes, impacts directly on teachers' access to ICT facilities. Buabeng-Andoh (2012:148) also observe that having access to excellent ICT is good, but teachers' negative attitude towards ICT is also very important. Strydom, Thompson and Hodgkinson (2005:148) discovered in their studies that the number of teachers in South Africa that incorporate ICTs into subject instruction despite access to ICT facilities is low compared to those with restricted access. They, therefore, concluded that access to ICT facilities is less likely to be responsible for lack of ICT integration and does not necessarily translate to the effective use of it.

Despite these setbacks, teachers and learners in most schools in urban areas in South Africa have full access to ICT facilities provided by provincial government in collaboration with private organisations like the Gauteng online school programme, the Khanya project in Western Cape, MTN project in KwaZulu-Natal and the Telkom project in Limpopo and North West provinces (Nkula & Krauss, 2014:78).

2.7.5. Curriculum-related factors

The draft White Paper on e-education (DOE 2003:15) supports various ways and methods in which ICT can be applied in the teaching and learning processes. One of them is ICT integration into the subject curriculum which is believed will improve teaching methodologies and serve as a resource tool for both teachers and learners. Vrasidas, Pattis, Panaou, Antonaki, Aravi, Avraamidou, & Zembylas, (2010:439) suggest a reformation or replacement of the curriculum for it to accommodate ICT. It is the responsibility of the schools' administrative systems to introduce new policies that will ensure that teachers are a part of the planning processes that involves the use of technology in the classrooms. This will help teachers to better understand that the objective of integrating ICT is not for the replacement but for the advancement of educational processes (Fu, 2013:116). It is evident that proper ICT integration in schools is still at its developmental stage in South Africa, because schools still concentrate in the acquisition of basic computer skills (DOE 2003:4). The Guidelines for Teacher training and Professional Development in ICT (2007) prescribe three necessary skills level for ICT incorporation into curriculum delivery. That is, the basic knowledge to use ICT, the knowledge to incorporate ICT into teaching and learning methodology, and the ability to use ICT as an innovative tool. One major reason why the National Standard for ICT in Education was established by the Department of Education is that the ICT content must be educationally useful, reliable, visible, relevant, and accessible to learners with special needs and must be perceived as capable of improving teaching and learning activities and should also support curriculum delivery (DOE, 2003:6).

The South African national primary school curriculum has identified ICT literacy skills as one that is necessary for participation in the 21century work place, because it promotes learning and higher order thinking skills (DOE, 2007:4). One of the major barriers that emerged from Vrasidas et al. (2010:443) study was the curriculum. Participants in this study pointed out that the length and the content of the curriculum for a school year is much and so most of them barely cope with the limited time frame. They express lack of supporting resources for teaching, because teaching manuals do not include the incorporation of ICT and they concluded that they need time to source materials and to study and merge them with teaching activities in order to meet the needs of learners and the demands of the curriculum.

2.7.6. Affordability of technology

This is a complex barrier to ICT integration in schools as Eze and Olushola (2013:23), in their study of teachers' use of ICT in Botswana, also identify expensive computers as an impediment to integration. Statistics from the DoE as recorded in 2013 revealed that out of 25, 870 schools only about 6, 000 of them were ICT-ready, due to lack of funding and high-priced internet connectivity (Phakathi 2014:99). Khan (2014:22), Eze and Olushola (2013:23) note that schools in urban areas are better funded compared to schools in rural areas and urged the government to pay more attention to rural schools. Mathipa and Mukhari (2014:1216) also identify lack of funds to maintain ICT use in schools as one of the reasons for the failure of ICT integration in African countries.

2.7.7. Technical and pedagogical support

Teachers do not only need support in the form of trainings and workshops, but also require access to career support in order to effectively incorporate technology into the curricula and develop their teaching skills (Vrasidas et al., 2010:440). Technical and pedagogical support as defined by teachers refer to technical assistance, casual or informal online network for learning and frequent training tailored to suit teachers' needs. Incorporating ICT becomes much easier when teachers are provided with the necessary equipment, technological and pedagogical support from time to time either by government or the school administration. Becta's (2008) survey of teachers also revealed that having an on-site technical support can trigger their interest for the use of technology (Oldfield, 2010:66). Bingimlas (2009:241) identify the following as technical barriers: teachers making use of outdated computers, websites not responding, internet connection failure, printers not responding and computer breakdown. Lack of technical support may discourage teachers from using ICT during lessons; school administrations must recognise the fact that the support of a technician is very crucial to the implementation of ICT in schools.

2.7.8. Learning environment

A learning environment needs to be created programme-wide so that pre-service teachers can be exposed to various kinds of ICT so by the end of the programme, they will have a good mastery of technological and pedagogical knowledge and skills of ICT integration in both subject-specific areas and the curriculum level. Other factors included lack of dedicated time to training and experimenting with ICT, insufficient class length and curricular restraints (Gulbahar & Guven 2008:iv). A study on creativity and innovation in Europe also reported

that government policies often emphasise buying tools like interactive whiteboards or learning platform environments without the maintenance or training to use them effectively (Srivastava & Banaji 2011:112). Results In (Tezci 2011) as cited by Mathipa and Mukhari (2014:1219) reveal that teacher perceptions of school culture are related to the level of ICT usage from both the technical and motivational perspectives. The results show that their perceptions from both perspectives were not positive, because the majority did not believe that they would receive adequate technical and motivational support from their school. However, as the school culture became more positive, the teachers' ICT usage level increased (Fu, 2013:120). Teachers reported a lack of clarity and understanding on the benefits to learning and how to translate it from policy and the curriculum into their pedagogy (Oldfield, 2010:66).

2.7.9. Amount of workload and shortage of class time

Time allocated to lessons and the workloads teachers have to deal with on a daily basis also impedes ICT integration. Some ICT competent teachers believe that introducing and making use of technology in the classroom consumes most of the time (Khan, 2014:22; Mathipa & Mukhari, 2014:1217). So for this reason, they avoid it totally even though they are aware of its advantages as nearly half of the teachers who participated in an EU netbook survey concurred that using netbooks will increase their workload (EU Schoolnet, 2010). Bingimlas (2009:98) notes that time limitation is a major reason why teachers fail to integrate ICT significantly into subject contents. More than half of the respondents in Samuel and Barker's (2006:9) study specifically indicated that even with ICT skills and knowledge of integration, factors like shortage of class time, workload in terms of teaching and other administrative tasks, are major constraints. In a survey by Vrasidas et al. (2010:443), most teachers mentioned that with the way the curriculum and evaluation systems are designed, they barely have time to plan for ICT-based lessons, but to focus on completing the required syllabus. According to Buabeng-Andoh (2012:9) the following are some of the reasons for increased workload of teachers: regular upgrades of teaching skills, course maintenance and the continuous search for sustainable strategies. In a study conducted by Neyland (2011), cited by Buabeng-Andoh (2012) adding more tasks to the ones teachers already have will put them under a lot of pressure, thereby making their job cumbersome. Oldfield (2010:65) also mentions lack of sufficient class time, time for training and self-development and time to try out ICT.

2.7.10. Collaboration and sharing practice

Collaboration means to work jointly with others or together especially in an intellectual endeavour (Meriam Webster Dictionary, 2010). Teamwork effort is a strategy that will always yield better results or is more profitable as compared to individual effort. Collaboration and sharing practices in technology application is no exception. Studies have reported that sharing practices among teachers and learners, teachers and teacher educators, teachers and their counterparts in other schools around the world with the aim of developing new ways of using ICTs in the classroom for positive outcome are very important (Vrasida et al. 2010:440). One of the key characteristics of successful professional development programmes is collaboration among stakeholders. ICT use in education has automatically allowed better, easier and new forms of collaboration and communication. Mathipa and Mukhari (2014:577) in their study identified lack of collaboration as a barrier to ICT integration and recommend that teachers should be encouraged to seek help from their counterparts and collaborate with those who are ICT competent so as to learn from their experiences. The authors also recommend support, knowledge sharing practices and discussions through online development communities.

Building partnerships for developing, implementing and evaluating programmes for teacher preparation in teaching with ICT has worked well in several instances. Radinsky, Smolin, and Lawless (2005:11) reported a case study where teachers and technology experts worked as a team on design modules that incorporate ICT in the curriculum. The aim was to develop curricula in specific content domains that are familiar with ICT innovative practices. Vrasidas et al. (2014:440) emphasise that the importance of collaboration, shared systems or practices help learners develop communicative competence skills whilst simultaneously acquiring knowledge of other languages and cultures. Collaborative learning is now very popular in the curricula of schools, because of the importance of ICT in education today (Eze & Olushola, 2013:20).

2.7.11 Teacher education and professional development

The primary purpose of 'teaching' is to acquire knowledge, skills, and attitudes for the advancement of an individual and the society at large. As with regard to teacher training and the use of ICT in education, teachers are at the centre of this development (Khan, 2014:1), because they are responsible for creating different teaching and learning models that will ensure a positive learning outcome. ICT is perceived as a tool that can potentially empower

teachers to successfully develop learners' thinking skills and also promote teachers' professional skills. The DOE (2007:7) stresses the need for the development of ICT knowledge and skills to be a fundamental component of pre-service and in-service teacher training and empowerment programmes, and also acknowledges the fact that for a mastery of these skills, the school as the context is very important. It is imperative for government to frequently organise trainings, workshops, conferences and self development programmes in order to acquaint teachers with the reasons, significance and proper integration of ICT into their classroom practices to achieve maximum benefits (Vrasidas et al., 2010:440). This argument is also supported by Khan (2014:23) who maintains that because teachers are able to use ICT in performing their administrative tasks, it does not stand to reason that they can incorporate it into their teaching. She continues by stating that more extensive training, commitment and effort rather than improved computer skills are required for teachers to successfully integrate ICT with pedagogy. Teachers' professional development is very crucial so as to keep up with innovations and trends in the profession as Vrasidas et al. (2010:440) note that continuous teachers' improvement is necessary for school development as it will enable teachers to deal with the problems and challenges they encounter in their daily routine. Professional development is now a growing concern as schools make an effort to transform and to fit into new guidelines and procedures established for school accountability and teacher recognition. Khan (2014:25) in her study proposes the following teachers' training model for effective ICT integration. Pre-service training, in-service training and on-going training.

Pre-service training: training institutions should emphasise the use of ICT as support tools in different subject areas through degree and diploma programmes.

In-service training: At this stage, their needs and priorities are different from those of the pre-service teachers, because of their experience; focus should be on proper and meaningful integration of ICT into subject content, because they still lack the skill and expertise in this area. Training should be flexible to involve distant and E-Learning.

On-going training: At this stage, training mechanisms should be decided on based on individual precise needs and acquired knowledge from pre-service and in-service development programmes. They need to be updated with the current trends and changes in the profession.

Vrasidas et al. (2010:440) suggest that universities offering Education courses should make it a priority to come up with strategies that will aid ICT integration into student teacher training processes and various subject curriculums so teachers can know, understand, appreciate and develop instructive methods for pedagogical use.

2.8 Summary

The integration of ICT is a comprehensive method of incorporating technology to subject curriculum in order to enhance teaching and learning. This chapter has discussed the relationship between language and literacy, ICT in education, the theoretical framework and the factors that influence ICT integration. The next chapter will focus on the research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a detailed explanation of the methods and tools that were used for the collection of data that will provide answers to the research questions raised in the first chapter. It aims to discuss the research methodology, design, qualitative research, data collection methods, classroom observations, field notes, content analysis, interviews and limitations. It presents the research participants and explains why they are involved and their contributions to the study.

3.2 Research methodology

Methodology is a very important aspect of research, because it is the key to reliable research findings. It is a systematic way of studying how research can be carried out scientifically (Rajasekar, Philominathan & Chinnathambi, 2013:52). Methodology refers to the logical sequence in which research is carried out. Kothari (2004:7) defines methodology as a way in which research problems are systematically solved. The main focus of this study is the integration of ICT into language learning and teaching in the Foundation Phase and it involves the description of teachers' experiences while incorporating ICT into language lessons, therefore, the research approach was qualitative.

3.3. Research design

Kolbaek (2014:72) defines it as a logical plan and process developed by the researcher in order to examine a scientific problem. Given (2008:761) says it is a process whereby a research idea is transformed or developed by the researcher into a workable research plan or project. Research design is generated by the researcher. This research used a field study research design which involves classroom observation; group interviews, field notes and photographs. This design is suitable for the study as the researcher aims to determine teachers' experiences in integrating ICT into English language lessons. In this study the researcher developed semi-structured interview questions, classroom observation, field notes and qualitative data analysis to provide answers on the basis of the aims of the study. These tools were used to collect data from primary school teachers about their experiences while incorporating ICT into English language lessons.

3.4. Qualitative research

Qualitative research is designed to investigate the fundamentals of a specific topic, where precise techniques are used to study how individuals perceive and experience the world (Given, 2008:176). It centres on the different ways by which people perceive social or psychological reality and studies people's behavior in a natural environment using verbal report or narration of experiences as primary source of data (Hancock, Ockleford & Windridge, 2009:6). The most important aspect of qualitative research is that it positions the researcher closer to the participants in order to gain easy access and to elicit a desired response. The data collection instrument for the study was a face-to-face interview and observations; the interview was semi-structured so that the researcher could use cues and prompts.

3.5. Research participants

In this study, a sample size was selected for data collection. Neuman (2011:219) defines sample as a smaller set of cases selected from a larger pool by the researcher for a particular study which is used to generalise an entire population. The study adopted a purposive sampling technique to select research participants. In other words, participants are selected for the reason that they are most likely to generate valuable data for the study. Hence grade three teachers were interviewed while Grades 1, 2 and 3 were observed in a natural setting during English language lessons. In addition, the HoDs of Foundation phase in each school were also interviewed, because of the leadership position they occupy. This was done in order to obtain more information regarding ICT integration in each school. Six schools were selected for this study. They are represented using these pseudo names: School A, School B, School C, School D, School E and School F. A total of sixteen teachers were interviewed.

3.5.1 Teachers

The key participants in this research were Grade 3 teachers who provided the information of relevance to the integration of ICT into English language lessons. For a better understanding of data collected through the interviews, Grades 1, 2 and 3 were observed during English language lessons so as to find out the types of ICTs available in schools and how teachers incorporated them into their lessons. That is, teachers' practices with regard to the approach they used in teaching English language were observed in order to address the research questions. Grade 3 teachers were interviewed, because it is the highest Grade in the Foundation Phase.

The head of Foundation Phase in each school was also interviewed, because they play a leadership role in the affairs of the school. They were selected, because they could provide information on the provision, training and technical support that teachers need to effectively integrate ICT.

3.6 Sampling

Sampling is a technique used in eliciting data from the representative group from a larger population. The main reason for sampling is to collect specific data that will explore depth and understanding of the study (Neuman, 2011:219).

3.6.1 Purposive sampling

Purposive sampling, also known as judgement sampling was used to select participants for this study, because purposive sampling allows the researcher to choose a smaller group from a much larger population depending on their availability, willingness and ability to provide the desired information (Given, 2008:784). This sample technique was chosen in order to maximise efficiency and validity. Purposive sampling techniques include: extreme or deviant case sampling, stakeholder sampling, typical case sampling, paradigmatic case sampling, maximum variation sampling, criterion sampling, theory guided case sampling, critical case sampling and disconfirming or negative case sampling (Palys, 2008:697). Maximum variation sampling was used for this study, because it involves selecting a sample size based on the search for various perspectives from individuals or groups of participants who are in the position to supply the desired information relating to the case study.

3.7 Research questions

Research question are a significant part of any research process, because it is viewed as one of the first vital steps that serve as a compass for an investigation. It acts as a link between the literature review and the method of data collection. The researcher should guide against unnecessary data collection and analysis, and spell out the kind of information a researcher seeks to obtain from the participants in the study (Agee, 2009:432). In qualitative research, questions are broad enough to allow the discovery of some events, experiences, concepts, empirical or analytic topic that is critical to the study (Given, 2008:786). The research questions generated for this study were:

- What are teachers' experiences in incorporating ICT into language Pedagogy in the Foundation Phase?
- What are the attitudes and responses of teachers towards the use of ICT in language teaching and learning?
- What is the level of teachers' resistance to the use of ICT?
- What is the level of appropriate use of ICT for curriculum delivery in language teaching and learning?

3.8 Data collection instrument

It refers to the methods used in gathering data for a particular study. An efficient and systematic data instrument is very vital to any research, because it determines the final result (Abawi, 2013:34). It allows a researcher to collect information that is needed for a study. Instruments used for data collection in this study included: interviews, observation, note taking and content analysis.

3.8.1 Interview

An interview is a form of formal discussion between two or more people. This discussion often comes in the form of questions and answers on a particular subject or topic. An interview is a significant tool used to describe the story about interviewees' experiences (McNamara, 1999). An interview is possibly the most commonly used method in qualitative research, because it is likely to provide insightful information that the researcher might find useful. Rashan and Deeptee (2009:5) refer to it as a dialogue involving two or more individuals whereby an interviewer obtains information from the interviewee by asking questions. Interviews may be structured, semi-structured or unstructured and can be done through the following means namely face-to-face interviews, telephone conversations, engaging in Skype, or video-conferencing. Conducting an interview is necessary if the researcher intends to get detailed information from a few specific interviewees about their opinions and experiences (Driscoll, 2011:163). Interviewing is also one of the best means to resolve seemingly opposing information; this is so because the interviewer has the direct opportunity to ask questions and get the right information (Harrell & Bradley, 2009:10).

Structured interviews have their questions all planned out and presented to every interviewees in the same way using a strict pre-arranged style. It is more focused compared

with semi-structured and unstructured interviews, but still allow a measure of freedom and flexibility in obtaining information from the interviewees (Valenzuela & Shrivastava, 2004:16)

Unstructured interviews are done in the form of a free-flowing discussion; it does not strictly follow any set down rules. **Semi-structured interviews** are the most frequently used method of data collection in qualitative research, because they are straight forward and easy to conduct. It entails open-ended questions based on the researchers' area of specialisation. The interviewer can demand for elaboration and make use of cues and prompts to elicit more responses from interviewees.

This study adopted a semi-structured interview method of qualitative research, because it allows the researcher to explore specific themes and ask questions that will prompt discussion or further reaction from the participants for the purpose of credible findings.

3.8.2 Observation

Observation is one of the most common data collection methods and it can be done in different ways. It is a technique used by the researcher to study people in their natural environments. It can also generate data that will validate or nullify information obtained through other methods (Hancock, Ockleford & Windridge 2009:18). Using observation, a researcher may decide to be a participant observer or a non-participant observer.

Participant observation involves the researcher as a participant. Here the researcher studies participants or events from within (Hancock, Ockleford & Windridge 2009:18).

Non-participant observation involves the researcher studying but not taking part in the interactions. Even though the researcher is alienated from the interactions; there is the possibility that the researcher's presence may have effect on the respondents and their responses (Hancock, Ockleford & Windridge, 2007:18).

There are various techniques for collecting data through observation such as written descriptions, video recording, photographs and artefacts. In this study, the researcher was a non-participant observer.

The study carried out a non-participant observation in all six schools. The reason was to find out how or whether teachers make use of ICTs during English language lessons in a natural

environment. Considering the nature of human inconsistency, this will serve as a tool to checkmate participants' responses during the focus group interviews.

3.8.3 Field notes

Field notes refer to jottings or notes written during data collection by the researcher so as to record all the activities, events and behaviours related to the study. They also contribute to the data collected and serve as evidence that the researcher has actually gone to field (Schwandt, 2015). Field notes give more meaning and understanding of the situation under study and act as a supplement to conventional interviews. In preparing field notes, the researcher provides a detailed, coherent description of what has been observed. Given (2008:40) observes that even though field notes provide researchers with more data, note taking reduces eye contact with participants and makes them sensitive to when the researcher scribbles down anything.

3.8.4 Content analysis

Content Analysis is a common way of analysing large amount of textual data like recorded observation, interviews, transcripts, photographs, drawings and open ended questions and it is very useful in answering the "why questions" (Given 2008:789). Various literatures by experts were also reviewed based on the objectives of the study.

3.9 Data analysis

Data are a set of information which may be in the form of words, pictures, numbers, audio or video (Given, 2008:185). Data analysis is a summary of all the information collected in the process of the research. It involves presenting data in such a way that it explains and describes events and occurrences in a simplified and comprehensive manner (Hancock, Ockleford & Windridge, 2009:24). In this study, data were analysed using the descriptive analysis technique as discussed by McMillan and Schumacher (1993:486). They list four steps towards data reduction and display. The following steps below were adopted for this study in an attempt to present and analyse qualitative data.

Step 1

To interpret and analyse the data for this study, the researcher started by reading the data set obtained from the interviews conducted with the participants as well as the observation notes to get the sense thereof. The researcher wrote down the ideas that occurred as the transcripts were read (McMillan & Schumacher, 1993:486).

Step 2

Topics that emerged from the data were identified and classified into themes. A theme refers to a name or title used to describe the main idea of a piece of writing. The themes were written down by the researcher (McMillan & Schumacher, 1993:486).

Step 3

After writing down the themes from the data collected, it was easy for the researcher to cross check if there is a repetition of any of the themes. The researcher now basically has a set of themes with which to group or classify the data. Classification means bringing similar thought or ideas together under the same theme (McMillan & Schumacher, 1993:486).

Step 4

Afterwards, the researcher made use of this temporary classification method on all the data sets, and then appropriate data were interpreted or analysed under each theme (McMillan & Schumacher, 1993:486).

3.10 Trustworthiness

Trustworthiness refers to the incorporation of elements vital to the research design to enhance the research quality (Baxter & Jack, 2008). The trustworthiness of this study was enhanced in the following ways. The validity of the instrument was ascertained by experts in the department of Early Childhood Education. The researcher has provided a description of data sources: semi-structured group interviews, observation, content analysis, field notes, and the reason for the choice of schools selected. Purposive sampling which is suitable has been applied. The researcher spent two days at each school accompanied by a research assistant, interviewing and observing participants in their natural environment.

3.11 Limitation

Data collection was successfully done, even though there were some challenges. Regardless of the letter of permission obtained from the KwazuluNatal Department of Education to carry out this research, principals of some schools turned down the request of using their schools for research purposes stating that it is the school's policy not to participate in research, because it is time consuming for their teachers. Making appointments with each school was a bit hectic as the researcher needed to constantly remind each school secretary through phone calls as classroom observation and interview schedules kept changing. Another major setback

was that the researcher was to interview three teachers from each school, but this was not possible, because some schools only had one arm of Grade 3 thereby reducing the number of participants. In some schools, Grade 3 teachers who were supposed to be interviewed were not available, because they were writing exams somewhere, while some were in hospital. In their response to the questions, participants who claim to integrate ICT into language lessons were unable to mention any specific software they are familiar with, except for the fact that they get materials on-line.

3.12 Ethical consideration

This study was carried out according to the University of Zululand's research guidelines; hence an ethical clearance certificate was issued. A letter of approval from the KwaZulu-Natal Department of Education was obtained. The principals or heads of schools also gave their approval for classes to be observed and teachers also consented after being assured of confidentiality to provide information as regards their experiences using ICT. Participant also signed a participant consent form which is meant to assure anonymity and utmost confidentiality. That is neither their names nor the names of their schools will be revealed in this study. Participants also reserve the right to withdraw from participating in this study at any point in time. All the information elicited from participants will not be used for any other purposes except for this study. Appointments for interviews and class observation as convenient for all participants were strictly adhered to in order not to interrupt privacy or class lessons.

3.13 Summary

This chapter has discussed the research methods and design employed in this study. It casts more light on the participants and sampling methods and has also examined the instruments used for data collection such as interviews, observations, field notes and content analysis.

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1. Introduction

This chapter presents and analyses the data that were collected through class observations, focus group interviews, and field notes in relation to the objectives and the research questions that were raised in Chapter 1 so as to present the experiences of Foundation Phase teachers in integrating ICT into English language lessons. This study made use of an interpretive research paradigm anchored in a descriptive analysis method which is in line with the qualitative research design described in Chapter 3.

This chapter is divided into four sections; the first section presents the participants' profiles, the second section presents the class observations and field notes, the third section is the arrangement of research questions and interview questions and the fourth will be the presentation of interview responses. Schools will be represented using letters of the Alphabet e.g. School A, B, C, D, E and F.

4.2. Section A: Teachers' Profile

Name of schools	**Participants**	**Sex**	**Years of teaching Experience**	**Qualifications**	**Type of school**
School A	Teacher A Principal	F M	4 45	Undergraduate (Unisa) Senior teacher diploma, (STD) fourth year further studies.	Private
School B	Teacher A Teacher B	F F	11 4	Diploma in Education.	Public

	HOD	F	24	HDE. Diploma in Education.	
School C	Teacher A HOD	F F	11 9	B. Ed, + Honours H.D.E	Private
School D	Teacher A Teacher B Teacher C	F F F	34 30 30	Diploma in Education. Diploma in Education. HDE	Public
School E	Teacher A Teacher B Teacher C Principal	F F F M	30 24 20 30	HDE Diploma in Education HDE Diploma in Education, Further Diploma in youth preparedness.	Private

School F	Teacher A	F	7	B. Ed.	Public
	Deputy Principal	F	17	Diploma in Education	

Based on the teachers' profile above, it is evident that all the teachers are well experienced, because their years of experience range from four to forty five years and are academically qualified to teach in the Foundation Phase as their qualification ranges from Diploma in Education to Bachelor's degree in education except for one who is presently studying. The majority of those who are included in this sample are females, because out of sixteen teachers that were interviewed only two of them are males.

4.3 Section B: Classroom observation and field notes

The study used observation as a form of data collection from the six primary schools investigated in the UThungulu district so as to compare data obtained through focus group interviews for further corroboration of the research result. The observation centred on the availability of adequate ICT facilities and usage in the primary schools especially in the delivery of English language lessons. Observation was conducted in School A, School B, School C, School D, School E and School F. This was done in order to capture events and occurrences in a natural setting. The researcher focused on the following during observation: the various ICTs available in schools, how confident and skilful teachers were in the use of such tools, teachers' attitude towards ICT use, how appropriately these tools were used. Observation schedules depended heavily on teacher's timetables. In doing this, the researcher spent two days in each school watching the process of English language learning and teaching as it occurs in the classroom.

4.3.1 Physical environment

A description of the learning environment is vital, because it helps to understand its importance to the total well-being and academic development of learners. The six schools investigated are located in a serene environment with well-built structures except for Schools A and C that have wooden structures.

4.3.2 Classrooms

All six schools have big enough classrooms except for School A whose classrooms are relatively small. The three private schools have an average of 20 learners in a class; while two of the public schools have an average of 30 learners; one has an average of 15 learners in a class. All six schools have the normal classroom seating arrangement, except for Schools B and D where Grades 1 and 2s sit in groups of six. All the classrooms have calendars, mathematical tables, pictures of animals and objects, spellings of words in the English language, their synonyms, antonyms, opposites and plurals on their walls that serve as a learning guide or teaching materials that aid the overall development of learners.

4.3.3 ICT facilities

The researcher discovered that even with the awareness of the benefits and importance of using technology in education, most schools investigated in this study are yet to align themselves with this innovation. Schools B, C and D still make use of chalk boards; Schools A and F have white boards while School E has white boards in Grade 1 and black boards in Grades 2 and 3. School F has functioning projectors and Wi-Fi facilities in their classes, School E has Wi-Fi, but only Grade 1 has a functioning projector and a faulty interactive board. School D is visibly in the process of installing projectors in their classes. School A has a television and a DVD in Grade 1, while at School C; teachers have PCs on their tables, but throughout the period of observation, only Schools E and F made use of these devices.

4.3.4 ICT usage

The researcher also discovered that even in schools with ICT facilities, not all English language lessons were taught using ICT tools or devices. All the lessons observed in this study were presented effectively and clearly, and there was smooth transition between activities in the classroom. The time allotted for each lesson is 30 minutes. For reading lessons it was observed that in all the schools, every learner in grade one and two already belong to a group of five or six which was identified by colours or names of animals. Each group sits on the floor either in front or at the back of the classroom to take its turn.

4.3.5 Lesson delivery

It was observed that in the Foundation Phase, English language as a subject is divided into: reading, comprehension, news writing, phonics, vocabulary and spelling and all these take place in the classroom not in a media or a computer room. Reading is meant to develop learners' reading and pronunciation skills, and how to observe punctuation in sentences while

they read. Comprehension is meant to develop learners' meta-cognition and make them active readers. News writing develops learners' writing and listening skills, communicative competence and confidence level, because it also involves narrating activities that learners were involved in over the weekend or during school holidays. Phonics teaches learners the relationship between sounds and letters, differences between consonants and vowel sounds and recognition of capital and lower case letters, while vocabulary and spelling help build learners' spelling skills and knowledge of words and meaning.

At school A, the researcher observed phonics lessons in Grade 1, comprehension in Grade 2 and vocabulary and spelling in Grade 3. When the bell rang for phonics lesson, the teacher wrote the topic on the board: "The i sound" and a list of the following words: flip, give pick, lick and dish were also written on the board. The teacher read them aloud twice pointing at each word and then asked each learner to come forward and do the same. The teacher later used two words from the list to form sentences, read them to the class, then asked learners to copy the two sentences into their books. Learners were told to form sentences on their own using the remaining three words from the list of words on the board, and then the teacher went round to supervise learners while they were writing. In Grade 2, learners were asked to open on page 15 of their reader titled *Robin Hood* and the whole class read together, but the teacher helped with pronunciation and punctuation where necessary. They paused intermittently so the teacher could explain what they had just read and then asked questions to find out if they really understood the passage. They all read the questions that followed the passage together and were told to answer them in their exercise books. The teacher checked the learners to be sure they were doing the right thing. For Grade 3, the topic was synonyms. The teacher started the lesson by explaining what synonym means and then wrote examples of words and their synonyms on the board and read them aloud. Learners were also allowed to give more examples of words and their synonyms after which they had to write out examples of five words each and their synonyms in their exercise books and then submit these for marking.

At School B, a reading lesson in Grade 1, vocabulary and spelling in Grade 2 and news writing in Grade 3 were observed. Immediately the bell rang for this lesson, the teacher called each group to sit on the floor in front of the classroom. Each group had different readers and each learner was asked to read a page while others were listening and the teacher helped with pronunciation and punctuation where necessary. In Grade 2, the teacher gave a worksheet

containing sentences and words that were classified under verbs to each learner; this worksheet also contained pictures that represented these actions. The teacher started by defining and explaining what a verb means citing numerous examples, and thereafter read out each sentence asking learners to identify the verbs. Learners' participation was very active as each was eager to answer the questions. The teacher later asked learners to make two sentences in their exercise books underlining the verbs as well. In Grade 3, the teacher started by narrating a recent event that happened, thereafter learners were also allowed to narrate recent events. It was a very interactive class as each learner wanted a chance to narrate an event. After listening to three learners narrating their events, the teacher asked learners to write out one recent event in their exercise books.

At School C, News writing was observed in Grade 1 and 3; Vocabulary and spelling were done in Grade 2. To begin the lesson in Grade 1, the teacher told the class about an activity she was involved in over the last weekend, she then asked each learner to also talk about a recent activity. Afterwards, learners were told to write out an activity in their exercise books and submit it for marking. When the bell rang for this lesson, the teacher in Grade 2 wrote out the day's topic "i-e words", a list of words with i-e, letters and a chart with i-e words and pictures representing each word was pasted on the board. She read out each word and learners repeated after her. Thereafter, the teacher asked learners to make sentences with the words on the chart and also draw a picture to represent each word and then submit for marking. In Grade 3 the teacher handed out a printout to each learner containing names of places, means of transportation, different activities and when and why these activities were carried out. The class read words on the printout aloud. Each learner was asked to tell the class about a recent activity, afterwards learners were told to write out one activity in their exercise books and submit these for marking.

At School D, the researcher observed reading in Grade 1, phonics in Grades 2 and 3. When the bell rang for reading lesson, the teacher asked all learners to sit on the floor in front of the classroom; she brought out a big reader containing pictorials titled *Mr Stoofflees and the painted tiger.* She read it along with the whole class, pointing at every word as they read. They paused intermittently, for the teacher to explain what has been read to learners. Participation was active as learners read out so loud. The topic for Grade 2 was "the Θ sound, (th words)". The teacher started by writing out 'th' words on the board, read them out and asked the class to repeat after her to ensure learners could pronounce the words correctly. The

teacher later handed out a worksheet containing words where learners had to fill in the gap, a crossword puzzle on 'th' words and sentences for learners to "unjumble", and later submit the worksheet for marking. The Grade 3 class had to sit in groups of six for this lesson, because the teacher wanted to introduce a game. The topic was "different realisation of the 'o' sound as in: eo, ow, oa, and oe". She wrote down some words that fall under each category on the board, read them out to the class, and then it was time for learners to give their own examples. There were four groups altogether, to select a group representative, the teacher threw a ball at each group and so whoever caught it came out to write examples under each realisation on the board. The scores depended on the number of correct examples given for each realisation. The class was very active as learners struggled to catch the ball and also whispered words to their representatives. The teacher corrected the wrong examples and told learners to copy them in their exercise books and then submitted these for marking.

At School E, vocabulary and spelling lessons were observed in Grades 1 and 2, while reading was observed in Grade 3. In Grade 1, the teacher began the lesson by reminding learners of the last topic, asked a few questions and learners provided the answers. The day's topic "the U sound" was projected on the board along with some three-letter words with letter 'U' missing on the screen and pictures representing each word. Learners were asked to fill in the missing letters, pronounce the word and link them to the picture they represent; all learners participated excitedly. The teacher then asked learners to copy the words, draw and colour the pictures that represent each word in their exercise books and then submit them for marking. In Grade 2, the teacher began the lesson by writing the topic "Word Identification" and some sentences on the board. The teacher read out each sentence for the class to repeat after her, and then she pasted a picture related to each sentence. Afterwards learners were given cards containing pictures or symbols and were told to open to page thirteen in their worksheets where they would find sentences and then paste a picture or symbol represented in each sentence and then submit it for marking. In Grade 3, the teacher called on a group and told them to read from their reader titled *The Masked Cleaning Ladies Of Om*. Learners were asked to read a page each while the teacher was correcting them where necessary and explained what had been read, participation was active as learners read out aloud. All the groups read from the same Reader.

At School F, Phonics lesson in Grades 1 and 2 and Reading lessons in Grade 3 were observed. As soon as the bell rang for this lesson, the Grade 1 teacher taught the learners

using the projector. The topic “word building” and a story highlighting three letter words in red were focused on. Then the teacher and learners read the story aloud. Each learner was asked to identify the highlighted words and sound the letters. Later, scrambled letters and pictures were displayed and learners were asked to build up three letter words with these letters and merged them with corresponding pictures and then submitted them for marking. For Grade 2, the topic was “rhyme scheme”. The teacher played a CD narrating a poem for about four times and also displayed through the projector a list of rhyming words used in the poem. Learners were told to pay attention to the poem and thereafter, the teacher also displayed four different sentences. She asked learners to pronounce the words that rhyme in the poem, and then write them out in their exercise books and submit them for making. To begin the lesson in Grade 3, the teacher called on a group to read from their Reader titled *A Fright in the Night*. Learners then read in groups and the teacher corrected them where necessary. Every learner participated actively. After all the groups have taken turns, the teacher wrote some words from the pages they had read and asked them to practise.

4.4. Section C: In this section, data will be presented according to the research questions, which will be structured into themes that are related to each question, two themes will be merged in the presentation of data. For the purpose of clarity, a theme refers to an idea that runs through the significant questions raised during the interview.

4.4.1 Research Question 1: What are teachers’ experiences in incorporating ICT into language Pedagogy in the Foundation Phase?

Theme 1: Opinions and views about ICTs in education

This theme expresses the general views of respondents towards the use of ICTs in education. All respondents agreed that the importance of ICTs in education cannot be over emphasized but expressed some form of fear in its integration.

Theme 2: Significant differences and challenges

This theme highlights the difference between the structured traditional method of lesson content delivery and ICT integration. It also presents the challenges respondents encountered in the process of integrating ICTs.

School A

Answers from the respondents provided in-depth information that aided to understand the unique situation or circumstances they are faced with in the process of incorporating ICT into the English language curriculum. Both respondents affirmed that ICT integration is a positive development that provides teachers with different options for lesson presentation. They also agreed that ICT is good and because learners are familiar with it, since they have these facilities at home they tend to pay more attention in class. Respondent 1 went further to say that apart from making lessons more enjoyable for learners; ICT also makes the teacher's work easier, but cautioned that there is the possibility that it may replace the textbook in the nearest future and warned that teachers must not go all ICT discarding the method of teaching with the textbooks.

Question: What is your opinion about ICT in education?

Respondent 1: *I think ICT provides teachers with different options to present their lessons when teaching the children. ICT is good and because the children are familiar with it they tend to pay more attention in class. It makes teachers' work easier but it should not replace the textbook.*

Question: What do you mean by "it should not replace the textbook?"

Respondent 1: *I mean teachers must not go all ICT discarding the traditional method of teaching with the text books, that is, they have to blend both methods.*

Respondent 2: *I think it is very critical. I believe that all schools should have ICT especially in the classroom, as it interacts with the children and the teacher will have more opportunity to connect with the internet*

and then enhance their lesson delivery.

In order words, ICTs should be supported with other teaching methods. Respondent 2 agrees that ICT integration is a very remarkable and positive development in the education sector and believes that every school must try as much as possible to provide ICT infrastructures, because of the enormous benefit it affords both teachers and learners.

When asked if integrating ICT makes language learning more interesting, the response was affirmative but respondent 1 was of the opinion that even though ICTs makes teaching and learning worthwhile, there are lessons that are better taught using the structured traditional method, but failed to mention such lessons even when asked.

Question: Do you think integrating ICT makes lessons more interesting?

Respondent 1: *Yes, of course using ICT makes lessons*

more interesting but this also depends largely on the lesson.

There are some lessons that can be interesting when they

are taught using the traditional method.

Question: Please mention the lessons?

Respondent 1: *I cannot remember any of them now.*

Respondent 2: *Yes, they become interested when you use computers.*

Respondent 2 agreed that ICTs get learners more involved in class activities.

The respondents outlined a number of challenges at the school level. The major challenge for this school is that the school is located on a temporary site, with small classrooms, and so there is no space to do proper classroom activities.

Question: What are the major challenges in integrating ICT?

Respondent 1: *First of all, we are in a temporary site; our classrooms*

are small, and sometimes there is no space to

do proper class activities. We need funds to get

a permanent space and then we can talk about having these facilities.

Respondent 2: *The main thing is that we need new premises;*

we are stuck in a building which belongs to the church

so we do not have our own structure. For us it becomes

very difficult to install something which when we move,

we cannot remove. It is also a question with the governing

body whether we should invest into something like that at this stage.

For this reason the school cannot acquire any facility at the moment. According to respondent 2, there is a very pressing need for funds to get a permanent space, then the issue of ICT integration can be tackled. Another challenge was the time allotted for each lesson. Both respondents expressed the fact that they are not given enough time in the timetable to use and practise ICTs.

Question: With ICT integration, is "time" a major challenge?

Respondent 1: *Time is very much a challenge and I think it*

should be looked into, thirty minutes is rather short.

Respondent 2: *Yes, time is very crucial; it is a sensitive*

issue that is why we have to be very careful not to

disrupt or alter our lessons.

Respondent 1 suggested that more time is needed for each lesson if full integration is to be achieved. Lack of ICT skills is also very challenging for teachers in this school, according to the respondents.

Question: Do you feel there is a need to upgrade your ICT skills?

Respondent 1: *Personally I have basic computer skills.*

I do feel the need to learn more,

because new technology keeps coming up.

Respondent 2: *I think we are all familiar with the computer, but*

we are having very little or no experience with other ICT tools.

Question: How often does the school organise training?

Respondent 1: *So far maybe about once in two years.*

Most of our teachers who are newly employed

have computer skills.

Respondent 2: *Once in a while we do organize training.*

One major reason for slow integration is that schools do not make it a priority to organise training for their teachers. Respondents confirmed that school A hardly organises proper and regular trainings that will enhance lesson delivery with the use of ICTs.

School B

All the respondents in this school were initially reluctant to grant this interview. The reason they gave was that they do not make use of modern ICTs, because their school is not well resourced. The researcher had to point out that radio cassette players, printers and photocopiers are also ICTs even though they are not modern. When asked if ICTs should be incorporated into education, this was their response.

Question: Do you think ICT should be incorporated into education?

Respondent 1: *ICT is good no doubt. It helps a lot but my problem*

with it is that it also promotes laziness and distraction

just like the worksheet. It will reduce teachers'

workload and it will help to source more materials

for effective planning.

Respondent 2: *It makes teaching and learning easy especially*

for the children, but I think it is easier to remember

when someone tells you something than when the

computer tells you, yes of course.

Respondent 3: *ICT is quite a new concept. I think it is*

important in the education sector, because

all other sectors have also got it. It is obviously

a thing of the future, but it involves a lot of money.

I do not know if it is going to make the job easier.

All three respondents agreed that the idea of using ICTs in education is good; it enhances learning and teaching and help teachers have access to teaching resources for effective planning. In as much as ICT has positive impact on learners, for Respondent 1, ICT encourages laziness and distraction among learners. Respondent 2 feels that it is easier for learners to recall lessons that are taught using the traditional method than to recall lessons that are taught using ICTs. Respondent 3 concurred with the use of ICTs in schools, and feels that it is important in the education sector, because it is the way to go, and it is obviously a thing of the future but it is capital intensive.

Question: Do you think using ICT makes any significant difference?

Respondent 1: *Yes it does. Everyone knows that with technology,*

things work better.

Respondent 2*: Of course there is a huge difference. That was*

why I acquired the skills on my own.

Respondent 3: *Yes of course, we all know that.*

Respondents all agreed that the difference between using ICT and the traditional method of teaching is huge. As regards the challenges involved, Respondent 1 revealed that ICT is totally new.

Question: What are the major challenges in integrating ICT?

Respondent 1: *I have never used it but I know it is good*

and as you can see we do not have it, because this

is a government school and projects like this will

take time, because it involves lots of money.

Respondent 2*: Yes that is true, we do not have it here.*

Respondent 3: *Our major challenge is that we do not have it here,*

although the school has a plan to provide ICT

facilities but, you know this takes a very long process,

because it has to go through the governing body and all that.

Question: Is "time" a major constraint identified with ICT integration?

Respondent 1: *Yes, I think so but I do not know much about it.*

Respondent 2: *Yes, that is true and another major challenge for me*

is time to learn the ICT skills. I went for trainings

on my own, I had to struggle through it because I was determined.

Respondent 3: *I cannot really say for now, may be when we start*

using it we will figure it out.

Respondent 1 does not have a personal experience in terms of teaching with modern ICTs, but explained that it is common knowledge that ICT enhances teaching and learning better than the traditional method. It is so unfortunate that learners in the school are denied such huge opportunity of experiencing learning in a 21st century classroom. The school lacks modern facilities like computers, projectors, interactive white boards, internet connectivity and everything that goes with it. This deprives teachers like Respondent 2 who already had

such skills from experimenting with it. Lack of time to learn the ICT skill is a challenge for Respondent 2 who spent personal resources on ICT trainings, because of the benefit it has. The Respondent revealed that because of the determination to learn, lots of sacrifices were made to acquire the knowledge and skills. Respondents also acknowledged the fact that because it is a government school, projects like this will take time since it involves a lot of money.

Question: Do you feel there is a need to upgrade your ICT skills?

Respondent 1: *Yes definitely we need to upgrade our skills.*

Respondent 2: *Yes of course we need to do that from time to time.*

Respondent 3: *Yes we really need it.*

School C

Respondents from this school feel that ICT integration is a great idea; it is so far the best thing to have happened in the education sector. It is believed that ICT will be of immense benefit to teachers and learners if only schools can make adequate provision.

Question: Will you say ICT in education is a welcome development?

Respondent 1: *It is a good idea; it is helpful because it teaches valuable knowledge and skills because our society today needs knowledgeable people who are capable of developing specialised systems.*

Respondent 2: *It is great, I think it will be lovely if we can*

all have computers in our classrooms.

In other words, the skills and knowledge gained from the integration of ICTs are what is required for growth and development in the society today.

With regards to the significance of ICT to lesson delivery, Respondent 1 pointed out that even though technology seemed to have all the solutions to classroom practices, it does not make a bad teacher better and vise-versa.

Question: Will you say ICT is a more reliable means of subject delivery?

Respondent 1: *I am not sure it is more reliable than the normal*

way we teach *I do not think it will make a teacher*

better or worse. If you have access to use it fine,

if you do not, I do not think it makes any difference.

Respondent 2 did not hesitate to say that the difference is that technologies cannot be relied upon, because it fails and lessons can be disrupted when computers develop fault or there may be a power failure in the middle of lesson presentation.

Respondent 2: *No, I do not think you can totally rely on it because it fails.*

You have to be well prepared for it if you have to use it;

you have to set it up before the lesson but always have a plan B.

The respondent advised that teachers must be well prepared or make alternative plans so as to be able to tackle these problems when the time comes. The challenges listed by respondents in this school is synonymous with those of respondents from schools A and B. Funding must be planned to properly equip classroom with modern technology gadgets. A lack of skills, proper training and the technicalities involved in ICT integration all contributed to challenges. Respondent 2 pointed out that integration is the key, but that while at it, time appears to run faster.

Question: What are the major challenges in integrating ICT?

Respondent 1: *The most pressing problem we have here is that our*

school lacks the funds to properly equip our classroom

with these ICTs, and then there is the issue of training and

the technicalities involved in its use.

Respondent 2: We need more funds to acquire more ICT stuff,

funny enough when you are using it, time appears

to run faster than normal.

The reason for this is because lessons are more interesting and motivating with ICTs and so teachers try as much as possible to compress all activities in the lesson within the short time allocated for the lesson.

Question: Do you think there is a need to upgrade your ICT skills?

Respondent 1: *Yes, it is important because we are talking about ICT here.*

Respondent 2: *Yes, because it changes.*

Question: In what way does the school support ICT use?

Respondent 1: *The school has done its best concerning ICT, in many ways possible to ensure that it runs smoothly.*

Respondent 2: *The school supports by sending us for training from time to time and we have an IT person who helps us with all the ICT problems, and fixes whatever goes wrong.*

Respondents revealed that the school takes ICT integration seriously and so ensures that provisions are made.

School D

According to Respondent 1, the idea of using ICT in education is a positive advancement, because it is innovative and interactive. It is an experience everyone should be given an opportunity to have.

Question: Will you say ICT in education is a welcome development?

Respondent 1: *Yes ICT is a welcome development in education. It is good, innovative and interactive. It is something to look forward to and I believe everyone should at least have an idea about it.*

Respondent 2: *For me ICT is fine, makes life much easier.*

And, also if you have visual stuff it keeps

the children's attention to focus on the problem.

Respondent 3: *ICT is new, it is good and I also*

think it is a welcome development.

Respondents revealed that with ICT learners show more interest and are motivated because they are surrounded with even more sophisticated technologies at home and so are used to everything being fast and visual. When teachers are not making use of ICTs, learners become bored and distracted.

Question: Is there any significant difference between integrating ICT and the traditional teaching methods?

Respondent 1: *Of course there is. I just find out that the children*

have got their own tablets and computers at home,

so as soon as they see you are using any of these

technologies, they show more interest. Whereas you do

not have to talk and talk like we do at the moment

because they get bored easily.

Respondent 2: *If you have visual stuff it keeps the children's attention*

to the problem, but with the chalk and board, as soon

as you turn your back, they lose their focus, you stand

in front of them you have good eye contact with learners.

Respondent 3: *What I found out as well is that children have lost focus;*

they have become bad listeners because of technology.

They are so used to everything being fast and visual

that they do not listen anymore.

Respondent 2 revealed that with the traditional method, teachers maintain good eye contact with learners which help them stay focused. Regarding the challenges, Respondent 1 feels that ICT is for young people, because of the nature of technology, old teachers find it difficult to learn new skills probably because of age and because they are digital immigrants it becomes more difficult to learn and master these skills. Respondents said that despite this difficulty in acquiring these skills, the situation at hand requires that teachers master these skills for effective delivery.

Question: What are the challenges you face in the process of integrating ICT?

Respondent 1: *I think for me it is the nature of the computer,*

I feel I am too old to start learning it because it is for

the young ones; I mean I find it difficult to master it.

I just manage to hang in there anyway. And we also need

money to complete the installations, for now only the

senior phase is using it.

Respondent 2: *Changing from the regular routine is quite challenging*

I must confess, and again the children seem to get carried

away by it. Then like she rightly said we need funds.

Respondent 3: *Yes, more money to finish what we have started.*

The issue of funds was also not left out as respondents mentioned that the school needed money to complete the installations of ICT infrastructures for which only those of the senior phase had been completed. This was evident during observation.

Question: Do you feel there is a need to upgrade your computer skills?

Respondent 1: *Yes, everyday it's changing. We as teachers*

have a challenge with our computer skills,

especially for us the "old school" ones.

Respondent 2: *We have a computer centre.*

Respondent 2: *Definitely, because it's changing and we have to keep up with it.*

Question: How supportive is the school Administration towards ICT use in the classroom?

Respondent 1: *Yes the school really supports us. For the smart boards, the teachers were trained on how to use them. It is sometimes trial and error.*

Respondent 2: *And if we feel we need more training. We will inform those who usually train us. I have attended workshops too but the school will go an extra mile to ensure we practice it.*

Respondent 3: *They came to the school to train us on how to use the data projector.*

All three respondents concur that the school offers training from time to time.

School E

All the respondents from this school attest to the wonderful expansion and progress that technologies have made since inception. Due to one reason or the other, implementation in the education sector is very low. The reason for the slow implementation is that most teachers are not familiar with its use, since ICT integration is a recent development.

Question: What is your perception about ICT in teaching and learning?

Respondent 1: *It's something that we were not brought up with but, because technology is such a part of the new generation we do have to incorporate in our lessons now and I think it*

is a wonderful extension of formal teaching, because the

children can actually see and actually be involved

in grasping the concept.

Respondent 2: *I think in the modern society, in the 21st*

century, it is obviously crucial, considering the fact

that our children are exposed to these kinds of things,

so we have to integrate it in the classroom as well.

It is very important.

Respondent 3*: ICT is a very good thing to have happened;*

I think it's a great idea, because we can project

all our lessons on the white board. The children

can write or draw on the board also; this makes them

part of the lesson.

ICT exposes both teachers and learners to current trends in the world. Respondent 3 said it is the perfect time to integrate ICT in education considering the fact that learners are already exposed to technology, so this makes it imperative to have it in the classroom as well.

Regarding differences in the methods of teaching and the challenges they face, respondents are of the opinion that with technology it is fine, but it comes with a lot of disadvantages.

Question: compared with the traditional method of teaching, is there any difference in using ICT?

Respondent 1: *I think there is a big difference because the old way*

of teaching was very much up in the classroom, but now

it is not just the teacher, but the teacher and a form of technology

as well as an extension of the teacher. So that is why it is vital to also have it

teacher-directed so as to improve their concentration and listening skills.

Respondent 2: *I like technology; what I do not like is that our children have become reluctant to study like we used to.*

Respondent 3: *Well I do not think there is a huge difference, because like my colleague said, we do incorporate both, we do not just teach teacher-oriented activities and we also do not just use technology-oriented approaches.*

The major challenge in this school according to all the respondents is poor internet network which respondents feel is because the school is located in a rural area. The poor connections force teachers to always have alternative plans for lesson delivery.

Question: What are the challenges you face in the process of integrating ICT?

Respondent 1: *Unfortunately our school is located in a rural area. Being a farm school, our internet connection is very weak; they are forever working on it. We are a big school so there is a lot of usage. So it is frustrating when you plan using the technology but there is no internet for that day, but then we always have a plan B.*

Respondent 2: *Yes, you cannot rely on it completely.*

Respondent 3: *Locating the internet here is quite challenging, because this is a rural area. It is not always possible and this is quite a big challenge for us.*

Question: Is it true that integration of ICT takes time?

Respondent 1: *Of course it does. Learning it, using it: it all takes time.*

Respondent 2: *Yes it takes time.*

Respondent 3: *Of course it does.*

Respondents said that their colleagues in the IT department of the school are always working on the network connection so that members of staff can easily access the internet but so far there has not been any significant improvement on the network connections. In terms of a upgrading ICT and the concept of time when dealing with ICT, all respondents agree that it is a crucial factor, because it will keep teachers informed.

Question: Do you agree that there is a need to upgrade your computer skills?

Respondent 1: Yes I agree.

Respondent 2: We do need it.

Respondent 3: Yes of course, you know how these things work.

Question: How often does the school organise ICT training for teachers?

Respondent 1: Regular training is organised, because we

are part of a bigger holdings company so there

is often one training or another at least once in a term.

Respondent 2: Yes that is what happens.

Respondent 3: We do acquire good training.

School F

Respondent 1 agrees that ICT integration is a good idea; according to the respondent it motivates and captures learners' attention easily, because it is colourful and learners have more fun when ICTs are used. Even with all the positive influence ICTs have on teaching and learning, the respondent suggested that ICTs should be combined with other methods especially at this level so that learners will also become used to other methods of lesson delivery.

Question: Do you think integrating ICT will bring about any positive change in classroom lessons?

Respondent 1: *I think it is a good system, the kids learn more when they have the system because it is colourful and they can see so we use all types of material on it but I do not think that you should only use that to teach kids. I think they must also get use to reading and writing a lot and not just through the computer.*

The second respondent concurs with the fact that ICT integration is a welcome idea; it makes lesson delivery more interesting and enjoyable especially for learners at the foundation level but advised that teachers should not get carried away with the euphoria of using ICTs so that it does not take the place of textbooks.

Respondent 2: *It is very good. The youth like it, they are immediately interested. It is more interesting than books, although it helps, but it should not take the place of books.*

Respondent 1 sees no major difference between ICT integration and the traditional methods of teaching except for the fact that it keeps or sustains learners' attention because they find it interesting. Respondent 1 feels the greatest challenge in using ICT is when one does not have the knowledge about it.

Question: Is there any major difference between using ICT and the traditional method of teaching?

Respondent 1: *Apart from the fact that it keeps or sustains learners' attention because they find it interesting, I do not really see any significant different between both.*

Respondent 2: *That is true, for me the difference is insignificant.*

Respondents further explained that teachers have to know and be familiar with modern ICTs to be able to use them effectively and mentioned that the school is fortunate to have a teacher who fixes most of the problems that has to do with ICTs in the school. Time to set up ICT facilities before the commencement of lesson is a big challenge according to the respondent, and the need to acquire proper integration skills.

Question: What are the challenges in integrating ICT?

Respondent 1: *I think for me the greatest challenge in using ICT is if you have no knowledge about it you find out that you keep struggling with it. You have to know the system very well and be familiar with it in order to use it effectively. If you do not know the system at all, it will be very difficult for you. Here we are lucky because whenever we are struggling with it we can easily call on the teacher who does the installations and then she helps us out. Setting it up is what really discourages me from using it.*

Respondent 2: *The challenges involved are so many, for example, funds require to maintain the facility, safety of infrastructure, lack of proper skills on the part of the teacher. I can go on and on.*

Question: Do you feel there is a need to upgrade your computer skills?

Respondent 1: *Definitely, because these things keep changing. I believe I need to upgrade my skills from time to time.*

Respondent 2*: Sure. It is important.*

These responses presents teachers' perspectives concerning ICT integration in education, the wide acceptance, support, change, influences and how it has enhanced classroom practices. Their response also points out some of the advantages and disadvantages of using ICTs. This implies that ICT integration in education is a welcome development which concurs with the opinion of Bolstad (2004:2) that ICT integration into the teaching pedagogy, policy and curriculum is embraced by stakeholders in the education sector. The perception is that it will bring about positive change in subject content delivery, learners' motivation and achievement. This further emphasises the views of Mikre (2011:7), who notes that ICT has brought about fundamental changes in teaching practices, schools and communities. It also highlights the pressing need for more funds as one of the factors that impedes integration. Responses revealed that teachers recognise that there is a need for them to continuously upgrade their ICT skills. This view is supported by Ndlovu and Lawrence (2012) who assert that the present teachers' ICT training has failed to meet their classroom needs. It draws attention to the effect of the lack of proper funding on the integration of ICT. Participants' points out that proper integration cannot be achieved if there is no adequate funding to set up, and maintain ICT facilities. It exposes the fact that school administrations and governing bodies do not offer adequate support in terms of proper and regular training on the integration of ICT into curriculum delivery. Respondents recognise that due to the nature of technology, they need to keep pace with current trends by attending regular and proper trainings.

4.4.2 Research Question 2. What are the attitudes and responses of teachers towards the use of ICT in language teaching and learning?

Theme 3: The need for ICT skills

This theme highlights the need for teachers to acquire ICT skills in order to properly incorporate it in their content delivery. All respondents agree that for them to be relevant in the teaching profession, they have to learn and upgrade their ICT skills periodically.

Theme 4: Teachers' commitment

This theme sheds light on teachers' willingness and dedication towards ICT integration. Respondents express total support and commitment for proper integration and also gave some reasons why there is a lack of commitment on the part of some of their colleagues.

School A

When asked about the attitude teachers towards ICT, respondent 1 from this school pointed out that the young teachers are more interested in integrating ICTs into lesson content compared to older colleagues. The respondent feels that this may be because the younger teachers are more inclined towards ICTs than older colleagues who are not comfortable with the new technology and so find it difficult to grasp the concept.

Question: Do teachers welcome ICT integration into language learning?

Respondent 1: *I think maybe the people that have been teaching for a very long time do not always incorporate ICT, because they are not comfortable with the new technology. So I guess the newer teacher will embrace and incorporate it into their lesson like doing a slide show, using DVDs and the internet.*

Respondent 2: *Teachers here are fine with it. They obviously make use of their private computers to teach the children.*

Concerning ICT skills, respondents were more willing to comment and reported that there is no problem with basic computer skills, but the problem is the lack of proper ICT integration skills.

Question: Are you computer literate? Do you have ICT skills?

Respondent 1: *Yes I have basic computer skills.*

Respondent 2: *I think we all have computer skills.*

Respondents went further to say that there is need to acquire more ICT integration skills. Because of the nature of technology it is important to attend training, workshops or seminars frequently. The second respondent also agreed that there is dire need for proper training so as to get acquainted with other ICT tools.

Question: Do you think there is need for you to acquire proper ICT skills?

Respondent 1: *Of course, I do feel the need, but the school does train us as well, because new technology keeps coming up.*

Respondent 2: *Yes there is an urgent need to do that. We all know that technology keeps changing and so you must learn.*

School B

Respondents were asked if ICT incorporation was welcomed by teachers. The reply was that most teachers welcomed the change but some did not because they felt so comfortable with the present practice and so were not up for the challenge. Respondents also said that teachers need to develop interest in ICT integration, because of the numerous benefits it offers both teachers and learners, but the regret is that many schools are yet to acquire these facilities.

Question: Are teachers enthusiastic about incorporating ICT?

Respondent 1: *I'm very sure we are. I like it and I welcome the change but everyone is different, some of our colleagues do not want to concern themselves with using it. I have been teaching for a long time and I am interested in it, because I recognise it will help make my job better and learners are also fascinated by it. It is unfortunate that many schools are yet to acquire these facilities.*

Respondent 2: *Some are receptive and others are not; you know with change people are reluctant especially the old ones.*

Respondent 3: *Yes that is true.*

All respondents have basic computer skills. The third respondent's reply when asked if teachers in this school are computer literate was in the affirmative, but went further to say that teachers make use of computers on a personal level, since the school does not have the resources to acquire these facilities.

Question: Are you computer literate/do you have ICT skills?

Respondent 1: *Yes, I don't know much just a bit about computer.*

Respondent 2: *Yes, it is very important.*

Respondent 3: *We all have computers which we make use of on a personal level.*

According to respondent 1, for teachers to be able to use ICT effectively in the classroom, they have to be properly trained and it does not just stop there; it has to be a continuous process considering the nature of technology so that teachers will keep up with what is necessary in the classroom.

Question: Do you think there is need for you to acquire proper ICT skills?

Respondent 1: *For us to be able to use it effectively in the classroom, we have to be properly trained. And it does not just stop there; it has to be a continuous process considering the nature of technology. What I am trying to say is that teachers will have to be trained from time to time so that they keep on with what they really* need to use in the classroom.

Respondent 2: *We really need more skills.*

Respondent 3: *I totally agree with that.*

School C

With regard to teachers' attitudes towards ICTs, the first respondent noticed that some teachers were more enthusiastic than the others. Those who are enthusiastic easily embrace the concept of ICT, while some others just take their time to learn Computer skills gradually.

Question: Do teachers welcome ICT integration in education?

Respondent 1: *Of course we do but some teachers are more forward*

than the others, those who are forward easily embrace the idea

of teaching with ICT and are more computer literate,

but others simply take their time to go gradually.

Respondent 2: *Yes, I am personally excited about it and I believe my colleagues are too.*

Respondents confirmed that most teachers do have basic computer skills but pointed out that these skills are not enough considering what ICT integration entails.

Question: Are you computer literate, and do you have ICT skills?

Respondent 1:*Of course I do have computer skills,*

even though I am not so good at it.

Respondent 2: *Yes I am.*

Question: Do you think you should acquire proper ICT skills?

Respondent 1: *It is important to go for trainings, because ICT*

is so relevant and very useful.

Respondent 2: *Yes, that is why we organise computer*

training every two years.

Respondents suggested that it is important for teachers to attend relevant trainings more often. The second respondent also mentioned that the school organises ICT training for teachers once in two years.

School D

The first respondent was honest about teachers' reaction towards integration. According the respondent teachers were afraid initially, the reason being that ICT is a new concept and obviously teachers did not grow up with computers. After some time, teachers became enthusiastic about it, went all out for it and were ready to be a part of this new change.

Question: Are teachers enthusiastic about incorporating ICT?

Respondent 1: *In the beginning we have to be honest we were a bit afraid, because we did not grow up with computers, but once we are taught how to use it, we go all out for it. We are very enthusiastic about it.*

Respondent 2: *Teachers do see it as a challenge, because it's something new that requires a lot of time and effort to get acquainted to. ICT is good. It reduces our workload, has less paper work and it's more visual. There is nothing you can do as an educator but to embrace it.*

Respondent 3: *I think we are trying to adapt to the change although it is not easy.*

The second respondent said that teachers do see it as a challenge because it's something new that requires a lot of time and effort to get familiar with. Teachers are aware that ICT is good; it reduces their workload, has less paper work, it is more visual and educators are left with no option but to embrace it. The third respondent replied that even though it is not easy to adapt to change, most teachers are really making an effort to ensure that learners have unforgettable learning experiences.

Concerning having ICT skills, the first respondent replied that although she is not so conversant with computers, she can perform basic computer operations. The second respondent obviously does not have basic computer skills as every computer task is done by a secretary. The third respondent can also carry out some basics, but not complicated computer task.

Question: Do you have ICT skills?

Respondent 1: *I'm smart phone literate; I can do basic operation with the computer.*

Respondent 2: *My secretary at school does all my computer related work.*

Respondent 3: *I'm very basic computer literate, I can*

use word and just a few programs, but not

complicated programmes.

Question: Do you feel there is a need to upgrade your computer skills?

Respondent 1: *Yes everyday it's changing. For us teachers,*

we have a challenge with our computer skills

especially for us the "old school" ones.

Respondent 2: *We have a computer centre.*

Respondent 2: *Definitely, because it's changing and*

we have to keep up with it.

Respondents all recognise the importance of having computer/ICT skills and agree that it is going to be quite challenging to master this skill.

School E

According to the first respondent, teachers' resisted ICT, because it is something new and the thought of going through a learning process was something teachers are not ready for and so would rather stick to the old method of teaching by doing what they know.

Question: Do teachers welcome ICT integration in teaching and learning?

Respondent 1: *They resist it because it is something new and they are not confident in themselves. They will rather stick to the old style of teaching, doing what they know. Some are keen and also a bit nervous and with technology, you get nervous when you do not know it.*

Respondent 2: *I agree, but I mean you have to move with the times.*

Respondent 3: *I think generally we are all very open-minded. Change of course is not easy and not everyone is able to accept it, so naturally there are always those who will lag behind regarding this change, but generally we have all embrace it.*

Respondents also mentioned that some teachers are keen and also a bit nervous, because of the lack of skills. The second respondent concurred with the first but added that it is high time teachers move with the times.

Question: Do you have ICT skills?

Respondent 1: *Yes I do.*

Respondent 2: *I have computer skills.*

Respondent 3: *Yes we do.*

The third respondent said that generally teachers are all very open-minded towards ICT integration, but adapting to change comes with a lot of sacrifices and not everyone can adapt easily, so naturally there are always those who will lag behind regarding this change, but generally teachers have all embraced it. The respondents affirmed that teachers in this school have ICT skills and responded well to ICT integration, attended the trainings organised by the school.

School F

According the respondent, the teachers' attitudes were positive and encouraging. There is the willingness to acquire ICT skills and also help learners achieve more, but most importantly, both teachers and learners find ICTs interesting.

Question: How do teachers perceive ICT in education?

Respondent 1: *Teachers love it and most importantly, because*

kids find it interesting and so they are forced to make use of it.

Respondent 2: *We like it and we accept and recognise its importance.*

Respondents said that teachers in this school appreciate, accept and recognise ICT integration mainly, because it fascinates learners, so for this reason, they make use of it.

Question: Are you computer literate or do you have ICT skills?

Respondent 1: *Yes of course I am.*

Principal: *Yes we are all computer literate.*

Question: Do you feel there is a need to upgrade your computer skills?

Respondent 1: *Definitely, because these things keep changing. I believe*

I need to upgrade my skills from time to time.

Respondent 2: *Yes I agree with my colleague here, we do need to do it often.*

The need for teachers to have ICT skills cannot be overemphasised. Respondents pointed out that having ICT skills is vital, since teachers are a central part of the education process.

This reveals the attitude of teachers about ICT integration and how negative attitudes and refusal to adapt to change can hamper proper integration. It also exposes the fact that experienced teachers find it difficult to accept change. This corresponds with what Mathipa and Mukhari (2014:1217) notes that experienced teachers find it difficult to adapt to change believing that integration of ICT does not make any considerable difference.

4.4.3 Research Question 3. What are the levels of teachers' resistance to the use of ICT?

Theme 5: Poor ICT infrastructure

This theme lays emphasis on the importance of quality ICT infrastructure. Respondents gave instances of the situations encountered and also throw more light on the effect of a lack of quality ICT infrastructure in schools.

Theme 6: Teachers' lack of confidence in using ICT

This theme emphasises teachers' lack of confidence as one of the reasons for teachers' resistance to the use of ICT. Some of the respondents express the fact that their low confidence level is as a result of a lack of proper training and constant use.

School A

The respondent's reply to the question of resistance borders on the issue of the disappointment experienced in the use of ICT infrastructure especially at crucial times. So to avoid such disappointment, teachers make alternative plans not to use ICTs at all during English language lesson delivery. Respondent 2 revealed that because the computers in the school are outdated, he finds it difficult to work with them.

Question: Do you have any resistance using ICT?

Respondent 1: *Except for the fact that sometimes these technologies*

do not actually respond when you need them the most,

so in order not to be disappointed you make a decision

not to use them, but apart from that it's fine.

Respondent 2: *Yes and when they do not respond you keep trying to see*

if it's something you can fix and before you know it, the time

for the lesson is over. Also because our computers are old I find

it discouraging to operate them.

Question: Do you have confidence in your ICT skills?

Respondent 1: *A little bit, because these things take time,*

so I am building my confidence gradually.

Question: Can you rate yourself?

Respondent 1: *Maybe I can get 30%.*

Respondent 2: *Well I will not say I can do much, but I just try.*

Both respondents recognise the fact that their confidence level is low and there is need to work on it.

School B

According to the first respondent, the major resistance teachers have is insufficient ICT facilities. Because there is always a clash between teachers who should use what facility and at what time, teachers have become discouraged and so have learnt to plan their lessons without technology. Respondents gave an instance of teachers' experiences in this regard.

Question: Is there any major reason why you do not incorporate ICT?

Respondent 1: *The major problem we have here is that the*

only ICT facilities that we use during lessons which

is the radio is just one and so we share. Sometimes when

you have plans to use it during lessons you discover

that one or two of your colleagues also need it at the

same time so you just have to carry on your lessons

without the radio. With this situation we become

discouraged and then we learn to plan lessons without it next time.

Respondent 2: *Yes that is really discouraging. Another problem*

is load shedding; sometimes while you are using the

radio during lessons the electricity goes off and you

just have to find a way to adjust your lesson delivery.

Respondent 3: *My reason is that I am not so keen about learning it.*

Maybe because we do not have it here.

The first respondent say that they are willing to incorporate ICTs into language lessons, but because this school lacks the ICT infrastructure, teachers are forced to plan their lessons without ICTs, and so to encourage its use by teachers, there should be adequate provisions.

The second respondent agreed that such situation is really discouraging, and also added that load shedding tends to disrupt lesson delivery like when playing a DVD for learners to listen, and load shedding occurs. The teacher is forced to find a way to continue the lesson by adjusting the lesson presentation method in a way that objectives are achieved.

When asked how confident teachers feel working with ICT, the reply was that ICT skills are poor, and this school does not have the modern ICTs so the question of confidence does not really arise in the case of Respondent 1. For Respondent 2, confidence while working with ICTs is not a problem. The main problem lies with the lack of opportunities created for teachers to use ICT, which affects their ICT skills, as they cannot practise them. Respondent 3 was of the opinion that she was not encouraged to acquire ICT skills, because she will not put such skills to use.

Question: How confident do you feel working with ICT?

Respondent 1: *I must say that my computer skills are not so*

good, and our school does not have the modern ICTs, so

the question of confidence does not really arise in my own case.

Respondent 2: *I am confident working with it, but I do not*

get the chance to use it often, because we do

not have it in our school.

Respondent 3: *I do not know how to use computers at that level.*

School C

According to respondents, ICT is not totally reliable, because it fails and some of these failures may be due to malfunctioning of any of the facilities. Respondent 1 said that teachers have to be well prepared with an alternative lesson plan.

Question: Please can you tell us what discourages you from using ICT in the classroom?

Respondent 1: *I do not think you can totally rely on it, because it fails.*

You have to be well prepared for it if you have to use it;

you have to set it up before the lesson, but always have a plan B.

Another thing is that the computer can develop a problem or there

may be an IT problem when you need it most and so you cannot

show it to the children when you want to, and then when

there is load shedding you cannot make use of it at all.

Respondent 2: *What discourages me is that it is time-consuming and then*

these things tend to disappoint you and leave you blank.

Another instance is when the computer hardware develops a problem or there may be IT problems during presentation like poor internet connectivity and poor audio quality of a DVD player. All these, respondents explained, tend to discourage teachers from using ICT in class. Concerning confidence when using ICT, respondents hinted that the confidence level is still work in progress.

Question: Are you confident working with ICT?

Respondent 1: *Yes, but not so confident.*

Question: Why?

Respondent 1: *You see these kids know so much*

about ICT and so one must be very careful

not to make mistakes.

Respondent 2: *That is one question I have not considered. I think I try.*

Question: How hard?

Respondent 2: *Enough to get my lesson going and for the kids to learn something.*

When asked why, respondent 1 replied it was because learners seem to know more about ICTs than teachers and so careful steps are taken during lesson presentation in order not to make mistakes.

School D

According to the first respondent, poor internet connection is one of those things that increases teachers' resistance to ICTs, poor internet connection consumes time, because computers become slow and teachers may end up not achieving anything at the end of the day.

Question: Do you have any resistance using ICT?

Respondent 1: *For me the poor internet connection is one of*

those things that puts me off.

Respondent 2: *Yes I have some resistance, like we said earlier on,*

that for now we borrow ICT equipment from our colleagues.

Like when I finish I take it up to my colleague and then

setting it up takes time, so there is a lot of time wasted,

but now they are going to install technology in our classes and we will

do much better.

Respondent 3: *It is actually a major issue.*

The second respondent agreed that the idea of borrowing ICT equipment from other colleagues is discouraging. Respondents went on to explain that apart from going to colleagues to borrow and to return equipment, setting up the equipment takes time, but they express the hope that since the school is in the process of installing ICT facilities teachers will do much better. The third respondent simply added that these are major issues.

Question: Are you confident working with ICT?

Respondent 1: I am working on it.

Respondent 2: *Confident? Now that is challenging seeing that*

I'm not so good with ICT. At my old age it is

challenging, but we are working on it.

Respondent 3: *Still working on it.*

The three respondents agreed that working on their confidence levels, was a new priority.

School E

For the first respondent, time spent in setting up ICTs discourages teachers from making use of it in the classroom considering the fact that only thirty minutes is allotted to each lesson, and while trying to set up the equipment, teachers discover that ten minutes is gone. This in some way tends to discourage teachers from using ICT, because it takes time to set it up.

Question: Please tell us what is it that discourages you from using ICT?

Respondent 1: *For me it is this issue of time spent in setting*

it up. We only have thirty minutes to deliver a

lesson and you find out that you have spent ten

minutes trying to set it up; This in some way tends

to discourage teachers from using technology, because it takes

time to set it up.

Respondent 2: *I agree and at the same time the class becomes*

noisy and so you find such a situation confusing

and a bit out of control.

Respondent 3: *Yes it becomes difficult really.*

The second respondent agreed and added that while trying to set up ICT equipment in the classroom for lesson delivery, the class becomes noisy and so teachers find such a situation confusing and a bit out of control. For the third respondent, such situations become really difficult.

The first respondent revealed that teachers in this school were not very confident at the beginning, but because these teachers are fortunate to be working at a school where frequent trainings are organised and there are good ICT facilities to work with, teachers' confidence in using ICT developed gradually.

Question: Can you confidently use ICT?

Respondent 1: *Yes, we started off not very confidently, but*

fortunately we are at a school where they can send

us for training and we have ICT facilities here in our school.

Respondent 2: *We go for a lot of trainings and workshops*

through the school. They do know if we

want more. They are very accommodating to send

us to workshops in order to advance our skills.

Respondent 3: *Definitely. Very confident.*

The second respondent echoed the first response that teacher training and workshops are organised by the school from time to time, so this helped in building teachers' confidence level. The third respondent replied that teachers are very confident in the use of ICTs.

School F

Setting up ICT facility in the classroom is what really discourages the first respondent from making use of it. Respondent also revealed that because of safety issues, this equipment is set up at the beginning of each term and at the end of the term they are removed because of theft, but the laptops are returned to the school office at the end of each day.

Question: What is it that discourages you from using ICT?

Respondent 1: *Setting it up is what really discourages me from using it, even though we cannot leave them in our classes, because of safety issues, so at the beginning of each term we set them up and at the end we take them off. Each day we have to bring in the laptops from the office and return them after school hours.*

Respondent 2: *Yes, safety issues like she mentioned, and the fact that problems always crop up whenever I try to use it.*

Respondent 2 agrees with respondent 1 concerning safety issues and the fact that ICT equipment are sometimes problematic.

Question: How confident do you feel working with ICT?

Respondent 1: *I feel very confident working with ICT even though I do not like the idea of not using the board that much.*

These responses emphasise the importance of quality ICT infrastructure. Respondents gave instances of the situations encountered and also throw more light on the effect of lack of

quality ICT infrastructure in schools. Blignaut Els and Howie (2010) affirm that quality content delivery can also be enhanced when there is access to quality ICT infrastructure. Another important factor here is teachers' willingness and dedication towards ICT integration. Respondents express their total support and commitment for proper integration and also provided some reasons why there is a lack of commitment on the part of some of their colleagues. This study revealed that teachers' lack of confidence in using ICT is also responsible for the slow progress recorded. This concurs with Oldfield (2010:64) who reported that teachers' lack of confidence is as a result of the fact that they are not competent in the use of ICT. In their study Al-Faki and Khamis (2014:153) also note that teachers face challenges in using ICT tools like the interactive white board, because they lack computer competency.

4.4.4 Research Question 4: What is the level of appropriate use of ICT for curriculum delivery in language teaching and learning?

Theme 7: Teachers' lack of ICT skills.

This theme highlights the level of teachers' lack of ICT knowledge and skills. Participants reveal the kinds of facilities available in their different schools and the personal effort they make in the situations they find themselves.

Theme 8: ICTs and English language learning

Responses involving this theme elucidate the need for schools to organise training for teachers' professional and self-development on a regular basis. Respondents narrated on the poor nature of training teachers and called on stakeholders to step on board for a positive change.

School A

The first respondent's answer to this question was in the affirmative, but quickly added that the ICTs used were the ones provided by the school and gave examples such as the DVD, CD player, computer, Wi-Fi, television and the white board when asked to mention the types available in this school. The respondent also mentioned that personally teachers also made use of their personal internet connection to ensure quality delivery.

Question: Do you use ICT in your language lessons?

Respondent 1: *Yes, I use what the school has at the moment, and in my own humble way I try as much as possible to make the most of what I have.*

Respondent 2: *I make use of what the school provides, and sometimes I make use of my own internet connection.*

Question: Please can you tell us the kinds of software you use during English language lesson?

Respondent 1: *The main technology that we use in our lesson is the DVD, CD and we also have the computer room where learners often make use of the internet under the guidance of a teacher. I make use of the DVD when I teach listening or speaking skills.*

Respondent 2: *I do not know about any available language teaching software. I just search for resources online whenever I think it is necessary.*

When asked about the kinds of software teachers use for English language lessons, Respondent 1 replied that only the DVD is used during English language lessons for teaching listening and speaking skills. Respondent 2 was not aware of any language software. This means that respondents rely on their basic computer skills, since the school does not have modern technology.

Question: Do you think ICT can improve English language learning outcome?

Respondent 1: *Yes, it can because ordinarily children do not concentrate on a particular thing for so long, but when using ICT during lessons they are able to concentrate and pay attention, since they have a short concentration span.*

sometimes when you do a story and read it aloud, you do not

grasp their attention but when it's on a CD,

and they listen to it, they really pay attention. The same goes for the video.

Respondent 2: *Yes, especially if there is software like you have mentioned,*

I think it will really help.

Respondents agreed that ICTs can improve English language learning outcomes, because ordinarily learners at this stage hardly concentrates on a particular thing for so long, but when using ICT during lessons they are able to concentrate and pay attention. The response from respondent 2 reveals that teachers do not make it a priority to attend ICT training.

School B

Question: Do you use ICT in your language lessons?

Respondent 1: *No, because we do not have it.*

Respondent 2: *Not in the school, but I am very familiar with how these things work.*

Respondent 3: *No we do not.*

The second respondent concurred, but added that even though the school does not have these facilities, some teachers have personal ones at home and so they know how some of these things work. Concerning the kinds of software, respondent 1 replied that apart from the DVD (hardware) player mainly used for pronunciation and listening skills, photocopiers and printers are shared among teachers. This school does not have the modern ICT facilities.

Question: Please can you tell us the kinds of software you use during an English language lesson?

Respondent 1*: Apart from the radio, DVD, photocopiers and*

printers which we share, because we have just one.

Like I told you earlier we do not have the modern ICT facilities.

Respondent 2: *That is true, so there's no way we can give what*

we do not have?

Respondent 3: *We do not make use of any technology apart from*

the ones we've mentioned.

From the responses, as teachers' ICT skills, it is clear that teachers are really not aware of any existing software and some cannot differentiate between hard and software.

School C

This respondent confirmed that ICTs like the computer and CD player, and the internet are sometimes used for English language lessons, but because the school does not have a projector or an interactive white board, there was a limitation to what could be achieved. Respondents stated that the internet is used to search for relevant materials that will enhance learning, and also agreed that ICTs can actually improve English language learning, but this goes to show that teachers do not attend ICT trainings and therefore, are not familiar with soft ware for the learning and teaching of language.

Question: Do you use ICT in your language lessons?

Respondent 1: *Not always, because I only have computer and*

not a projector. Sometimes I show them things

on the computer, but because I do not have a projector

or a white board I do not always use them.

Respondent 2: *Sometimes I do, sometimes I don't because the projector is faulty.*

Question: Do you know or use any English language software?

Respondent 1: *No I do not know any software.*

Respondent 2: *No I don't. I search for materials online and*

get something that is relevant to what I intend to teach.

School D

When asked if ICTs are used in language lesson, all three respondents from this school said that the school once had ICT infrastructures, but due to a lack of maintenance, they became dysfunctional and were discarded. Presently, installations at the upper primary is up and running, but that of the lower primary is work in progress.

Question: Do you use ICT in your language lessons?

Respondent 1*: Not exactly, because we are still trying to install them.*

We are not using any at the moment; we are still trying to install them.

Respondent 2: *At one time we had overhead projectors, the internet*

and smart board, but we do not have it anymore, because we

could not service or get them going, so we had to do away

with that. So presently we are busy putting new systems in place.

Hopefully, before the end of the year, that will be sorted out.

Respondent 3: *Exactly, but we have them functioning well in the upper grades.*

We have DVD players. For example, there are DVD players in the

classroom which we use for storytelling purposes to improve

learners' speaking and listening skills.

It was evident during observation that installations of ICT facilities is a priority. Respondents were hopeful that installation would soon be completed. The third respondent added that the installations were completed and everything was functioning well in the upper grades, and that they used DVD players during language lessons to improve learning outcomes.

To the question of whether ICTs can improve English language learning, all three respondents agreed that ICTs are very useful for the development of the English language. The second respondent added that one reason is because children are very visual today.

Question: Do you think ICT can improve English language learning outcomes?

Respondent 1: *Not only that, but if you need a word that they do not*

understand, you can quickly google it and put it on the board, see it and read it instead of waiting for learners to check their dictionary which may be time-consuming, so it is so much easier to just put it up on the board. We just need more training and that will be fine.

Respondent 2: *I think so, because children are very visual today. Yes more training.*

Respondent 3: *May be once every year. ICT is good, because in the senior phase, they are using it despite the challenges. So we are ready to face those challenges now.*

Respondent 3 believed that the benefit of using ICT far outweighs its challenges. According to the respondents they need adequate skills to complete this process and so the school should organise training, not just once but frequently, so that teachers can keep in touch with new developments.

Question: Which software programmes do you use for an English language lesson?

Respondent 1: *None at the moment.*

Respondent 2: *None.*

Respondent 3: *None.*

Question: Do you know about any language teaching software?

Respondent 1: *I am not aware of any.*

Respondent 2: *Same here.*

Respondent 3: *Me too.*

All the respondents were not aware of any language teaching software.

School E

All three respondents replied in the affirmative in response to if they use ICT during English language lessons.

Question: Do you use ICT in your language lessons?

Respondent 1: *Yes.*

Respondent 2: *Yes.*

Respondent 3: *Yes.*

With regard to the English language software used in the classroom, none of the respondents was aware of the existence of such software, because according to the respondents, teachers inform the IT department of this school to upload content that is relevant to the topic they want to teach.

Question: Please can you tell us the kinds of software you use during English language lesson?

Respondent 1: *Well, here in our school the IT department does all Installations; we just inform them of what we want and they get it fixed.*

Respondent 2: *I do not know their names but, whenever I search through the internet for information, I always get something useful for the kids.*

Respondent 3: *Yes of course, that is what happens; they help us also to assist the learners.*

All respondents also agreed that ICTs can improve English language learning, because it has been tested and the result has been positive. Respondent 1 actually said that ICT is the way to go, because learners at this level are exposed to so much technology and are fascinated by it.

Question: Do you think ICT can improve English language learning outcome?

Respondent 1: *Yes, I have been teaching with ICT for over ten years*

and honestly it is definitely the way to go. Children are

more geared towards ICT and they do not just like the old way of teaching.

We have to learn to adapt to change as times have changed.

Everyone is aware that there is so much technology out there,

if we do not bring to the school, we will lose our children.

So we as a school believe that the more you include it in the lessons,

the more they are going to benefit from it.

Respondent 2: *I also think with technology children tend to become unresponsive;*

it's a machine, there's nobody telling them to

listen or concentrate. It's too easy for children to lose

concentration.

Respondent 3: *It is good and we need it. Having any of the technologies,*

will make them lazy writers and poor spellers at the end of the day.

You know technology does all spell checking.

Learners do not have to learn those kind of skills.

Respondent 2 and 3 are of the opinion that ICT has its own disadvantages and so the traditional method of teaching must not be totally discarded.

Respondents feel that the education sector should not be left out of this innovative method, because it has brought about so much transformation in the teaching and learning process, and learners are more attracted to ICTs.

School F

Respondents confirm using ICTs for English language lessons, but Respondent 1 said that the board is still preferred.

Question: Do you use ICT in your language lessons?

Respondent 1: *Yes I do, but most times I still prefer using the board.*

Respondent 2: *Yes I do.*

To the question of the kinds of software used for English language lessons, respondents were not aware of any English language teaching software, because one of the teachers in this school does all the installations and also upgrades the programmes and equipment when necessary.

Question: Please can you tell us the kinds of software you use during English language lesson?

Respondent 1: *Here in our school, one of our teachers installs all the software we need to use during our lessons. So we really do not know about such programmes, because she does all the installations and also upgrades them when necessary.*

Respondent 2: *That is true.*

Question: But do you know of any?

Respondent 1: *No.*

Respondent 2: *No.*

When asked if ICT can improve language learning outcomes, respondent 1 said that ICTs can, but this has nothing to do with the teaching aids, resources or materials used, positive and enhanced lesson outcome depends on the personality of the teacher.

Question: Do you think ICT can improve English language learning outcome?

Respondent 1: *I think it depends on a teacher and not the materials used. If you are a good teacher, you can teach the kids with or without ICT. It is more interesting for the kids so we use them to keep their attention and then we carry on with the board so they have to get*

used to doing different things, because I believe a kid needs to learn to read and write. You cannot just use the computers, because it is not everything in life that is interesting. You have to get used to everything, so we use different materials to gain interest.

Respondent 1 is of the opinion that a good teacher can effectively teach with or without ICTs, but because it motivates learners, it is important to integrate ICTs.

Respondent 2: Of course it does, even though technology has its negative aspect, I seriously think the positives to a great extent outweighs the negatives."

This points out that the lack of ICT skills also impedes integration, and even though some teachers use ICT, they seem not to be knowledgeable about the kinds of software appropriate for English language learning and teaching. The lack of proper training is a major setback in ICT integration.

4.5 Summary

This chapter focused on the presentation and analysis of data acquired from the observation of learning environment, classroom lessons and the focus group interviews with teachers from the six selected schools. It also presents the profile of teachers who took part in this study. The interviews conducted involved Grade 3 teachers and a management staff comprising the principal or the head of Foundation Phase.

From the observation and interview response, two of the six selected schools, viz: School F (public) and School E (private) have and make effective use of ICT facilities. It also revealed that teachers are aware of the positive impact of ICT on their job enhancement, learning outcomes and subject content delivery. The contradiction here is that despite this awareness, some of them are reluctant in acquiring ICT skills. Some teachers who made it a priority to acquire ICT skills on their own are working in an environment that does not support their knowledge. This means that schools are not equipped with ICT facilities, and so discourage

other teachers from even making an effort to personally acquire these skills. Judging from interviews, there were no significant differences in the response of teachers as regards ICT integration, but their major challenge is lack of proper and regular training, and access to quality ICT infrastructure. Findings and fundamental issues raised in this chapter will be discussed in the next chapter.

CHAPTER FIVE

DISCUSSION OF FINDINGS, RECOMMENDATION AND CONCLUSION

5.1. Introduction

The preceding chapter was the presentation, analysis and interpretation of observation and interview responses. Data were collected from primary school teachers in UThungulu educational District qualitatively through interviews and observations so as to validate the data collected.

The discussion is based on the research objectives stated in Chapter 1, they are:

- To explore the experiences of teachers in incorporating ICT into language pedagogy in the Foundation Phase;
- To investigate teachers' attitudes and responses towards the use of ICT in language learning and teaching;
- To investigate the level of teachers' resistance on the use of ICT; and
- To investigate the appropriate use of ICT for curriculum delivery in language learning and teaching.

5.2. Participants' profile

The profile of teachers who participated in this study is referred to next. They were selected from primary schools in UThungulu educational District in KwaZuluNatal. Although this study set out to interview eighteen teachers, only sixteen teachers were interviewed and data were also obtained from each school through observations.

Judging from the profile of participants presented in the previous chapter, all teachers in this study are professionals with experience ranging from four to forty-five years. The study also reveals that there are a significant number of women in the teaching profession as compared to men. The participants' profile indicates that most Foundation Phase teachers in UThungulu District schools have diplomas and certificates in education. This contradicts the National Qualifications Framework Act 67_2008 which states that the minimum requirement for Foundation Phase teachers is a Bachelor in Education in Foundation Phase. Studies have laid emphasis on the importance of teachers' qualifications (Government Gazette no 38487, 19

February 2015:9, Verbeek (2014). In as much it is important for one to have gone through and successfully completed a planned course programme, Musau and Migosi (2015:19) and Zuzovsky (2003:9) in their study found out that there is no positive correlation between teachers' qualifications and learning outcomes.

The profile also reveals that all the participants are experienced teachers. The importance of teaching experience in the support of learning outcome and job enhancement is pointed out in several studies (Ladd 2013:2, Adeyemi 2008:210) but Rice (2010:1) notes that teachers' productivity tends to decline as they acquire more experience.

The profile reveals a significant higher proportion of female teachers than males in the Foundation Phase, this may be because of the following reasons: teaching is perceived as a feminine profession. The cultural role of women as natural caregivers endeared them into teaching as they will work for few hours each day and also get to be free during school holidays, this will enable them earn a living and at the same time, bond with their own families. Kelleler (2011:11) and Arends (2007:14) affirm that women are a significant majority in the teaching profession especially at the Foundation Phase level, and the reason may be as a result of their qualities and responsibilities. Another reason according to Mashiya (2014:25) is that men are associated with child abuse.

5.3. Objective 1: To explore the experiences of teachers in incorporating ICT into language pedagogy in the Foundation Phase.

The research question was:

What are teachers' experiences in incorporating ICT into language Pedagogy in the Foundation Phase?

This study determines the opinions and perceptions of teachers about their experiences in integrating ICT into language learning and teaching in the Foundation Phase. It revealed that Foundation Phase teachers in UThungulu District recognise ICT integration in language learning and teaching as a positive development. They strongly believe that all schools should be equipped with ICT infrastructures in order to be relevant in the 21st Century. This is because it offers different options to present lessons, enhances subject content delivery, reduces their workload and it is a significant tool that can enhance learners thinking skills if adequate provisions are made. Respondents agreed that it helps learners develop sound pronunciation and reading skills, and also make language learning and teaching more

interesting. They also acknowledge the fact that learners are enthusiastic about ICT. They prefer it because it is fun, more visual and colourful. It facilitates their understanding, helps them learn more, gets them involved, motivates and also sustains their concentration for a longer period.

This was evident in the observation of phonics lessons in Grade 2 at School F where a video clip was played for learners. They all got involved and listened with riveted attention for as long as the clip played. Also at School E, during spelling lessons in Grade 1, learners were all excited and eager to take part in the lesson, because each has to write on the board. This points the fact that ICT integration in language learning and teaching can actually strengthen learners' literacy skills, because it is a new way to learn how to read and write. It is clear from the responses that teachers incorporate ICT not only because it has the potential to improve language proficiency but because they want to be relevant in the teaching profession.

However, in as much as ICT integration is considered as a valuable tool and is welcomed by stakeholders in the education sector, because of the positive contribution to lesson delivery and learners' understanding and language development, it also comes with its own weaknesses. All the respondents agreed that acquiring and maintaining ICT facilities involves so much capital, they bemoan the limited funds available to schools and sometimes these funds are not properly channelled especially in the schools run by the government. This finding is in line with Udoh, and Egwuchukwu (2015:71) who observed that even in cases where the funds are provided for ICT facilities in schools, such funds are channelled to individuals' pockets. Another weakness is that ICT deprives learners from properly learning writing and spelling skills, because it provides spelling options for users. This means that learners do not really have to take their time or make so much effort in learning writing skills.

Respondents also pointed out that ICTs make learners become bad listeners, because contents can easily be replayed. They also mentioned that teaching experience has little or no relevance to ICT integration, because they were not brought up with modern technologies. Although respondents appeared to be familiar with ICTs they still did not really understand that technology is meant to complement teaching methods. They expressed fear that ICTs may likely replace the traditional method of learning and teaching and suggested that it should be a combination of both methods. These findings contradict that of Mann's (2014:37) study of Canadian teachers who perceived technology as an assistive tool and not a replacement tool. Time also posed to be a challenge for teachers in the process of integrating

ICT, more specifically time to attend trainings because of their work schedule. Time to set up ICT facilities in the classroom before the commencement of the lesson and time allocation for each lesson, which is just thirty minutes, appears to be too short for proper integration. For some respondents, changing from the regular traditional method of teaching to the use of ICT is quite a huge challenge, because they are advance in age, but because learners find ICT fascinating, and because they are required to use it, they just have to find a way around it. Lack of ICT skills, which is vital to proper integration, is also one of the challenges respondents are faced with.

Apart from basic computer skills, most respondents confessed that they do not have the knowledge of proper integration. This is because schools do not have modern ICT facilities so the issue of organizing ICT trainings for teachers does not feature prominently. Of the two schools that have modern ICT facilities in this study, only School E organised trainings for teachers once in every term, School F on the other hand sent only one of its teachers for training who in turn trained all other teachers afterwards. Respondents also stated that because they realised the importance of having ICT skills, they had to acquire training at their own expense when their schools or government failed to organise training for them. This finding corroborates what Chigona and Chigona (2010:217) found in their study, in the Khanya project in the Western Cape they discovered that factors responsible for the low level of technology integration in the classroom includes teachers' lack of ICT skills, lack of adequate training, inadequate equipment, lack of technical support and teachers lack of content and pedagogical knowledge.

Poor internet access and technical problems are part of the challenges respondents are confronted with while integrating ICT into lesson delivery. This tends to discourage those even in well equipped schools from planning their lessons along this line, because on so many occasion they have experienced disappointment during lesson delivery and are forced to end the lesson unexpectedly. Internet connectivity may not respond or the computer hardware can just develop a particular technical fault which the teacher may not be able to fix. Teachers on their own part realised that they had to make alternative plans for lesson delivery.

5.4. Objective 2. To investigate teachers' attitudes and responses towards the use of ICT in language learning and teaching.

The research question was:

Question: What are the attitudes and responses of teachers towards the use of ICT in language teaching and learning?

Teachers' attitude towards ICT is important to its successful integration. Respondents confirmed that initially they were reluctant about integrating ICT. The reason was because they were not brought up with these modern technologies. They were so comfortable with the traditional methods of teaching; therefore adapting to the use of ICT was quite a huge challenge especially for teachers who are advanced in age but because of the importance of ICT integration, they have resorted to confront and overcome these challenges. They also revealed that the younger teachers are more positively inclined towards ICT and are more likely to incorporate it into lessons when compared with their older counterparts.

Judging from their response, it is clear that all the respondents have basic computer knowledge but very few of them knew about other digital tools and devices such as slide projectors, interactive whiteboards and various software applications, so as such they all recognised the need for frequent adequate and effective ICT integration training in order to keep up with trends. Respondents revealed that sometimes they make use of their own personal laptops and internet just to ensure that learners have a different and a well informed experience. They all expressed commitment and willingness to know more about ICT and total support for proper integration.

This study demonstrates that respondents have a positive attitude towards ICT but their lack of adequate skills impedes successful integration. Teachers' attitude is a determinant to the extent of ICT use in the teaching and learning process (Al-Zaidiyeen, Mei & Fook, 2010:215). Stressing the importance of teachers' attitude, Üredi (2013:669) points out that if teachers' attitudes towards a particular situation are positive then the possibility of making the right decision concerning such situation is high. This positive attitude means that teachers understand the valuable impact of ICT in education (Punie, Zinnbauer & Cabrera, 2006:12), and the great opportunities it offers learners to become a part of their own assessment (Wilson 2011:24) to be active participants in order to develop self-confidence and critical thinking skills. This attitude will no doubt enhance the process of integration which will have

a significant impact in learners' performance and in the learning of fundamental skills. Teachers demonstrate a positive attitude not only because ICT has the potential to enhance teaching and learning but because they are required to use it. This finding is consistent with Albirini (2006:384), Al-Zaidiyeen, Mei & Fook (2010:215) and Nair et al. (2012:11) who found in their studies that teachers' attitudes towards ICT use were positive and satisfactory. This contradicts Ang'ondi, (2013:147) whose study concluded that teachers' attitudes and perceptions towards technology are abysmal and recommended that it should be made a priority if successful integration is to be achieved. Amuko, Miheso, and Ndeuthi (2015:1) note that teachers' attitude can be influenced by many other factors and that the problem of teachers' attitude towards ICT is hard for policy makers to resolve, because a change in attitude can only come from teachers.

5.5. Objective 3: To investigate the level of teachers' resistance to the use of ICT

The research question was:

What are the levels of teachers' resistance to the use of ICT?

Due to the technical problems associated with technological devices, respondents pointed out that these problems tend to discourage many of them from integrating ICT. It was also confirmed that resistance to change impedes the flow of integration. Respondents confirmed that some of their colleagues still prefer the structured method of lesson delivery. Some take to change easily while others need time to gradually adapt, because they are scared or reluctant to face new challenges and risks. Nervousness, lack of confidence, load shedding, poor internet access, inadequate ICT facilities, safety issues, shortage of class time, classroom management and control and setting up the system before the actual lesson are some factors that also promote resistance on the part of the teachers to ICT integration. Respondents stated that the access to limited facilities for lesson presentation caused tension among teachers and so in order to avoid such situations they presented their lessons without using ICT. This implies that teachers' ability to integrate ICT optimally becomes problematic because of the issues raised above. This finding corresponds with Salehi and Salehi (2012:218), whose study identified shortage of class time, inadequate technical support and restricted access to the internet as important factors that discourage teachers from implementing proper integration. Raman and Yamat (2014:15-17) also agreed that limited class time, teachers' lack of ICT competence and difficulty in classroom management are common factors that impedes ICT integration.

5.6. Objective 4: To investigate the appropriate use of ICT for curriculum delivery in language learning and teaching.

The research question was:

What is the level of appropriate use of ICT for curriculum delivery in language learning and teaching?

On the issue of appropriate use, the results show that teachers only made use of the minimal ICT facilities at their disposal in the delivery of English language lessons. Most of them revealed that the technology for language learning and teaching available at their disposal are computers, printers and photocopiers for the preparation and duplication of worksheets, DVD players used especially for teaching speaking and listening skills and for storytelling purposes as evident in the observation of classroom lessons. Sometimes teachers went the extra mile in making use of their personal laptops and internet connectivity for preparation and presentation of English language lessons. None of the respondents interviewed or observed in this study knew about or made use of any English language teaching software, according to their responses and as observed, teachers either made use of search engines like Google or lesson contents were uploaded by the IT department of the schools, where they taught. They also agreed that technology integration into the English language will enhance learning outcomes and also help learners concentrate and participate actively in classroom activities, since they respond well to it. Some respondents feel that the use of ICT is non-negotiable, because it has to do with current development, failure to use it will have an adverse effect on the schools' reputation.

While some respondents agreed that ICT sustains learners' concentration span for a longer period, others argued that ICT easily distracts learners. They also warned that despite the fact that ICT is important, it must be used wisely. ICT in education can only be meaningful if it is used appropriately in the delivery of subject content. From the responses above, it is evident that some teachers do not perceive ICT as a method that will enhance teaching and learning but as fancy equipment they can use in their classroom practices. Hence, many of them were not aware of the availability of specific software for the teaching and learning of the English language. This implies that the level of appropriate use for effective curriculum delivery is low. This finding corresponds with Hennessy, Ruthven and Brindley (2005:5) who posit that in reality even schools where ICT facilities are available, teachers still stick to the traditional method of teaching and thus those facilities are rarely used and poorly incorporated into

subject content. Chigona and Chigona (2010:210) point out that this may be because teachers are not well grounded in the subject curriculum or they do not possess the necessary integration skills. Udoh, and Egwuchukwu (2015:72), in their study of Incorporating ICT into English language learning and teaching in Nigeria, indicate that the supply of relevant and appropriate software is a major setback to effective integration and suggested that there is also need for curriculum developers to fully assess the curriculum content in order to reduce the workload for effective content delivery.

Lev Vygotsky's constructivist theory reveals that language is critical to thinking and can be developed through communication, interaction or collaboration with competent or native speakers, and based on these interactions, learners are able to construct their own knowledge (Excell & Linington, 2015:29). Interaction, collaboration and self-discovery forms a major part of ICT integration, because learners are encouraged to get involved and actively participate in classroom activities, interact with peers through e-mails and blogs from all over the world who are native speakers of English language in order to enhance language learning and development.

Language learning and teaching have its foundation in the theories of language development (Phatudi, 2015:3), because these theories help teachers understand how learners' learn and assist teachers with choosing the most suitable methods and strategies to adopt during language lesson delivery. To build learners' cognitive skills, it is important, therefore, that teachers integrate ICTs so as to create an environment that allows learners to think and come up with solutions to problems regarding classroom activities. An environment where learners can use and apply new ideas in language, stimulates active thought processes. An environment that supports or promotes incidental learning and self-discovery should accommodate the use of technology. The use of technology helps learners to be positive towards language learning (Phatudi 2015:4). Active learning and participation should also be encouraged for optimal learning and effective curriculum delivery.

5.7. Conclusion

The focus of this section is on important issues emerging from this study, its contributions, limitations and implications. ICT integration has made it possible for teachers and learners to work more collaboratively and both now perceive technologies as tools that can enhance their teaching and learning attainment. Teachers now recognise and understand the importance and the positive impact of ICT integration into English language curriculum especially in the

teaching of reading, speaking, writing and listening skills. However, the level or extent of ICT integration into English language learning is dependent on so many other factors. The study found that teachers in UThungulu district had a positive attitude towards ICTs even though they were initially unresponsive, because they were not brought up or taught using ICTs, so adapting to the use of ICT was quite a big challenge especially for those who have stayed long in the teaching profession. Teachers were constrained by the fact that these facilities are not available or availability is limited for their use. Even in schools where ICT facilities are available, they are not effectively utilised for curriculum delivery, because respondents were not aware of language teaching software appropriate or suitable for each grade. They either make use of search engines or contents are uploaded on their behalf.

Several resistant factors impede ICT integration such as teachers' lacking the knowledge and skills of proper integration, lack of ICT facilities, shortage of time, poor internet access, lack of adequate and constant training and lack of technical support from school administration. The study unveiled some of the numerous challenges teachers are faced with in the process of integration. The most critical of these challenges is the lack of funds, which are sometimes not properly channelled. Other challenges include a lack of constant and sufficient training, lack of ICT skills, lack of adequate facilities, poor internet connectivity, technical problems and difficulty in adapting to ICT trends. The onus is now on teachers to face this new challenge, learn, master and hone their skills on the concept of ICT integration, because learners are surrounded by these technologies at home and so are far ahead when it comes to e-capabilities.

Meanwhile this study has revealed that ICT integration is now imperative for English language learning and teaching at primary schools in UThungulu districts and teachers embraced this fact by investing in their professional development. This is because the teachers recognised its usefulness. It is important to note that the majority of the primary school teachers and schools in UThungulu district were not equipped in terms of ICT. The implication is that the need for professional self-development on the part of the teachers becomes necessary and the provision of funds on the part of government and school administrators. The study revealed that privately-owned primary schools were better resourced compared with that of the government. This means that private school administrators made an effort to furnish their schools with modern ICTs. It becomes crucial for the Department of Education to make adequate provisions for primary schools to be

equipped with the necessary ICT infrastructure. The government policies and school curriculum should be reviewed to reflect support for ICT integration teaching models so that both teachers and learners will actively play their roles in the teaching and learning process. It was also evident that the group sitting arrangement adopted in schools investigated is in line with Vygotsky's constructive theory of learning because it encourages a form of collaboration and cooperation among learners Vygotsky (1978). These groups can engage in conversations before, during and after the reading a story with the modelling, prompting, and reinforcing of the teacher.

It is important to state the limitations of this study. It is limited to just a fraction schools in UThungulu district, therefore it is expected that the results can only be applied in UThungulu district schools. The sample size was drawn from just six schools in the district. Future research should expand the scope to accommodate more districts or provinces in order to have more insight and a deep understanding of the process of integration.

5.8. Recommendations

Recommendations are summarized by the following research objectives:

i. To explore the experiences of teachers in incorporating ICT into language pedagogy in the Foundation Phase.

ii. To investigate teachers' attitudes and responses towards the use of ICT in language learning and teaching.

iii. To investigate the level of teachers' resistance on the use of ICT and;

iv. To investigate the appropriate use of ICT for curriculum delivery in language learning and teaching.

Objective 1: To explore the experiences of teachers in incorporating ICT into language pedagogy in the Foundation Phase.

Given that the study shows that respondents realise that ICTs have a positive impact in learners' motivation, achievement and teachers' job enhancement, it also revealed that schools lacked proper funding to integrate ICTs, and teachers were rarely trained on proper integration. This study therefore recommends the following: That stakeholders in the education sector should be more involved especially in the provision of infrastructure in order

to see to the successful integration of ICT in education and funds that are allocated to schools for ICT facilities should be properly monitored in order to ensure the purchase of quality equipment and right installations. Frequent and intensive trainings should be organised for teachers so they can acquire the necessary skills to use ICTs that will enhance the objectives of language lesson presentations and also develop learners' thinking skills. That ICT integration should be incorporated into teacher education curriculum from the very first year.

Objective 2. To investigate teachers' attitudes and responses towards the use of ICT in language learning and teaching.

Due to teachers' negative attitude to the use of ICTs, the process to kick start integration into subject content occurred at a very slow speed. This attitude, the study gathered was because teachers who participated in the research were sceptical about technology and they perceived it as a replacement tool. Some of them stated that they were not able to make use of these technologies, because they were not brought up with them. They felt very comfortable with the same methods they were taught with, so adapting to something new scared them. They acquired ICT skills, because they wanted to retain their jobs and they did not want to be perceived as mediocre by their learners who were digital natives. It is also important to point out that the respondents lacked expertise for effective integration which is the reason for their low confidence level in using ICTs in the classroom. Due to the fact that ICT integration is a demand on their job teachers they now expressed willingness and commitment to ensure that learners were equipped for the 21st century work place. Some teachers preferred the structured approach to classroom practices. It is recommended that monetary rewards or awards and greater recognition should be given to teachers with inventive or modern practices that promote critical thinking skills and improve learning outcomes. Some teachers attended trainings on their own; they tended to acquire knowledge from informal sources in the sense that trainings were not accredited or not organised by experts. It is, therefore, recommended that government and school governing bodies should be responsible for ICT training.

Objective 3: To investigate the level of teachers' resistance to the use of ICT

Respondents in this study made mention of some factors that impeded or discouraged them from using ICT in the classroom. These factors include inadequate knowledge and skill, lack of confidence, limited access to ICT facilities, load shedding, shortage of class time,

restricted access to the internet, poor connectivity, technical problems, inadequate technical support and the most important of all, teachers' resistance to change. It is, therefore, recommended that school administrations pay attention to teachers' insecurities and needs concerning digital technologies and offer support so they can adapt easily. Teachers should be encouraged to participate in offline online communities where they can interact and collaborate with their peers. It is also recommended that schools should be properly funded, in order to acquire quality facilities and internet installations.

Objective 4: To investigate the appropriate use of ICT for curriculum delivery in language learning and teaching.

This study found that the level of appropriate use of ICT is very low due to the fact that schools are not well resourced and teachers are not well skilled in the use of ICTs. This is because they are not aware of the various software packages available for the teaching and learning of English language. They only make use of search engines to access materials that will enhance their teaching objectives. It was revealed that apart from the DVDs printers, photocopiers, televisions and the whiteboards, teachers in UThungulu district schools do not even have the modern technologies to work with in the first place and so the issue of appropriate use seems out of place. Curriculum experts should partner with teachers so as to redesign the curriculum to accommodate ICT integration. It is again recommended that regular and intensive training and adequate provisions should be a priority for schools and teachers should also develop their knowledge of the subject content.

REFERENCES

Abawi, K. (2013). Data Collection Instruments (Questionnaire & Interview) Training in Sexual and Reproductive Health Research, Geneva Workshop 2013. Retrieved on 04/03/2015 from http://www.gfmer.ch/SRH-Course-2012/Geneva-Workshop/pdf/Data-collection-instruments-Abawi-2013.pdf.

Abbad, M.M, David, M. & Nahlik, C. (2009). Looking under the Bonnet: Factors affecting student adoption of E-Learning systems in Jordan. *International review of research in open and distance learning,* 10(2): Retrieved on 05/01/2015 from https://www.openaire.eu/search/publication?articleId=doajarticles::94ce83134813b0322a137add26cdd4eb

Adeyemi , T.O, (2008). Teachers' teaching experience and students' learning outcomes in secondary schools in Ondo State, Nigeria. Retrieved on 21/10/1016 from http://www.academicjournals.org/article/article1379590988_Adeyemi.pdf .

Agee, J. (2009) Developing qualitative research questions: A reflective process. *International journal of qualitative studies in education.* www.tandfonline.com/doi/pdf/10.1080/09518390902736512.

Akker, J.V. (2010) Design research on technology based innovations. *Journal of educational research and innovation.* Retrieved on 20/11/2015 from www.nu.edu/assets/.../journal-of-research-in-innovative-teaching-volume-8.pdf .

Albirini, A. (2006). Teachers attitudes toward information and communication technologies: the case of Syrian EFL teachers Retrieved on 23/09/2016 from http://s3.amazonaws.com/academia.edu.documents/28748407/teacherattitudeseflsyria.pdf.

Al-Faki, I. M. & Khamis, A.H.A. (2014). Difficulties facing teachers in using interactive whiteboards in their classes. *American international journal of social science, 3(2):* Retrieved on 31/08/2016 from http://www.aijssnet.com/journals/Vol_3_No_2_March_2014/16.pdf.

Al-Zaidiyeen, N.J., Mei, L.L, Fook, F.S. (2010). Teachers' attitudes and levels of technology use in classrooms: The case of Jordan schools. *Journal of international education*

Studies,3(2): Retrieved on 23/09/2016 from http://files.eric.ed.gov/fulltext/EJ1066020.pdf

Ambu-Saidi, S. (2010). Student and teacher attitudes towards the use of Language Learning Technology (LLT) in a tertiary English course in Oman. Retrieved on 07/02/16. from: https://espace.library.uq.edu.au/view/UQ:211618/s41914285_MA_Thesis.pdf .

Amuko, S., Miheso, M. & Ndeuthi, S. (2015). Opportunities and challenges: Integration of ICT in teaching and learning Mathematics in Secondary Schools, Nairobi, Kenya. *Journal of Education and Practice, 6(24):* Retrieved on 06/10/2016 from http://files.eric.ed.gov/fulltext/EJ1078869.pdf .

Ang'ondi, E.K. (2013). Teachers' attitudes and perceptions on the use of ICT in teaching and learning as observed by ICT Champions X World conference on computers in Education Retrieved on 23/09/2016 from http://edu.rsei.umk.pl/wcce2013/publications/v1/V1.3_100-Angodi-fullR-FPR.pdf.

Arends, F. (2007). The employment status of educators' research and development programme on teacher education in South Africa. Fabian Human Sciences Research. Presented at the "Teacher Development hand Institutional Change in an evolving Education Context" Conference Retrieved on 13/09/2016 from http://cepd.org.za/files/pictures/TEC%202007%20Educator%20Employment%20Status_1.pdf.

Arkorful, V., & Abaidoo, N. (2014). The role of e-learning, the advantages and disadvantages of its adoption in Higher Education. *International journal of education and research,* 2(12) Retrieved on 05/01/2015 from http://www.ijern.com/journal/2014/December-2014/34.pdf .

Asabere, N.Y. & Enguah, S.E. (2012). Use of information & communication technology (ICT) in Tertiary Education in Ghana: A case study of Electronic Learning (E-Learning). Retrieved on 06/04/2016 from http://esjournals.org/journaloftechnology/archive/vol2no1/vol2no1_9.pdf .

Atherton, J.S. (2013). Learning and Teaching; Cognitive theories of learning[On-line: UK] retrieved from http://www.learningandteaching.info/learning/cognitive.htm on 6/05 2016.

Baxter, P. & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report*, 13(4), 544-559. Retrieved 0n 23/07/2016 from http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf .

Bharuthram, S. (2012). Making a case for the teaching of reading across the curriculum in higher education. *South African Journal of Education,*32(2): Vol.32 No 2 Retrieved on 16/06/2015 from www.scielo.org.za/scielo.php?script=sci...0100**2012**0002...

Bialobrzeska, M, & Cohen, S. (2005). Managing ICTs in South African Schools: A Guide for School Principals Retrieved on 12/03/16 from http://www.education.gov.za/Portals/0/Documents/Reports/Managing%20ICTs%20in%20South%20African%20Schools.pdf?ver=2011-01-18-115657-700 .

Bingimlas, K.A (2009). Barriers to successful integration of ICT in Teaching and Learning Environment: A Review of Literature. *Euroasia Journal of Mathematics Science and Technology Education,* 5(3):235-245. Retrieved 0n 09/05/2016, from http://www.ejmste.com/v5n3/EURASIA_v5n3_Bingimlas.pdf.

Blake, D. & Hanley, V. (1995). Dictionary of Educational Terms, Aldershot, Arena.

Blignaut, S., Els, C, Howie, S (2010). Contextualising South Africa's participation in the SITES 2006 module *South African Journal of Education On-line version,* 30(4): Retrieved on 12/03/16 from http://www.sajournalofeducation.co.za/index.php/saje/article/viewArticle/242 .

Bolderston, A. (2008). Writing an effective literature review. *Journal of medical imaging and Radiation sciences Research informing Practice, 39(2):51-106.* Retrieved on 23/09/2015 from http://www.jmirs.org/article/S1939-8654(08)00057-X/fulltext .

Bolstad R. (2004). The role and potential of ICT in early childhood education. New Zealand Council for Educational Research. Retrieved on 25/11/2015 from http://www.nzcer.org.nz/system/files/ictinecefinal.pdf.

Bowden, R. (2008). Linking premise to practice: An instructional theory-strategy model Approach. *Journal of College Teaching & Learning,* 5(3). Retrieved on 21/02/2016 from http://www.cluteinstitute.com/ojs/index.php/TLC/article/viewFile/1305/1288.

Buabeng-Andoh, C. (2012). Factors influencing teachers' adoption and integration of information and communication technology into teaching: A Review of the literature. *International journal of education and development using information and communication technology,* 8(1): Retrieved on 15/09/2015 from http://files.eric.ed.gov/fulltext/EJ1084227.pdf.

Can, T. (2009) Learning And Teaching Languages Online: A Constructivist Approach Novitas-Royal, Vol.: 3(1), 60-74. Retrieved on 05/04/2017 from http://www.novitasroyal.org/Vol_3_1/can.pdf

Carlson, S. & Gadio, C.T. (2002). Teacher professional development in the use of technology. Retrieved on 01/06/2015, from http://www.ictinedtoolkit.org/usere/library/tech_for_ed_chapters/08.pdf

Celebic, G. Rendulic, D.L. (2011). Basic concepts of information and communication Technology. Open society for idea exchange (ODRAZI), Zagreb. Retrieved on 15/08/2015 from www.itdesk.info/handbook_basic_ict_concepts.pdf.

Chan, D. (ND). The role of ICT in a constructivist approach to the teaching of thinking skills. Retrieved on 02/05/2016, from

Chapman, D.W. & Mahlck, L.O. (eds). (2004). Adopting technology for school improvement: A global perspective. Paris: UNESCO, International institute for Educational planning. Retrieved on 16/10/2015 from https://experts.umn.edu/.../adapting-technology-for-school-improvement(93f13ffa-5e0c..

Chauhan, A.K. (2013). Role of ICT's and Learning English Language in Different Perspective. *Indisciplinary Journal of Contemporary Research in Business No 5 Vol.7*. Retrieved on 30/03/2016 from http://journal-archieves36.webs.com/406-419.pdf .

Cherry, K. (2016). Piaget's Stage Theory of Cognitive Development. Retrieved on April 24, 2016, from https://www.verywell.com/piagets-stages-of-cognitive-development-2795457.

Chigona, A. & Chigona, W. (2010). Capability approach on pedagogical use of ICT in Schools. *The journal for transdisciplinary research in Southern Africa*, l.6(1):209-224. Retrieved on 06/10/2016 from http://www.td-sa.net/index.php/td/article/download/117/251 .

Ching-Ting, H., Ming-Chaun, L., & Chin-Chung, T. (2014). The influence of young children's use of technology on their learning: A Review. *Journal of Educational Technology & Society,* 17(4):85-99. Retrieved on 04/02/2016 from http://www.ifets.info/journals/17_4/6.pdf.

Creswell, J. (2008). The selection of a research design. Retrieved on 21/10/2015 from http://www.sagepub.com/sites/default/files/upm-binaries/22780_Chapter_1.pdf.

Dargham, J. Saeed, D. & Mcheik, H. (2012). Learning at school level: Challenges and benefits. Presented at the 13th International Arab Conference on Information Technology ACIT2012 Retrieved on 10/11/2015 from http://docplayer.net/12844261-E-learning-at-school-level-challenges-and-benefits.html.

David, M. & Nahlik, C. (2009). International review of research in open and distance learning, Volume 10, Number 2. Looking under the Bonnet: Factors Affecting Student Adoption of E-Learning Systems in Jordan retrieved on 15/01/16 from http://www.irrodl.org/index.php/irrodl/article/viewFile/596/1232

Davood .J, Azizolah, D. & Hossein, .V.D. (2015). *The effects of integrating ICT resources into reading comprehension in Iranian high school. International journal of research studies in language learning,* 4(2): Retrieved on 20/08/2016 from http://www.consortiacademia.org/index.php/ijrsll/article/view/851.

Department of Education (2004). White Paper on e-Education. Notice 1869 of 2004, published. Retrieved on 19/02/2016 from carnegie3.org.za/.../papers/197_Ndlovu_The%20quality%20of%20ICT%20use%20in.

Department of Education and Early Childhood Development, (2012). Blended learning. A synthesis of research findings in Victorian education 2006-2011 State of Victoria Retrieved on the 27/02/16 from http://www.education.vic.gov.au/Documents/about/research/blendedlearning.pdf.

Department of Education and Science, (2008). ICT in Schools: Inspectorate Evaluation Studies. Retrieved on 15/11/15 from https://www.education.ie/en/Publications/Inspection-Reports-Publications/Evaluation-Reports-Guidelines/ICT-in-Schools-Inspectorate-Evaluation-Studies.pdf.

Department of Education, (2003). Draft White Paper on e-Education Transforming Learning and Teaching through ICT. Retrieved on 17/04/2016 from http://www.gov.za/sites/www.gov.za/files/26762_1.pdf.

Department of Education, (2007). Guidelines for teacher training and professional development in ICT: A Review of the Impact of ICT on Learning Retrieved on 17/11/2015 from www.schoolnet.org.za/sharing/guidelines_teacher_training.pdf.

Dighe, A. (2006) Using ICT to Develop Literacy. UNESCO, Thailand.

Driscoll, D.L. (2011). Introduction to primary research: Observations, surveys, and interviews retrieved on 12/07/2016 from http://www.parlorpress.com/pdf/driscoll--introduction-to-primary-research.pdf .

Dzidonu, C. (2010). The role of ICTs to achieving the MDGs in Education: An analysis of the Case of African Countries. Retrieved on 14/04/2015 From http://unpan1.unorg/intradoc/groups/public/documents/un-depadn/unpan039076.pdf.

Education Labour Relation Council ELRC, (2010/11). Improving the quality of teaching through labour peace. Annual Report Retrieved on 17/12/2015 from http://pmg-assets.s3-website-eu-west-1.amazonaws.com/docs/111013elrc.pdf.

Efe, R. (2011). Science Student Teachers and Educational Technology: Experience, Intentions, and Value. *Educational Technology & Society*, *14*(1): Retrieved on 12/03/16 from http://www.ifets.info/journals.

ENCA (2014). Language debate continues in SA schools. Retrieved on 17/10/2016 from http://www.enca.com/language-debate-continues-sa-schools.

Epignosis LLC, (2014). E-Learning Concepts, Trends, Applications. Retrieved on 20/11/2015 from https://www.talentlms.com/elearning/elearning-101-jan2014-v1.1.pdf.

European Schoolnet, (2010). Survey of Schools: ICT in Education Benchmarking Access, Use and Attitudes to Technology in Europe's Schools https://ec.europa.eu/digital-single-market/sites/digital-agenda/files/KK-31-13-401-EN-N.pdf.

Excell, L & Linington, V. (2015). *Teaching grade R. South Africa*: Juta and Company.

Eze, R.I. & Olusola, E. (2013). The Teachers and the Use of ICT for Professional Development retrieved on 14/04/2016 from http://ictforafrica.org/attachments/section/4/ict4africa2013_submission_34.pdf.

Fu, J.S (2013). *ICT in Education: A Critical Literature Review and Its Implications. International Journal of Education and Development using Information and Communication Technology (IJEDICT), Vol. 9, Issue 1* National Institute of Education, Singapore. Retrieved on 12/03/16 from http://ijed**ict**.dec.uwi.edu/include/getdoc.php?id=5402 .

García-Valcarcel, A (2010). Integrating ICT into the teaching–learning process. *British Journal of Educational Technology. Vol. 41 (5)* http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.2009.00988.x/full.

Given, L.M. (Ed). (2008). The Sage Encyclopedia of qualitative research methods Sage Publications Inc. U.S.A Retrieved on 21/07/2016 from http://www.stibamalang.com/uploadbank/pustaka/RM/QUALITATIVE%20METHOD%20SAGE%20ENCY.pdf .

Government Gazette Republic of South Africa, 19 February 2015 Vol. 596, No.38487. http://www.dhet.gov.za/Teacher%20Education/National%20Qualifications%20Framework%20Act%2067_2008%20Revised%20Policy%20for%20Teacher%20Education%20Quilifications.pdf .

Gray, A. (2007). Constructivist teaching and learning SSTA Research centre report Retrieved on 23/04/2016 from http://www.saskschoolboards.ca/old/ResearchAndDevelopment/ResearchReports/Instruction/97-07.htm.

Gulbahar, Y. & Guven, I. (2008). A Survey on ICT Usage and the Perceptions of Social Studies Teachers in Turkey. *Educational Technology & Society*, 11(3):37-51. Retrieved on 04/10/2015 from http://www.ifets.info/journals/11_3/4.pdf.

Halvorsen, A. (2009). Social networking sites and critical language learning. In Thomas, (Ed.), *Web 2.0 and Second language Learning*. IGI global: Hershey, PA. Retrieved on 23/12/2015 from http://lts.uoregon.edu/people/andy-halvorsen.

Hancock, B., Ockleford, E. & Windridge, K. (2009). An Introduction to qualitative research. The NIHR RDS for the East Midlands / Yorkshire and the Humber. Retrieved on 17/11/15 from http://www.rds-yh.nihr.ac.uk/wp-content/uploads/2013/05/5_Introduction-to-qualitative-research-2009.pdf .

Harrell, M.C. & Bradley, M.A. (2009). Data collection methods: Semi-structured interviews and focus groups, Pittsburgh, Rand Corporation. Retrieved from on http://www.nature.com/bdj/journal/v204/n6/full/bdj.2008.192.html

Hennessy, S. Ruthven, K. & Brindley, S. (2005). Teacher perspectives on integrating ICT into subject teaching: Commitment, constraints, caution and change. *Journal of Curriculum Studies* retrieved on 04/10/2016 from https://www.educ.cam.ac.uk/research/projects/istl/WP042.pdf .

Hofstee, E. (2006). Constructing a good dissertation: A practical guide to finishing a Master's, MBA or PhD on Schedule. Retrieved on 03/03/2016 from www.exactica.co.za/dn/exactica-book-dissertation-blues.pdf.

http://static1.1.sqspcdn.com/static/f/1751776/20693267/1350729059353/ICT-in-Constructivist-Teaching-of-ThinkingSkills.pdf?token=vUJMkf2rifG1Inv76KJ2J62zYak%3D.

http://www.academia.edu/1462066/ict_and_teacher_competencies.

ICT Rev (2015). Use of ICT in support of language teaching and learning. European centre for modern languages Retrieved on 30/11/2015 2015 from http://ict-rev.ecml.at/en-us/Resources/Web-tool-directory/InventoryID/33.

IIomaki, L. (2008). The effects of ICT on school: Teachers' and students' perspectives, Doctoral Dissertation, Retrieved on 22/02/16 from https://pdfs.semanticscholar.org/09a6/2d0c51d773656626d90122a5601e5003050b.pf

Iiyoshi, T., Hannifin, M. J., & Wang, F. (2005). Cognitive tools and student-centered learning:Rethinking tools, functions, and applications. Educational Media International, 42, 281-296. Retrieved on 03/04/2017 from http://www.tandfonline.com/doi/full/10.1080/09523980500161346?scroll=top&needAccess=true

Inan, F.A & Lowther, D.L. (2010). Laptops in the K-12 classrooms: Exploring factors impacting instructional use Retrieved from on 14/03/2016 http://www.sciencedirect.com/science/article/pii/S0360131510001119.

Inglis, F. & Aers, L. (2008). Key concepts in Education, London, Sage. IEA 2006

Isisag, K.U. (2012). The positive effects of integrating ICT in foreign language teaching http://conference.pixel-online.net/ICT4LL2012/common/download/Paper_pdf/235-IBT107-FP-Isisag-ICT2012.pdf .

Issacs, S. (2007). Survey of ICT and Education in Africa: South Africa Country Report ICT in Education in South Africa. Retrieved on 31/10/2015 from http://www.Infodev.org.

Kaffash, H. R, Kargiban, Z.A, Kargiban, S.A, Ramezani, M.T (2010). A close look into role of ICT in Education. *International Journal of Instruction, 3(2):* Retrieved on 25/11/2015 from http://files.eric.ed.gov/fulltext/ED522936.pdf.

Keesee, G.S. & Brandi, S. (2011) "Learning Theory-Cognitivism." Retrieved on 07/05/2016, from http://teachinglearningresources.pbworks.com/w/page/31012664/Cognitivism.

Kelleler, F. (2011). Women and the Teaching Profession: Exploring the Feminisation Debate London: Commonwealth & UNESCO.

Khalid, M. (2007). Least common multiple of teacher leadership styles: Implication for classroom Bulletin of Education and Research, Vol. 9 No 2. Retrieved on 15/10/16 from http://pu.edu.pk/images/journal/ier/previous_pdf/7_Least%20Common%20Multiple_Khalid%20Mahmood.pdf.

Khan, S.H. (2014). A model for integrating ICT into teacher training programs in Bangladesh based on TPCK *International Journal of education and development using Information and Communication Technology (IJEDICT),* 10(3): Retrieved on 18/06/2016 from http://files.eric.ed.gov/fulltext/EJ1059060.pdf.

Kilickaya, F. (2007). The effect of computer assisted language learning on Turkish learners' achievement on the TOEFL exam Retrieved from 19/04/2016 from http://files.eric.ed.gov/fulltext/ED506354.pdf

Kolbaek, R. (2014). Research designs Retrieved on 14/07/16 from https://irisnetwork.sharepoint.com/WIP2014Malta/Dr.Kolbaek_Research_design-IRIS-2014-WIP-Malta.pdf .

Kothari, C.R. (2004). Research Methodology: Methods and techniques Published by New Age International (P) Ltd., Publishers New Delhi Retrieved on 14/03/2016 from http://www.modares.ac.ir/uploads/Agr.Oth.Lib.17.pdf .

Kumar, S. & Tammelin, M. (2008). Integrating Information Communication Technology (ICT) into Language Learning and Teaching: Guide for Institutions. Retrieved on 20/02/2016 from:http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.501.9255&rep=rep1&type=pdf.

Ladd, H.F. (2015). Why experienced teachers are important–And what can be done to develop them. Scholars Strategy Network. Retrieved on 21/10/2016 from gssaweb.org/wp-content/uploads/.../Teacher-Experience-and-Student-Achievement.pd

Lawrence, A.S. & Veena, K. (2013). *Improving teacher competency through ICT.* Retrieved on 17/03/2016).from

Liu, S. (2011). Factors related to pedagogical beliefs of teachers to technology education *Computers & Education journal* retrieved on 14/03/2016 from http://kodu.ut.ee/~pedaste/meetodid/artiklid/Hii_ruut_Factors%20related%20to%20pedagogical%20beliefs%20of%20teachers%20and%20technology%20integration.pdf.

Mann, A.S. (2014). Science teachers' experiences in integrating Information and Communication Technology (ICT) into their Teaching Practices. Ontario Institute for Studies in Education of the University of Toronto Retrieved on 09/10/2016 from

https://tspace.library.utoronto.ca/bitstream/1807/67042/1/Mann_Amandeep_S_20140 6_MT_MTRP.pdf.

Mashiya, N. (2014). Becoming a (male) foundation phase teacher: A need in South African schools. *South African Journal of Childhood Education, 4(3):24-36.* Retrieved on 13/09/2016 from http://www.scielo.org.za/pdf/sajce/v4n3/03.pdf .

Mathipa, E.R. & Mukhari, S. (2014). Teacher factors influencing the Use of ICT in Teaching and Learning in South African Urban Schools. *Mediterranean journal of social sciences MCSER Publishing, Rome-Italy,* 5(23): Retrieved on 01/12/15 from www.mcser.org/journal/index.php/mjss/article/viewFile/4647/451.

Mbodila, M., Jones, T., & Muhandji, K. (2013). Integration of ICT in Education: Key Challenges. *International journal of emerging technology and advanced engineering,* 3(11): Retrieved on 11/01/2016 from http://www.ijetae.com.

McEntire, E. (1992). Lecture notes for Psychology of Learning course. Baylor University

McLeod, (2009). Simply Psychology Retrieved on 13/05/2016 from http://www.simplypsychology.org/piaget.html.

McMillan, J.H. & Schumacher, S. (1993). *Research in education: A conceptual understanding* New York: Haprer Collins. Retrieved on 16/05/2016 from http://www.academia.edu/4694244/Chapter_9_Research_Design_Qualitative_Methos

McNamara, C. (1999). General guidelines for conducting interviews. Retrieved on 13/07/2016 from: http://www.mapnp.org/library/evaluatn/intrvi ew.htm

Mdlongwa, T. (2012). Information and Communication Technology (ICT) as a Means of enhancing education in schools in South Africa: Challenges, benefits and recommendations. Africa Institute of South Africa (Policy briefing No. 80). Retrieved on 18/12/2015 from http://www.ai.org.za/wp-content/uploads/downloads/2012/10/No.-80.-ICTas-a-means-of-enhancing-Education-in-Schools-in-South-Africa.pdf.

Meriam-Webster Dictionary, (2010). Retrieved on 03/07/2016, from http://www.meriam-webster.com/dictionary/collaborate.

Mikre, F. (2011). The Roles of Information Communication Technologies in Education with Emphasis to the Computer and Internet. *Ethiopian Journal of Education and science,* 6(20): Retrieved on 20/09/2015 from http://web.stanford.edu/~efs/callcc/callcc-intro.pdf.

Mlitiwa, N. Koranteng**,** K. (2013). Integration of ICT onto Curricula in the Western Cape Schools: The Activity Theory Perspective Retrieved on 26/04/2016 from http://citeweb.info/20131980346.

Modisaotsile, B.M. (2012). The Failing Standard of Basic Education in South Africa. Policy brief Africa Institute of South Africa Briefing NO 72 Retrieved on 19/02/2016 from http://www.ai.org.za/wp-content/uploads/downloads/2012/03/No.-72.The-Failing-Standard-of-Basic-Education-in-South-Africa1.pdf .

Moeller, B. & Reitzes, T. (2011). Integrating technology with student-centred learning. Quincy, MA: Nellie Mae Educational Foundation.

Mohanty, R.R. (2011). ICT Advantages and Disadvantages Retrieved on 27/4/2016 from http://ict-adv-disadv.blogspot.co.za/ .

Molawa, S. (2009). The "first" and "third world" in Africa: knowledge access, challenges and current technological innovations in Africa. Retrieved on 12/03/16 from http://wiredspace.wits.ac.za/bitstream/handle.

Molotsi, A.R. (2014). Secondary-school teachers' information communication technology competencies in classroom practices Retrieved on 29/10/2016 from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1027.1555&rep=rep1&type=pdf .

Motteram, G. (2013). (ed). Innovations in learning technologies for English language teaching Spring Gardens London SW1A 2BN, UK www.britishcouncil.org .

Musau, L.M. & Migosi, J.A. (2015). Teacher qualification and students' academic performance in science mathematics and technology subjects in Kenya. *International journal of education* Retrieved on 15/10/2015 from http://www.academicjournals.org/article/article1433517242_Musau%20and%20Migosi.pdf .

Mvududu, N and Thiel-Burgess, J (2012) Constructivism in Practice: The Case for English Language Learners. International Journal of Education ISSN 1948-5476 2012, Vol. 4, No. 3 108 Retrieved on 04/04/2017 from http://www.macrothink.org/journal/index.php/ije/article/viewFile/2223/2044

Nair, G.K.S, Rahim, R.A, Setia, R, Adam, A.F.B.M, Husin, N, Sabapathy, E, Mohamad, R, So'od, S.M.M, Yusoff, N.I.M, Razlan, R.M, Jalil, N.A.A, Ariffin, E.F.N.H, Seman, N.A (2012) ICT and Teachers' Attitude in English Language Teaching. *Journal of Asian Social Science*,8(11): Retrieved on 23/09/2016 from http://ccsenet.org/journal/index.php/ass/article/view/19793.

Ndlovu, N.S. & Lawrence, D. (2012). The quality of ICT use in South African Classroom. University of the Witwatersrand Ph.d Thesis Retrieved on 01/04/2016 from https://www.uj.ac.za/faculties/...of.../Donovan-Lawrence.aspx.

Neaum, S. (2012). *Language and Literacy know for the Early Years*. Singapore, Sage.

Neisser, U. (1967). *Cognitive Psychology*. New York: Appleton- Centuiy-Crofts.

Neuman, W.L. (2011). *Social research methods: qualitative and quantitative approaches*. New York: Pearson.

Nkula, K. & Krauss, K.E.M. (2014). The integration of ICTs in marginalised schools in South Africa: Considerations for understanding the perceptions of in-service teachers and the role of training. Retrieved on 01/12/15from http://www.developmentinformatics.org/conferences/2014/papers/20-Nkula-Kirsten.pdf.

O' Neill, G. & McMahon, T. (2005) University College Dublin Student-centred learning: What does it mean for students and lecturers? Dublin. All Ireland Society for Higher Education (AISHE) Retrieved on 25/05/2016 from www.aishe.org/readings/2005-1/oneill-mcmahon-Tues_19th_Oct_SCL.html.

Oldfield, A. (2010). A summary of teacher attitudes To ICT Use in schools. Retrieved on 20/03/2016 from http://itec.eun.org/c/document_library/get_file?p_l_id=10307&folderId=17990&nam.

Orey, M (Ed.),Emerging perspectives on learning, teaching, and technology. Retrieved 30/03/2017, from http://projects.coe.uga.edu/epltt/

Oyeronke, A. & Fagbohun M. (2013) An Assessment of Computer and ICT Skills among Secondary School Teachers in Ota Ogun State 05/04/2016 http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2193&context=libphilprac.

Pagán, B. (2006). Positive contributions of constructivism to educational design Retrieved from on 27/4/2016 from http://ejop.psychopen.eu/article/view/318/html.

Palys, T. (2008). Purposive Sampling, In Given (Ed.). The Sage Encyclopaedia of Qualitative Research Methods. (Vol. 2). Sage: Los Angeles.

PanAf, (2008-2011). Pan African Research Agenda on the Pedagogical Integration of Information and Communications Technologies, South Africa (PanAf). Database, Retrieved on 20/06/2015, from http://www.observatoiretic.org".

Phakathi, B. (2014). Schools ill-equipped to teach computer skills, study says. Access on 08/04/2016 from http://www.bdlive.co.za/national/education/2014/06/13/schools-ill-equipped-to-teach-computer-skills-study-says.

Phatudi, N., Joubert, I. & Harris, T. (2015). Self-Reflective Practices during Teaching and Learning of an Undergraduate Literacy Module. Retrieved on 23/12/2015 from http://repository.up.ac.za/bitstream/handle/2263/42105/Phatudi_Self_2015.pdf?sequence=1&isAllowed=y.

Pitler H, E.R. Hubbell, Malenoski, K. Using technology with classroom instructions Retrieved on 03/04/2017 from http://thelearningweb.wikispaces.com/file/view/Using_Technology_with_Classroom_Instruction_That_Works.pdf

Prinzessinnadia, (2013). ICT In English Language Teaching And Learning. Retrieved on 11/04/16 from https://prinzessinnadia.wordpress.com/2013/02/01/ict-in-english-language-teaching-and-learning/

Punie, Y., Zinnbauer, D., & Cabrera, M. (2006). Working paper prepared for DG EAC, Retrieved on 10/11/15 from http://ec.europa.eu/education/programmes/elearning/programme_en.html.

Radinsky, J., Smolin, L.I., & Lawless, K. (2005). Collaborative Curriculum Design as a Vehicle for Professional Development. In Vrasidas, C. and G. Glass (Eds), Preparing Teachers to Teach with Technology: 369-380. Current Perspectives on Applied Information Technologies. Greenwich, CT: Information Age Publishing.

Rajasekar, S., Philominathan, P. & Chinnathambi, V. (2006). Research methodology. Retrieved on 14/06/2016 from https://arxiv./porgdf/physics/0601009.pdf.

Raman, K. & Yamat, H. (2014). Barriers Teachers Face in Integrating ICT During English Lessons: A Case Study. *The Malaysian online journal of educational technology,* 2(3): 11-19. Retrieved on 26/09/2016 from http://www.mojet.net/frontend/articles/pdf/v02i03/v02-i03-02.pdf.

Rashan, B. & Deeptee, P.R. (2009). Justifications for Qualitative Research in Organisations: A Step Forward *The Journal of Online Education*, New York. Retrieved on 13/07/2016 from http://www.nyu.edu/classes/keefer/waoe/deeprosh2.pdf.

Research Report Commissioned by Cambridge Assessment, (2013). What is literacy? An investigation into definitions of English as a subject and the relationship between English, literacy and 'being literate'. Retrieved on 20/11/2015 from www.cambridgeassessment.org.uk/insights/the-cambridge-view-on-english/.

Rhalmi, M. (2011). Learning Theories: Jerome Bruner's Constructivist Theory Retrieved on 12/04/2016 from http://www.myenglishpages.com/blog/categories/learning-theories/

Rice, J.K. (2010). The impact of teacher experience examining the evidence and policy implications national centre for analysis of longitudinal data in education research Retrieved on 13/09/2016 from http://www.urban.org/sites/default/files/alfresco/publication-pdfs/1001455-The-Impact-of-Teacher-Experience.PDF

Salazar, S.R. (2007). Constructivism and ICTs to improve Language Skills. Retrieved on 13/10/2016 from https://dialnet.unirioja.es/descarga/articulo/5476015.pdf

Salehi , H. & Salehi, Z. (2012). Integration of ICT in language teaching: Challenges and barriers. 2012 3rd International Conference on e-Education, e-Business, e-Management and e-Learning IPEDR vol.27 IACSIT Press: Singapore

Samuel, R. & Bakar, Z. (2006). The utilization and integration of ICT tools in promoting English language teaching and learning: Reflections from English option teachers in Kuala Langat District, Malaysia. International Journal of Education and Development using ICT [Online], 2(2). Retrieved on 17/01/2016 from http://ijedict.dec.uwi.edu/viewarticle.php?id=161.

Sang, G, Valcke, M, Braak, J.V, Tondeur, J (2010). Student teachers' thinking processes and ICT integration: Predictors of prospective teaching behaviours with educational Technology *http://www.sciencedirect.com/science/article/pii/S0360131509001870*

Schwandt, T.A. (2015). The SAGE Dictionary of qualitative inquiry. 4th edition. Thousand Oaks, CA: SAGE, Retrieved on 20/07/2016 from http://libguides.usc.edu/writingguide/fieldnotes.

Selwyn, N. (2003). Apart from technology: understanding people's non-use of information and communication technologies in everyday life Retrieved on 01/11/2015 from http://ltc-ead.nutes.ufrj.br/constructore/objetos/obj14623.pdf .

Shandu, N. (2011). Digital Literacy: ICT Integration in Grade 10 English First Additional Language teaching Retrieved on 26/ 12/ 2015 from http://etd.uwc.ac.za/xmlui/bitstream/handle/11394/3782/Shandu%2c%20Nonhlanhla.%202011.pdf?sequence=1.

Smeets, E (2005). Does ICT contribute to powerful learning environments in primary education? Journal of Computers & Education Vol.44 343-355 https://pdfs.semanticscholar.org/ebee/52bfa3ca104db4fa21cabd43be17fba7e4b7.pdf

Srivastava, S.B., & Banaji, M.R (2011). Culture, Cognition, and Collaborative Networks in Organizations. American Sociological Review 76, no. 2, 207-233 Retrieved on 02/06/2016 from https://dash.harvard.edu/handle/1/12724039

Strnberg, R. & Zhang, L. (2011). Perspectives on thinking, learning and style. New York: Routledge.

Strydom, W.M., Thompson, J. & Hodgkinson, W.C. (2005). Understanding ICT integration in South African classrooms. Perspectives in education. Special Issue: *Research on*

ICTs and education in South Africa, 4(23): Retrieved on 20/09/2015 from www.schoolnet.org.za/research/research/Wilson-Strydom_Thomson.doc

Tabor, K.S. (2011). Constructivism as educational theory: Contingency in learning and optimally guided approach. Retrieved on 23/04/2016 from https://camtools.cam.ac.uk/access/content/group/cbe67867b9994f628eb758696f3cedf7/Educational%20Theory/Constructivism%20as%20Educational%20Theory.pdf.

Tai, S.D. (2015). Tpack-In-Action Workshops to classrooms: Call Competency Developed And Integrated. *Journal of Language Learning and Technology,* 19(1): Retrieved on 02/03/2016 from http://llt.msu.edu/issues/february2015/tai.pdf

Tasir, Z. (2012). Relationship between teachers' ICT competency, confidence level, and satisfaction toward ICT training programmes: A case study among postgraduate students. TOJET: *The Turkish Online Journal of Educational Technology*, 11(1): Retrieved on 16/03/2016 from www.tojet.net/articles/v11i1/11112.pdf.

Tay, L.Y, Lim, C.P, (Eds). (2013). Creating holistic technology-enhanced learning experience. Netherlands: sense.

Tay, L.Y, Lim, S.K, Lim, C.P, Koh, J.H.L (2012). Pedagogical Approaches for ICT integration into Primary School English and Mathematics: A Singapore case study. *Australian Journal of Educational Tecnology*. Retrieved on 10/12/2015 from https://ajet.org.au/index.php/AJET/article/viewFile/838/134 .

Tedla, B.A. (2012*).* Understanding the importance, impacts and barriers of ICT on Teaching and Learning in East African Countries*. International Journal for e-learning Security (JeLS),* 2(3 & 4): Retrieved on 07/09/2016 from http://infonomics-society.ie/wp-content/uploads/ijels/IJELS-Volume-2-Issue-3-4.pdf

Tinio, V. L. (2003) ICT in education. Retrieved on 11/12/15 from http://www.apdip.net/publications/iespprimers/eprimer-edu.pdf retrieved.

Trucano, M. (2012). Mobile learning in developing countries in 2012: What's Happening? Edutech: A world Bank blog on ICT use in Education Retrieved on 10/01/2016 from http://blogs.worldbank.org/edutech/mlearning-.

Udoh, V.C. & Egwuchukwu, I.O(2014). Integrating Ict in the Teaching and Learning of the English Language in Nigeria Schools. *World Journal of Management and Behavioral Studies* 2 (3):69-73, 2014. Retrieved on 01/04/2016 from https://idosi.org/wjmbs/2(3)14/3.pdf.

UNESCO, (2002). Information and communication technology in education. Retrieved on 18/10/2015 from http://www.unesdoc.unesco.org/images/0012/001295/129538e.pdf.

UNESCO, (2004). A shift in pedagogy and integrating ICT into education. Retrieved on 20/08/2015 from http://www.unescobkk.org/education/ict/online-resources/features/ict-pedagogy/.

UNESCO, (2008). ICT Competency standard for teachers. Retrieved on 17/03/2016 from http://unesdoc.unesco.org/images/0015/001562/156207e.pdf.

UNESCO, 2008.UNESCO National Education Support Strategy Lao People's Democratic Republic 2008-2013. Retrieved on 25/12/2015 from portal.unesco.org/education/...Lao_PDR.../UNESS++Lao+PDR_15+May+2008.pd.

UNESCO, (2012). Information Communication Technology (ICT) in Primary Education; Analytical Survey. Vol.1 Retrieved on 16/02/2016 from iite.unesco.org/pics/publications/en/files/3214735.pdf .

Üredi, L. (2013). The effect of classroom teachers' attitudes toward constructivist approach on their level of establishing a constructivist learning environment: A case of Mersin. *Academic Journals of Educational Research and Reviews,* 8(11):668-676. Retrieved on 24/09/2016 from http://www.academicjournals.org/article/article1379761768_Uredi.pdf.

Valenzuela, D. & Shrivastava, P. (2004). Interview as a Method for Qualitative Research, Paper Presented at Southern Cross University and the Southern Cross Institute of Action Research (SCIAR). Retrieved on 24/05/2016 from http://www.public.asu.edu/~kroel/www500/Interview%20Fri.pdfs.

Verbeek, C. (2014). Critical reflections on the PGCE (Foundation Phase) qualification in South Africa. *South African Journal of Childhood Education,* 4(3):37-51. Retrieved on 13/09/2016 from http://www.scielo.org.za/pdf/sajce/v4n3/04.pdf .

Vincent, L. (2008). Differentiating Competence, Capability and Capacity. *Journal of innovating perspective,* 16(3): Retrieved from http://innovationsthatwork.com/images/pdf/June08newsltr.pdf on 17/03/2016.

Vrasidas, C. Pattis, I, Panaou, P, Antonaki, M., Aravi, C., Avraamidou, L., & Zembylas, M. *(2010) Teacher Use of ICT: Challenges and Opportunities. Proceedings of the 7th International Conference on Networked Learning* Retrieved on 13/02/2016 from cardet.org/.../271-vrasidas-c-et-al-2010-teacher-use-of-ict-challenges-and-opportuniti.

Wellington, T. (2004). The role and potential of ICT in early childhood education A review of New Zealand and international literature. New Zealand council for educational research. Retrieved on 15/ 08/2016 from http://www.nzcer.org.nz/system/files/ictinecefinal.pdf.

Wilson, A.A. (2011). A social semiotics framework for conceptualizing content area Literacies. *Journal of Adolescent and Adult Literacy,* 54(6): Retrieved on 29/11/2015 from http://onlinelibrary.wiley.com/doi/10.1598/JAAL.54.6.5/epdf.

WNET, (2004). Education Concept to Classroom: Constructivism as a Paradigm for Teaching and Learning. Retrieved on 23/04/2016 from http://www.thirteen.org/edonline/concept2class/constructivism/index.html.

Yunus, M. M, Nordin, N, Salehi, H, Embi, M.A, Salehi, Z (2013). The use of Information and Communication Technology (ICT) in Teaching ESL Writing Skills. *Journal of English Language Teaching,* 6(7): 4742 - 4750 Published by Canadian Center of Science and Education 1 Retrieved on 24/11/15 from http://www.ccsenet.org/journal/index.php/elt/article/view/27998

Yusuf, N. & Al-Banawi, N. (2013). The Impact of Changing Technology: The Case Of E-Learning. *Journal of contemporary issues in education research,* 6(2): Retrieved on 11/01/2016 from http://www.cluteinstitute.com/ojs/index.php/CIER/article/viewFile/7726/7790.

Zevenbergen, R. (2007). Digital natives come to preschool: Implications for early childhood practice. *Contemporary Issues in Early Childhood,* 8(1):19-29. Retrieved on 14/12/2015 from http://cie.sagepub.com/content/8/1/19.full.pdf+html.

Zuzovsky, R. (2003). Teachers' qualifications and their impact on student achievement: Findings from timss 2003 data for Israel. Ieri Monograph Series: Issues and Methodologies In Large-Scale Assessments Retrieved 17/08/2016 from http://www.ierinstitute.org/fileadmin/Documents/IERI_Monograph/IERI_Monograph_Volume_02_Chapter_02.pdf

Appendix A

Research and Interview Questions

S/N	Research Questions	Interview questions
1.	What are teachers' experiences in incorporating ICT into language Pedagogy at the foundation phase?	• What is your opinion about ICT in education? • Do you support the integration of ICT in education? • Do you think ICT should be used in schools? • What is your perception about ICTs in teaching and learning? • Do you think ICT incorporation in education will make a positive difference? • Will you say ICT in education is a welcome development? • Do you think integrating ICT will bring about any positive change in your lessons? • Do you think integrating ICT makes lessons more interesting? • Is there any difference between integrating ICT and the traditional teaching methods? • What are the major challenges in integrating ICT? • Do you feel there is a need to upgrade your ICT skills? • How often does the school organise training?

		• Is "time" a major constraint identified with ICT integration?
2.	What are the attitudes and responses of teachers towards the use of ICT in language teaching and learning?	• Do teachers welcome this integration idea • Are teachers enthusiastic about incorporating ICT? • Are you computer literate/Do you have ICT skills? • Are your teachers computer literate? • Do you think there is need for you to acquire proper ICT skills?
3.	What are the levels of teachers' resistance to the use of ICT?	• Do you have any resistance using ICT? • Will you say ICT is a reliable means of subject delivery? • Please tell us what is it that discourages you from using ICT? • Do you encounter any problems while integrating ICT?
4.	What is the level of appropriate use of ICT for curriculum delivery in language teaching and learning?	• Do you use ICT in your language lessons? • Please can you tell us the kinds of software you use during English language lesson? • Do you think ICT integration can improve English language learning outcome?

Appendix B

UNIVERSITY OF ZULULAND
RESEARCH ETHICS COMMITTEE
(Reg No: UZREC 171110-030)

RESEARCH & INNOVATION
Website: http://www.unizulu.ac.za
Private Bag X1001
KwaDlangezwa 3886
Tel: 035 902 6887
Fax: 035 902 6222
Email: MangeleS@unizulu.ac.za

ETHICAL CLEARANCE CERTIFICATE

Certificate Number	**UZREC 171110-030 PGM 2016/251**							
Project Title	**Foundation phase teacher's experience in integrating information communication technology into language learning and teaching in uThungulu District Schools**							
Principal Researcher/ Investigator	Dorodolu Mercy							
Supervisor and Co-supervisor	Dr JN Mashiya		Dr SCB Xulu					
Department	Early Childhood Education							
Nature of Project	Honours/4th Year		Master's	x	Doctoral		Departmental	

The University of Zululand's Research Ethics Committee (UZREC) hereby gives ethical approval in respect of the undertakings contained in the above-mentioned project proposal and the documents listed on page 2 of this Certificate.

Special conditions: (1) The Principal Researcher must report to the UZREC in the prescribed format, where applicable, annually and at the end of the project, in respect of ethical compliance.
(2) Documents marked "To be submitted" (see page 2) must be presented for ethical clearance before any data collection can commence.

The Researcher may therefore commence with the research as from the date of this Certificate, using the reference number indicated above, but may not conduct any data collection using research instruments that are yet to be approved.

Please note that the UZREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the documents that were presented to the UZREC
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

Appendix C

University of Zululand

P.O box X1001

KwaDingezwa

3886

The Director

Department of Education

Province of KwaZuluNatal

28/09/2015

Dear Ms/Mr

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a registered Master's student in the Department of Early Childhood Education at the University of Zululand. My Supervisor is Dr. J. N. Mashiya.

The proposed topic of my research is **Foundation Phase teachers' experiences of Integrating Information Communication Technology (ICT) into language learning and teaching at UThungulu district schools.**

The objectives of the study are:

i. To explore the experiences of teachers in incorporating ICT into language pedagogy in the Foundation Phase;

ii. To investigate teachers' attitudes and responses towards the use of ICT in language teaching and learning;

iii. To investigate the level of teachers' resistance on the use of ICT;

iv. To investigate the appropriate use of ICT for curriculum delivery in language teaching and learning.

I am hereby seeking your consent to conduct an interview with teachers in selected schools in UThungulu district.

To assist you in reaching a decision, I have attached to this letter:

a) A copy of my research proposal and

b) A copy of research instrument which i intend using

Should you require any further information please do not hesitate to contact me or my supervisor, our contact details are as follows:

Mercy Durodolu mercydurodolu@gmail.com or 0747961754

Dr. J.N. Mashiya MashiyaJ@unizulu.ac.za or 0788740789

Upon completion of the study, I undertake to provide you with a bound copy of the dissertation.

Your permission to conduct this study will be greatly appreciated.

Your sincerely

Mercy Durodolu

Appendix D

INFORMED CONSENT DECLARATION

(Participant)

Project Title: Foundation Phase teachers' experiences of integrating Information Communication technology (ICT) into Language learning and teaching at UThungulu district Schools.

Durodolu Mercy from the Department of Early Childhood Education, University of Zululand has requested my permission to participate in the above-mentioned research project.

The nature and the purpose of the research project, and of this informed consent declaration have been explained to me in a language that I understand.

I am aware that:

- The purpose of the research project is to explore teachers' experiences in incorporating ICT into language learning and teaching;
- The University of Zululand has given ethical clearance to this research project and I have seen/ may request to see the clearance certificate;
- By participating in this research project I will be contributing towards the development of education;
- I will participate in the project by answering interview questions and allow the researcher to observe my English language lessons;
- My participation is entirely voluntary and should I at any stage wish to withdraw from participating further, I may do so without any negative consequences;
- I will not be compensated for participating in the research, but my out-of-pocket expenses will be reimbursed;
- There may be risks associated with my participation in the project. I am aware that
    - the following risks are associated with my participation;

- the following steps have been taken to prevent the risks' and
- there is a ……% chance of the risk materializing.

- The researcher intends publishing the research results in the form of a dissertation and conference presentations. However, confidentiality and anonymity of records will be maintained and my name and identity will not be revealed to anyone who has not been involved in the conduct of the research;
- I will not receive feedback in the form of regarding the results obtained during the study;
- Any further questions that I might have concerning the research or my participation will be answered by Durodolu Mercy. Email: mercydurodolu@gmail.com;
- By signing this informed consent declaration I am not waiving any legal claims, rights or remedies;
- A copy of this informed consent declaration will be given to me, and the original will be kept on record;

I have read the above information and confirm that the above-mentioned information has been explained to me in a language that I understand and I am aware of this document's contents. I have asked all questions that I wished to ask and these have been answered to my satisfaction. I fully understand what is expected of me during the research.

I have not been pressurised in any way and I voluntarily agree to participate in the above-mentioned project.

……. 03/05/2016

Participant's signature Date

Appendix E

education

Department:
Education
PROVINCE OF KWAZULU-NATAL

Enquiries: Nomangisi Ngubane | Tel: 033 392 1004 | Ref.:2/4/8/582

Ms M Durodolu
Private Bag X 1001
KWADLANGEZWA
3886

Dear Ms Durodulo

PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: **"FOUNDATION PHASE TEACHERS' EXPERIENCES IN INTEGRATING ICT INTO LANGUAGE LEARNING AND TEACHING IN THE UTHUNGULU DISTRICT SCHOOLS"**, in the KwaZulu-Natal Department of Education Institutions has been approved. The conditions of the approval are as follows:

1. The researcher will make all the arrangements concerning the research and interviews.
2. The researcher must ensure that Educator and learning programmes are not interrupted.
3. Interviews are not conducted during the time of writing examinations in schools.
4. Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
5. A copy of this letter is submitted to District Managers, Principals and Heads of Institutions where the intended research and interviews are to be conducted.
6. The period of investigation is limited to the period from 01 December 2015 to 31 November 2016.
7. Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
8. Should you wish to extend the period of your survey at the school(s), please contact Miss Connie Kehologile at the contact numbers below.
9. Upon completion of the research, a brief summary of the findings, recommendations or a full report / dissertation / thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.
10. Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.

UThungulu District

Nkosinathi S.P. Sishi, PhD
Head of Department: Education
Date: 24 November 2015

KWAZULU-NATAL DEPARTMENT OF EDUCATION

POSTAL: Private Bag X 9137, Pietermaritzburg, 3200, KwaZulu-Natal, Republic of South Africa ...dedicated to service and performance
PHYSICAL: 247 Burger Street, Anton Lembede House, Pietermaritzburg, 3201. Tel. 033 392 1004beyond the call of duty
EMAIL ADDRESS: kehologile.connie@kzndoe.gov.za / Nomangisi.Ngubane@kzndoe.gov.za
CALL CENTRE: 0860 596 363; Fax: 033 392 1203 WEBSITE: WWW.kzneducation.gov.za

Appendix F

Thesis

ORIGINALITY REPORT

%14	%12	%4	%5
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	uir.unisa.ac.za Internet Source	%1
2	itec.eun.org Internet Source	<%1
3	www.mcser.org Internet Source	<%1
4	Submitted to University of Venda Student Paper	<%1
5	webcache.googleusercontent.com Internet Source	<%1
6	www.tojet.net Internet Source	<%1
7	webh01.ua.ac.be Internet Source	<%1
8	jeteraps.scholarlinkresearch.com Internet Source	<%1
9	www.acit2k.org Internet Source	<%1
10	www.lancs.ac.uk Internet Source	<%1

Appendix G

OBSERVATION SCHEDULE

During the observation of English language lessons in the six schools selected for the study, the researcher was looking out for the following:

- The various ICTs available in schools.
- How confident and skilful teachers were in the use of such tools.
- Teachers' attitude towards ICT use.
- How appropriately these tools were used.

This schedule is intended to check for the availability of various ICTs at schools investigated	
School A	Apart from the Compact Disk (CD) player, this school does not have any other ICT tools for learners.
School B	This school does not have any other ICT tool apart from one CD player that is available.
School C	This has just the computer, DVDs and white boards available in the classrooms.
School D	In this school, there are CD players, but installation of ICT facilities is noticeable.
School E	This school has white boards, computers, projectors and DVDs in the classrooms. Grade one has a faulty interactive white board.
School F	There are white boards, computers, projectors, and DVDs available in the classroom.

This schedule is intended to capture the level of teacher's confidence in using ICT in the classroom.		
School A		
GRADE	**LESSON**	**PERFORMANCE**
Grade 1	Phonics	Teacher did not make use of any kind of ICT
Grade 2	Comprehension	Teacher did not make use of any kind of ICT
Grade 3	Vocabulary and Spelling	Teacher did not make use of any kind of ICT
School B		
GRADE	**LESSON**	**PERFORMANCE**
Grade 1	Reading	Teacher did not make use of any kind of ICT
Grade 2	Vocabulary and Spelling	Teacher did not make use of any kind of ICT
Grade 3	News Writing	Teacher did not make use of any kind of ICT

School C		
GRADE	**LESSON**	**PERFORMANCE**
Grade 1	News Writing	Teacher did not make use of any kind of ICT
Grade 2	Vocabulary and Spelling	Teacher made use of the white board.
Grade 3	News Writing	Teacher made use of the white board.
School D		
GRADE	**LESSON**	**PERFORMANCE**
Grade 1	Reading	Teacher did not make use of any kind of ICT
Grade 2	Phonics	Teacher did not make use of any kind of ICT
Grade 3	Phonics	Teacher did not make use of any kind of ICT
School E		
GRADE	**LESSON**	**PERFORMANCE**
Grade 1	Vocabulary and Spelling	The teacher displayed so much confidence while using the projector, and was also consistent while providing explanation and alternative examples.
Grade 2	Vocabulary and Spelling	Teacher did not make use of any kind of ICT.
Grade 3	Reading	Teacher did not make use of any kind of ICT.
School F		
GRADE	**LESSON**	**PERFORMANCE**
Grade 1	Phonics	The teacher was confident and skillful in using the projector.
Grade 2	Phonics	The teacher was confident and skillful in the use of CD and the projector.
Grade 3	Reading	Teacher did not make use of any kind of ICT

This schedule is intended to capture teacher's attitude towards the use of ICT in the classroom	
School A	Teachers understand the important role ICTs play in the education sector and are willing to make use of these tools and resources to improve learners' performance but are unable to do so because this school is not equipped.
School B	Positive attitude, confident and very familiar with ICT but no ICT facilities to work with.
School C	Teachers understand the implication of not incorporating ICT in education and so make the most of the facilities available.
School D	Teachers have a very positive attitude, attends ICT trainings so as to update professional skills and keep up with the trend.
School E	Teachers' attitude is positive and encouraging as they make the most of the facilities available to enhance learning. Attends regular training to improve their knowledge.

School F	Teachers have a positive attitude towards the use of ICTs. For them, using ICTs in the classroom is now a way of life.
This schedule focuses on how teacher's were able to use of ICT appropriately in the classroom	
School A	Teachers used CD player to teach phonics lesson. This was done so that learners could hear the correct pronunciation of words directly.
School B	Teachers did not make use of any tool because none was available.
School C	Teachers did not make use of any ICT tool even though the DVD was available for phonics lesson.
School D	Teachers did not make use of ICT
School E	Teachers made use of the projectors and DVDs effectively.
School F	Teachers made use of ICTs

Appendix H

Dr C.G.A Smith

PhD (English)

Language practitioner - translation, text editing and proofreading

Smithcga@tut.ac.za

Unit 36 Kiss-me- quick townhouses
Dorandia

Cell nr 0727661428

This is to certify that the following document has been professionally language edited:

FOUNDATION PHASE TEACHERS' EXPERIENCES OF INTEGRATING INFORMATION COMMUNICATION TECHNOLOGY (ICT) INTO LANGUAGE LEARNING AND TEACHING AT UTHUNGULU DISTRICT SCHOOLS

Author: **Durodolu Mercy**

Nature of document: Master's dissertation,

Date of this statement: 13 March 2017

160 pages

C.G.A. Smith